ANNUAL REPORT 2022

2022

ANNUAL REPORT

ĐẠI HỌC QUỐC GIA THÀNH PHỐ HỒ CHÍ MINH
VIET NAM NATIONAL UNIVERSITY - HO CHI MINH CITY

Table of Contents

GENERAL INTRODUCTION

Vision

Vietnam National University Ho Chi Minh City (VNUHCM) aims to become a university system at the top of Asia, a home for the convergence of Vietnam's science, technology, creative innovation, culture, and knowledge.

Mission

To be a pioneer in governance reform under the model of university autonomy.

To be at the forefront of training high-quality human resources and fostering talents to be able to lead and promote socio-economic development; to develop and apply science, technology, excellent research, creative innovations, and new economic growth models, making essential contributions to the nation's construction, promoting social progress, and enriching the human knowledge treasure.

VNUHCM UNIVERSITY OF TECHNOLOGY

Vision

The University of Technology (UT) aims to be globally recognized as a leading university in the region for teaching, learning, research, entrepreneurship, and innovation.

Mission

- To train international quality human resources.
- To create new knowledge through scientific research and technology transfer, entrepreneurship and innovation.
- To fulfill the social responsibility and serve the community.

VNUHCM UNIVERSITY OF SCIENCE

Vision

The University of Sciences (US) aims to become a leading university in Vietnam and Southeast Asia in terms of training, scientific research, foundational technology of knowledge economy and digital economy.

Mission

To be a centre for training, research, development and implementation of the applications of science and technology, providing human resources and scientific and technological products so as to meet the requirements of socio-economic development of the country.

VNUHCM UNIVERSITY OF SOCIAL SCIENCES & HUMANITIES

Vision

The University of Social Sciences & Humanities (USSH) aims to become a research university in the VNUHCM system and be at the Asian top in the field of social sciences and humanities.

Mission

To train high-quality human resources, create exemplary scientific research works in the field of social sciences and humanities; to make a practical contribution to the socio-economic development strategy of the country and localities, with a focus on the southern region.

VNUHCM INTERNATIONAL UNIVERSITY

Vision

The International University (IU) aims to be a leading research university in Asia, an international, autonomous and creative educational institution; to be a home for cultivating and developing high-quality human resources for the domestic and international labour market.

Mission

- To be an international higher education institution with the Vietnamese cultural identity;
- To be a higher education institution pioneering in the university governance reform under the model of autonomy and progress.
- To provide multidisciplinary and multidisciplinary high-quality training, meeting the international/ regional education quality accreditation standards for all its study programmes.
- To make teaching and research conducted in English a difference that elevates the international level of the IU. Learners are instructed and trained to become global citizens and be socially responsible, leading society in the future.
- To have basic research of extensive knowledge content simultaneously conducted in the companion of applied research, meeting the requirements of innovation and sustainable development of enterprises, localities and society; activities to connect and serve the community are interested and promoted.

VNUHCM UNIVERSITY OF ECONOMICS & LAW

Vision

By 2035, the University of Economics & Law (UEL) aims:

- To be a research-oriented university in the digital age.
- To be a higher education institution that meets international standards and is ranked among prestigious universities where learners have a strategic vision and creative thinking, capable of working in a global environment.
- To be one of Vietnam's leading centers for scientific research and policy consultancy in the fields of economy, business, and law.

Mission

To promote social development and progress through research and training, and provide high-quality services in the fields of economics, business, and law.

VNUHCM UNIVERSITY OF INFORMATION TECHNOLOGY

Vision

The University of Information Technology (UIT) aims to become a prestigious university in information technology and communication, and related fields in the Asian region.

Mission

- To be an undergraduate and graduate training center that provides high-quality human resources to meet the needs of labor markets and serve the community.
- To be a leading center for scientific research and technology transfer in information technology and communication, and related fields.

VNUHCM AN GIANG UNIVERSITY

Vision

An Giang University (AGU) strives to become a multidisciplinary and multi-level higher education institution with scientific research and technology transfer to serve the community and be socially recognised.

Mission

To become a prestigious centre for training high-quality human resources, scientific research and technology transfer; to effectively contribute to economic development and social progress, contributing to the implementation of VNUHCM's mission in the Mekong Delta region.

VNUHCM SCHOOL OF MEDICINE

Vision

The School of Medicine (SM) aims to be a prestigious and advanced university of health sciences in the region.

Mission

To train a medical workforce with quality and capacity for international integration; to conduct research and apply advanced scientific and technical achievements into health care for people.

SCHOOL OF POLITICAL & ADMINISTRATION SCIENCES

Vision

The School of Political & Administration Sciences (SPAS) aims to build itself into a branded VNUHCM unit for training management human resources, conducting scientific research, consulting and fostering politics and administration in the Southern region and the whole country.

Mission

To train and foster high-quality human resources in the field of political, management and administration sciences, contributing to the nation's development.

VNUHCM CAMPUS IN BEN TRE PROVINCE

Vision

VNUHCM Campus in Ben Tre Province aims to be a leading member university of VNUHCM in Southwest Vietnam which provides application-oriented training; to be home for the convergence of knowledge, science and technology.

Mission

- To implement the VNUHCM's mission in Southwest Vietnam
- To be at the forefront of training high-quality human resources, focusing on scientific research and innovation, applying science and technology to serve the community, meeting the socio-economic development needs of the Southwest region and the whole country.
- To have innovations in university education and governance, contributing to improving the quality of Vietnam's education and international integration.

PRIME MINISTER PHAM MINH CHINH: "VIETNAM NATIONAL UNIVERSITY HO CHI MINH CITY HAS DEVELOPED BOTH IN BREADTH AND DEPTH."

On January 14th, 2022, after receiving the 2021 Annual Report from Vietnam National University Ho Chi Minh City (VNUHCM), Prime Minister Pham Minh Chinh sent a letter acknowledging and congratulating VNUHCM on its efforts and achievements in the development, particularly the proactive adaptation to the COVID-19 pandemic, and the preservation of its high position in the reputable university rankings in the region and the world.

To: Vietnam National University Ho Chi Minh City

I, Vietnam's Prime Minister, have received the 2021 Annual Report from VNUHCM. I highly acknowledge and congratulate you as one of the high-quality international centers for undergraduate and graduate education, and multi-disciplinary research and technology training, playing an essential role in our country's higher education system.

After 27 years of construction and development, VNUHCM has developed both in breadth and depth. VNUHCM has maximized the strengths of integrating multi-disciplinary and multi-field intelligence with many international-standard study programs; numerous research works have been published in prestigious international journals, and many staff, lecturers, and students have achieved remarkable accomplishments.

In 2021, under the complex spread of the COVID-19 pandemic, VNUHCM fully restructured its organization, proactively adapted, quickly transformed its working methods and training activities, strengthened its self-reliance, and continued to preserve a high position in the reputable university rankings in the region and the world.

It is my hope and trust that in the new development stage, with several challenges and opportunities intermingled, VNUHCM will further promote its spirit of self-reliance and self-improvement, then strive more strongly from your own inner strengths; VNUHCM's leaders, lecturers, and employees will make union and efforts, have innovations, strengthen research and application of science and technology, and cooperate domestically and internationally; accelerate the digital transformation, proactively participate in the global innovation network, turn challenges into stimulation and opportunities, and build and develop yourself into a "high-quality" university system among the leading universities in Asia and the world so as to be worthy of the attention, expectations from the Vietnamese Communist Party, Government, and People.

On the occasion of the new year, I respectfully send my warmest greetings to all the leaders, lecturers, employees, and students of VNUHCM. I wish you all the best for a new year full of new achievements and victories.

Assoc. Prof. Dr. Vu Hai Quan

VNUHCM CHANCELLOR'S MESSAGE

With the desire to reach out to the world and the determination to implement the direction by Vietnam's Prime Minister in the letter to VNUHCM, dated January 14, 2022: *"It is my [Vietnam's Prime Minister] hope and trust that in the new development stage, with several challenges and opportunities intermingled, VNUHCM will further promote its spirit of self-reliance and self-improvement, then strive more strongly from your inner strengths… turn challenges into stimulation and opportunities, and build and develop yourself into a "high-quality" university system among the leading universities in Asia and the world so as to be worthy of the attention, expectations from the Vietnamese Communist Party, Government, and People."* In 2022, VNUHCM promoted international cooperation, actively renewed the operating mechanism of its member universities and affiliates towards autonomy, improved competencies and governance efficiency, and integrated deeply into the global advanced higher education. Looking back on the achievements during a year of continuous efforts, we can be proud that VNUHCM has gradually put its name sharply on the educational map of Southeast Asia and the world.

2022 - Outstanding hallmarks affirming its domestic and international positions

In 2022, VNUHCM coordinated with the Central Propaganda Department, Central Economic Department, HCMC Communist Party, Ministry of Science and Technology, and the Vietnam Union of Science and Technology Associations to organize two National Conferences on policies and guidelines for the national industrialization and modernization to 2030, with a vision to 2045. The conferences have contributed many critical practical materials to the process of developing and promulgating Resolution No. 29-NQ/TW by the Communist Party of Vietnam's 13th Central Committee on continuing to promote the national industrialization and modernization to 2030, with a vision to 2045.

VNUHCM made active contributions to the law projects submitted at National Assembly sessions. A significant highlight is the Law on Emulation and Reward (amended) approved by the National Assembly on June 5, 2022. Accordingly, VNUHCM was proposed to the Government and the Prime Minister's consideration for awards and titles of merit emulation. In addition, Vietnam National University has been mentioned for the first time in another law, apart from the Law on Amending and Supplementing a number of Articles of the Law on Higher Education promulgated in 2018.

VNUHCM sent many delegations to large and prestigious universities in Europe, Australia, and America, signed two cooperation agreements with Hungarian and British universities, eight MOAs with Australian and New Zealand universities, and one MOU with Seoul National University, Korea. Furthermore, VNUHCM attended many important international academic events such as the AUN Rectors' Meeting in Laos.

VNUHCM is currently the governing body of many significant international projects with a total budget of over USD 132 million. It is an important resource to improve the quality of education and research, and develop modern and synchronous facilities for the VNUHCM District. Some exemplary are: (i) Vietnam National University Development Project - VNUHCM Subproject (~USD100 million USD from the World Bank); (ii) Higher Education Innovation Cooperation Project (~USD15.62 million funded by USAID); (iii) Southeast Asian Young Leaders Initiative - Mekong Young Leaders Program (~$5 million funded by USAID); (iv) Sustainable Smallholder Agriculture (SRP) Planning and Establishment Project (~AUD4.3 million funded by the Australian Government), and (v) Project on Strengthening Higher Education in Agriculture at VNUHCM (~USD 9.09 million funded by KOICA, South Korea).

VNUHCM had active approaches to international standards in education and research: pioneering innovations in its university admissions with the competency assessment test and recruitment based on various combinations of different; diversifying its modes and training methods, especially the talented and advanced bachelor programs; enhancing extracurricular activities (those related to culture, literature, arts, and physical education); promoting the implementation of educational accreditation under different national and international standards. VNUHCM is now leading the country with 110 internationally accredited study programs; maintaining the top 801-1,000 best universities in the world (QS World), reaching 167th best universities in Asia (QS Asia). Especially, the Petroleum Engineering program not only ranks first in Vietnam but also comes in the top 51-100 in the world (QS Subject).

According to the statistics from the Scopus database, as of December 2022, VNUHCM had 1,913 publications in international journals and conferences. As a result, in this category, VNUHCM is Vietnam's university with the leading number of publications. The year 2022 saw VNUHCM be granted 2 American patents. Many VNUHCM lecturers and students won prestigious awards in teaching, learning, research, and technology development. Some remarkable are: People's Teacher Pro. Dr. Tran Doan Son received the Ho Chi Minh Award, Dr. Ha Thi Thanh Huong received the Outstanding Female Scientist 2022 Award of the L'Oreal - UNESCO program; VNUHCM

students won first place in the IEEExtreme Programming Competition, and won the Robotics Competition Championship in Singapore, and so on.

VNUHCM promoted its cooperation activities with localities to carry out the community service mission. After two years of disruption due to the COVID-19 pandemic, in 2022, VNUHCM facilitated the signing and implementation of cooperation with many localities in the country such as Ho Chi Minh City, provinces of Binh Duong, Tay Ninh, Ba Ria - Vung Tau, and Lam Dong, etc. In particular, the focus is on consulting and reviewing their planning; research, education, and improvement of the quality of civil servants are also part of the focus. Thanks to its valuable and practical contributions to the local socioeconomic development, VNUHCM was entrusted by the Prime Minister to lead the project "Developing VNUHCM to be in the top higher education institutions in Asia." This project is part of the Government's Action Program to implement Resolution No. 24-NQ/TW by the Politburo on socioeconomic development and maintenance of national defense and security in Southeast Vietnam to 2030, with a vision to 2045.

VNUHCM continued to innovate the organizational system and manage and improve those of its member universities and affiliates. In 2022, the Prime Minister approved the plan on establishing the University of Health Sciences as a member university of VNUHCM. Also this year, the VNUHCM University Council approved the plan for establishing enterprises under VNUHCM and the project to renovate the operation mechanism of the High School for the Gifted. VNUHCM sent 22 executive lecturers to the improving university governance program held at Indiana University, USA.

The above achievements are just some remarkable ones, not to mention all the efforts and dedication in thousands of hours of teaching, research, working, and learning of the collective of VNUHCM lecturers, officials, employees, and students. We deeply understand that the University needs to strive further and constantly innovate to adapt to the educational context of globalization and internationalization.

In addition to these achievements, the direction, administration, and professional work at VNUHCM still faced limitations and challenges. Thus, many goals and targets have not been achieved. Digital transformation was still slow; the compensation for site clearance, the disbursement, and the planning adjustment have not met the deadlines, and so on. These difficulties and limitations have both objective and subjective causes, but the latter are the main ones.

2023 - Innovating and improving the management efficiency, education quality, and research through a digital transformation throughout the system.

In 2023, VNUHCM identifies the key task of implementing the Strategic Plan for the period 2021-2025 and conducting a mid-term review and assessment. In order to successfully implement the Strategic Plan with crucial activities, including: promoting digital transformation, diversifying financial resources to innovate, improving governance efficiency, training quality, and scientific research, VNUHCM will focus on the points as follows:

- As for governance: (1) To develop and submit to the Prime Minister the Project "Developing VNUHCM to be in the top higher education institutions in Asia"; (2) To continue to innovate the VNUHCM governance structure in the lean and efficient direction; (3) To gradually improve the university autonomy model, focusing on the accountability to stakeholders, and improving the effects the university councils.

- As for education: (1) To implement a digital transformation, improving the quality of training, including: Developing a shared digital learning system in teaching and learning; Constructing and implementing online courses on the MOOC platform; Comprehensively and synchronously implementing the education management system; (2) To continue the implementation of dual-degree programs, BS-MS integrated programs; to enlarge the scale of graduate education; to enhance practical and extracurricular experience activities for learners; to promote the upgrade and improvement of the competencies and professional qualifications of the teaching staff; (3) To implement refresher training courses tailored for localities and enterprises.

- As for science and technology: Digital transformation is implemented, improving the efficiency of science and technology activities: (1) To construct and operate a system of project registration and management of data science and technology; (2) To continue the implementation of the strategy of increasing the number of Scopus-indexed international publications and focusing on international cooperation in publications; (3) To effectively implement international projects, national key research projects and programs, and cooperation programs signed with Ho Chi Minh City, Binh Duong Province, and localities.

- As for finance: (1) To continue the diversification of university financial resources; (2) To complete the financial regulations and those for management and use of VNUHCM's public property; (3) To establish enterprises under VNUHCM.

- As for the construction of the University District: (1) To effectively implement the Vietnam National University Development Project - VNUHCM Subproject funded by the World Bank; (2) To commence a number of new projects in VNUHCM District to serve students; (3) To adjustment the VNUHCM planning.

With high determination in implementing the national strategic task and the tasks of developing Vietnam's regions and developing VNU-HCM into one of the leading higher education institutions in Asia as expected by the Party and State leaders, I call on all the VNUHCM administrators, lecturers, employees, and laborers to unite together and contribute their intellect and enthusiasm to bring VNUHCM to a new and solid height in its journey to reach the world.

In the early days of the New Year 2023 and the coming Lunar New Year, I wish all the academic, administrative, and support staff good health, happiness, and success, and make more contributions to VNUHCM's striking development.

OVERVIEW

LIST OF THE VNUHCM BOARD OF REGENTS

Assoc. Prof. Dr. VU HAI QUAN, Chairman of the University Council

Members:

Assoc. Prof. Dr. Nguyen Hoang Tu Anh, Assoc. Prof. Dr. Phan Thanh Binh, Mr. Tran Ba Duong, Assoc. Prof. Dr. Huynh Thanh Dat, Prof. Dr. Le Thanh Hai, Mrs. Phung Thi Dieu Huong, Assoc. Prof. Dr. Hoang Cong Gia Khanh, Assoc. Prof. Dr. Tran Tien Khoa, Assoc. Prof. Dr. Ngo Thi Phuong Lan, Mr. Phan Van Mai, Mr. Vo Van Minh, Assoc. Prof. Dr. Nguyen Tan Phat, Assoc. Prof. Dr. Mai Thanh Phong, Assoc. Prof. Dr. Tran Le Quan, Assoc. Prof. Dr. Tran Hong Quan, Assoc. Prof. Dr. Nguyen Minh Tam, Dr. Tran Viet Thanh, Assoc. Prof. Dr. Vo Van Thang, Lam Tuong Thoai, MA., Assoc. Prof. Dr. Nguyen Dinh Tu - Secretary.

VNUHCM BOARD OF CHANCELLORS

1

2

1. **Assoc. Prof. Dr. Vu Hai Quan**
   Chancellor
2. **Assoc. Prof. Dr. Nguyen Minh Tam**
   Vice-Chancellor

CHAIRPERSONS OF VNUHCM'S MEMBER UNIVERSITY COUNCILS

Assoc. Prof. Dr. Le Minh Phuong
UC Chairman of VNUHCM
University of Technology

Assoc. Prof. Dr. Tran Cao Vinh
UC Chairman of VNUHCM
University of Science

Dr. Le Thi Ngoc Diep
UC Chairwoman of VNUHCM
University of Social Sciences
& Humanities

Dr. Ho Nhut Quang
UC Chairman of VNUHCM
International University

Assoc. Prof. Dr. Le Tuan Loc
UC Chairman of VNUHCM
University of Economics and Law

Assoc. Prof. Dr. Vu Duc Lung
UC Chairman of VNUHCM University
of Information Technology

Assoc. Prof. Dr. Tran Van Dat
UC Chairman of VNUHCM
An Giang University of

PRESIDENTS OF VNUHCM'S MEMBER UNIVERSITIES AND AFFILIATES

Assoc. Prof. Dr. Mai Thanh Phong
President of University of Technology

Assoc. Prof. Dr. Tran Le Quan
President of University of Science

Assoc. Prof. Dr. Ngo Thi Phuong Lan
President of University
of Social Sciences & Humanities

Assoc. Prof. Dr. Tran Tien Khoa
President of International University

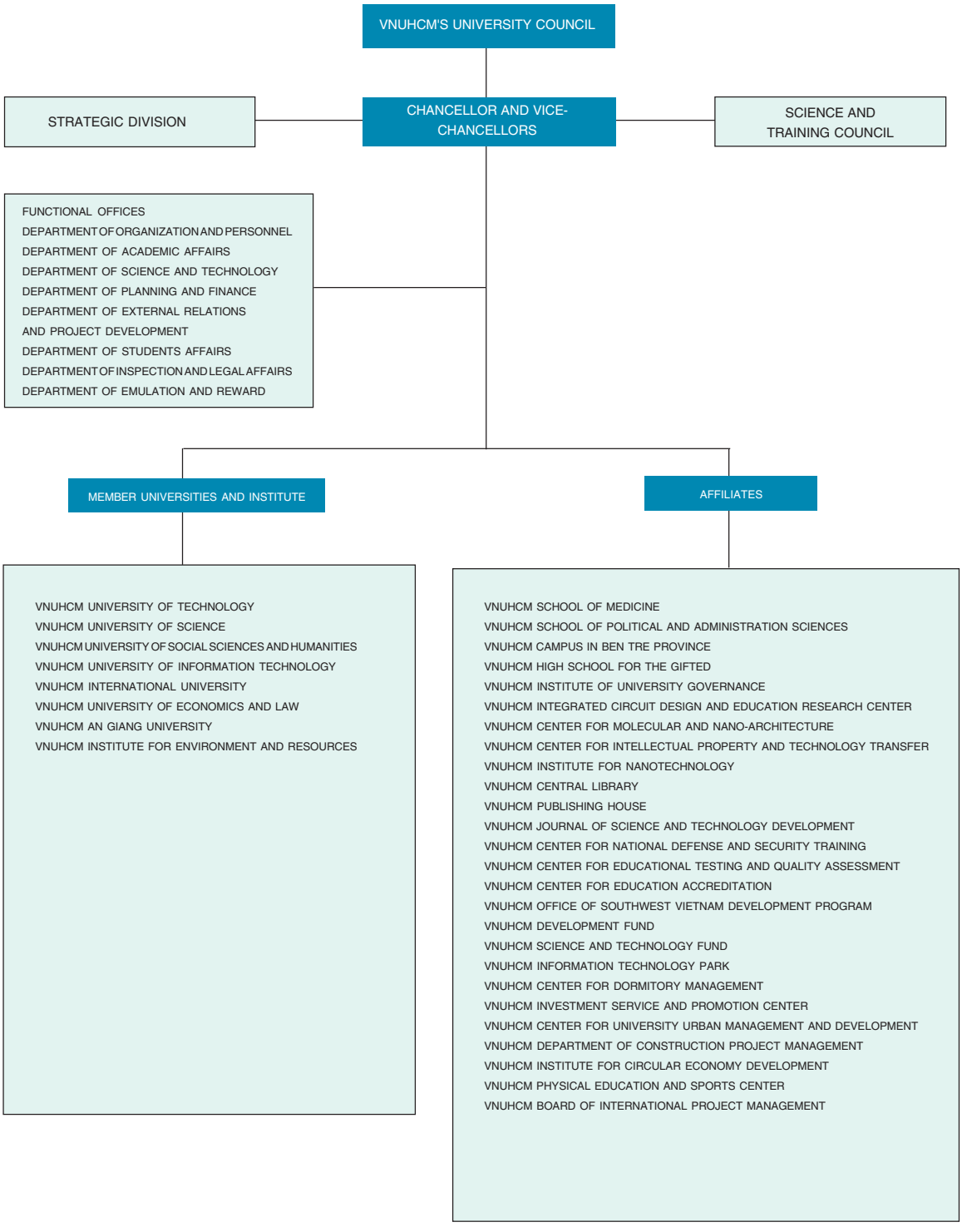
Assoc. Prof. Dr. Hoang Cong Gia Khanh
President of University
of Economics & Law

Assoc. Prof. Dr. Nguyen Hoang Tu Anh
President of University
of Information Technology

Assoc. Prof. Dr. Vo Van Thang
President of An Giang University

Prof. Dr. Le Thanh Hai
Director of the Institute of
Environment and Resources

VNUHCM'S STRUCTURE OF ORGANIZATION



SYSTEM STRENGTHS

HIGHLIGHTED EVENTS AND PROFESSIONAL ACTIVITIES IN 2022

A. HIGHLIGHTED EVENTS

1. VNUHCM contributed to the drafting of resolutions of the Party Central Committee and new laws and regulations passed by the National Assembly

In 2022, VNUHCM worked collaboratively with the Party Central Committee's Commission for Propagation and Education and Economic Commission, the Ho Chi Minh City Party Committee, the Ministry of Science and Technology, and the Vietnam Union of Science and Technology Associations to hold two national conferences on guidelines and policies on the national industrialization and modernization to 2030, with a vision to 2045. The conferences have contributed many critical practical materials to the process of developing and promulgating Resolution No. 29-NQ/TW by the Communist Party of Vietnam's 13th Central Committee on continuing to promote the national industrialization and modernization to 2030, with a vision to 2045.

Additionally, VNUHCM made active contributions to the law projects submitted at National Assembly sessions. A significant highlight is the Law on Emulation and Reward (amended) voted by the National Assembly on June 5, 2022. Accordingly, VNUHCM was proposed to the Government and the Prime Minister's consideration for awards and titles of merit emulation. In addition, Vietnam National University has been mentioned for the first time in another law, apart from the Law on Amending and Supplementing a number of Articles of the Law on Higher Education promulgated in 2018.

2. VNUHCM lecturers and students awarded national and international titles and prizes

- The VNUHCM researchers and lecturers were awarded many prestigious titles and prizes, including the Ho Chi Minh Award 2021, the Kovalevskaya Award 2021, the Ta Quang Buu Award 2022, the L'Oreal-UNESCO for Women in Science Young Talents Award 2022, the Alexandre Yersin Prize 2021, the title of International Federation for Medical and Biological Engineering (IFMBE) Honorary Life Member, the Golden Globe Science and Technology Award 2022, the Vietnam Science and Technology Innovation Award 2021, the Asia Innovation Award 2022, the Outstanding Teacher Award, and the Outstanding Young Teacher Award at the central level;

- The VNUHCM students won the following national and international awards, including: one silver medal in the International Mathematical Olympiad 2022, the champion in the International MYOR 2022 in Singapore, the first prize in the International Innovator Award 2022, first place in the Maker to Entrepreneur Program in 2022, the first prize in the 4th National Student Leader Competition in 2022, the "Best Startup by Student" special award in the Startup Wheel 2022, the first place in the global ranking of the IEEExtreme Programming Competition 16.0 in 2022, the first place in terms of group performance in the 24th National Physics Olympiad for University Students in 2022, the Science and Technology Awards for Female Students in 2022, to name but a few.

3. Prime Minister assigned VNUHCM to chair the project "Developing Vietnam National University Ho Chi Minh City into one of the Leading Higher Education Institutions in Asia"

The project was carried out as stipulated in Resolution No. 24-NQ/TW on socioeconomic development and maintenance of national defense and security in the Southeast region to 2030, with a vision to 2045, which the Politburo issued on October 7, 2022. It is also a key aim that VNUHCM is pursuing to fulfill its national strategic and regional development tasks assigned by the government.

4. President Nguyen Xuan Phuc attended VNUHCM's opening ceremony in 2022

VNUHCM held its 2022 opening ceremony on October 13, 2022. As the guest speaker of this year's opening ceremony, President Nguyen Xuan Phuc delivered a speech entitled "Students as Pioneers in Innovation and Creativity to Fulfill the National Aspiration Towards Building a Prosperous and Happy Country." The event also welcomed the presence of the Secretary of the Ho Chi Minh City Party Committee, the Chairman of Ho Chi Minh City People's Committee, the Ministers of Science and Technology, Planning and Investment, Construction, Information and Communications, the Deputy Minister of Education and Training, the Head of the Presidential Office, the Party Central Committee's Commission for Mass Mobilization and the Secretary of An Giang Provincial Party Committee.

5. VNUHCM approved the strategic plans for the 2022-2025 period of the member universities and affiliates

VNUHCM approved the strategic plans for the 2022-2025 period of eight out of eleven member universities and affiliates whose proposals had been evaluated. As of December 2022, 27 VNUHCM member universities and affiliates obtained their approvals, which provides the vital basis for their operations.

6. VNUHCM University Council adopts several important guidelines

- On April 26, 2022, Prime Minister Pham Minh Chinh signed Decision No. 521/QĐ-TTg on the appointment of Mr. Vu Hai Quan, member of the Party Central Committee, Chancellor of VNUHCM as Chairman of VNUHCM Board of Regents.
- VNUHCM University Council and VNUHCM's Member University Councils were consolidated.
- The projects on the renovation of the operating mechanism of the High School for the Gifted and the founding of enterprises under VNUHCM, etc. were approved.

7. The Government approves the plan to establish the University of Health Sciences, a new VNUHCM member university

Deputy Prime Minister Vu Duc Dam signed Decision No. 1122/QĐ-TTg, dated September 23, 2022, on approving the plan to establish the University of Health Sciences, a member university of VNUHCM. The Deputy Prime Minister assigned the Ministry of Education and Training to lead and coordinate with concerned ministries and agencies in evaluating the content and possibility of the plan to establish the University of Health Sciences, a member university of VNUHCM following the laws concerning the conditions for investment and operation in the education sector and relevant regulations to later submit to the Prime Minister for consideration and decision.

8. VNUHCM welcomed and worked with leaders of central agencies

VNUHCM was honored to welcome and work with the delegations led by Mr. Nguyen Hoa Binh, Politburo member, Secretary of the Party Central Committee, Chief Justice of the Supreme People's Court; Mr. Nguyen Trong Nghia, Secretary of the Party Central Committee and Head of the Party Central Committee's Commission for Propagation and Education; Mr. Nguyen Kim Son, member of the Party Central Committee and Minister of Education and Training; and Mr. Nguyen Manh Hung, member of the Party Central Committee and Minister of Information and Communications.

9. VNUHCM maintained its position in prestigious university rankings

- VNUHCM was among 56 percent of the world's top universities (ranked #801-1,000 in the QS World University Rankings 2023), placing #601+ in the QS Sustainability Rankings 2023. It is also the only Vietnamese institution honorably listed in the QS Graduate Employability Rankings, securing its #301-350 position. It took the 167th spot and was among 22 percent of the top universities in the QS Asia University Rankings 2023.
- Several of VNUHCM's disciplines and subject areas were listed in the QS World University Rankings by Subject 2022, including Petroleum Engineering (#51-100), Computer Science and Information Systems (#401-450), Modern Languages (#251-300), Chemical Engineering (#351-400), Electrical and Electronic Engineering (#301-350), Chemistry (#601-650) and Mathematics (#401-450); Social Sciences and Management (#401-450), Engineering and Technology (#362). VNUHCM was also highly rated for several disciplines and subjects in the Times Higher Education (THE) World University Rankings 2022 by subject.

10. More VNUHCM research products were granted intellectual property protection in the United States

VNUHCM was granted two other patents in the United States for the research work "Metal-Organic Frameworks (MOFs) and Methods of Synthesizing and Using the Same" by Prof. Dr. Phan Bach Thang and colleagues from VNUHCM Center for Innovative Materials and Architectures and "A Submerged Tubular Membrane Distillation (STMD) Method and Apparatus for Desalination" by Assoc. Prof. Dr. Bui Xuan Thanh and colleagues from VNUHCM University of Technology. Three other patent applications are currently under evaluation.

Additionally, VNUHCM had 1,913 articles published in Scopus-indexed international journals and conference proceedings in 2022, maintaining its position as the country's leading institution regarding the number of Scopus-indexed publications.

B. HIGHLIGHTED PROFESSIONAL ACTIVITIES

1. VNUHCM had 33 more study programs accredited by international standards organizations

In 2022, VNUHCM remarkably had 33 study programs that met international accreditation standards, namely AUN-QA (12), CTI (8), ASIIN (9), AQAS (3), and FIBAA (1).

2. VNUHCM served as the governing body of many significant international projects

VNUHCM actively collaborated with international partners to carry out major VNUHCM-level projects with a total budget of over USD 132 million, including (1) Vietnam National University Development Project - VNUHCM Subproject, funded by the World Bank; (2) Higher Education Innovation Cooperation Project (PHER), funded by USAID; (3) Southeast Asian Young Leaders Initiative - Mekong Young Leaders Program, funded by USAID; (4) Sustainable Smallholder Agriculture (SRP) Planning and Establishment Project, funded by the Australian Government; and (5) Project on Strengthening Higher Education in Agriculture at VNUHCM, funded by KOICA,…

3. The organizational structure was improved further

- VNUHCM's network of member universities and affiliates was enhanced by approving the plan to establish the University of Health Sciences and restructuring the JVN Institute;
- The job placement schemes of 18 member universities and affiliates were approved, and similar ones proposed by 11 others were supported;
- VNUHCM provided feedback on the legal bases and contents of the draft Decree on Vietnam National Universities; instructed and ordered the member universities and affiliates to develop plans to reexamine their current organizational and personnel structures and submit their restructuring proposals.

4. VNUHCM collaborated with ministries and central agencies in organizing several national conferences and seminars, and international seminars

The conferences under collaboration were entitled "Developing Science and Technology for Industrialization and Modernization in the Context of Socialist-oriented Market Economy and International Integration;" "Solutions to Promote Research Activities, Technology Transfer, and Creative Innovation in Higher Education Institutions;" "Sustainable Development of the Real Estate Market in the New Context;" "Policies of Supporting Enterprises in Technology Invention, Transfer and Innovation;" and the Summer Conference 2022 within the framework of the PHER Project.

5. VNUHCM promoted the cooperation with ministries, agencies, localities, and enterprises

VNUHCM signed contracts for cooperation with the Ministry of Science and Technology, the People's Committee of Ho Chi Minh City, Binh Duong Province, Ba Ria - Vung Tau Province, Lam Dong Province, Tay Ninh Province, An Giang Province, the People's Committee of Binh Chanh District, Vietnam News Agency's affiliate in Southern Vietnam, Cho Ray Hospital, and Loc Troi Group.

6. The training management quality was improved

- Offering new study programs: In 2022, VNUHCM launched one graduate program and six undergraduate one in social sciences and humanities, natural science, agriculture, and health sciences.

- Running major projects: Selecting gifted students at VNUHCM and cultivating their talent in the 2023-2027 period; Completing the framework for VNUHCM graduates' competencies and qualities; Training digital human resources (IT subject areas) for digital transformation, digital economy development, and digital society promotion; Increasing digital transformation capacity for training; Training internationally qualified human resources (8 subject areas) in the 2020-2035 period and adopting the shared governance model in higher education; Researching how to develop Ho Chi Minh City as the training center which provides a high-quality human resource for the whole country and the region as well.

7. The scale and number of testing sites of the VNUHCM's Competency Test increased

VNUHCM's Competency Test 2022 was held in 17 provinces and cities from Da Nang City onwards toward Southern Vietnam, attracting 95,736 candidates from 1,598 high schools in 58 provinces and cities nationwide. VNUHCM's member universities, its campus in Ben Tre Province, and more than 76 other universities and colleges used the results of this test as a basis for their student admission.

8. VNUHCM organizes many different professional seminars

VNUHCM organized many different professional seminars entitled "Raising Some Issues Concerning the Implementation of Resolution No. 54/2017/QH14;" "Directive No. 10/CT-TTg by the Prime Minister in 2022 and the Role of VNUHCM in Promoting Sustainable Development of the Mekong Delta Region;" "Directing the Collection of Statistics on the Employment of Former VNUHCM Students After One Year of Graduation;" "Physical Education Tasks and Activities at VNUHCM;" seminar on the orientation of implementation of the project "Selecting gifted students at VNUHCM and cultivating their talent in the 2023-2027 period;" and the seminar on increasing digital transformation capacity for training at VNUHCM.

9. VNUHCM accompanied the staff in charge of student support, physical education and training, and extracurricular sports

VNUHCM continued to maintain and develop scholarship programs targeting student support; conducted a survey on its students' attitudes before returning to face-to-face learning; conducted a study on students' credit loan demands; organized the VNUHCM Student Games 2022, which attracted the participation of 971 athletes from 9 training institutions; hosted the finals of National University Basketball Championship; organized the response event of the S-Race 2022; organized the Creative Idea Challenge; hosted the national English contest called Star Awards; organized the Green Summer Campaign and Spring Voluntary Campaign with a lot of meaningful and practical work; issued and implemented the master plan for the development of physical education and school sports in the 2022-2025 period.

10. The University District was made greener, smarter, and friendlier

- The learning zone called NV.B4-1 was put into use at the Thu Duc campus of VNUHCM University of Social Sciences and Humanities with a total surface area of 6,500 sq m. It is considered a project of great significance because it is part of the most challenging area for land clearance in VNUHCM District.

- Some part of the land in the University District was reclaimed for the construction of some sidewalks and roads, such as Marie Curie Street, Ho Xuan Huong Street, Nguyen Du Street and its sidewalks, Isaac Newton Street, Ton That Tung Street, Van Cao Street, Galileo Galilei Street, the Creative Square, and the area surrounding VNUHCM University of Technology.

REACHING FOR GLOBAL STANDARDS, VNUHCM PARTICIPATED IN UNIVERSITY RANKINGS

As a leading higher education system in Vietnam, in recent years, VNUHCM has taken the initiative to continuously affirm its international academic position and reputation by participating in global university rankings such as the Quacquarelli Symonds (QS) and the Times Higher Education (THE).

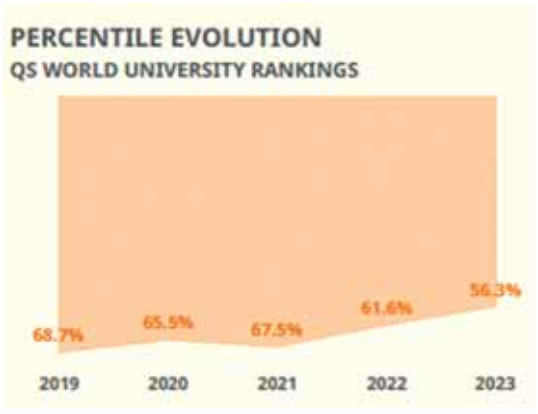
VNUHCM's encouraging results in global university rankings have positively contributed to the process of achieving the goals of quality improvement and meeting global standards.

The general trend of global university rankings

Rankings have been proven to significantly help maintain and build higher-education institutions (HEIs)' positions and reputations, especially in terms of attracting excellent prospective students.

In recent years, policymakers at universities have utilized ranking systems as a benchmark to achieve macro goals such as improving quality, global branding, and maintaining and enhancing the development of the whole system. More than 68% of the key university stakeholders use rankings to plan their branding strategies and advance their academic quality (QS, 2018[1]). According to the IREG Observatory on Academic Rankings and Excellence, last updated in October 2022, there are 51 regional and global university rankings; at the same time, many countries have their own national rankings for HEIs (57 national rankings[2]). The rankings scale tends to expand each year at 10% to 12% to meet HEIs' demand for benchmarks better. As a result, HEIs face a significant challenge, requiring them to make efforts and breakthroughs in order to ensure their sustainable competitive advantage.

In Vietnam, university rankings have received significant attention from the key stakeholders at HEIs. Holding the point of view that "HEIs' rankings are meant to reflect their reputation, quality, and effectiveness according to certain criteria and ensure accessibility of information to relevant organizations and individuals" and the decision that "HEIs may select and participate in reputable national and international ranking systems"3, more and more HEIs in Vietnam are participating and



VNUHCM's rankings are compared to other leading groups of higher education institutions worldwide and in Asia.
Source: **QS World and QS Asia reports**

investing considerably in this activity.

VNUHCM has gradually risen in university rankings

By providing data to trusted organizations such as QS and THE, VNUHCM has proactively participated in university rankings since 2016.

The year 2022 marks a significant development with VNUHCM continuing to rise to the top 56% of the world's best universities (QS World 2023) and the top 22% of the best universities in Asia (QS Asia 2023), moving up 12 places on the QS Asia Ranking 2023, and listed among the best higher education institutions in Asia at the 167th position and in Southeast Asia at the 37th position.

According to QS's results regarding academic reputation, VNUHCM remains the top institution in Vietnam in both the Academic Reputation and Employer Reputation. Regarding these two categories, VNUHCM is near the top 100 in Asia; this is an objective set and continually improved year after year. Specifically, VNUHCM's Academic Reputation ranks 89th, while its Employer Reputation ranks 117th. The results show that the connection between VNUHCM and its stakeholders, especially enterprises, is gaining more and more attention. The improvement in the Employer Reputation score has a direct and positive impact on VNUHCM's results in other rankings, such as QS World or QS GER.

According to program rankings, VNUHCM is the top university in Vietnam in terms of the variety of training disciplines and areas (collectively referred to as "subjects"). Specifically, according to QS World University Rankings by Subject, from having 01 subject ranked in 2021, VNUHCM had 09 subjects in 2022. Moreover, the Petroleum Engineering (of the VNUHCM-University of Technology) moved from the world's top 101-150 to the top 51-100. According to THE rankings, the number of ranked programs consistently increases yearly. Currently, VNUHCM has already had six programs (out of 11) listed in the rankings, doubling the number in 2019.

Especially in 2022, VNUHCM was listed in the top 601+ on the QS Sustainable Development Rankings (QS Sustainability), of which VNUHCM ranked 501+ in the Environmental Impact. This is the latest QS rankings conducted on a global scale, contributing to promoting the participation of higher education institutions to tackle the world's greatest environment, society, and governance (ESG) challenges.

These outstanding achievements were made possible thanks to significant contributions and efforts from many key stakeholders, including leaders, officials, lecturers, students, and alumni in the whole system.

In order to continuously promote the university rankings, in the next period, VNUHCM will implement the policy of investing in and developing research activities, improving teaching quality, and stimulating innovation in order to maintain its pioneering and leading position. For international rankings, VNUHCM continues to implement Project VNU100 in the 2021-2025 period with specific solutions such as strengthening VNUHCM's and its member universities' brand and image promotion; enhancing interactions with academic partners, employers, alumni, and international students; standardizing the ranking practice at VNUHCM and its member universities; and encouraging its member universities to actively participate in other prestigious rankings.

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1. https://www.qs.com/4-reasons-why-rankings-matter-in-higher-education/
2. https://ireg-observatory.org/en/initiatives
3. Article 9, Law on Higher Education Amended in 2018 (Law No.34).

Accreditation of the Environmental and Natural Resources Management program according to ASIIN standards at VNUHCM-University of Technology. *Photo:* **VNUHCM-UT**

Program-level accreditation according to AUN-QA standards at the VNUHCM-University of Information Technology. *Photo:* **VNUHCM-UIT**

33 STUDY PROGRAMS ACCREDITED WITH INTERNATIONAL STANDARDS

In 2022, VNUHCM had 33 training programs accredited with international standards, of which 12 were accredited by AUN-QA, 08 by CTI, 03 by AQAS, 09 by ASIIN, and 01 by FIBAA.

The University of Technology had the most accredited programs, i.e., 21 out of 33, accredited by CTI, AQAS, ASIIN, and FIBAA. The remaining 12 programs accredited with the AUN-QA standards belonged to the University of Social Sciences and Humanities (02 programs), the University of Information Technology (02 programs), and An Giang University (08 programs).

List of the programs accredited with international standards in 2022 (as of November 7, 2022)

No.	Study Programs	Accredited Organizations
VNUHCM University of Technology		
1.	Programme de Formation d'Inge'nieurs d'Excellence au Vietnam (PFIEV) in Mechanical Engineering - Mechatronics Engineering specialization	CTI
2.	Programme de Formation d'Inge'nieurs d'Excellence au Vietnam (PFIEV) in Mechanical Engineering - Aeronautical Engineering specialization	CTI
3.	Programme de Formation d'Inge'nieurs d'Excellence au Vietnam (PFIEV) in Mechanical Engineering - Energy Materials specialization (Previously named: Advanced Materials)	CTI
4.	Programme de Formation d'Inge'nieurs d'Excellence au Vietnam (PFIEV) in Mechanical Engineering - Polymer and Composite Materials specialization	CTI
5.	Programme de Formation d'Inge'nieurs d'Excellence au Vietnam (PFIEV) in Electrical Engineering - Telecommunications specialization	CTI
6.	Programme de Formation d'Inge'nieurs d'Excellence au Vietnam (PFIEV) in Electrical Engineering - Energy System specialization	CTI
7.	Programme de Formation d'Inge'nieurs d'Excellence au Vietnam (PFIEV) in Construction Engineering - Civil Engineering - Building & Energy Efficiency specialization (Previously named: Civil Engineering and Energy)	CTI
8.	Mechanical Engineering (high-quality service program)	AQAS
9.	Chemical Engineering (high-quality service program)	ASIIN

10.	Mechatronics Engineering	AQAS
11.	Mechatronics Engineering (high-quality service program)	
12.	Food Technology	ASIIN
13.	Food Technology (high-quality service program)	
14.	Biotechnology	ASIIN
15.	Industrial Management (high-quality service program)	FIBAA
16.	Applied Science (high-quality service program)	ASIIN
17.	Programme de Formation d'Inge'nieurs d'Excellence au Vietnam (PFIEV) in Construction Engineering - Urban Water Engineering and Management specialization	CTI
18.	Environmental and Natural Resources Management	ASIIN
19.	Environmental and Natural Resources Management (High-quality service program)	
20.	Physics Engineering	ASIIN
21.	Physics Engineering (High-quality service program)	
VNUHCM University of Social Sciences and Humanities		
22.	Tourism management	AUN-QA
23.	Sociology	AUN-QA
VNUHCM University of Information Technology		
24.	Information Security	AUN-QA
25.	Information Technology	AUN-QA
	VNUHCM An Giang University	
26.	Food Technology	AUN-QA
27.	Information Technology	AUN-QA
28.	Literature and Linguistics Teacher Education	AUN-QA
29.	English Teacher Education	AUN-QA
30.	Biology Technology	AUN-QA
31.	Software Engineering	AUN-QA
32.	Mathematics Teacher Education	AUN-QA
33.	English Language	AUN-QA

Program-level accreditation according to FIBAA standards at the VNUHCM-University of Technology. *Photo:* **VNUHCM-UT**

DEVELOPING THE SCHOOL OF MEDICINE INTO THE UNIVERSITY OF HEALTH SCIENCES

In September 2022, the Viet Nam Prime Minister issued Decision No. 1122/QĐ-TTg on approving the policy to upgrade the School of Medicine (SM) to the University of Health Sciences as one of VNUHCM's member universities.

VNUHCM-School of Medicine. *Photo:* **School of Medicine**

This is an important milestone in the development of the School of Medicine in particular and the health sciences at VNUHCM in general. It also opens up a new phase in training high-quality human resources for the fields of medicine, research, and technology transfer in the health sciences, contributing to the refinement of VNUHCM's multidisciplinary model.

In 2009, VNUHCM established the SM, serving as a foundation to develop into the University of Health Sciences afterward. Over the past 13 years, the School of Medicine has proven to be an exemplary example of taking advantage of the strengths of the VNUHCM system to accelerate its development, quickly approaching the top institutions in medical human resources education and health science research in Vietnam.

The SM has organized and participated in many projects to prepare for the upgrade to the University of Health Sciences. Among them, part of the cooperation project with the Medical University of Vienna (Austria), under the support of a team of leading experts from international medical schools (including Austria, the Netherlands, Australia, etc.) helped the SM to implement an advanced integrative medical program according to international standards right from its first cohort.

In addition, the SM has cooperated with leading hospitals in Ho Chi Minh City and neighboring provinces. Through these practical cooperations, the School has gradually integrated into the national health system, sharing human resources and facilities in education and research.

Thanks to VNUHCM's unique mechanism, the SM has been able to attract the participation of leading medical experts and promote the intelligence and talents of these experts in effectively training human resources for health in general and the successors to these experts in particular.

The investment projects of VNUHCM contribute to the completion of the SM's facilities and lay the groundwork for the future development of the University of Health Sciences.

The Health Promotion project of the ASEAN University Network allows the SM to send its representatives to participate in the activities of the AUN-Health Promotion Network, making VNUHCM the pioneer in building a Healthy University model in Vietnam.

Students of the VNUHCM-School of Medicine. *Photo:* **School of Medicine**

Furthermore, the SM has prepared to implement a number of key international projects to increase resources for the establishment of the University of Health Sciences. These are the Vietnam National University Development Project - VNUHCM Subproject - Construction of the School of Medicine, funded by the World Bank; and the Partnership for Higher Education Reform (PHER), funded by USAID.

The SM has served as the foundation for the establishment of the University of Health Science. This helps enhance its status, reputation, and potential as an institution for health science education and research within the VNUHCM system, paving the way for relevant significant advancements and significant contributions to the nation's growth and development.

VNUHCM BOARD OF REGENTS MAKES DECISIONS ON MULTIPLE CRUCIAL MATTERS

VNUHCM University Council plays a vital role in focusing resources and unifying the willpower and goals of the VNUHCM system in order to make strategic decisions for the overall development of the system.

Lecturers attend the 17th meeting of VNUHCM's University Council, Section IV.

On April 26, 2022, Prime Minister Pham Minh Chinh signed Decision No. 521/QD-TTg appointing Assoc. Prof. Dr. Vu Hai Quan, Member of the Party Central Committee, Chancellor of VNUHCM, as Chairman of VNUHCM Board of Regents.

In 2022, VNUHCM made adjustments and added new members to its University Council. Accordingly, Mr. Phan Van Mai, Chairman of the Ho Chi Minh City People's Committee; Mr. Vo Van Minh, Chairman of the Binh Duong Province People's Committee; Assoc. Prof. Dr. Tran Le Quan, President of the University of Science; Assoc. Prof. Dr. Hoang Cong Gia Khanh, President of the University of Economics and Law; and Ms. Phung Thi Dieu Huong, Secretary of the Union's Steering Committee, have all joined VNUHCM's University Council.

During this year, the University Council held 02 regular meeting sessions and 01 extraordinary one to decide on multiple crucial matters of VNUHCM as follows:

VNUHCM's University Council agreed to consolidate the title "chairman" of VNUHCM's University Council; recognized the title of President for the University of Information Technology and the University of Economics and Law; approved the Project on Renovating the Operational Mechanism of the High School for the Gifted; approved the Project of Establishing Enterprises under VNUHCM; approved the Project of Using Public Property at the Dormitory Management Center; reorganized the Planning and Finance Department, the Institute of Management Research and Training; and consolidated the university council members of the member universities, and so on.

By delivering these decisions, VNUHCM's Board of Chancellors directed the member universities to refine their organizational structure toward autonomy, making an important contribution to the development of the whole system.

UNIVERSITY AUTONOMY: MEETING THE REQUIREMENTS OF EDUCATIONAL REFORM, DEVELOPMENT, AND TRAINING

In the context of deep globalization and international integration of today's world, university autonomy is the key, the vital factor, and the inevitable trend to innovate the operating mechanisms of higher education institutions.

The Communist Party and the Government of Vietnam have provided conducive conditions regarding law and mechanism, specifically through Law No. 34/2018/QH14, dated July 1, 2019. The content of this law includes but is not limited to the following areas: expanding the scope and improving the efficiency of university autonomy, reforming the university governance, training management, and Government management during the implementation of university autonomy. Such reforms are groundbreaking and close to international practices, which indicates how firm our national policy is in giving educational institutions more freedom.

On that basis, VNUHCM has reformed its university governance based on autonomy and accountability, completed the legal basis, and encouraged the member universities to change their operating mechanisms. That will enhance their power and the entire system while contributing to the sustainable development of VNUHCM and Vietnam's higher education. Some noticeable activities include:

- VNUHCM and VNU-HN proactively worked with each other and agreed upon their suggestions for the draft Decree on Vietnam National Universities. A document was sent to the Ministry of Education and Training, based on which the Government could review and issue the Decree.

- VNUHCM directed the member universities to establish their University Councils. Up to now, seven VNUHCM member universities have accomplished this task following the quantity and structure regulations.

- VNUHCM completed the legal basis for the members' university autonomy: Guiding them to develop reform projects to their operating mechanisms, enabling their autonomy attached with accountability in organizational structure and personnel, academic expertise, finance, and property.

- VNUHCM's University Council has so far approved 06 Reform Projects to the Operating Mechanisms from 06 qualified university members, namely the University of Technology, the International University, the University of Economics and Law, the University of Information Technology, the University of Social Sciences and Humanities, and the University of Science.

VNUHCM's member universities' reforms into autonomous mechanisms have yielded positive results. Many of them enhanced their positions and gradually asserted their role as multi-disciplinary training institutions that provide high-quality human resources for society. This contributes to the success of the action plan for the VNUHCM Party's Resolution regarding university autonomy, VNUHCM's 2021-2025 Strategic Plan, and meets the expectations of the Communist Party and the Government of Vietnam.

The University of Technology

VNUHCM APPROVES ITS MEMBER UNIVERSITIES AND AFFILIATES' ' 2022-2025 STRATEGIC PLANS

VNUHCM Chancellor approved VNUHCM's Strategic Plan for the 2021-2025 period, with Decision No. 115/QĐ-ĐHQG, dated February 4, 2021. Based on this plan, the member universities and affiliates developed their own ones so as to achieve the central objective presented in VNUHCM's 2021-2025 Strategic Plan, i.e., "Developing VNUHCM's system and completing its model based on university autonomy and accountability."

To achieve this objective, VNUHCM issued an action plan to all its member universities and affiliates, guiding them to build and submit their 2021-2025 Strategic Plans to VNUHCM for approval. The plans lay the foundation for activities conducted in the five-year timeline. Their strategic plans must be centered around the core objective stated in the VNUHCM's 2021-2025 Strategic Plan while reflecting their particular objectives.

In 2021, VNUHCM approved the 2021-2025 Strategic Plans of its 19 member universities and affiliates. In the following year, VNUHCM continued to reach out to the remaining units based on their actual needs so they could build similar plans to accomplish the assigned missions following their developmental directions.

From June 22 to 25, 2022, VNUHCM held an appraisal of 08 member universities and affiliates' 2021-2025 Strategic Plans. The Appraisal Council was facilitated by Assoc. Prof. Vu Hai Quan, Chancellor of VNUHCM, Chairman of the Appraisal Council. Experts in university governance, training, science, technology, foreign affairs & cooperation, and finance were invited to join the meeting so that their constructive and objective feedback could help complete each of these Strategic Plans.

The Appraisal Council pointed out several points to be supplemented and the strengths and competitive environments to be further analyzed. Then, it offered some solutions to promote their advantages and overcome their limitations. The Appraisal Council also suggested that the units focus on the advantages of VNUHCM's prestige and values, as well as the strengths of the interaction, coordination, and complementarity among the units in the whole system.

After receiving feedback from the Appraisal Council, these units revised and resubmitted their plans to VNUHCM for final approval. As a result, in 2022, VNUHCM approved eight strategic plans drawn up for 2022-2025, making up 27 approved plans.

The Executive Committee of the VNUHCM's Party issued a resolution on leading the implementation of VNUHCM's 2021-2025 Strategic Plan. Accordingly, all the units each develop their action plans with specific criteria, based on the level of completion of which they assess how much they have accomplished their own and VNUHCM's objectives every year.

THE UNIVERSITY OF SCIENCE HAS BECOME AUTONOMOUS SINCE 2022

On December 31, 2021, VNUHCM's University Council issued a resolution ON approving the Reform Project to the Operating Mechanism of the University of Science, whereby autonomous activities can be held with stipulated accountability under the Government's Law No. 34 and Decree 99.

VNUHCM Chancellor gives the decision to the members of the University Council. *Photo:* **University of Science**

The University of Science's mission is to become a center for science and technology training, research, and development, providing human resources and products of science and technology as required by the national socio-economic development. With this mission in mind, the University has gradually completed the legal basis, regulations, and infrastructure to adapt to the new mechanism.

When exercising university autonomy, the University is accountable for the following areas: organizational structure and personnel, training activities, scientific and technological research, finance and property, investment in and development of facilities, and external cooperation.

At the initial implementation stage, the University had the opportunity to maximize its existing potential to build and develop an advanced, autonomous university governance model and ensure effective governance, leadership, and management. With the strength of training and scientific research in the fields of basic science and key science and technology, it was proactive in building the structure of professional training, suitable enrollment targets, and responding better to the needs of society. The teaching staff and scientists here became more active in scientific research, eagerly seeking opportunities for technology transfer to benefit the country's innovation. To fulfill the social responsibility of an autonomous public university, it also strived to balance its resources for scholarship policies, creating favorable conditions for disadvantaged students to have learning opportunities.

In addition, the University faces many challenges, such as uncertain revenue sources, possibly reduced training scales, increasing enrollment challenges in the basic sciences, and so on. To deal with such challenges, the University prepared solutions such as a project diversifying training types and programs, close coordination among related fields in terms of organizational structure and personnel, training, research, community service, and international cooperation, along with financial calculation to innovate income policies for officials and employees. Moreover, all the facilities and public assets were utilized and exploited to increase revenues, aiming to alleviate existing difficulties, create changes, and motivate development.

In the coming time, the University's officials and employees will be more determined to complete their tasks, thereby positively contributing to increasing the prestige and value of VNUHCM in the higher education system nationally and worldwide.

THE PHER PROJECT ON HIGHER EDUCATION REFORM

On November 24, 2021, the Partnership for Higher Education Reform (PHER) Project was officially kicked off with the participation of the representative leaders from VNUHCM, VNU-HN, the University of Danang, the University of Indiana, the United States Agency for International Development (USAID), and the World Bank (WB). According to the Agreed Minutes of Negotiations, VNUHCM was chosen to be the governance body of the project.

Launching Ceremony of the Partnership for Higher Education Reform Project

The leadership and management training program at the University of Indiana, USA.

VNUHCM issued Decision No. 1661/QĐ-ĐHQG, dated December 20, 2021, regarding the establishment of the PHER Project Steering Committee and Secretariat.

In 2022, the PHER Project surveyed, assessed, and interviewed VNUHCM, VNU-HN, and the University of Danang regarding the need to improve their governance skills. Among them, the PHER Project and VNUHCM selected 61 candidates (three groups of leaders and two groups of managers) to participate in a leadership and management training program at the University of Indiana, USA.

On July 25 and 26, 2022, VNUHCM and the University of Indiana co-organized the Summer Conference 2022, aiming to build a growing community of university experts. These experts, from the University of Indiana and other international universities, came to meet the leaders, the president boards, and experts from Vietnam universities and discussed the following matters: the roles of public universities in the 21st century, finance and autonomy in universities, sharing management, and digital transformation. The goal of the PHER Project is to build an effective model, propose creative approaches, and nurture partnerships to support VNUHCM, VNU-HN, and the University of Danang in becoming more independent and sustainable with increasing the quality of research and education.

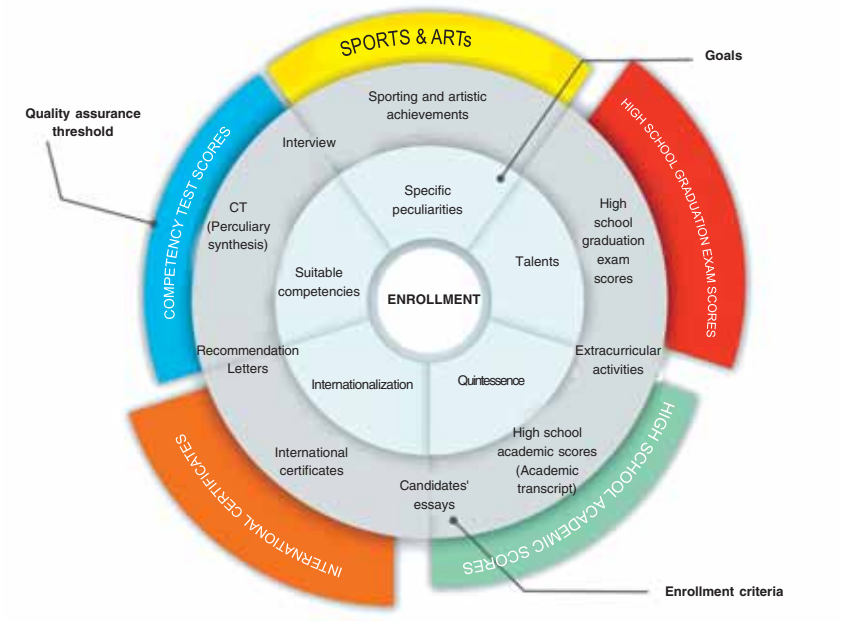
In September and October 2022, the PHER Project, in collaboration with the Project Coordination Committee of VNUHCM, VNU-HN, and the University of Danang, organized two courses in research on leadership development and university governance at the University of Indiana. Participating in the program were 53 representatives of three universities, including the members of the Director Board, Chairpersons of the University Councils, Presidents and Vice Presidents of the member universities, Heads of affiliates, etc. They are the critical and pioneering figures in the process of governance and institutional reform at the three universities. The reform is meant to meet the requirements of higher education modernization, turning Vietnam's public higher education institutions into leading universities in the region and the world.

The course syllabi revolved around 04 main pillars: Governance Reform, Teaching Quality Improvement, Research and Innovation Strengthening, and University-Business Connection Enhancement.

These two programs serve as the foundation for the PHER Project's higher education reform in the coming year of 2023.

ENROLLMENT REFORM AT THE UNIVERSITY OF TECHNOLOGY

It is highly urgent to reform university enrollment and necessary to develop appropriate evaluation methods that ensure equality among candidates, where the enrolled ones are those whose academic performance meets the university strategic goals of excellent training and internationalization.



An overview of the synthetic enrollment method of the University of Technology. *Source:* **Enrollment Report according to VNUHCM's undergraduate enrollment reform plan in the 2021-2025 period**

Based on the orientation of VNUHCM on the enrollment reform, and in comparison with the mainstream enrollment methods of the world's top universities, in 2022, apart from applying the existing enrollment methods, the University of Technology piloted the synthetic evaluation of their academic performance, personal achievement, social work, music, physical education, and art activities.

Synthetic enrollment method

In application of this method, candidates are evaluated based on the following criteria:

- Academic ability (90%): There are three components, i.e., the learning results at high school (HS), the high school graduation exam scores, and the Competency Test scores; the weight of the components and the rules for converting points are decided by the University Enrollment Committee;

- Personal ability (5%): It is based on the prizes of the National Excellent Student Contests, Science and Technology Contests, foreign language proficiency, international certificates, and other academic awards;

- Social work, music, physical education, and art activities (5%).

Enrollment results following the synthetic enrollment method

In 2022, Ho Chi Minh City University of Technology applied the synthetic evaluation to approximately 70-90% of the 5,000 full-time university applications. The total number of candidates registered by this method was 13,922 for about 3,500 slots, reaching a rate of about 400%.

The figures of candidates admitted using the synthetic method showed that 43.2% of those with a Competency Test score of 800 points and above were among the top 6% of candidates with the highest Competency Test scores in 2022 and are the top 43% with high school graduation exam scores of 26 points (66.7% with 25 points) (according to the combination of enrollment registration). Although this was the first year of the new method's application, all the admitted students had outstanding academic performances.

Orientation on enrollment methods from 2023

From 2023, the University of Technology will reform its enrollment methods with the following focuses:

- Continuing to deploy and expand the VNUHCM Competency Test so that it can become an important exam in the enrollment process at the University of Technology in particular and VNUHCM's member universities in general, then it can be employed as a national exam.

- Improving the enrollment process by using the synthetic evaluation method to admit suitable candidates with appropriate skills and attitudes in line with the University's occupational goals.

The University will promote its enrollment activities, providing adequate information to candidates and society and encouraging students to focus on developing both their learning and personal ability in research, academic competitions in high school, social work, music, physical education, and art activities. That is to prepare them to become excellent individuals and create high-quality human resources in the future.

NEW STUDY PROGRAMS LAUNCHED SATISFY THE NEEDS OF SOCIETY AND LABOR MARKETS

With its mission of training high-quality human resources and fostering talents able to lead and promote socio-economic development, VNUHCM has always been one of Vietnam's higher educational institutions that pioneer in orienting and launching new study programs to catch up with the social development trends for years.

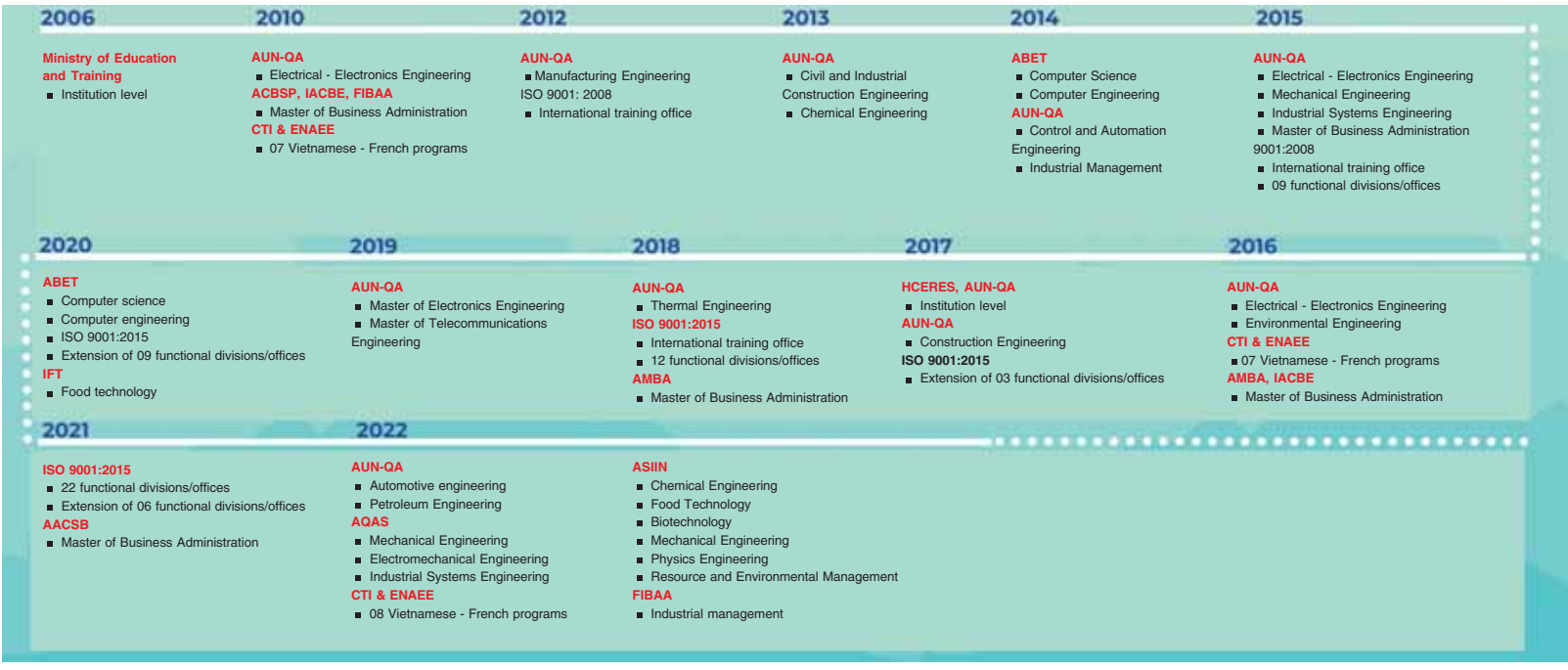
VNUHCM students

Recently, the rapid development of science and technology, especially artificial intelligence (AI), has changed several traditional occupations and created many new ones. This change required VNUHCM to proactively update and design new study programs which fit the development in a positive and interdisciplinary way. Those study programs were developed after consultation with many employers, experts, and worldwide advanced study programs to meet the needs of both present and future society. There are some popular programs as follows (see the table):

Up to now, VNUHCM has completed the Regulation on launching study programs in accordance with the Law of Higher Education and guiding documents by the Ministry of Education and Training. The Regulation creates favorable chances for VNUHCM member universities and affiliates to autonomously operate new interdisciplinary study programs of their own or in combination with each other so that they can share the pooled resources. Henceforth, it promotes the operation of new study programs in the VNUHCM system to train and provide high-quality human resources to meet social needs and towards international integration.

In 2022, in addition to launching new study programs, VNUHCM continued to implement the dual-degree and BS-MS (Bachelor's-Master's combined degree) programs; expand the scale of graduate education; add more practical and extracurricular activities for students to have hands-on experience; enhance study programs to foster and improve the competencies and professional knowledge of its lecturers; and implement study programs complying with the requirements of localities and businesses. VNUHCM also maintained its enrollment methods and set at least 45% of the admission quota for the Competency Test.

Ord.	Level	Program code	Program title	Higher education institution
1	Bachelor	7440107	Electronic Physics and Informatics Technology	University of Science
2	Bachelor	7340208	Financial Technology	University of Economics and Law
3	Master	8480107	Artificial Intelligence	University of Science
4	Dotoral	9480107	Artificial Intelligence	University of Science
5	Master	8460108	Data Science	University of Science
6	Dotoral	9310630	Vietnamese Studies	University of Scoial Sciences and Humanities



The University of Technology's Achievements in education qualify accreditation as of 2022.

INTERNATIONALIZATION OF HIGHER EDUCATION THROUGH INTERNATIONAL ACCREDITATION

The internationalization of higher education has helped improve the quality of the learning experience and promote the integration of Vietnamese higher education in the region and the world. To catch up with the process, the University of Technology (UT) built a Development strategy for the 2021-2025 period, vision to 2030, which considers the internationalization of higher education its major goal.

In order to pursue this strategy, UT concentrated its resources on implementing study programs, scientific research, and creative innovations and achieving international quality assurance.

Meeting European and American standards

The UT's quality assurance orientation is to meet international quality standards, notably European and American ones so that it can diversify the program- and institution-level quality accreditation.

In 2021, the UT actively sought prestigious quality assurance organizations being members of the European Network for Quality Assurance in Higher Education (ENQA) and accredited by the German Accreditation Council (GAC). For instance, they are ASIIN (Accreditation Agency for Study Programs in Engineering, Informatics, Natural Sciences, and Mathematics), AQAS (Agency for Quality Assurance by Accreditation of Study Programmes), and FIBAA (Foundation for International Business Administration Accreditation).

The UT conducted the quality assessment/ accreditation for 20 study programs in 2021 and achieved the official certifications in 2022 as follows:

- ASIIN assessed the Chemical Engineering, Biotechnology, Food Technology, Natural Resources and Environmental Management, Engineering Physics, and Technical Mechanics programs.

- FIBAA assessed the program in Industry Management.

- AQAS assessed Mechanical Engineering, Mechatronics Engineering, and Industrial and Systems Engineering programs.

- AUN-QA assessed the Car Engineering and

Petroleum Engineering programs.

- CTI assessed eight of the PFIEV programs.

Notably, six and three listed study programs accredited with ASIIN and AQAS standards, respectively, were the first programs achieving the certifications of compliance with these two international standards after the Ministry of Education and Training approved the ASIIN and AQAS to conduct the assessment in Vietnam.

The international accreditation brings mutual benefits.

As of November 2022, the UT had 51 study programs (35.17%) (excluding programs re-assessed and accredited with many sets of standards) accredited according to the standards of different international assessments like ABET, AQAS, ASIIN, FIBAA, AUN-QA, CTI, and so on.

Accredited study programs bring enormous benefits to both the students and the University. Graduates of programs meeting the international accreditation standards have more advantages in applying to global businesses. The international quality assurance organizations the UT joined are members of the European Network for Quality Assurance in Higher Education. So, its students have been granted great chances to transfer credits, access scholarships, gain postgraduate admission to prestigious international universities, and apply for jobs in European countries and others.

The international accreditation of the study programs is a commitment to the UT's training quality given to the students and their parents, employers, and society. Besides, it helped the UT build a "culture of quality" for every activity, which partly promotes and enhances the University's image and values at home and abroad.

The University of Technology presents the certificates to the study programs accredited by the ASIIN, AQAS, and AUN-QA.

The University of Technology presents the certificates to the study programs accredited by the ASIIN and FIBBA.

The University of Technology presents the certificates to the study programs accredited by the CTI.

An Giang University

AN GIANG UNIVERSITY STRONGLY RISES AND BECOMES A REMARKABLE MEMBER OF VNUHCM

On August 13, 2019, the Prime Minister signed Decision No. 1007/QĐ-TTg transferring An Giang University as a VUNHCM member.

The external AUN-QA assessment at An Giang University

After three years of being a VNUHCM member university, An Giang University (AGU) has had an opportunity to engage in and benefit from many joint activities and projects of VNUHCM. Especially, AGU met the standards of a higher educational institution and became an associated member of the ASEAN University Network - Quality Assurance (AUN-QA).

With the determination to enhance the quality of its staff, study programs, and scientific research, AGU has implemented many solutions to improve the human resources, management ability, finance, infrastructure, information system, and

The external AUN-QA assessment at An Giang University

management and administration capacity in accordance with VNUHCM's regulations and its realities. As a result, it gained many positive achievements, such as:

1. AGU's officials and employees gradually improved in quality and quantity from 786 (including 50 Ph.D. holders and 444 masters) in 2018 to 806 (with 91 Ph.D. holders and 396 masters) in 2022.

An Giang University

2. AGU conducted the internal assessment for 26 study programs, of which 8 underwent the external assessment and were accredited with the AUN-QA standards. They are Biotechnology, Information Technology, Food Technology, Software Engineering, English Language Teacher Education, English Linguistics, Literature and Linguistics Teacher Education, and Mathematics Teacher Education. The results demonstrate a firm commitment to AGU's training quality to society and employers.

3. The number of research projects, notably at the VNUHCM level, considerably increased to 32. Additionally, the number of articles published in international journals significantly grew from 45 to 125 between 2018 and 2021.

4. Specifically, AGU boosted its international cooperation. Recently, it has conducted two major international projects: a USD 9.9 million Project on Strengthening agricultural higher education of VNUHCM and an AUD 4,386 million Project on Planning and Establishing a Sustainable (SRP) Smallholder Rice Chain in the Mekong Delta. These projects contributed to the Mekong Delta's sustainable development to adapt to climate change and social change. They also established and built a sustainable rice value chain in this region.

As a VNUHCM member, AGU is making efforts to vigorously develop into one of the universities boasting their research and technology transfer, especially in agriculture. It has also implemented internationally recognized new branches of science related to climate change and sustainable development.

TO BOOST ONLINE TEACHING EFFICIENCY

In 2022, VNUHCM rewarded 15 lecturers and lecturer groups for their excellent performance in online teaching. With their experience, the awarded shared their solutions and initiatives for improving online teaching quality.

Dr. Vo Thi Tuyet Giang, *lecturer in Water resources engineering and management at the Faculty of Construction Engineering at the University of Technology*

The virtual platform is a solution for smart online teaching, as digital lesson plans can be uploaded and shared through the LMS (learning management system) platform with the assistance of advanced devices and technology. Not only does this teaching method save time, but it also helps achieve expected learning outcomes.

Gradually, online teaching will change from a temporary solution in the COVID-19 pandemic to a chance for education to find a new direction in the fourth industrial revolution era.

For an effective online class, it is essential to design the course in diverse forms of teaching and learning based on an evolving roadmap so that students can easily and actively join the class anywhere and anytime. Subsequently, I [Dr. Giang] created an asynchronous learning environment through the BKeL system of the UT (www.elearning.hcmut.edu), allowing students to perform self-study at their own pace and on a personal schedule. The lesson completion requirements were always set to boost their enthusiasm and generate learning motivation. Besides, I employed a synchronous learning environment through online classes in a weekly fixed schedule to interact with students face-to-face. It also promoted our detailed discussions on related topics.

***MSc. Do Thi Thanh Ha**, lecturer in Computer vision and Smart cybernetics at the Faculty of Information Technology at the University of Science*

In addition to serving the majority of learners without any limits on their participation, space, and time, online teaching helps learners flexibly choose suitable study programs and learning paths. They can also review previous lessons several times. Some lecturers have built animated lessons with clear illustrations for each topic, which helps students visualize the lessons as conveniently as, or possibly even more than, traditional learning. Explanation and assistance become flexible in form and time, making students more active and lowering their communication barriers. However, not all lecturers can perform online teaching effectively; and not all students can study online well.

In my view, to perform online teaching effectively, lecturers need to modify their lesson plans proactively and design teaching activities appropriately. Specifically, the essential and core parts of the lessons should concentrate in online classes. Traditional teaching methods should be minimized and partly replaced with guidance and orientation or discussion on clarifying problems, question-solving, and explanation for students to broaden their knowledge. Some lesson contents can be designed into short videos for learners to preview as topics for an open discussion during online hours. Furthermore, interactive activities such as group activities, discussions, presentations, and counterarguments should be added. It is also necessary to deploy different devices in online teaching.

M.D. Doctor Nguyen Thanh Tuan, *lecturer in Ear, Nose and Throat at VNUHCM School of Medicine*

To have a practical online class, lecturers have to master assistant devices and information technology to create exciting and attractive lessons, interact with students the most naturally, and troubleshoot some unwanted issues during online hours. Besides, self-discipline, enthusiasm, and activeness are key characteristics of lecturers, and they should give some orientation to help learners set specific goals and be more active in learning. Lecturers and students need flexible interactions and communication through online platforms to create cohesion. Last but not least, the concern and support of higher education institutions are also crucial.

Dr. Nguyen Hoang Anh, *lecturer in Finance at the Faculty of Finance - Banking at the University of Economics and Law*

I believe two factors are boosting online teaching efficiency. The first one is the preparation of elaborate and diverse materials and assessment methods to ensure students' continuous interactions and excitement and uplift their spirit of self-study. Technology and educational application development has allowed teachers to create a learning environment as vivid and creative as a traditional class. The second one is that lecturers need to seek joyfulness in the online course and emphasize students' situations. Students may share the same uncomfortable feelings with those of their teachers, and that means they feel like they were speaking to themselves in front of the screen in some first online classes.

Moreover, not all students can afford online courses. I usually spend five to seven minutes before the lesson to let my students listen to music and anonymously share their emotions and thoughts through Slido or Jamboard apps in my online class. These activities may not relate to the lessons, but they can generate cohesion and motivate students to focus on the lecture better.

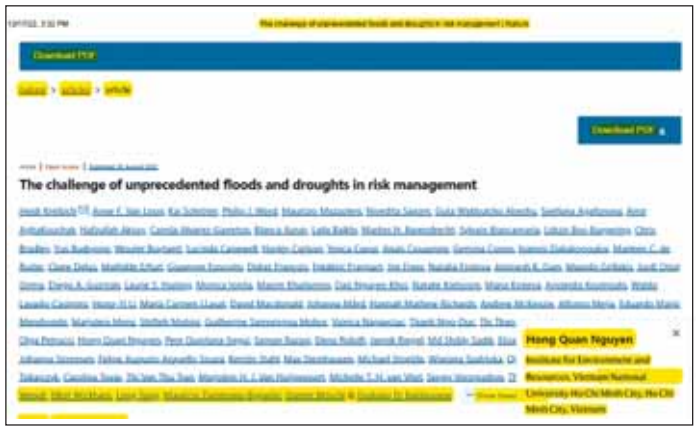
Dr. Nguyen Hoang Anh

GREAT SUCCESSES IN SCIENCE, TECHNOLOGY, AND CREATIVE INNOVATION

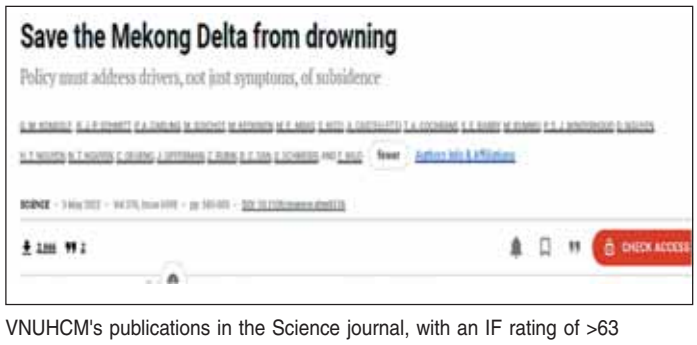
VNUHCM achieved a number of notable successes in science, technology, and creative innovation performance over the 2021-2025 period by putting its strategic plan into practice, including publications in international journals, applied products, university rankings, etc.

VNUHCM had 1,913 published articles indexed in the Scopus database by December 2022. More publications kept showing up in reputable journals, including Nature, Science, Advanced Functional Materials, and The Lancet Neurology. The Scopus database shows that 7,837 articles were published by VNUHCM between 2017 and 2022.

VNUHCM was placed #801-1,000 in the QS World University Rankings 2023, #167 in the QS Asia University Rankings 2023, and #37 among universities in Southeast Asia, according to the most recent rankings of QS, an organization specializing in analyzing the world's higher education institutions. In the THE World University Rankings 2022, VNUHCM maintained its #401+ ranking among the top institutions with less than 50 years of operation. VNUHCM was named in the rankings for three years in a row.



VNUHCM's publications in the Nature journal, with an IF rating of >69



VNUHCM's publications in the Science journal, with an IF rating of >63

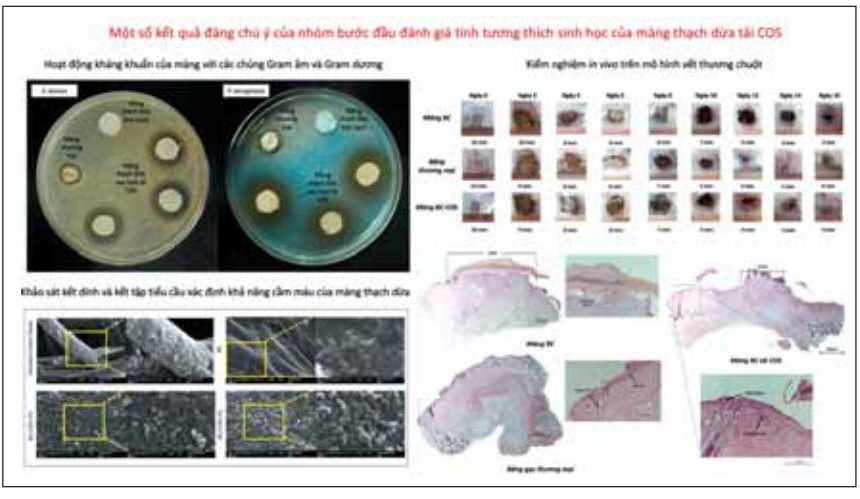
The member universities and affiliates attempted to produce products based on applied research in 2022, and successfully deployed 636 contracts for science and technology services, totaling VND 154.1 billion in revenue. VNUHCM researchers submitted 35 intellectual property applications and obtained two patents in the United States.

The signing of the Cooperation Program for the 2022-2025 period between VNUHCM, the Ministry of Science and Technology, and the Ho Chi Minh City People's Committee to strengthen cooperation in directing and administering science and technology activities in Ho Chi Minh City was one of the numerous significant cooperation activities that took place in 2022. Conferences are another critical means of cooperation. They were conferences entitled "Sustainable Development of the Real Estate Market in the New Context," co-held by the Party Central Committee's Economic Commission and VNUHCM; "Policies of Supporting Enterprises in Technology Invention, Transfer and Innovation" jointly organized by VNUHCM, Ministry of Science and Technology and Ministry of Foreign Affairs' State Committee for Overseas Vietnamese; "Developing Science and Technology for Industrialization and Modernization in the Context of Socialist-oriented Market Economy and International Integration" co-held by the Party Central Committee's Commission for Propagation and Education Commission, Ministry of Science and Technology, the Vietnam Union of Science and Technology Associations and VNUHCM, etc.

In 2022, many VNUHCM researchers received awards. Dr. Ha Thi Thanh Huong received the L'Oral-UNESCO for Women in Science Young Talents Award 2022; Prof. Dr. Vo Van Toi was named an Honorary Life Member of the International Federation for Medical and Biological Engineering (IFMBE); Assoc. Prof. Dr. Le Thi Kim Phung and Assoc. Prof. Dr. Bui Xuan Thanh received the Hitachi Global Foundation's Best Innovation Award and Asia Innovation Award 2022; Prof. Dr. Tran Doan Son, People's Teacher, received the Ho Chi Minh Prize for Science and



Equipment for the automatic manufacture of rice paper; Equipment for the manufacture of pho and vermicelli; Cashew processing line (from left)



The dressing created with chitosan oligomer and coconut jelly

Technology; Prof. Dr. Nguyen Thi Thanh Mai received the Kovalevskaya Award; Assoc. Prof. Dr. Nguyen Thi Le Thu received the Ta Quang Buu Award; Drs. Le Thanh Long, Nguyen Ly Sy Phu, and Tran Thi Nhu Hoa received the Golden Globe Science and Technology Award, etc.

The year 2022 also saw VNUHCM students win numerous awards at international academic competitions, including first place in the Maker to Entrepreneur Program in 2022; two top prizes in the USAID BUILD-IT & Dow Vietnam STEM Program eProjects contest; certificates from the Global Satellite Tracking Initiative; the top spot in the global ranking of the IEEExtreme Programming Competition 16.0; the champion in the International MYOR 2022 in Singapore, and numerous high awards at the National Student Biology Olympiad.

Remarkable applied products

Cooperation programs on scientific research, technology transfer, and training in response to requests from localities and enterprises are also used to boost VNUHCM's community engagement and service initiatives. Following are a few examples of remarkable applied products in 2022:

A variety of equipment for the production and processing of Vietnamese agricultural products and edible food wrap developed by the University of Technology's research groups, for example: an automatic production line for net spring roll wrappers; vermicelli production; export cashew nut kernel processing technology; coffee cherry processing; the use of an AI/IoT-based solution to address environmental management issues at the Vietnamese Tram Chim National Park; high-performance aerogel composite from agricultural by-products used in construction and environmental treatment; edible food wrap composed primarily of cassava starch that is easily soluble in hot water and may replace nylon spice packets in instant pho and noodles products, etc.

Hemostatic dressing from coconut jelly combined with chitosan oligomer: Research teams from the International University transferred their research work on developing hemostatic dressing from coconut jelly combined with chitosan oligomer to the Department of Science and Technology and the Department of Health of Ben Tre Province. They also transferred the method of preserving fresh medicinal herbs in the form of tubers (Ngoc Linh ginseng) in Kon Tum Province to the province's Department of Science and Technology and Dak To Forestry Company.

The stem cell medicine developed by a University of Science's research group: This is a notable product of the "off-the-shelf" stem cell technology. The powerful "off-the-shelf" stem cell technology is booming and also as important as compared to mobile and artificial intelligence technologies.

Experimental stem cell medications from human body fat produced at the Stem Cell Laboratory

IMPROVING CAPABILITY FOR INTERNATIONAL PUBLICATION

VNUHCM has made an effort to have 15,000 international publications by the year 2025 in order to fulfill the Science and Technology Strategic Plan for the 2021-2025 period, with a vision for 2030.

Annual growth in the number of international publications

The rate of publications in international journals by VNUHCM, as indexed in the Scopus database between 2012 and 2021, climbed steadily by an average of over 30% per year. Of these, the rate of outstanding articles in Q1 and Q2 ranked journals of VNUHCM was 67% and tended to rise yearly.

In terms of noteworthy publications, there were a total of 7,837 articles published in the ISI/ Scopus-indexed international journals between 2017 and 2022. The ratio of articles to Ph.D. holders gradually increased to 1.23 and 1.33 in 2020 and 2021, respectively. By December 2022, 1,913 VNUHCM international publications were found in the Scopus database, which was 77% of its 2022 goal. Particularly in fundamental research, VNUHCM scientists collaborated with domestic and international organizations to publish research findings in some of the most prestigious scientific publications in the world, including Science, Nature, and others. Many publications were published in renowned journals with an IF rating of over 69.

Enhanced positions in international rankings

The aforementioned international publications have significantly impacted academic reputation, publishing, and citation categories, which has helped elevate VNUHCM's standing in global university rankings. VNUHCM was ranked #801-1,000 in the QS World University Rankings 2023, #167 in the QS Asia University Rankings 2023, and #37 in Southeast Asia. According to the QS's rankings, VNUHCM's standing among Asian universities has improved over time, moving from 33.3% in 2018 to 22% of the best higher education institutions in this region.

According to the above rankings, VNUHCM maintained its position as the top university in the nation in the categories of academic reputation at position #89 and employer reputation at position #117, making it one of the universities in Asia with the best reputation.

VNUHCM retained its position as the top university with fewer than 50 years of existence in the THE World University Rankings at #401+. It has been included in the rankings for the past three years in a row as of 2022.

Growth of global academic networks

VNUHCM has issued a number of policies on encouraging cooperation activities for the implementation of international projects and setting up international academic networks, including: (i) Cooperation projects with MINATEC of France (building and developing nanoscience and technology); The University of California at Los Angeles (UCLA) and the University of California at Berkeley (UCB) of the United States (growth of research groups in the field of nanostructured and molecular materials); (ii) Formation and development of cancer studies; Cooperation projects with Synopsys, Toshiba, etc. (development of IC technology); Intel Corporation (training and transfer of high-performance computing technologies); the Netherlands (climate change program), etc.

Figure 1: In the statistics of the Scopus database, the rate of outstanding articles in Q1 and Q2 ranked journals of VNUHCM is 67% and tends to rise yearly.

Table 1: Statistics of VNUHCM's international publications listed in the Scopus database in the period from 2017 to December 2022

	2017	2018	2019	2020	2021	12/2022
Scopus-indexed publications	611	717	1,011	1,539	1,861	1,913
Growth rate (%/year) An average increase of 32%/year		17.4	41	52.2	20.9	-
International publications/Ph.D. holder	0.65	0.70	0.82	1.23	1.33	-

VNUHCM GRANTED TWO INTERNATIONAL PATENTS BY THE UNITED STATES

By December 2022, VNUHCM received two patents from the United States Patent and Trademark Office in materials technology and environmental technology.

VNUHCM has recently made several requests to the United States for foreign patents; four are currently being examined and evaluated. In 2023, it is anticipated that VNUHCM will secure three more foreign patents.

"Metal-Organic Frameworks (MOFs) and Methods of Synthesizing and Using the Same" and "A Submerged Tubular Membrane Distillation (STMD) Method and Apparatus for Desalination" are two notable VNUHCM inventions that were granted patents in the United States in 2022.

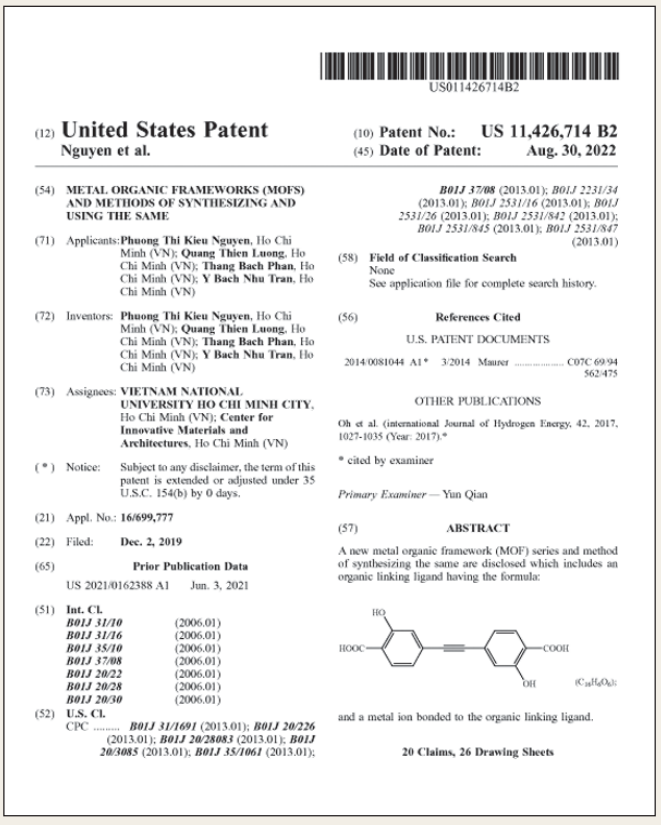
The invention "MOFs and Methods of Synthesizing and Using the Same" was conducted by Nguyen Thi Kieu Phuong, Tran Bach Nhu Y, Luong Thien Quang, and Phan Bach Thang. The new MOFs' ability to catalyze cyclic carbonate and absorb CO2 makes them potential solvents and sustainable alternatives to the hazardous processes now employed in the chemical industry. The use of this invention will significantly reduce adverse effects on the environment and human health.

VNUHCM is the owner of the patient "MOFs and Methods of Synthesizing and Using the Same."

The invention known as "An STMD Method and Apparatus for Desalination" was created by Bui Xuan Thanh, Nguyen Cong Nguyen, and Ngo Thi Tra My. The procedure and tools for desalinating salt water are described in the invention's description. These tools are beneficial to people living on islands, along coastlines, and in locations with a lot of mangroves since they make it easier for them to go about their everyday lives.

The "An STMD Method and Apparatus for Desalination" invention was owned by VNUHCM.

Because the United States imposed the highest and harshest standards for patent applications, the patents awarded to VNUHCM by the United States demonstrated the exceptional degree of scientific, technical, and technological research conducted by VNUHCM. As a result of this acknowledgment, VNUHCM now has more opportunities and advantages when working with several nations and major corporations throughout the world.



US011426714B2

(12) **United States Patent**
Nguyen et al.

(10) **Patent No.: US 11,426,714 B2**
(45) **Date of Patent: Aug. 30, 2022**

(54) **METAL ORGANIC FRAMEWORKS (MOFS) AND METHODS OF SYNTHESIZING AND USING THE SAME**

(71) Applicants: **Phuong Thi Kieu Nguyen**, Ho Chi Minh (VN); **Quang Thien Luong**, Ho Chi Minh (VN); **Thang Bach Phan**, Ho Chi Minh (VN); **Y Bach Nhu Tran**, Ho Chi Minh (VN)

(72) Inventors: **Phuong Thi Kieu Nguyen**, Ho Chi Minh (VN); **Quang Thien Luong**, Ho Chi Minh (VN); **Thang Bach Phan**, Ho Chi Minh (VN); **Y Bach Nhu Tran**, Ho Chi Minh (VN)

(73) Assignees: **VIETNAM NATIONAL UNIVERSITY HO CHI MINH CITY**, Ho Chi Minh (VN); **Center for Innovative Materials and Architectures**, Ho Chi Minh (VN)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/699,777**

(22) Filed: **Dec. 2, 2019**

(65) **Prior Publication Data**

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(51) **Int. Cl.**

B01J 31/10	(2006.01)
B01J 31/16	(2006.01)
B01J 35/10	(2006.01)
B01J 37/08	(2006.01)
B01J 20/22	(2006.01)
B01J 20/28	(2006.01)
B01J 20/30	(2006.01)

(52) **U.S. Cl.**
CPC ***B01J 31/1691*** (2013.01); ***B01J 20/226*** (2013.01); ***B01J 20/28083*** (2013.01); ***B01J 20/3085*** (2013.01); ***B01J 35/1061*** (2013.01); ***B01J 37/08*** (2013.01); *B01J 2231/34* (2013.01); *B01J 2531/16* (2013.01); *B01J 2531/26* (2013.01); *B01J 2531/842* (2013.01); *B01J 2531/845* (2013.01); *B01J 2531/847* (2013.01)

(58) **Field of Classification Search**
None
See application file for complete search history.

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Primary Examiner — Yun Qian

(57) **ABSTRACT**

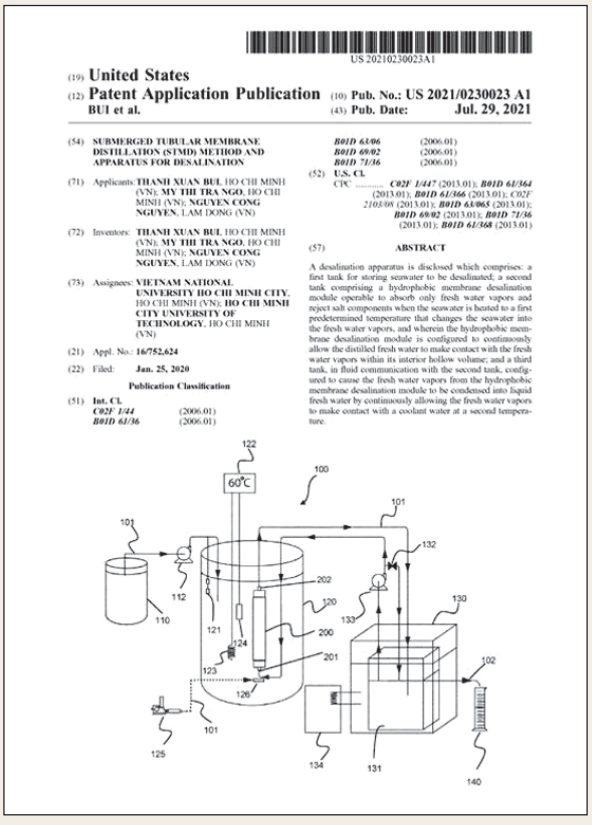
A new metal organic framework (MOF) series and method of synthesizing the same are disclosed which includes an organic linking ligand having the formula:

$(C_{16}H_8O_6)$;

and a metal ion bonded to the organic linking ligand.

20 Claims, 26 Drawing Sheets

The VNUHCM-owned patent "MOFs and Methods of Synthesizing and Using the Same"



US 20210230023A1

(19) **United States**
(12) **Patent Application Publication**
BUI et al.

(10) **Pub. No.: US 2021/0230023 A1**
(43) **Pub. Date: Jul. 29, 2021**

(54) **SUBMERGED TUBULAR MEMBRANE DISTILLATION (STMD) METHOD AND APPARATUS FOR DESALINATION**

(71) Applicants: **THANH XUAN BUI**, HO CHI MINH (VN); **MY THI TRA NGO**, HO CHI MINH (VN); **NGUYEN CONG NGUYEN**, LAM DONG (VN)

(72) Inventors: **THANH XUAN BUI**, HO CHI MINH (VN); **MY THI TRA NGO**, HO CHI MINH (VN); **NGUYEN CONG NGUYEN**, LAM DONG (VN)

(73) Assignees: **VIETNAM NATIONAL UNIVERSITY HO CHI MINH CITY**, HO CHI MINH (VN); **HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY**, HO CHI MINH (VN)

(21) Appl. No.: **16/752,624**

(22) Filed: **Jan. 25, 2020**

Publication Classification

(51) **Int. Cl.**

C02F 1/44	(2006.01)
B01D 61/36	(2006.01)
B01D 61/06	(2006.01)
B01D 69/02	(2006.01)
B01D 71/36	(2006.01)

(52) **U.S. Cl.**
CPC ***C02F 1/447*** (2013.01); ***B01D 61/364*** (2013.01); ***B01D 61/366*** (2013.01); *C02F 2103/08* (2013.01); ***B01D 61/065*** (2013.01); ***B01D 69/02*** (2013.01); ***B01D 71/36*** (2013.01); ***B01D 61/368*** (2013.01)

(57) **ABSTRACT**

A desalination apparatus is disclosed which comprises: a first tank for storing seawater to be desalinated; a second tank comprising a hydrophobic membrane desalination module operable to absorb only fresh water vapors and reject salt components when the seawater is heated to a first predetermined temperature that changes the seawater into the fresh water vapors, and wherein the hydrophobic membrane desalination module is configured to continuously allow the distilled fresh water to make contact with the fresh water vapors within its interior hollow volume; and a third tank, in fluid communication with the second tank, configured to cause the fresh water vapors from the hydrophobic membrane desalination module to be condensed into liquid fresh water by continuously allowing the fresh water vapors to make contact with a coolant water at a second temperature.

The patent entitled "An STMD Method and Apparatus for Desalination."

KOVALEVSKAYA AWARD HONORS VNUHCM FEMALE CHEMISTRY PROFESSOR

In Hanoi, on May 16, the Kovalevskaya Award 2021 was presented to Prof. Dr. Nguyen Thi Thanh Mai, Vice President of the University of Science. This honor is dedicated to female scientists who have made outstanding contributions to research and practical application.

Prof. Dr. Nguyen Thi Thanh Mai (second from left) is honored at the Kovalevskaya Award 2021. *Photo courtesy of* **Prof. Dr. Nguyen Thi Thanh Mai**

Assoc. Prof. Dr. Vu Hai Quan, Chancellor of VNUHCM, honors and congratulates Prof. Dr. Nguyen Thi Thanh Mai. *Photo*: **Thien Thong**

Prof. Dr. Thanh Mai has so far discovered hundreds of compounds with new structures and diverse biological effects from medicinal herbs; chaired and completed 14 scientific research projects at various levels, including ten ministerial projects (seven at VNUHCM and three at the National Foundation for Science and Technology Development, or NAFOSTED), and four provincial projects. She has also published 141 scientific articles, including 75 articles in international journals and 66 others in domestic journals. Additionally, she has had many publications in the form of monographs and textbooks, as well as two patent applications approved by the Intellectual Property Office of Vietnam. She also served as group leader for the strong research group for VNUHCM's Pharmaceutical Chemistry Research Program in 2020.

As a devoted medicinal herb researcher, Prof. Dr. Thanh Mai has collaborated with Toyama University (Japan) in studying medicinal herbs and active components that cause cytotoxicity in pancreatic cancer in an environment lacking nutrients. She and her research group found several active components with previously unknown structures as a result of their combined study. Particularly potent pancreatic cancer cytotoxic effects are produced by the active components of autumn crocus grown in An Giang Province. "We have identified 21 new compounds and 36 active components with potent cytotoxic activity against pancreatic cancer. We have effectively extracted and produced nanotechnology products from them that can be utilized to treat gastrointestinal cancer," said Prof. Dr. Thanh Mai.

The research findings by Prof. Dr. Thanh Mai and her group provide strong scientific evidence for using medicinal herbs to heal ailments. She affirmed: "Our health support products are now under research for sale in the market. Moreover, more focus research will be done to develop the herbs into drugs for disease treatment." It is also Prof. Dr. Thanh Mai's last-ditch endeavor following her fundamental investigation.

Prof. Dr. Nguyen Thi Thanh Mai instructs graduate students on their research projects. *Photo:* **NVCC**

Prof. Dr. Vo Van Toi instructs the students on using functional near-infrared spectroscopy (fNIRS).

Prof. Dr. Vo Van Toi: "I CONSIDER MY PURPOSE IN LIFE TO BE SCIENTIFIC RESEARCH AND EDUCATION"

Prof. Dr. Vo Van Toi, former dean of the Faculty of Biomedical Engineering at the International University, is credited with founding the science of biomedical engineering in Vietnam and has made considerable contributions to the cause of education and scientific research.

Prof. Dr. Vo Van Toi received the Award of International Federation for Medical and Biological Engineering (IFMBE) Honorary Life Member last June in Singapore for his unceasing efforts.

** What does the IFMBE Honorary Life Member Award mean to you?*

- To be honest, I didn't have many strong feelings when it came to this award. However, in terms of the advancement of this field, I take immense pride in the fact that this prize provides indisputable proof that the science of biomedical engineering in Vietnam has already gained recognition on a global scale. It is the fruit of our efforts that motivates other biomedical engineering professionals and me to advance professionally every day.

Students benefit significantly from this Award as it inspires them with hope for the subject's future and gives them confidence in their decision to study biomedical engineering in Vietnam. I suppose this is what I'm most proud of. Finally, the designation also creates prospects for collaboration with nations with the world's most advanced biomedical engineering disciplines.

** How do you feel about this work after spending almost a lifetime conducting scientific research?*

To me, conducting scientific research is a fun game, and I always become immersed in the discovery, research, and fulfillment cycle before

Prof. Dr. Vo Van Toi's lifetime accomplishment

In 2003, Prof. Dr. Vo Van Toi's proposal to establish the Department of Biomedical Engineering at Tufts University (USA) was approved, and he received the Best Professor Award. He was named to the board of directors of the Vietnam Education Foundation (VEF) a year later, and in 2007 he was designated CEO of the VEF. It is a U.S. government agency created by the U.S. Congress in 2003 to provide opportunities for close cooperation with Vietnam through educational exchanges in science, engineering, mathematics, medicine, and technology. When Prof. Dr. Vo Van Toi returned to Vietnam in March 2009, he established the Faculty of Biomedical Engineering at the International University.

Vietnam's biomedical engineering field has made several significant advancements under his guidance. The International University's Biomedical Engineering study program was acknowledged as achieving the ABET accreditation standards in August 2019. He was also praised for inducting the Biomedical Engineering Society in Vietnam into the IFMBE in 2017.

Prof. Dr. Vo Van Toi received the IFMBE Honorary Life Member Award in 2022 as a result of his ongoing support of education and scientific research. This honor is given to those who have contributed exceptionally well to the IFMBE.

continuing to investigate new information. I think that once we become excited about anything new in that "game," nobody can resist playing.

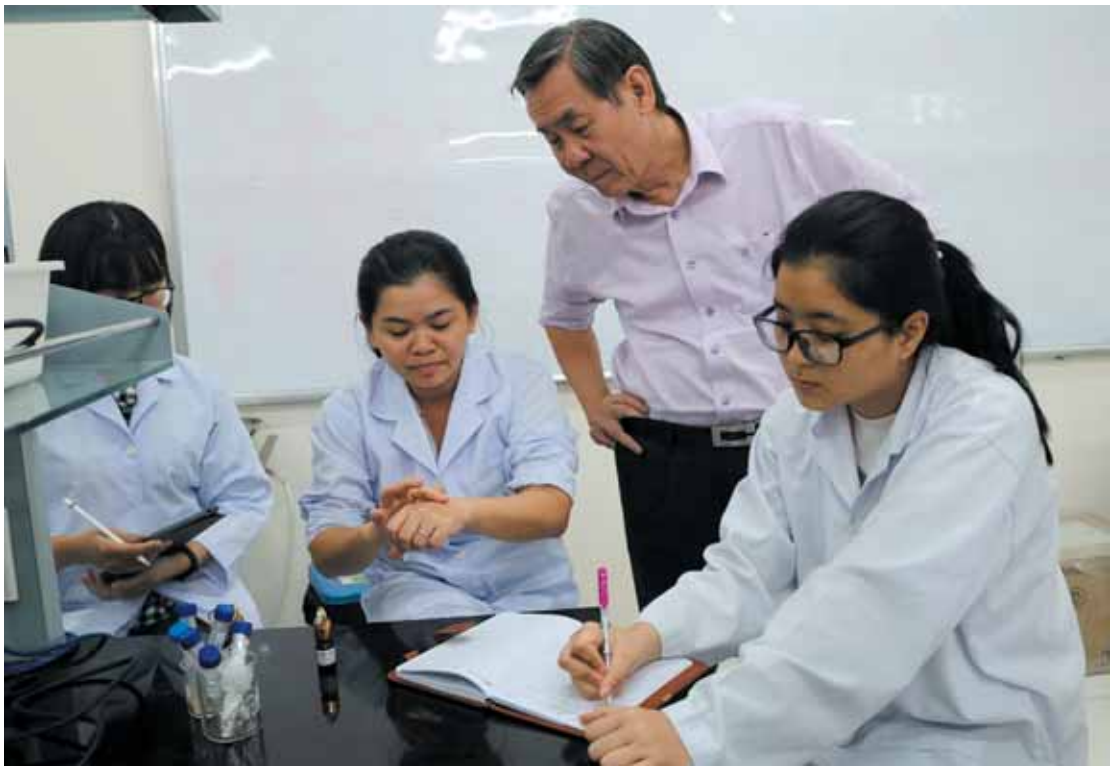
My existence and purpose in life may be summed up as scientific research and education. I have no other options if I don't conduct research, and I might even become lost in life.

Above all, I value my contributions to society through my scientific research, which includes sharing my knowledge with younger generations and producing helpful research findings.

** What message would you like to convey to students who aspire to pursue scientific research?*

First of all, I would like to congratulate you, students, for having just and noble dreams. However, you need to create a vision for yourself if you want that dream to come true. As sailing a ship, our vision serves as a "lighthouse" that directs to our target even when the weather conditions obscure it, so we are not concerned about being disoriented.

Moreover, those who choose to opt for a career in scientific research must understand how to train themselves and learn from their mistakes in order to make their dreams a reality. I have a great deal of faith in the forthcoming generations.



Prof. Dr. Vo Van Toi and Assoc. Prof. Dr. Nguyen Thi Hiep (white shirt, center, left) are discussing stem cells with students in the lab.

People's Teacher, Prof. Dr. Tran Doan Son: "I'LL KEEP WORKING ON MY RESEARCH AND PURSUING MY TEACHING CAREER UNTIL ALL OF MY STRENGTH IS GONE"

People's Teacher, Prof. Dr. Tran Doan Son, continues to be highly active in both teaching and research every day despite having lived nearly all of his life. If there is a minute of relaxation, his mind is occupied with unfinished tasks and fresh ideas that arise out of nowhere and engulf him in the boundless passion for scientific invention.

Prof. Dr. Tran Doan Son begins his working day by looking up materials. *Photo:* **Phuong Mai**

A daily commitment to inventiveness

The fruitful results of his more than 40 years of diligent research and invention efforts include 09 inventions, 13 research projects at all levels, 33 scientific articles, and more than 500 production lines of food and agricultural products for both domestic and international customers that have been transferred jointly with his alumni.

Prof. Dr. Tran Doan Son made the decision to focus on the development of food and agricultural goods for himself from the very beginning of his career as a researcher. The thought of "I have to do something to help farmers overcome poverty" was always on his mind. Since then, he has been driven to design cutting-edge machinery that enables farmers to produce high-quality, productive goods and frees up their labor. "My mission is to always search for solutions by being dedicated to daily innovation and discovery," he believed. "To alleviate the arduous work of farmers and move toward sustainable growth in the future, I should take such action."

A number of his studies on equipment for the production of food from Vietnamese agricultural products were launched after the study on cashew nut extraction and basic processing technologies. These are the tools used to make fresh pho, rice rolls, Quang noodles, rice paper, spring roll pastry, net spring roll wrappers, etc. All of these investigations received patents, and their associated technologies have been transferred locally and internationally.

The Ho Chi Minh Award is not yet the ultimate goal.

Speaking about the invention of an automatic net spring roll wrapper maker, he recalled that some households were still creating hand-made net spring roll wrappers during his visit to Tien Giang Province's Co Co market area in perhaps 2015. To make the wrappers' net patterns, they had to dip their hands in a pot of flour and drip the dough strings onto a heated pan. They worked from early in the morning till late at night for meager pay. "I was born in a rural village as well, so I can partially understand their thoughts," he said. "I traveled to Western and other Asian nations before returning to my own, where I realized that many people still struggle to make ends meet."

Prof. Dr. Tran Doan Son receives the Ho Chi Minh Award in Science and Technology from President Nguyen Xuan Phuc.
Photo: **Quang Hieu**

After numerous setbacks, Prof. Dr. Tran Doan Son finally finished building a net spring roll wrapper manufacturing equipment and introduced it to Co Co. "I was thrilled when I initially saw my machine produce the first batch of finished goods," he added. "I'm happy I was able to do a little something to assist my less fortunate fellow citizens."

He received three Ho Chi Minh City Innovation Awards (Second, Third, and Consolation Prizes) in 2020. The "Vermicelli production equipment that uses the technology of extrusion of wet powder masses" is the most notable invention among them. The equipment is ideal for restaurants and hotels to manufacture their own fresh noodles for diners because of its easy but convenient operation. He has provided this production technology to nine businesses, especially some of them located in the United States, Sweden, Japan, and South Korea.

The fact that Mr. Son would receive Vietnam's most prestigious scientific prize, the Ho Chi Minh Prize, has been making the rounds in the newspapers since the end of last year. He claimed that he felt incredibly honored. This honor represented a significant defining moment in his career. It allowed him to reflect on the full period of time during which he had lived and dedicated his life to serving the community.

"This honor, however, has not been thought of as my 'ultimate destination.' I'm still incredibly passionate about developing more equipment to benefit my fellow folks. He looked away and continued, "I will do research and follow my teaching career until all of my strength is gone."

Prof. Dr. Tran Doan Son, People's Teacher, was born in 1954 in Kim Loc Commune, Can Loc District, Ha Tinh Province. At the age of 23, he became a lecturer at the University of Technology. He traveled to Czechoslovakia in 1982 to complete his fellowship. Five years later, he obtained his Ph.D. in Manufacturing Engineering Technology from the Plze College of Electricity and Machinery in this nation.

After returning to his home country, he was appointed head of the Department of Manufacturing Engineering at the University of Technology. He was designated an Associate Professor in 2002. He received the title of People's Teacher in 2020. The State Council for Professor Title of Vietnam granted him the title of Professor at the end of 2021.

Prof. Dr. Tran Doan Son was honored by the Prime Minister with two certificates of recognition for his dedication as well as the Third-Class Labor Medal. In particular, he was given the Ho Chi Minh Award in Science and Technology by the State Council for his work on the cluster of projects titled "Research on Innovation and Development of Food and Agricultural Product Processing Technologies and Equipment in Vietnam" on November 23, 2022, in Hanoi.

The International Conference on Social Sciences and Humanities 2022:

A PRESTIGIOUS ACADEMIC FORUM

The University of Social Sciences and Humanities (USSH) has organized numerous academic conferences and forums with the goal of raising the quality of its teaching and scientific research. The 2022 International Conference on Social Sciences and Humanities (USSH-ICSSH) is one of the university's most notable and typical events.

Assoc. Prof. Dr. Ngo Thi Phuong Lan, President of the USSH, delivers her opening remarks during the conference. *Photo:* **Kim Uyen**

The representatives of the Engaging with Vietnam speak at the conference. *Photo:* **Ly Nguyen**

The USSH-ICSSH 2022 is a three-day academic event that was co-hosted by the USSH and the global initiative Engaging with Vietnam. Approximately 1,000 people attended the event, which took place from October 26-28, 2022.

The conference focused on the following main topics: (1) Theoretical foundations, innovative ideas, new theories, research methods, and approaches to social sciences and humanities that are appropriate for training and research programs; (2) New findings in the field research process and practical approach; (3) University teaching methods in the context of COVID-19; (4) Practical issues of Vietnamese society and international community; (5) International publication in the field of social sciences and humanities in the context of the internationalization of higher education and the period of global higher education rankings, etc.

Throughout the course of the three-day conference, 225 reports were delivered, and numerous insightful and beneficial debates and exchanges were conducted.

In her opening remarks, Assoc. Prof. Dr. Ngo Thi Phuong Lan, President of the USSH, said: "The USSH-ICSSH 2022 is more than just a venue for academic discussion; it is also a vibrant international academic environment with multidimensional connections amongst the participants. It effectively illustrates the USSH's position as a preeminent institution in Southern Vietnam's social sciences and humanities sector, demonstrating the commitment to its core values of 'Creativity - Leadership - Responsibility' and the principle of the Engaging with Vietnam, which calls for an open, interdisciplinary, and cross-cultural dialogue."

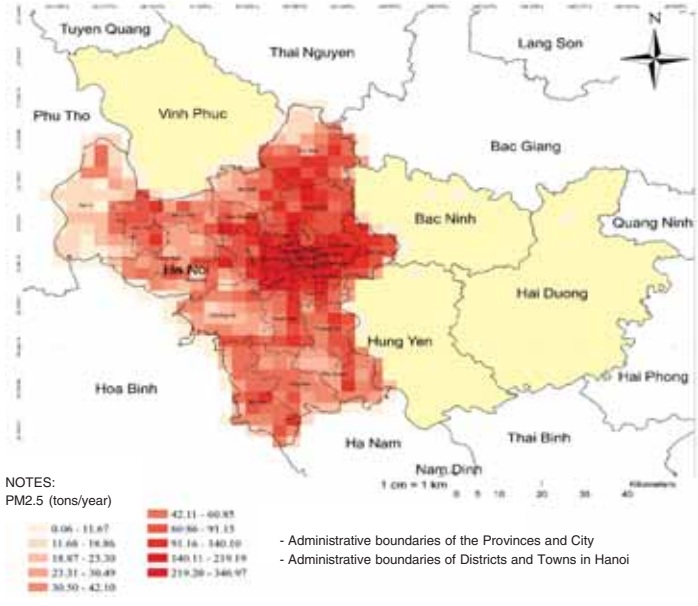
The conference featured 21 subcommittee sessions chaired by the USSH on philosophy, literature, education, anthropology - tourism, linguistics - Vietnamese studies, English linguistics and literature, and library - history - Asian studies, as well as 35 subcommittee sessions presided over by the Engaging with Vietnam. Many academics, doctoral candidates, and graduate students presented at the subcommittees using original and inventive methods, such as musical performances and Zoom connections with international academics who cannot come to Vietnam to attend directly. The participants engaged in lively conversation and raised a variety of complex discussion topics. Even if there were points of agreement and disagreement, the USSH-ICSSH 2022 was mostly a creative and diverse academic playground for researchers who are graduate students, doctoral candidates, young lecturers, and esteemed academics both domestically and overseas.

The USSH-ICSSH 2022 has been an annual academic forum organized by the USSH since 2017. The university will further invest in the conference so that it develops into a significant academic endeavor and carries the hallmarks of a research-oriented institution.

Institute for Environment and Resources: CONTRIBUTION IN SCIENCE AND TECHNOLOGY TOWARD AIR POLLUTION CONTROL IN VIETNAM'S NORTHERN KEY ECONOMIC REGION

The Ministry of Natural Resources and Environment (MONRE) launched the project "Creating an air pollutant emission map for forecasting and controlling air pollution in Vietnam's Northern key economic region." It was coded TNMT.2020.04.10 and assigned to the Institute of Environment and Resources (IER).

MAP OF THE AVERAGE EMISSION LOAD DISTRIBUTION IN 2019
DISCHARGE SOURCE: ALL SOURCES
RESEARCHED AREAS: HANOI AND 4 PROVINCES NEARBY



NO_x		PM_{25}	
Emission of motorcycles	32,0%	Heavy-duty vehicles	27,8%
Emission of buses and coaches	22,0%	Cars	18,6%
Heavy-duty vehicles	16,3%	Biomass burning	18,2%
Production of construction materials	32,0%	Buses and coaches	13,6%
		Households	6,7%
SO_2		Motorcycle emissions	3,1%
Production of construction materials 28,5%			
Emission of motorcycles	18,3%	PM_{10}	
Cars	13,4%	Heavy-duty vehicles	23,0%
Production of food and wares	12,2%	Biomass burning	18,4%
Biomass burning	6,3%	Cars	14,9%
		Bushes, coaches	10,9%
CO		Production of fertilizers and chemicals	7,7%
Emission of motorcycles	94,3%		
Biomass burning	1,7%		
Cars	1,6%		
Households	0,9%		

The results of determining the causes of air pollution and mapping the current state of Hanoi's emissions

It was the first project to be carried out in Northern provinces by the IER. The experts produced statistics on emission sources in the Northern key economic region from available documents and investigated, surveyed, and gathered needed information. Based on the data, they calculated the exhaust emission of the primary emission sources. Simultaneously, the experts created a digital map of the emissions status of NOx, CO, SO_2, PM10, and PM2.5 substances in the research areas to identify the primary emission sources and high emission zones.

On September 30, 2022, the MONRE established an advisory council to evaluate and do an acceptance test on the result of ministry-level task No. TNMT.2020.04.10. Since all the products, especially those related to scientific publication and teaching, reached or surpassed the registration proposal, the project was graded excellent.

The project followed the guidance of exhaust emission inventory of EMEP/EEA, US-EPA, and CORINAIR, which had been successfully done in some Vietnamese provinces, to inventory the gas waste of Point sources, Area sources, Mobile sources, and Biological sources in the study areas. Notably, researchers successfully employed the EMISENS models in road traffic air emissions sources. Assoc. Prof. Dr. Ho Quoc Bang created these models, and the Copyright Office of Vietnam has granted them a copyright.

Based on the statistics on air emissions in Hanoi and major sources in the provinces of Vinh Phuc, Hung Yen, Hai Duong, and Bac Ninh, the project proposed solutions for air pollution control in Hanoi in the future.

Subsequently, the statistics on air emissions from all sources were used to create a map of the emissions status of air pollutants in Hanoi. The map revealed that the major polluted areas in Hanoi were the central districts with highly dense traffic networks.

The results were transferred to the Northern Center for Environmental Monitoring and the Institute of Meteorology, Hydrology and Climate Change to maintain the applicability of the project. The EMISENS models and inventory results of gas emissions will soon be adopted for updating exhaust emissions situations in Hanoi and conducting related studies to develop an air quality management plan.

The Central Lake in VNUHCM Center for National Defense and Security Training is one of the fresh green spaces of VNUHCM District

VNUHCM DISTRICT
A MODERN, GREEN, INTELLECTUAL CENTER

VNUHCM was established in January 1995. In 2003, the Prime Minister approved the detailed planning of VNUHCM District with a total area of 643.7ha. It comprises two separate zones - Thu Duc City (HCMC) and Di An City (Binh Duong Province).

Within the area of 643.7ha, VNUHCM has a system of seven naturally beautiful lakes of different sizes. The lakes own a total area of 78ha of water surface, creating an airy green space in the center of the University District.

In addition to those natural lakes, VNUHCM has built more artificial intelligent, clean, and beautiful lakes, succinctly outlining a harmonious, green, and modern university district of Vietnam.

Being a construction of the University of Social Sciences and Humanities, Lake Anh Duong (Lake Sunshine) owns a modern space and serves as a unique highlight on its Linh Trung Campus in Thu Duc City.

Lake Ban Nguyet (Lake Half-moon) in VNUHCM's Dormitory in Block B is one of the beautiful works and favorite entertainment places for boarding students.

VNUHCM District owns a topography of land and water in harmony with cold and fresh air.

The complex of Rocky Lake, green trees, and spacious streets creates VNUHCM District's unique green space.

DIVERSIFYING STUDENTS' ACTIVITIES IN VNUHCM DORMITORY

If lecture halls, systems of laboratories, and libraries are "official" learning environments that help students improve their intellectual and professional capacities, the dormitory has its specific roles in students' life. It is not only a "settlement" place but also a diversified, attractive space that can help students consolidate and develop soft skills through collective and community activities.

Self-study zones are found in all the buildings in the dormitory site, helping students to find quiet and convenient study corners.

There are many extracurricular activities for students, such as the Workshop entitled "Teamwork in Gen Z's style"...

Students in VNUHCM Dormitory are doing morning exercises.

Students are learning practical and useful rescue and firefighting skills.

Students at VNUHCM Dormitory are doing exercise, starting a new day in a cool and fresh green space.

After classes, many students return to the dormitory to work out at the gym, improving their physical fitness.

... or participate in the activity entitled "Swap Recycle Waste for Green Trees."

At weekends, students join hands to plant trees, creating a fresh green landscape for their "common home."

The USSH leaders, academics, employees and students participate in Green Action Day 2022.

"DIVERSIFYING SOLUTIONS TO BUILD A GREEN UNIVERSITY"

Since 2018, the University of Social Sciences and Humanities (USSH) has launched the "Green University" program with the aim of enhancing the university's landscape and spreading the sense of " green living " among its academics, officials, employees, and students.

The campus of the University of Social Sciences and Humanities

The program is implemented into three phases: Green Awareness (2018-2022), Green Action (2022-2026), and Green Culture (2026-2030).

Actions to create a green future

In 2022, the USSH began implementing many solutions to launch the program's second phase, i.e., Green Action.

On the day called the "USSHers shall build a green university," the University organized events to sponsor trees and devices, rearrange the campuses, fix signs with environmental protection messages, and so on.

Because the sidewalks between the USSH and the University of Information Technology are full of weeds and wild plants, the USSH created spaces to plant trees, flowers, and lawns in order to render a greener space for VNUHCM District.

The University also conducted media communication on social networks, newsletters, billboards, etc.; organized talks to share practices of green lifestyle and minimalist lifestyle; attached the Green University labels on its constructions. This activity was to promote the process of changing people's awareness to adapt to the green lifestyle proposed by the University.

Assoc. Prof. Dr. Ngo Thi Phuong Lan, the USSH President, said: "With a social responsibility, our university determines the view that it is necessary to promote building a green lifestyle for all the staff, lecturers, and students so that those values will forever accompany students after completing their programs, thereby contributing to

Mr. Phan Van Mai, Assoc. Prof. Dr. Vu Hai Quan and delegates take a visit to the Local Orchard Garden.

spreading this spirit widely in society."

To celebrate the new academic year 2022-2023, the university organized a tree-planting activity in Anh Duong Park. Padauk trees planted by the delegates and leaders at the event will then give shade to the B4 building, which had just been put into use. In particular, Mr. Phan Van Mai, Member of the Central Committee of the Communist Party and Chairman of HCMC People's Committee, presented the university with a native garden collection including local species in the Southwest region.

Enterprises' joining the implementation of green dreams

In order to support the USSH in innovating activities as well as enhancing the facilities for teaching and scientific research, Phuc Khang Group sponsored the USSH to build the Innovation Research Center, named "Phuc Khang - USSH Innovation Hub." It is located at Thu Duc Campus and equipped with modern equipment, meeting the green building standards - LOTUS SI.

At the Opening Ceremony of the 2022-2023 academic year, "Phuc Khang - USSH Innovation Hub" was introduced to be a place to select key research ideas and topics and provide resources for student and lecturer research activities; to connect students with lecturers and professionals; to link businesses to sponsor their initiatives. This project contributed to improving the USSH's quality of teaching and research in the newly implemented university autonomy mechanism.

The year 2022 was the marking year of promoting the implementation of the theme "Green Awareness" throughout the University in order to create a nature-friendly learning environment, contribute to environmental protection, and reflect the characteristics of the USSHers.

The campus of the University of Social Sciences and Humanities

PROMOTING INTERNATIONAL COOPERATION TO ENHANCE EDUCATION AND RESEARCH EFFICIENCY

In the context of the world's deep integration into every single area, VNUHCM and its member universities are increasingly enhancing their higher education, further cooperating, and developing bilateral and multilateral relationships internationally.

Participating in the Education Forum in Australia, three VNUHCM member universities sign 5 MoAs with Australian partners.

Expansion of international cooperation

VNUHCM considers expanding international cooperation a significant strategy for approaching innovative higher education in the region and around the world to develop the system in accordance with international standards.

During 2018 and 2022, VNUHCM expanded its international partnership network through 316 Memoranda of Agreements with higher education institutions and international educational organizations. 165 of them are from 16 Asian countries, and the majority are from Japan, Taiwan, South Korea, and Thailand; 100 others from Europe, mainly France, Germany, Poland, and the United Kingdom; an insignificant proportion of partners (34 partners) are from the United States and Canada; and the remaining 17 are from Australia and New Zealand.

The expansion of the international network not only helped promote VNUHCM globally but also created further opportunities for its lecturers and students to develop their skills through exchange programs, training cooperation, research, career orientation, and funding reception. Particularly in recent years, through the signing of Memoranda of Agreements on non-refundable technical projects, VNUHCM has successfully promoted many funded projects from Australia, the United States, and South Korea. The promotion contributed to the infrastructure of the University District, improved the training quality and research capacity, and yielded many practical results for the community.

Active participation in world educational events

In 2022, VNUHCM continued to affirm its position and pioneering role in participating in major regional and international events. Some of them were the Hungarian Rector's Conference, the Vietnam-UK Education Cooperation Forum, the Rector's Conference of the Southeast Asian University Network, the Management Board's Conference of the Southeast Asian University Network, and the TF-NUS PLUM Southeast Asia Leaders' Summit.

At these significant and prestigious international educational events, VNUHCM had opportunities to learn about advanced models of training, scientific research, and university governance. At the same time, VNUHCM and other representatives of Vietnam also shared their achievements, experiences, and solutions to the main problems encountered by regional and international higher education: the challenges and opportunities of universities during COVID-19; the role of higher education in the fulfillment of the Sustainable Development Goals; the promotion of innovation and entrepreneurship; and the trends in multidisciplinary training and research.

VNUHCM's active participation in global educational events has resulted in an extensive network of connections with global partners, which helps develop its personal capabilities, attract more international students, improve training quality, and cooperate in research.

The VNUHCM delegation attends the Vietnam-UK Education Cooperation Forum.

VNUHCM'S COLLABORATION WITH UNIVERSITIES IN AUSTRALIA AND NEW ZEALAND

The VNUHCM delegation participated in educational activities during an official visit to Australia and New Zealand led by Vuong Dinh Hue, Vietnam's National Assembly Chairman, and a high-ranking delegation of the National Assembly from November 30 to December 7, 2022.

A panoramic view of the Vietnam - New Zealand Education Cooperation Forum.

Assoc. Prof. Dr. Vu Hai Quan, Chancellor of VNUHCM, speaks at the Vietnam-New Zealand Education Cooperation Forum.

Assoc. Prof. Dr. Vu Hai Quan, Chancellor of VNUHCM, joined the meetings of Vuong Dinh Hue, Vietnam's National Assembly Chairman; Jason Clare, Australian Education Minister, former Governor-General of New Zealand Anand Satyan, a leader of educational institutions; and the representatives of Australia-New Zealand universities. At the meetings, they discussed strategies to further develop their collaboration in education. With more than 30,000 Vietnamese undergraduates and graduates in Australia and 2,700 undergraduates in New Zealand, the education cooperation not only contributes to Vietnam's human resources development but also helps promote partnerships between Vietnam and those two key partners in the South Pacific region.

On December 2, the Vietnam-Australia Education Cooperation Forum was held in Melbourne, Australia, with the attendance of Vuong Dinh Hue, the National Assembly Chairman; a high-ranking delegation of Vietnam's National Assembly; the representatives of Vietnam's Ministry of Education and Training; and 17 member universities of VNUHCM.

National Assembly Chairman Vuong Dinh Hue and high-ranking delegates of Vietnam's NA attend the Vietnam-Australia Education Cooperation Forum.

At the forum, VNUHCM member universities exchanged five MoUs (out of the 12 agreements exchanged at the event) with three universities in Australia, namely Deakin University, the University of South Australia, and the University of Tasmania.

On December 5, Vietnam's National Assembly Chairman visited the University of Waikato and attended the Vietnam-New Zealand Education Cooperation Forum in Hamilton, New Zealand. Speaking at the event, he expressed the expectation that along with the cooperation at the level of government, higher education institutions of the two countries would have specific and direct cooperation agreements, thereby deepening the bilateral cooperation in this significant area.

At the forum, Assoc. Prof. Dr. Nguyen Danh Thao, Vice President of the University of Technology, also gave a presentation on the topic "Development of University-Industry Linkage towards Internationalization," whereupon the universities' achievements, challenges, and solutions in developing cooperation with the industry were shared.

Apart from the activities joined with the delegation led by the National Assembly Chairman, the leaders of VNUHCM and its member universities also had bilateral meetings with partners in Australia and New Zealand, including the Ferner School of Environment and Society (under the Australian National University), Deakin University, and Auckland University of Technology to discuss cooperation plans in various fields such as environment, climate change, education, agriculture, and so on.

The delegates of VNUHCM visit Deakin University, Australia.

TAPPING RESOURCES FROM INTERNATIONAL COOPERATION FOR VNUHCM'S DEVELOPMENT

The year 2022 witnessed many positive results for VNUHCM in the implementation of 80 international projects. It is this success that provided VNUHCM with considerable resources to achieve its strategic missions for the 2021-2025 period.

Wallonie-Burxelles Region is a sponsor of the project "Towards the Knowledge Transfer of International Maritime Law to Vietnam."

Such international projects have provided technical and financial support to VNUHCM, creating favorable conditions for the improvement of teaching skills, training quality, scientific research, innovation, and infrastructure.

They were the Vietnam National University Development Project (VNUHCM Subproject) (USD100 million funded by the World Bank); the Partnership for Higher Education Reform (PHER) project (USD15.62 million funded by USAID); the Southeast Asia Young Leaders Initiative Project (Mekong Young Leaders Program) (USD5 million funded by USAID); and the Project on Planning and Establishing a Sustainable Smallholder Rice Chain (SRP) in the Mekong Delta (PHER) project (USD15.62 million funded by USAID).

Alongside internal development projects, VNUHCM also developed many international projects in association with localities. The course of action contributes to knowledge transfer for the national socio-economic growth. Some typical projects that could be named are the Project on "Planning and Establishing a Sustainable Smallholder Rice Chain in the Mekong Delta" (funded by ACIAR, Australia), the Project on "The Application of AI/IoT in Environment Management at Tram Chim National Park" (funded by AUS4Innovation), and the Project on "The Strengthening of Vietnam's Legal System in Sustainable Marine Fishing" (funded by the Wallonia-Brussels Region).

In addition, many international projects have begun to include several sections regarding university-industry linkages. Promoting this cooperation is also one of VNUHCM's important tasks. Along with international projects, VNUHCM will be supported to strengthen connection abilities and develop programs and effective cooperative models between universities and businesses in the future.

The project on "Strengthening Agricultural Higher Education at VNUHCM," sponsored by KOICA (Korea), kicks off in April 2022.

The international cooperation facilitates the execution of practical programs and projects, making a great contribution to the development of the VNUHCM system. It has provided considerable resources when the government's investment budget is increasingly limited. To promote the effectiveness of project development and attract more international resources, VNUHCM will actively expand its relationships with many partners in the region and around the world and search for international funding and aid sources. In addition, VNUHCM will focus on ensuring the effectiveness and sustainability of the ongoing projects to strengthen and build the trust of international sponsors and partners, creating a good foundation for developing more new projects.

Scientists from An Giang University and Australian experts hold activities in Vietnam within the project "Planning and Establishing a Sustainable Smallholder Rice Chain in the Mekong Delta."

VNUHCM'S FULFILLMENT OF ITS MISSION OF COMMUNITY SERVICE

VNUHCM has launched many activities in collaboration with localities and businesses nationwide. The positive collaboration results not only demonstrate VNUHCM's role in connecting and supporting the community but also promote the effectiveness of its external relations.

The Cooperation Program is signed between HCMC People's Committee and VNUHCM.

Signing the Cooperation Agreement with Hung Thinh Group.

Since its establishment, VNUHCM has been heading toward an important mission assigned by the Vietnamese Communist Party and Government, i.e., accomplishing the national strategy and regional development. VNUHCM has closely followed its training objectives and key research and technology programs, advising on the development of planning strategies and policy frameworks at the request of localities and businesses.

From 2017 to 2022, VNUHCM actively expanded its collaboration network to many focused areas, such as HCMC, Binh Duong, Tay Ninh, Ben Tre, An Giang, Lam Dong, Ninh Thuan, Dak Nong, Quang Ngai, Bac Lieu, and Ba Ria-Vung Tau Provinces. At the same time, VNUHCM built potential partnerships with new areas such as Quang Nam, Phu Yen, Binh Thuan, Long An, Dong Thap Provinces, etc. In addition, VNUHCM vigorously promoted and expanded the signing of cooperative agreements, sponsorship agreements, and memoranda of understanding with businesses like Becamex IDC, Vietcombank, NutiFood Nutrition Food Joint Stock Company, Novaland Group, Vinacapital, Hoa Sen Group…

Signing the Cooperation Agreement with Viettel Group.

Up to October 2022, VNUHCM signed over 60 cooperative agreements with localities and businesses, aiming at organizing various collaborative activities in terms of training and professional development (over 40 activities), conducting urgent research and technology tasks (over 200 ones), and other planning and strategic consulting activities (over 40 activities).

Despite achieving some positive results, VNUHCM's community activities also encountered some difficulties and limitations in terms of policies, regulations, and coordination among stakeholders.

To improve the efficiency of community service activities, in the coming time, VNUHCM is going to focus on finding solutions to the existing problems, implementing signed cooperative plans, and finding creative ways to collaborate in order to make practical contributions to the socio-economic development of the localities in particular and the country in general.

THE UNIVERSITY OF ECONOMICS AND LAW'S PARTICIPATION IN COMMUNITY SERVICE AND POLICY REVIEW

With the orientation to become the leading center of scientific research and policy consulting in Vietnam in economics, business and law in 2022, the University of Economics and Law (UEL) organized many conferences nationally and internationally, playing significant roles in community service, and policy consultancy and review.

The International Conference on "Vietnam and International Legal Framework on Sustainable and Responsible Fishing".

The Conference on "Sustainable Real Estate Market Development in a New Context".

In March 2022, the University of Economics and Law hosted a conference titled "The Sustainable Development of the Real Estate Market in the New Context." It was a joint effort of the Central Economic Committee and VNUHCM.

The conference took place when in the real estate market, there had been several issues of site clearance, land auction in Thu Thiem Urban Area, and bond issuance of real estate enterprises, etc. All these showed that the government's land management still had certain limitations and that land resources were not fully exploited to become an essential internal resource for socio-economic development. Therefore, the conference aimed to further contribute to the improvement of mechanisms and policies for sustainable development of the real estate market and to strengthen the management and regulation of the government from central to local levels. In addition to the reports and presentations presented, the conference held a dialogue session with the business community in the real estate sector, representatives of ministries and sectors, localities, and experts to discuss problems as well as solutions for the sustainable development of Vietnam's real estate market in the new context.

In July 2022, the UEL cooperated with the University of Liège, Belgium, to co-organize the international conference "International and Vietnamese legal framework on sustainable and responsible fishing." The conference clarified the international legal framework, Vietnamese law, and solutions to remove the EU's "yellow card" for Vietnamese seafood in order to build a responsible and sustainable development of this industry in accordance with international law. Based on the conclusion of the conference, the organizing committee would gather recommendations and a number of measures to remove the "yellow card" from Vietnam's seafood industry and send them to the government and functional agencies.

Within the framework of cooperation and sponsorship by the Rosa Luxemburg Foundation, in October 2022, the UEL organized an international conference on "Applying fairness in judicial activities in Vietnamese courts and experience from some countries." At the conference, researchers and legal practitioners exchanged and discussed with each other so as to learn from different countries how to apply "justice," thereby improving the application of this principle in adjudication activities in Vietnam.

The conferences organized by the UEL were always based on the current social needs, thereby demonstrating the role and social responsibility of the University in contributing valuable proposals for the community and businesses as well as consulting and reviewing the government's macroeconomic policies on Vietnam's economic development.

VNUHCM STUDENTS GAINED OUTSTANDING ACHIEVEMENTS IN 2022

Not only do VNUHCM students strive to study, research, and join social activities, but they also actively participate in many national and international contests. In 2022, they excellently won numerous high-ranking awards in academic and startup competitions.

HCMUS-Flaming Tomatoes team from the University of Science (HCMUS) became the Champion of the International Collegiate Programming Contest (ICPC) Asia Hanoi Regional Programming Contest 2021. The team will represent Vietnam to compete in the Word Finals ICPC 2021 in Egypt, scheduled for 2023.

The HCMUS students team was ranked third overall (with one First, three Second, and one Third prizes in total) in the 2nd National Student Biology Olympiad in 2022.

Student Pham Hoang Son from VNUHCM High School for the Gifted received a Bronze medal in the International Mathematical Olympiad (IMO) 2022.

Eleventh-grader Ngo Dinh Gia Bao of VNUHCM High School for the Gifted was crowned Champion in the Robot Youth maker - MyOr Competition in Singapore.

HCMUS-Flaming Tomatoes team and mentor Luong Vi Minh (rightmost) from the HCMUS are at the ICPC Asia Hanoi Regional Programming Contest 2021.

The HCMUS team is the third overall winner in the 2nd National Student Biology Olympiad in 2022.

Silver medalist Pham Hoang Son at the IMO 2022

Champion Ngo Dinh Gia Bao at the Robot Youth maker - MyOr Competition.

Nguyen Thi Chau Anh, Chairwoman of the Vietnam National Union of Students at the International University (IU), became the Champion and the National Student Leader in the National Student Leadership Contest 2022, organized by the Central Vietnam National Union of Students.

The University of Information Technology (UIT) students published a research paper in the Neural Computing & Applications Journal. This international journal, owned by Springer publisher, has published research papers on practical applications of Neural Computing and related techniques such as genetic algorithms, fuzzy logic, and neuro-fuzzy systems.

DeepSignature team from the University of Technology (UT) and the HCMUS, the copyright owner of the research on Anti-counterfeiting technology by blockchain algorithm, won the top award in the International Innovator Award 2022 jointly held by the Leipzig University and the UEH College of Technology and Design.

Nguyen Thi Chau Anh receives the Certificate of merit at the Contest.

The UT students gained First prize in the Maker to Entrepreneur 2022 with their product

Assamica teabags. The tea was made with the seeds of Crotalaria assamica Benth for calming and relieving anxiety.

The ELLA project by the IU student group received the First award in the 4th SV.STARTUP.

The student group from the Faculty of Foreign Economic Relations of the University of Economics and Law (UEL) won the prize for the best startup project in the Startup Wheel 2022 with the Foria E-commerce platform project.

UEL student Nguyen Tien Dat was awarded a team Gold medal and an individual Bronze medal at the 31st Seagame in Hanoi in May 2022. Henceforth, he won another Gold medal in the men's 100m immersion at Finswimming World Cup 2022.

Huynh Nguyen Mai Phuong from the University of Social Science and Humanity (USSH) was crowned Miss World Vietnam 2022. Simultaneously, Le Nguyen Bao Ngoc from the IU was placed First Runner-up.

IU student Le Nguyen Bao Ngoc was crowned Miss Intercontinental 2022. It has been the highest record of Vietnamese contestants in this competition since their first participation in 2003.

The UIT students group with their publication with a high Impact Factor (IF) of 5.102

USSH student Huynh Nguyen Mai Phuong (center) is crowned Miss World Vietnam 2022, and IU student Le Nguyen Bao Tran (left) finishes as First Runner-up.

UEL student Nguyen Tien Dat won a Gold medal in the men's 100m immersion at Finswimming World Cup 2022.

Miss Intercontinental 2022 Le Nguyen Bao Ngoc from the IU

DeepSignature team from the UT and the HCMUS is crowned Champion in the International Innovator Award 2022.

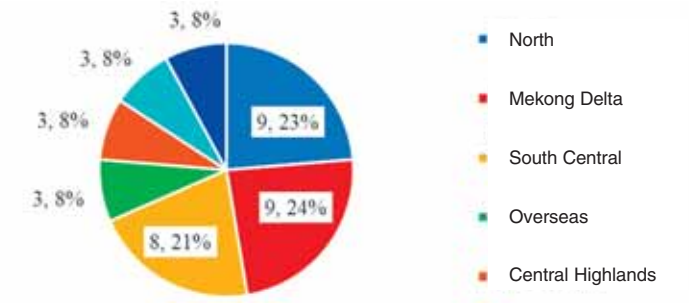
The UT students group receives First prize in the Maker to Entrepreneur 2022.

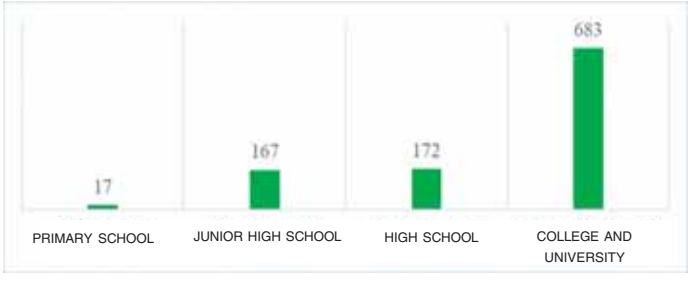
The IU students are awarded the Top prize in the 4th SV.STARTUP 2022.

The UEL student group gains the Best startup Project Award in the Startup Wheel 2022.

LITERARY CONTEST OF VNUHCM YOUTH 2022 THEMED "ENTREPRENEURIAL SPIRIT ON LITERATURE"

In July 2022, VNUHCM joined hands with the Ho Chi Minh City Writers' Association, the Southern branch of the Vietnam Writers' Association Publishing House, and the Ho Chi Minh City Literature and Art Journal to organize the Literary Contest of VNUHCM Youth 2022. The Contest aimed to jointly evoke and encourage students' competence in creative verbal art. Simultaneously, it created a meaningful spiritual playground where students could convey humane messages and perform their responsibility for the community and the country, thereby partly encouraging awareness and spreading positive sentiments among the youth and society.





Allocation chart of the literary entries by academic level

The Literary Contest of VNUHCM Youth 2022 entitled "Entrepreneurial Spirit on Literature" was a significant jump-start that helped students, lovers of literature and literary career, broaden their horizons and encourage them to become writers.

Monthly literary entries were selected for publication in the Journal of the Ho Chi Minh (HCM) City Writers' Association and the VNUHCM channels of communication. The literary entries and overall winning entries chosen by the Organizers were edited and published in books for distribution nationwide.

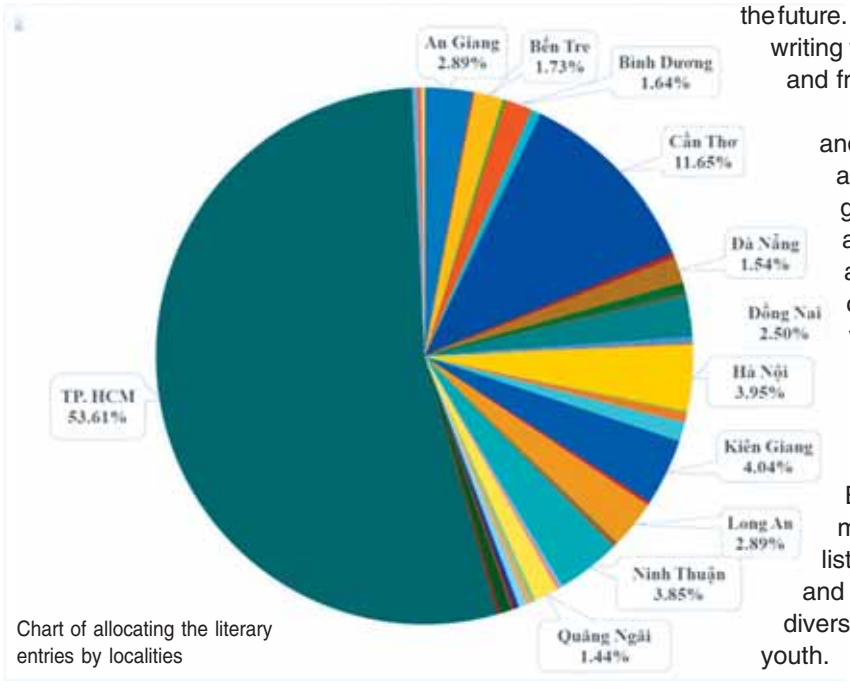


Chart of allocating the literary entries by localities

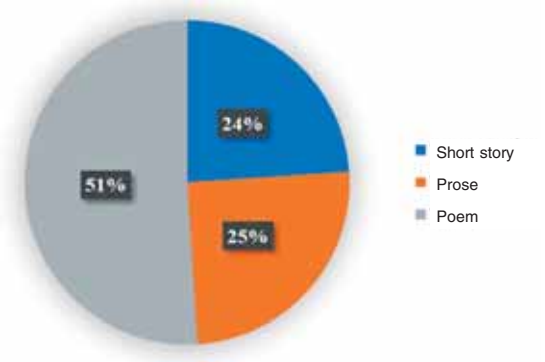


Chart of allocating the literary entries by gene

Despite being organized the first time, the Contest attracted the attention of students and pupils throughout the country. The Organizers received 1,039 entries from students and pupils hailed from many localities (36/63 provinces). Incredibly, seven entries were sent from foreign countries (namely the USA, Canada, and Thailand).

The writers of 1,039 entries varied in age and academic level from primary school pupils to college and university students. Among them, undergraduates accounted for the greatest number.

Accounting for 51% of the three main genres of short stories, prose, and poems were 530 works of poetry.

All the submissions expressed the young generations' emotions, thoughts, and concerns about many problems in life. The entries showed images of the diversity of young people's inner worlds when they looked to and examined the present, pondered and were moved by the past, and contemplated and ambitiously believed in the future. The contestants were creative in various writing forms with both traditional, innovative, and fresh writing styles.

The significant number of submissions and the diversity of contestants, contents, and writing forms showed that the young generations, in general, and students and pupils, in particular, really demanded a spiritual playground. Henceforth, they could express their creative ability in verbal art and share their thoughts, feelings, ambitions, and aspirations. For the first time, the Literary Contest of VNUHCM Youth 2022 became a playground meeting all their needs. Each piece of writing carried a specific message that the writer(s) wanted to be listened to and understood. Enthusiastic and thoughtful pieces of writing made the diverse characteristics and enthusiasm of the youth.

VNUHCM FRESHMEN WERE PROVIDED WITH KNOWLEDGE AND SKILLS TO ADAPT TO THE CAMPUS ENVIRONMENT

After a long time with educational activities affected by the COVID-19 pandemic, the academic year 2022-2023 was opened in the new normal period. In addition to the specific activities of each member university, the Freshmen Welcoming and the Orientation Week at the beginning of the academic year 2022-2023 were two major tasks carried out comprehensively and efficiently in the VNUHCM system.

The Student Affairs Office receives the admission application documents from new students of the 2021 cohort.

To prepare well for the new academic year, VNUHCM continued to hold annual training courses for its officials who are in charge of educating students about political ideology and ensuring their security, order, and safety. VNUHCM also issued guiding documents for student affairs right at the beginning of the academic year.

With the experiences and results gained through the implementation of online admission in the school year 2021-2022, VNUHCM member universities, affiliates, and Dormitory Management Center kept increasing the use of information technology in student affairs. Specifically, it promoted communication and offered guidance to students on the admission process and procedures through the websites, fan-pages, portals, and hotlines of VNUHCM and its member universities and affiliates. Besides, VNUHCM streamlined the admission procedures and enhanced the online admission for students into the dormitories, saving their time.

The admission of 20,445 matriculated students through all the enrollment methods took place from mid-September to mid-October. In early October, the Orientation Week was implemented simultaneously in the VNUHCM system. The organization was flexible in form and time. The member universities and affiliates arranged the classes in several installments during the academic year and linked them with the activities of the Youth Union and Students' Association. This compulsory educational activity was aimed at heightening students' awareness of the Communist Party's guidelines and advocacy, the Nation's policies and laws, and the regulations of VNUHCM and member universities. The framework of the Orientation Week was flexibly designed to suit different groups of students. The Week's focuses were five themes, including (1) Politics & Ideology; (2) Legal knowledge; (3) VNUHCM and its member universities and affiliates; (4) Skills; (5) Responsibility, ethics, and lifestyle. Those practical themes closely followed the VNUHCM Strategic Plan for the 2021-2025 period, focusing on students and standards in students' education quality and graduation ability. It also helped students become quickly adaptive and strive to study and practice.

With the responsibility and consistency in perspective on "learner-centered activities," the VNUHCM student affairs and Orientation Week in the academic year of 2022-2023 took place safely and successfully applying digital technology applications most efficiently. It was a commitment to VNUHCM's responsibility for caring for and assisting learners, as well as its educational environment and advanced programs for students, parents, and society.

New students of the 2022 cohort in a class during the Orientation Week.

MULTIPLE PROGRAMS BEAR THE STAMP OF VNUHCM YOUTH

In 2022, VNUHCM carried out many outstanding activities and programs bearing the stamp of its youth that positively affected the nationwide youth and adolescents.

Finnovation Contest

The Finnovation Contest 2022 - the first and largest regular national competition was held for students' innovative startups in financial technology (Fintech). It aimed to promote and raise society's awareness of innovation and intellectual property in the field of fintech and digital transformation.

Assoc. Prof. Dr. Nguyen Minh Tam and Mr. Nguyen Nhat Linh present the Thank-you Letter to the Organizing Board.

The Contest was jointly organized by the National Agency for Technology Entrepreneurship and Commercialization Development (NATEC), the Vietnamese Students Development and Support Center, the Ministry of Science and Technology Youth Union, and the VNU-Hanoi Youth Union.

Assoc. Prof. Dr. Nguyen Minh Tam - Vice Chancellor of VNUHCM, delegates, and guesses give the Top Award to Zinance team at the Gala Dinner Awards Ceremony.

After being run for over three months, the Contest attracted more than 180 projects from students throughout the country. Zinance team (from Vin University and La Trobe University) surpassed its counterparts to obtain First prize.

"Enlightenment" Festival

The "Enlightenment" Festival 2022 was a contest for contestants to learn about Marxist-Leninist science and Ho Chi Minh's Thought. HCMC Communist Youth Union hosted it in coordination with HCMC Propaganda Department, VNUHCM, the Party Committees of universities and colleges, and HCMC Department of Education and Training.

Team 2 of the HCMUS Youth Union (center) becomes the Contest Champion.

The competition's focuses were the enhancement of studying and following of Ho Chi Minh's thoughts, morality, and style; Marxism-Leninism; knowledge about the Vietnamese Communist Party; the country and cities; history; national culture; and traditions of the Youth Organizations.

From April 17 to May 10, the Festival attracted more than 64 teams of 425 contestants. In the end, the second team of the HCMUS Youth Union excellently became the Champion.

"Star Awards" Contest

On September 5, the Youth Union Committee launched and hosted an English Language

Assoc. Prof. Dr. Vu Hai Quan, Mr. Bui Quang Huy, and guesses have a photo taken with the delegates at the Conference.

DtaMed team - the HCMC representative, advances to the National Final Round.

contest, namely "Star Awards 2022," with the theme "Generation Z and Digital Transformation Mindset." It was co-organized by five other major universities, namely VNU-Hanoi, Thai Nguyen University, Hue University, Da Nang University, and Can Tho University.

Star Awards Contest was a playground for nationwide students to exchange knowledge and learn English, enhance social knowledge systems and the digital transformation mindset, and raise their awareness of the importance of foreign languages for study and future job opportunities.

After about 4 months of organization, there were over 70,000 online registration entries, comprising more than 60 projects and ideas for digital transformation applications in business models for various businesses and agencies. The DataMED team (consisting of students from RMIT University), excellently won the First Prize and represented the HCMC cluster in the national final round.

Youth Union & Students' Association Conference of Vietnam National Universities and Regional Universities

From September 9 to 10, 2022, the Youth Union Committee hosted the Youth Union & Students' Association Conference of Vietnam National Universities and Regional Universities with the theme "The Youth Union in the Digital Transformation Era."

The Conference was participated by 210 delegates who were the Youth Union and Students' Association cadres from Vietnam National Universities and Regional Universities (namely Thai Nguyen University, Hue University, and Da Nang University), and two universities (Can Tho University and Tay Nguyen University). The Conference discussed effective models and solutions for youth activities in the digital transformation era. Simultaneously, the participants provided feedback on the draft Political Report of the 12th National Congress of delegates of the Ho Chi Minh Communist Youth Union for the 2022-2027 period.

It was also the first time the Organizers decided that the Conference would be held biennially, and they officially introduced the youth project called the Youth E-Portal of Vietnam National Universities and Regional Universities.

The official introduction of the youth project called The Youth E-Portal of Vietnam National Universities, and Regional Universities

Top scorers in the VNUHCM entrance exams: PLANNING TO FULFILL DREAMS

The best students from VNUHCM member universities who received the highest entry scores are eager for the future and aspire to excel in every aspect. Each has picked a strength or a particular approach, but they all aim to do the jobs of their dreams.

*** Nguyen Hoang Tu** - *Top scorer on the high school graduation exam (29.8 points), freshman in the Faculty of Computer Science at the University of Technology*

The University of Technology was my ultimate goal.

I initially intended to major in math education, but after discovering how to program, I became interested in information technology majors. I chose the University of Technology's Faculty of Computer Science as my ultimate aim in the high school graduation exam after consulting my cousin, a University of Technology alumnus, for advice and learning about the University's reputation.

Fortunately, I scored a surprisingly high grade and fulfilled my dream. The lecturers' teaching style, which delves into the origins and nature of the subject, captivated me the most during the first few days in the lecture hall because it is so well suited to how I have been learning thus far.

To become a more mature, dynamic, and self-assured student during my university years, I want to actively self-study more specific knowledge, enhance my English, and practice teamwork skills. I want to participate in a club run by the Faculty and take part in research projects.

*** Phan My Tran -** *Top scorer on the high school graduation exam (28.2 points), freshman in the Medical Doctor Program at the School of Medicine*

Getting closer to my childhood dream

Since elementary school, I've wanted to become a doctor to cure people of their illnesses and make positive contributions. As a result, I began learning about the medical doctor major in

grade 10, and I was particularly fascinated by the Medical program in English offered by VNUHCM School of Medicine. Studying medicine in English, in my opinion, will make it simple for me to enter the global medical sector.

I now have the chance to get one step closer to my childhood dream as a student in the Medical Program at the School of Medicine. In addition to my academic studies, I plan to develop my soft skills and broaden my social world by engaging in clubs and extracurricular activities. I believe that if I want to be a successful doctor, I need to be fluent in several foreign languages; therefore, I'll start learning French and Chinese and take the IELTS exam in mid-2023.

In the future, I'll apply for scholarships to study overseas, then come back to contribute to Vietnam's healthcare as a doctor or lecturer.

*** Dinh Huu Nghiem -** *Top scorer on the Competency Test (1,009 points), freshman in the English Faculty at the University of Social Sciences and Humanities*

Studying English, Chinese, and Korean on my own

I used to be highly interested in economics, and via the recruitment process, I could even get into the Foreign Trade University. However, after listening to the advice of my uncle, who is working in the import and export sector, I discovered that if I were strong at foreign languages, getting a second degree in economics would benefit me and open up more employment options. Then, I decided to attend the English Faculty at the University of Social Sciences and Humanities.

The expertise and dynamism of my friends surrounding me on the first days at University completely overwhelmed me. I decided to accelerate my IELTS training and make specific plans for four years at University to keep up with them and improve myself daily.

I would benefit from memorization power in studying various languages during my university years. Along with English, I have been teaching myself Chinese and Korean and intend to learn Thai, too. My attention has also focused on earning the "Students of Five Merits" Award and pursuing opportunities to study abroad. However, to me, learning alone is insufficient. In the future, I hope to get more experience by joining volunteer clubs, participating in Ho Chi Minh Communist Youth Union and Vietnamese Students' Association events, or working as a teaching assistant at a language center.

*** Huynh Van Hieu -** *Top scorer on the Competency Test (1,092 points), freshman in the Faculty of Information Technology at the University of Science*

Working for multinational corporations is my goal.

I had a motor impairment at an early age and had trouble walking. I, therefore, sought a major that was appropriate for my skills and only needed a little walking. After searching for a suitable choice, I discovered that the University of Science's Faculty of Information Technology satisfies the above requirements.

The schedule for my upcoming four academic years has also been planned in great detail. I'll concentrate on general education courses in my first year to keep my scholarship. In the second and third years, I'll seek teammates who share my enthusiasm for competing in programming contests. If I have the funds and opportunities, I hope to pursue a master's degree or study overseas after graduation.

I'm not very outgoing and tend to be shy when speaking to strangers. I hope that I'll become more confident and learn how to interact with others better during my four years at University.

Working for multinational corporations in the technology sector is my primary goal. At that time, I'll be able to support my family while also making a living from my passion.

THE SCIENCE ALUMNI COMMUNITY ORGANIZED THE FIRST CONGRESS

The University of Science and the Provisional Representative Board of the Science Alumni Community collaborated to organize the "First Congress of the Science Alumni Community," along with connection and gratitude activities, on November 19, 2022, to commemorate the 40th anniversary of Vietnamese Teachers' Day.

The Science Alumni Community's Honorary Representative Board

The Science Alumni Community's Entrepreneurship Club admits more members


The Science Alumni Community's Representative Board for the 2022-2025 term

Hundreds of graduates from various generations joined the Congress to elect the official Representative Board of the Science Alumni Community for the 2022-2025 term and to adopt the organizational rules of the Representative Board.

After over 80 years of foundation and growth across the ups and downs of the nation's history, the University of Science has striven to take the top spot in Southeast Asia for teaching, research, technological grounds of knowledge, and digital economies. The caliber of its education, the achievements of its research, and the accomplishments of previous generations of students in various fields have all affirmed the University's reputation and academic standing.

The University of Science launched the Science Alumni Community Connection Day event on August 14, 2022, in recognition of the crucial role that its graduates play in the successful implementation of the University's development strategy. This was also done to foster communication and unity among student generations during the institution's formation and growth (from the Saigon University of Science, then to Ho Chi Minh City General University, and finally to VNUHCM University of Science). Hence, the Science Alumni Community's Provisional Representative Board and Honorary Representative Board have been formally constituted.

With help from the University's faculties and departments, the Provisional Representative Board worked hard for over three months to establish a strong alumni network and directly contribute to the University and society. The highlight of this work was the founding of the Science Alumni Community's Entrepreneurship Club.

The Science Alumni Community Congress was not only a fantastic alumni event but also a cornerstone for the Science Alumni Community's entry into a new stage of growth. The Representative Board will coordinate the Science Alumni Community in the first term to connect, contribute, support, and cooperate to promote the University of Science's brand; at the same time, it will organize practical activities to support the University's transformation under the model of university autonomy in a long-term and sustainable way; it will also promote cooperation in teaching, research, and transfer of science and technology, generating many beneficial values for the society.

INNOVATION AND CREATIVITY IN EMULATION AND COMMENDATION

The National Assembly voted to adopt the Amended and Supplemented Law on Emulation and Commendation, dated June 15, 2022, establishing a legal pathway to empower the two Vietnamese national universities' (VNU) increased autonomy in emulation and commendation.

Assoc. Prof. Dr. Nguyen Minh Tam (standing) co-chairs the conference. *Photo:* **Anh Thu**

Assoc. Prof. Dr. Vu Hai Quan, Chancellor of VNUHCM, presents letters of congratulations to outstanding groups and individuals in scientific research and international rankings.

VNUHCM Board of Chancellors presents the group of lecturers and individual lecturers with the awards for Excellent Online Lecturer.

As a result, through the Party Central Committee's Commission for Emulation and Commendation, the VNU chancellors are permitted to take into account and recognize accomplishments, as well as request the Prime Minister to submit to the President for the awarding of medals, the "Ho Chi Minh Award," state awards, and honorary state titles. This illustrates the two VNUs' high degree of autonomy and, in terms of process, has sped up the process of reviewing rewards for groups and individuals that fall under their purview. The Ministry of Education and Training is authorized to establish the emulation titles and forms of commendation exclusively for the two VNUs, making it simple to accumulate merit titles at the VNU level and propose prizes at higher levels as mandated by law.

VNUHCM took over as leader of the Emulation Block for ministries and agencies in science, culture, and social affairs in 2022. With the participation of leaders, officials, and specialists in emulation and commendation from central to local levels, VNUHCM successfully conducted the Preliminary Conference of the first six months of the Emulation Block.

The most notable aspect of the emulation and commendation in 2022 was that VNUHCM actively created commendation regulations that are subject-specific and not included in the former regulations on emulation and commendation at VNUHCM, including awards for excellent online lecturers, awards for lecturers of the year, and forms of VNUHCM honor like the VNUHCM badges. This unique and creative feature shows how emulation and commendation have changed at VNUHCM, creating a new competitive environment and providing staff, officials, and lecturers with timely inspiration and encouragement on a material and spiritual level.

VNUHCM had 15 groups of lecturers and individual lecturers honored "Excellent Online Lecturer" and nine honored "Lecturer of the Year". This was the first time these emulation and commendation titles were applied. Each lecturer group or individual lecturers who achieved the honors received a reward of VND 25 million.

INAUGURATION OF THE LIBRARY OF VNUHCM CAMPUS IN BEN TRE PROVINCE

During the Opening Ceremony of the 2022-2023 academic year, VNUHCM Central Library sponsored devices, computers, bookshelves, and new books to establish the Library in VNUHCM Campus in Ben Tre Province. This has contributed to improving the quality of teaching and learning in this area as it has faced many difficulties regarding facilities.

The delegates are cutting the ribbon to inaugurate the Library of VNUHCM Campus in Ben Tre province.

The staff and students arranged and decorated the Library according to the models used to participate in the contest "Book Arrangement and Display Space Festival of Ben Tre Province in 2022". The students chose "Aspirations" as the theme of the arrangement model to welcome the delegates attending the Inauguration Ceremony.

"Aspirations" are good things, driving forces and bonds, prompting everyone to commit and work together to achieve a common goal. The meaning within the model is the connection from the past - present - future, namely: Rach Mieu bridge - the Ship reaching out to the sea - Wind turbines. It is not only the inheritance and promotion of traditional values but also the vision and developmental orientation of Ben Tre Province toward the East. Moreover, it is the aspiration of students and the province itself to make a new Dong Khoi revolution, implementing Ben Tre's aspiration. That means, by 2045, Ben Tre can become a "worth living, good income, green, clean, friendly and modern" place.

During the initial establishment stage, the Library of VNUHCM'S Branch received sponsored books from VNUHCM Central Library and others. In the next stage, VNUHCM Campus in Ben Tre Province will review and update all its book data in order to promptly add new documents, giving priority to selecting books for teaching, learning, and research in the field of construction engineering; then will aim to expand the documents by field and category so that resources at the Library can be balanced. It is expected that in 2023, VNUHCM Campus in Ben Tre Province will deploy an electronic library and put it into operation with the database from the support of major journals such as Scopus/CABI/World Bank Open Data.

Libraries play a significant role in university education, and they are one of the factors that evaluate education quality. VNUHCM Campus in Ben Tre Province is committed to developing its Library more and more fully so it can quickly meet the needs of teaching and learning.

An artistic book stacking model with the theme "Aspiration".

The library is equipped with computers for data retrieval.

TOWARD THE FUTURE

VNUHCM'S OPERATION PLAN

The theme "Autonomy Model - Reaching the World" was chosen as the annual theme during the 2021-2025 period and the central orientation for the implementation of activities throughout the VNUHCM system with the determination to establish novel, different, and international-level values.

In 2023, VNUHCM identifies the key task of implementing the Strategic Plan for the period 2021-2025 and conducting a mid-term review and assessment. In order to successfully implement the Strategic Plan with crucial activities, including:

- As for governance: (1) To develop and submit to the Prime Minister the Project "Developing VNUHCM into one of the leading higher education institutions in Asia"; (2) To continue to innovate the VNUHCM governance structure in the lean and efficient direction; (3) To gradually improve the university autonomy model, focusing on the accountability to stakeholders, and improving the effects the university councils.

- As for education: (1) To implement a digital transformation, improving the quality of training, including: Developing a shared digital learning system in teaching and learning; Constructing and implementing online courses on the MOOC platform; Comprehensively and synchronously implementing the education management system; (2) To continue the implementation of dual-degree programs, BS-MS integrated programs; to enlarge the scale of graduate education; to enhance practical and extracurricular experience activities for learners; to promote the upgrade and improvement of the competencies and professional qualifications of the teaching staff; (3) To implement refresher training courses tailored for localities and enterprises.

- As for science and technology: Digital transformation is implemented, improving the efficiency of science and technology activities: (1) To construct and operate a system of project registration and management of data science and technology; (2) To continue the implementation of the strategy of increasing the number of Scopus-indexed international publications and focusing on international cooperation in publications; (3) To effectively implement international projects, national key research projects and programs, and cooperation programs signed with Ho Chi Minh City, Binh Duong Province, and localities.

- As for finance: (1) To continue the diversification of university financial resources; (2) To complete the financial regulations and those for management and use of VNUHCM's public property; (3) To establish enterprises under VNUHCM.

- As for the construction of the University District: (1) To effectively implement the Vietnam National University Development Project - VNUHCM Subproject funded by the World Bank; (2) To commence a number of new projects in VNUHCM District to serve students; (3) To adjustment the VNUHCM planning.

VNUHCM's Orientation Plan 2023 is the basis for the implementation of the member universities and affiliates' operation plans in 2023, contributing to the achievement of the Strategic Plan for the 2021-2025 period of the VNUHCM system.

AUTONOMY IN UNIVERSITY GOVERNANCE

Assoc. Prof. Dr. Phan Thanh Binh

Speaking at the 17th Assembly - Section IV of VNUHCM University Council at the VNUHCM Administration Building on December 8, Assoc. Prof. Dr. Phan Thanh Binh - former member of the Central Committee of the Communist Party of Vietnam (CPV), Chairman of the National Assembly's (NA) Committee on Culture and Education, and Chancellor of VNUHCM - made in-depth analysis and comments on the impact of democracy and autonomy in university governance, as well as the necessity of the regulations on the organization and operation of VNUHCM and its member universities and affiliates.

The need for autonomy

In 2022, VNUHCM chose the "Autonomy Model," confirming its proper awareness and determination to build a standard for higher education and ensure academic freedom, democratic governance, and autonomy in social responsibility awareness. All of them serve to unleash the VNUHCM system's creative potential as a whole, from leaders, administrators, lecturers, and employees to outstanding and talented student groups. This policy is in line with the resolutions of NA Plenary Session VI on "Improving the law-governed Socialist Republic of Vietnam in the New Period" and "Renovating the CPV ruling method over the political system in the New Period." Noticeably, the phrase "in the New Period" is used in both resolutions.

Only an autonomous organization under the new democracy can train self-sufficient intellectuals who are willing, brilliant, creative, and courageous to accept social and national responsibilities. That is the function of any university.

In order to build an autonomous higher education, the academic values, mechanisms, and human resources are all autonomous.

The establishment of a complex based on many traditional major universities in HCMC determines VNUHCM's academic and scientific values. If academic quality and contribution are declining today, VNUHCM, including VNUHCM's University Council, will bear the responsibility.

Another matter is building and ensuring an autonomous mechanism that aligns with the definition of a university, i.e., VNUHCM needs to further enhance its scientific values and intellectual contribution of lecturers and students. This requires

their constant efforts to become responsible with full awareness and autonomy.

Only when we have the proper awareness of university autonomy and are fully qualified to implement an autonomous university, the current higher education can become true higher education, and a university can become a true one, where the competencies of intellectuals can be trained and developed to serve the country. Otherwise, we will forever remain an administrative agency or a form of high school 2.0, where we can only train decent and docile workers for society, not the owners of the future.

This is a significant challenge for VNUHCM's University Council to keep in its mind and strive for improvement. Democracy and autonomy in universities are still new for awareness and implementation, especially when society still heavily focuses on administration and management, when the market's impact on universities is getting greater, and when the competition between national higher education and international one is getting fiercer. A lack of genuine care for democracy or autonomy can make it difficult for our staff to unleash our creativity, our system to be enthusiastic and disciplined, and our mindset and critical thinking to improve; therefore, VNUHCM might miss chances and conditions to become world-class in this case.

The need for VNUHCM's organization and operation regulations

The issue of autonomous mechanisms and autonomous humans is raised when discussing university autonomy. Humans will ensure the mechanisms function properly, and the mechanisms will ensure that the system is adjusted in accordance with the principles, immediately adjusting the behavior and thinking of those in charge as well as those under management.

The autonomous mechanisms include an operation system and a board of governance, which ensure that they can operate in accordance with principles and relationship balance via the operation regulations and legal framework. For VNUHCM, a large university system with six out of seven member universities becoming autonomous and financially independent affiliates, it is critical that the system's organization and operation regulations be clearly established.

The amended and supplemented Law on Higher Education (Law 34) has been in effect for more than three years (since July 1, 2019), but the Government has not yet issued a regulation on the operation of VNUHCM in accordance with the Law. VNUHCM and its member universities and affiliates units have been operating under the old regulations since then. It is remarkable that no autonomous units are mentioned in Law 34.

This is a critical and pressing issue that VNUHCM's University Council and the VNUHCM must be aware of, investigate, and address.

For the VNUHCM system, once it has recognized the autonomy of the member, both their mechanism regulations and the systemic relationship must be clearly and concisely defined, not just in terms of tuition fees. These connections are now different, particularly in academia, business, and finance. Moreover, how is the power deployed and monitored within an autonomous university or affiliate? In a system where the mechanisms, structures, and responsibilities of individual leaders are all intertwined, how can an autonomous mechanism demonstrate its capacity, bravery, and effectiveness?

VNUHCM and its member universities' current regulations do not officially specify the role of the university councils, nor do they specify the content and format required to ensure the effectiveness of the university councils' activities. As we all know, a university council's activities, working approaches, and nature are quite different from those of the governing body. A university council operates on a parliamentary system, exchanging, debating, and issuing a joint resolution for implementation by the management party. The council chairperson is not its head but rather a coordinator who ensures that the council can effectively perform its functions and duties and issue a quality resolution.

Only with clear distinction can we ensure the correctness in implementing the functions and duties of each member university and affiliate as well as each position.

The Central Committee recently issued a resolution on "Fully institutionalizing and effectively implementing the mechanism by which the people exercise government power through direct democracy, representative democracy, particularly grassroots democracy," and "All power must be controlled by mechanisms." In that spirit, I humbly propose that the leaders of the CPV Committee, VNUHCM Board of Chancellors, and VNUHCM's University Council review and develop organization regulations and the temporary operation ones of VNUHCM and its member universities and affiliates waiting for the regulations updated or newly-issued by the Government

By Law, VNUHCM's regulations are to be issued by the Government. However, with their aptitude and development process over the past 20 years, I do believe it is completely feasible for VNUHCM to draft and promulgate its temporary regulations on organization and operation. The Government's regulations mainly expand the mission and powers of VNUHCM, which are held by the Prime Minister. Moreover, by Law, internal processes and regulations, from contents to forms, should be decided by VNUHCM and its University Council to ensure the flexibility and practicality of the whole system, member universities, and affiliates.

The set of regulations is even more urgent when the model, position, and operation of Vietnam National Universities are receiving great attention and expectations from society, in parallel with the recent approval by the Prime Minister of the establishment of more multi-disciplinary universities.

PROMOTION OF DIGITAL TRANSFORMATION IN VNUHCM'S EDUCATION ACTIVITIES

In VNUHCM's Strategic Plan for the 2021-2025 period, digital transformation (DT) is determined as a solution to enhance the efficiency of governance and the quality of education and research. It is also a key activity in 2023.

In the field of education, these activities are: (1) developing a system of shared digital learning resources for teaching and learning; (2) developing and implementing online courses on the MOOC platform; and (3) implementing comprehensively and synchronously the education management system.

Development of shared digital learning resources

VNUHCM has actively built digital learning resources with a system of highly interactive lesson plans, exercises, and documents. Materials for core subjects in all study programs (general subjects) are its first focus. Up to now, on the VNUHCM shared digital learning resource system, there have been more than 40 lectures on basic or specialized subjects and two general subjects: Marxism-Leninism and Statistics & Probability. The endogenous electronic resource system at the Central Library, with 85 textbooks, 355 graduate theses, and 288 research topics, has been collected and gradually put into service to serve the teaching, learning, and research needs of lecturers and students in the VNUHCM system.

In 2023, VNUHCM will continue accelerating the construction of a shared digital data store. Specifically: (1) developing a project to establish a digital lecture production center; (2) issuing policies on the management and exploitation of a shared digital learning materials system; (3) continuing to build more digital learning materials for basic and specialized subjects.

These digital learning resources serve as the foundation for the student-centered model of blended learning, which encourages self-study, self-research, and question-asking and discussion skills; students will then develop the skills required by employers.

Development and implementation of online courses on MOOC platforms

Aside from formal undergraduate and graduate programs, VNUHCM has a mission to engage and serve the community, as well as to promote social progress. One way to accomplish this mission is to create online courses on MOOC platforms to spread new knowledge throughout the community. In 2023, VNUHCM intends to create at least five online courses on the MOOC platform for students both inside and outside VNUHCM. The courses are developed so as to introduce basic knowledge at the university level for students to orient their future careers.

The seminar to collect the stakeholders' opinions for the Project on Strengthening digital transformation capacity in education activities at VNUHCM

No.	Description	UT	US	IT	EL	IU	USSH	AG	SoM
1.	Online training portal	x	x	x	x	X	x	x	x
2.	Learning management system (LMS)	x	x	x	x	X	x	x	x
3.	Learning content management system (LCMS)	x	x	x	x	X	x	x	
4.	Digital learning system	x	x	x	x	X	x	x	
5.	Server system and connection infrastructure	x	x	x	x	X	x	x	
6.	Administrative personnel and technical support	x	x	x	x	X	x	x	x
7.	Online training on lecturers' teaching skills	x	x	x	x	X	x	x	
8.	Regulations on the application of information technology in teaching and learning	x			x				

Comprehensive and synchronous implementation of the education management system

In 2023, VNUHCM will continue to build and gradually complete data centers for education management, including:

- Learner's Data Center is the repository for all data of learners from the time they register for the VNUHCM entrance exam until they graduate; a base to store and update the entire process, learning results, and learner activities.

- Lecturer's Data Center is the repository for all data of officials, lecturers, and researchers in the VNUHCM system; a base to store and update the entire working history of lecturers in the VNUHCM system from the time they begin working until they retire.

This database serves as the foundation for implementing inter-training and credit recognition throughout the VNUHCM system. The VNUHCM system's analysis of learners' big data will aid in the discovery of factors influencing learning outcomes, allowing adjustments to be made in policies, teaching methods, and assessment methods. That is to improve education quality while meeting the growing needs of learners and society. Finally, based on this big data, AI applications will recommend a personalized learning path, assisting in the improvement of teaching, management, and tutoring effectiveness.

ORIENTATION OF SCIENCE AND TECHNOLOGY ACTIVITIES AND INNOVATION IN 2023

VNUHCM's strategic plan on science, technology, and innovation has been implemented in the medium term 2021-2025 with two crucial missions. (i) Enhancing international publications to quickly increase the number of international journals indexed in the Scopus and Web of Science databases; (ii) Strengthening the system's power through gathering the whole system's resources to carry out the science and technology (S&T) missions at the VNUHCM level. Until December 2022, the whole system's total number of publications in the Scopus database reached 1,913, meeting 77% of the target of 2,500 articles for the year, not to mention that four member universities surpassed their set goals for international publication. The number of Scopus-indexed international publications increased by 63% compared to the same period in 2021 (with 1,211 articles). Two patent applications were granted by the USA. VNUHCM hosted the Scheme "Developing VNUHCM into one of the leading educational institutes in Asia." Its purposes were to continue conducting the strategic plan on S&T in 2023 with the theme "Self-governance model - Reaching the world level" and to implement the Government's action program following Resolution No. 24-NQ/TW, dated October 7, 2022, by the Political Bureau. In 2023, four essential activities will be continuously implemented as follows:

1. Completing the supportive policies for activities of science, technology, and innovation

Specific activities:

(i) Building supportive policies for the member universities and affiliates to hold conferences/ seminars on publishing the articles indexed in Scopus.

(ii) Granting awards to international publications at VNUHCM in the 2022-2025 period.

(iii) Issuing regulations on KPI framework guidelines, and assessment forms/regulations on task completion for lecturers in the academic year.

(iv) Building supportive policies for female lecturers/researchers participating in science and innovation research.

(v) Updating the criterion set for approving VNUHCM-level research projects of types A, B, and C. A priority is given to projects chaired by female researchers, projects with international publications indexed in Scopus, and in direct relation to education.

(vi) Proposing a cooperation model among the Government, researchers, and enterprises (enterprises have good understandings of product markets in S&T, commercialize research results, and invest in research for the final products).

2. Continue developing major research groups/centers of excellence and cooperating with foreign countries/enterprises

Specific activities:

(i) Continuing investing in crucial research programs by strong research groups.

(ii) Enhancing international cooperation in research related to establishing some Centers of Excellence (efficiently implementing the VIAN network of the Partnership for Higher Education Reform (PHER) project by Indiana University, USA, sponsored by the United States Agency for International Development (USAID)).

(iii) Recommending VNUHCM member universities and affiliates to organize international conferences and seminars depending on their fortes. Simultaneously, VNUHCM will finance the organization of conferences, especially those listed in Scopus.

3. Enhancing startup activities, innovation, and technology transfer

Specific activities:

(i) Building a project to establish the Innovative Entrepreneurship Center at the Advanced Research Center (part of the World Bank loan project) in which there is a zone as an office of intellectual property and technology transfer for scientists, research groups, postgraduates, and businesses to meet and discuss relevant issues.

(ii) Giving orders for potential/strong research groups to submit proposals from the National S&T programs, the contents of cooperation with localities, especially HCM City, the Ministry of S&T, the coordinative research program on Material Science of VNUHCM and VNU-Hanoi, research programs in collaboration with enterprises such as Hung Thinh Group, Loc Troi Group, and Vietnam Food Joint-Stock Company.

(iii) Signing cooperation agreements with many Central Ministries/ International educational institutes/ Enterprises/ Large Groups; encouraging enterprises and international educational institutes to set up their laboratories or R&D offices at the Advanced Research Center.

4. Building a management information system of science, technology, and innovation

Specific activities:

(i) Completing and operating the science and technology portal. The portal offers instructions on presenting proposals, helps locate various sponsorships, assists research groups in registering research topics, and fosters a culture of academic integrity.

(ii) Completing the software to manage the research topic and proposal registration, approval, and project acceptance.

The overall perspective of the Advanced Research Center.

MANY MODERN CONSTRUCTIONS TO BE BUILT IN THE VNUHCM DISTRICT

With the $98 million funding (over VND 2,300 billion) from the World Bank (VUDP project), VNUHCM will prioritize investment in an advanced and modern infrastructure to transform VNUHCM into a green and smart district imbued with Vietnamese identity.

Accordingly, within 2023, VNUHCM planned to renovate classrooms, construct the VNUHCM School of Medicine buildings, and build the Advanced Research Center.

With the goals of improving training quality and applying advanced technology in teaching and learning, the VUDP project aims to renovate 15,000-square-km lecture halls, labs, and simulation labs. It will also invest in building smart classrooms, multimedia auditoriums, virtual practice rooms, and virtual labs which help improve interactions and teaching quality at five member universities, namely the University of Technology, the University of Science, the University of Social Sciences and Humanities, the University of Information Technology, and the University of Economics and Law.

The VUDP project offers appropriate funding to upgrade the facilities for the School of Medicine so that it can transform into the University of Health Sciences. Buildings YB1, YB2, and YB3 are expected to have an 8,300-square-meter built-up area and a 33,500-square-meter floor area to meet the required size for training 3,000 students.

The perspective of a smart classroom.

Simultaneously, the VUDP project proposes constructing the Advanced Research Center for the VNUHCM system with a 10,900-square-meter built-up area on a 46,500-square-meter land area. The total floor area of the main building and additional buildings will be 42,000 square meters. When the construction is completed, the Advanced Research Center will serve as a collaborative center for interdisciplinary research, in-depth experiments, and high-quality technology transfer.

The VUDP project is expected to end in 2025 and will significantly contribute to transforming VNUHCM into an advanced university worldwide.

The overall perspective of the buildings of the School of Medicine.

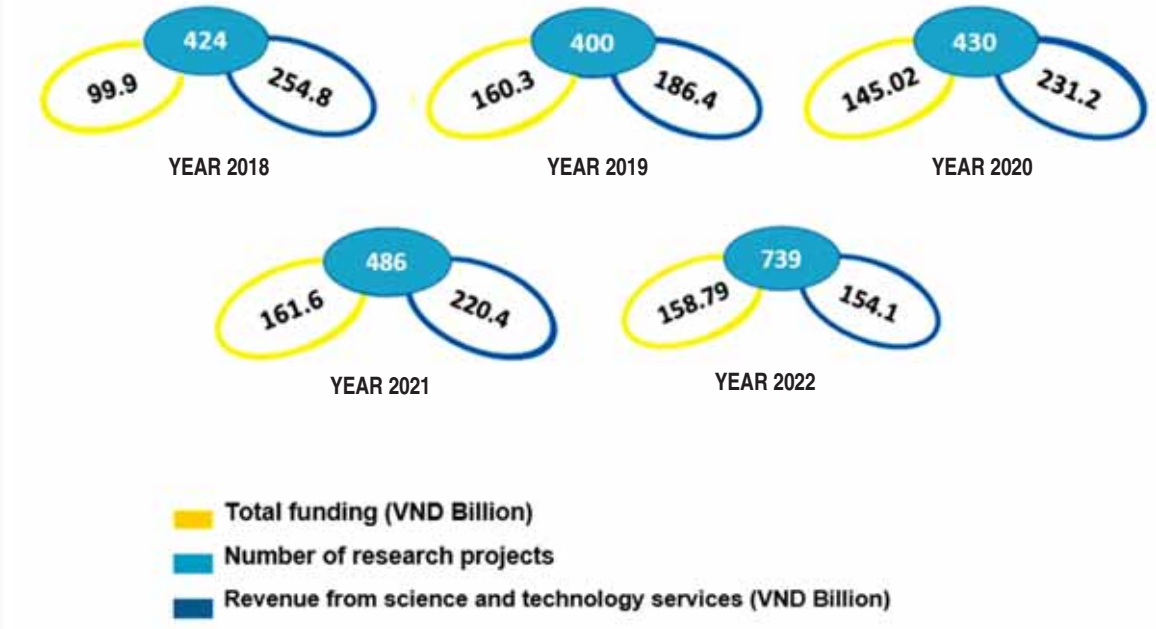
The construction of the Learning Lab House BK.B7.

Administration & Research Building QT.A1.

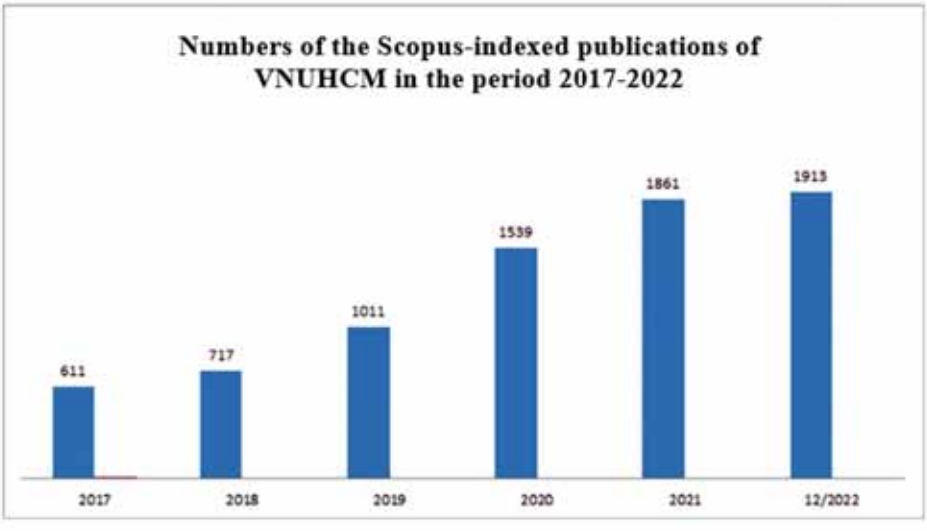
APPENDIXES

(FACTS AND FIGURES OF 2022 UPDATED AS OF OCTOBER 2022)

FIGURES OF SCIENCE & TECHNOLOGY

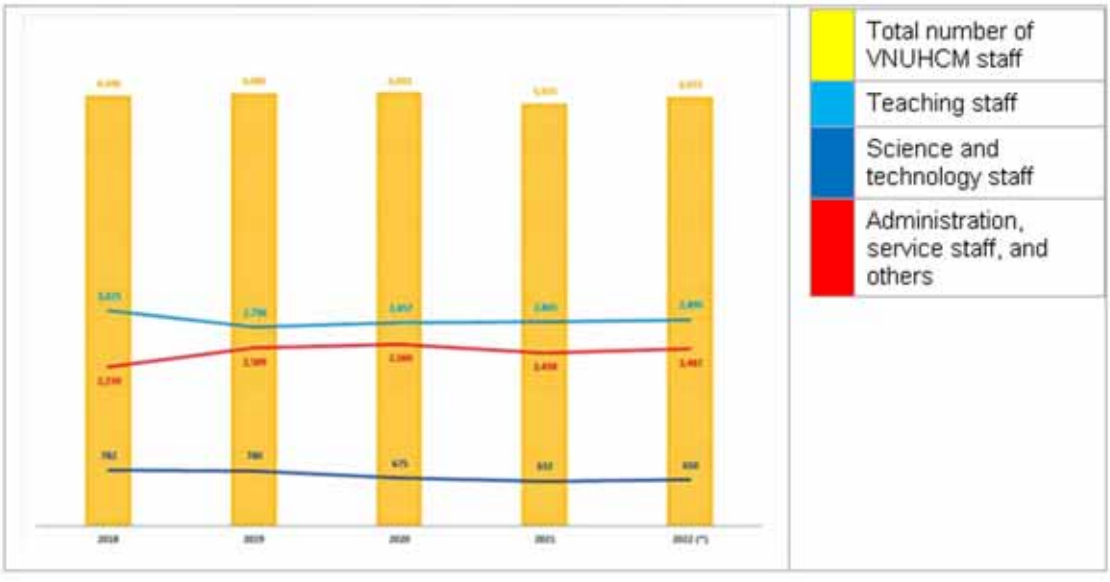


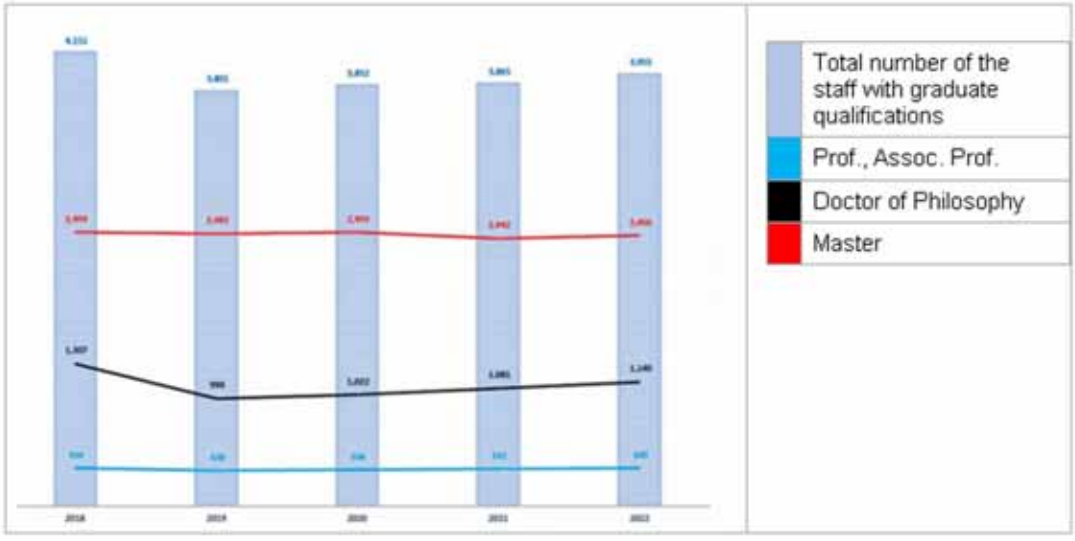
FIGURES OF SCOPUS-INDEXED PUBLICATIONS



Number of the Scopus-indexed publications as of December 2022: 1,913

FIGURES OF VNUHCM STAFF





I. TRAINING AND EDUCATIONAL QUALITY ASSESSMENT

Table 1. TRAINING SCALE OF REGULAR UNDERGRADUATE PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2018	2019	2020	2021	2022
University of Technology	19,735	18,968	20,955	23,957	23,987
University of Science	11,322	12,007	13,792	15,270	17,062
University of Social Sciences & Humanities	10,174	12,394	10,942	11,753	13,291
International University	4,732	4,855	5,656	6,323	7,566
University of Information Technology	4,937	5,009	5,988	7,038	8,123
University of Economics & Law	6,479	7,133	7,619	8,674	9,936
An Giang University			7,413	9.262	9,308
School of Medicine	885	955	1,043	1,137	1,248
School of Politics and Administration Sciences	-	-	-	61	121
VNUHCM Campus In Ben Tre Province	-	-	19	49	80
VNUHCM	**58,264**	**61,321**	**73,427**	**82,586**	**90,722**

Table 2. TRAINING SCALE OF IN-SERVICE AND DISTANCE-LEARNING UNDERGRADUATE PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2018	2019	2020	2021	2022
University of Technology	3,535	3,726	3,442	3,480	4,111
University of Science	337	422	794	1,095	1,427
University of Social Sciences & Humanities	2,483	137	1,692	1,452	1,897
University of Information Technology	281	259	351	351	452
University of Economics & Law	1,169	583	705	626	741
An Giang University	-	-	1,085	1,277	951
VNUHCM	**7,805**	**5,127**	**8,069**	**8,281**	**9,579**

Table 3. TRAINING SCALE OF MASTER'S PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2018	2019	2020	2021	2022
University of Technology	1,956	2,330	2,191	2,752	2,267
University of Science	1,184	1,138	1,151	1,262	1,805
University of Social Sciences & Humanities	1,307	1,294	1,348	1,440	1,585
International University	699	572	543	472	521
University of Information Technology	302	298	338	435	334
University of Economics & Law	639	500	487	417	703
An Giang University		173	142	173	139
Institute for Environment and Resources	229	212	207	273	232
VNUHCM	**6,316**	**6,517**	**6,407**	**7,224**	**7,946**

Table 4. TRAINING SCALE OF DOCTORAL PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2018	2019	2020	2021	2022
University of Technology	250	269	265	229	233
University of Science	202	214	186	211	200
University of Social Sciences & Humanities	426	422	427	370	366
International University	40	51	55	64	73
University of Information Technology	31	27	25	23	15
University of Economics & Law	159	172	169	126	149
An Giang University	-	-	-	-	-
Institute for Environment and Resources	31	23	13	14	15
VNUHCM	**1,139**	**1,178**	**1,140**	**1,037**	**1,051**

TABLE 5. NUMBERS OF STUDY PROGRAMS*

YEAR	NUMBER OF CODES FOR UNDERGRADUATE PROGRAMS	NUMBER OF CODES FOR MASTER'S PROGRAMS	NUMBER OF CODES FOR DOCTORAL PROGRAMS
2018	126	121	89
2019	127	129	89
2020	127	129	93
2021	134	133	96
10/2022	139	141	98

(*) Excluding the identical programs

Table 6. LIST OF NEWLY-OPENED PROGRAMS IN 2022

ORD.	MEMBER UNIVERSITY/AFFILIATE	Program name	Code	BA	MA	PhD
1.	University of Social Sciences & Humanities	Vietnamese Studies	9310630			x
2.	University of Science	Resource and Environmental Management	7850101	x		
3.		Electronics, Physics, and Information Technology	7440107	x		
4.	University of Information Technology	Artificial Innrelligence	7480107	x		
5.	An Giang University	Quality Assurance and Food Safety	7540106	x		
6.		Veterinarymedicine	7640101	x		
7.	School of Medicine	Traditional Medicine	7720115	x		
8.		Nursing	7720301	x		

Table 7. GRADUATION SCALE OF REGULAR UNDERGRADUATE PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2018	2019	2020	2021	2022	Total
University of Technology	4,281	4,100	2,525	2,274	2,305	15,485
University of Science	1,670	1,839	1,732	1,637	888	7,766
University of Social Sciences & Humanities	1,780	2,348	1,858	2,200	2,308	10,494
International University	742	842	230	576	753	3,143
University of Information Technology	259	645	368	130	487	1,880
University of Economics & Law	1,065	949	1087	1,226	872	5,199
An Giang University	-	1,709	1,120	1,457	1,008	5,294
Khoa Y	100	112	105	160	210	687
VNUHCM	**9,897**	**12,544**	**9,025**	**9,660**	**8,822**	**49,948**

Table 8. NUMBERS OF GRADUATES FROM HONOR ENGINEERING/ BACHELOR PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2018	2019	2020	2021	2022	Total
University of Technology	258	265	250	116	666	955
University of Science	94	86	104	92	0	376
University of Social Sciences & Humanities	12	21	31	15	24	103
University of Information Technology	10	42	28	29	37	146
University of Economics & Law	55	34	27	27	47	190
VNUHCM	**429**	**448**	**440**	**279**	**174**	**1,770**

Table 9. NUMBERS OF GRADUATES FROM HIGH-QUALITY SERVICE PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2022	Total
University of Technology	474	20.56%
University of Science	26	2.93%
University of Social Sciences & Humanities	185	8.02%
University of Information Technology	207	43.31%
University of Economics & Law	698	80.02%
VNUHCM	**1,590**	**18.02%**

%: Percentage of graduates from the High-quality Service Programs/ Total of full-time graduates

Table10. GRADUATION SCALE OF IN-SERVICE AND DISTANCE-LEARNING UNDERGRADUATE PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2018	2019	2020	2021	2022
University of Technology	166	146	242	392	300
University of Science	21	41	40	33	224
University of Social Sciences & Humanities	674	678	360	315	260
University of Information Technology	85	57	41	39	7
University of Economics & Law	414	5	289	255	116
An Giang University	-	169	172	61	178
VNUHCM	**1,360**	**1,096**	**1,144**	**1,095**	**785**

Table 11. GRADUATION SCALE OF MASTER'S PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2018	2019	2020	2021	2022
University of Technology	544	460	497	206	391
University of Science	365	306	306	226	338
University of Social Sciences & Humanities	254	154	205	151	180
International University	88	92	172	29	89
University of Information Technology	51	33	32	32	35
University of Economics & Law	183	298	217	120	136
An Giang University	-	21	48	49	25
Institute for Environment and Resources	36	29	27	41	0
VNUHCM	**1,521**	**1,393**	**1,504**	**854**	**1,194**

Table 12. GRADUATION SCALE OF DOCTORAL PROGRAMS

MEMBER UNIVERSITY/AFFILIATE	2018	2019	2020	2021	2022
University of Technology	20	26	29	6	44
University of Science	29	40	29	27	24
University of Social Sciences & Humanities	31	21	45	42	23
International University	-	-	3	3	0
University of Information Technology	3	-	4	6	2
University of Economics & Law	5	6	5	5	13
Institute for Environment and Resources	8	1	-	-	1
VNUHCM	**96**	**94**	**115**	**89**	**107**

Table13A. JOINT UNDERGRADUATE PROGRAMS

ORD.	MEMBER UNIVERSITY/ AFFILIATE	Programme name	Joint partner	Approved Decision
1	University of Technology	Springfield Business Administration	University of Illinois	909/QĐ-ĐHQG-QHĐN
2	University of Technology	Business Administration	University of Macquarie	510/QĐ-ĐHQG
3	University of Technology	Petroleum Engineering	University of Adelaide	187/QĐ-ĐHQG-QHQT
4	University of Technology	Pharmaceutica Engineering	University of Adelaide	1885/QĐ-ĐHQG
5	University of Technology	Chemical Engineering	University of Adelaide	1884/QĐ-ĐHQG
6	University of Technology	Chemical Engineering	University of Queensland	969/QĐ-ĐHQG
7	University of Technology	Construction Engineering	Griffith University	857/QĐ-ĐHQG
8	University of Technology	Environmental Engineering	Griffith University	858/QĐ-ĐHQG
9	University of Technology	Information Technology	University of Queensland	184/QĐ-ĐHQG-QHQT
10	University of Technology	Mechatronics	University of Technology Sydney	855/QĐ-ĐHQG
11	University of Technology	Electrical & Electronic Engineering	University of Macquarie	856/QĐ-ĐHQG
12	University of Science	Chemistry	Le Mans University	958/QĐ-ĐHQG
13	University of Science	Service Science	Auckland University of Technology (AUT)	496/QĐ-ĐHQG
14	University of Science	International Business	Keuka College	1496/QĐ-ĐHQG
15	University of Science	Information technology	Claude Bernard Lyon 1 University (UCBL1)	859/QĐ-ĐHQG
16	University of Social Sciences & Humanities	Journalism	Deakin University	1875/QĐ-ĐHQG
17	University of Social Sciences & Humanities	International Relations	Deakin University	1142/QĐ-ĐHQG
18	University of Social Sciences & Humanities	English Language	University of Minnesota	609/QĐ-ĐHQG

19	University of Social Sciences & Humanities	Chinese Language	Guangxi Teachers Education University	862/QĐ-ĐHQG
20	University of Social Sciences & Humanities	Vietnamese Studies	Yongsan University	891/QĐ-ĐHQG
21	University of Social Sciences & Humanities	Vietnamese Studies	Chungwoon University	892/QĐ-ĐHQG
22	University of Social Sciences & Humanities	Vietnamese Studies	Busan University	893/QĐ-ĐHQG
23	International University	Business Administration	Auckland University of Technology	962/QĐ-ĐHQG
24	International University	Business Administration	University of the West of England	375/QĐ-ĐHQG
25	International University	Business Administration	University of the West of England	376/QĐ-ĐHQG
26	International University	Biotechnology	University of the West of England	1291/QĐ-ĐHQG
27	International University	Biomedical Science	University of the West of England	1292/QĐ-ĐHQG
28	International University	Electronics and Telecommunications Engineering	University of the West of England	632/QĐ-ĐHQG
29	International University	English Language	University of the West of England	567/QĐ-ĐHQG
30	International University	English Language	University of the West of England	568/QĐ-ĐHQG
31	International University	Information Technology	University of the West of England	174/QĐ-ĐHQG-QHĐN
32	International University	Information Technology	University of the West of England	629/QĐ-ĐHQG
33	International University	Industrial and Systems Engineering	Binghamton University	819/QĐ-ĐHQG
34	International University	Computer Science	Binghamton University	817/QĐ-ĐHQG
35	International University	Electrical Engineering	Binghamton University	818/QĐ-ĐHQG
36	International University	Business Administration	University of Houston	1873/QĐ-ĐHQG
37	International University	Business Administration	University of New South Wales	449/QĐ-ĐHQG
38	International University	Business Administration	University of Nottingham	1714/QĐ-ĐHQG
39	International University	Information Technology	University of Nottingham	1715/QĐ-ĐHQG
40	International University	Biotechnology	University of Nottingham	1716/QĐ-ĐHQG
41	International University	Electronics and Telecommunications Engineering	University of Nottingham	1713/QĐ-ĐHQG
42	International University	Food Technology	University of Nottingham	816/QĐ-ĐHQG
43	International University	Information Technology	Deakin University	483/QĐ-ĐHQG
44	International University	Business Administration	University of Missouri St. Louis	861/QĐ-ĐHQG
45	International University	Business Administration	Truman State University	627/QĐ-ĐHQG
46	International University	Business Administration	Andrews University	811/QĐ-ĐHQG

47	International University	Business Administration	Central Oklahoma University	576/QĐ-ĐHQG
48	International University	Computer Science	Central Oklahoma University	579/QĐ-ĐHQG
49	International University	Information Technology	Turku University	812/QĐ-ĐHQG
50	International University	Commercial Economics	Toulouse Capitole 1 University	1460/QĐ-ĐHQG
51	Information Technology University	Computer Science	Birmingham City University	689/QĐ-ĐHQG
52	Information Technology University	Computer Network and Information Security	Birmingham City University	690/QĐ-ĐHQG
53	University of Economics and Law	International Business	University of Gloucestershire	1704/QĐ-ĐHQG
54	University of Economics and Law	Business Administration	University of Gloucestershire	1705/QĐ-ĐHQG
55	University of Economics and Law	Accounting and Finance	University of Gloucestershire	956/QĐ-ĐHQG
56	University of Economics and Law	International Business	Birmingham City University	1266/QĐ-ĐHQG
57	University of Economics and Law	International Finance	Birmingham City University	1265/QĐ-ĐHQG

Table 13B. JOINT GRADUATE PROGRAMS

ORD.	MEMBER UNIVERSITY/ AFFILIATE	Program name	Joint Partner	Approved Decision
1	University of Technology	Computer Science	University of Technology Sydney	1241/QĐ-ĐHQG
2	University of Technology	Strategic Management	Maastricht University	899/QĐ-ĐHQG
3	University of Technology	International Management Consulting	University of Applied Sciences and Arts - Northwestern Switzerland	1006/QĐ-ĐHQG
4	University of Science	Applied Mathematics	4 higher education institutions of the French Republic	1353/QĐ-ĐHQG
5	University of Science	Materials Science	Japan Advanced Institute ò Science and technology (JAIST)	1144/QĐ-ĐHQG
6	University of Science	Information Technology	Japan Advanced Institute ò Science and technology (JAIST)	781/QĐ-ĐHQG
7	University of Science	Information Systems	University Claude Bernard Lyon 1 (UCBL1)	782/QĐ-ĐHQG
8	University of Science	Commercial Applications in Experimental Science	Université Grenoble Alpes	343/ QĐ-ĐHQG
9	University of Social Sciences & Humanities	TESOL	Benedictine University	31/QĐ-ĐHQG

10	University of Social Sciences & Humanities	Communication Management	Stirling University	201/QĐ-ĐHQG
11	International University	Business Administration	University of Hawaii at Manoa	1134/QĐ-ĐHQG
12	International University	Business Administration	Swinburne University of Technology	128/QĐ-ĐHQG
13	International University	International Business Administration	Paris Graduate School of Management	200/ QĐ-ĐHQG
14	International University	Business Administration	Andrews University	457/QĐ-ĐHQG; 1682/QĐ-ĐHQG
15	International University	Software Technology	University of Bordeaux, Paris 6	172/ QĐ-ĐHQG
16	University of Economics & Law	International Business Administration	Birmingham City University	1267/QĐ-ĐHQG
17	University of Economics & Law	Management and Finance	Birmingham City University	1264/QĐ-ĐHQG
18	University of Economics & Law	International Business Law	Paris 2 Panthéon-Assas University	964/QĐ-ĐHQG
19	University of Economics & Law	Vietnamese & French Property Law	Paris 1 Panthéon-Assas University	821/QĐ-ĐHQG
20	University of Economics & Law	Vietnamese & French Property Law	Paris 2 Panthéon-Assas University	1757/QĐ-ĐHQG
21	University of Economics & Law	French and Asian Business Law	Paris 2 Panthéon-Assas University	348/QĐ-ĐHQG

Table14. LIST OF ACCREDITED MEMBER UNIVERSITIES/AFFILIATES AND STUDY PROGRAMS

ORD.	MEMBER UNIVERSITY/AFFILIATE	ASSESSMENT TIME	STANDARDS
I.	**INSTITUTIONAL-LEVEL ACCREDITATION**		
1.	International University	2015	VIETNAM'S MOET
		2018	AUN-QA
2.	University of Social Sciences & Humanities	2016	VIETNAM'S MOET
		2022	
3.	University of Information Technology	2016	VIETNAM'S MOET
		2022	
4.	University of Economics & Law	2016	VIETNAM'S MOET
		2022	
5.	University of Science	2016	VIETNAM'S MOET
		2022	
6.	University of Technology	2017	AUN-QA
		2017	HCERES
7.	An Giang University	2017	VIETNAM'S MOET

II.	**PROGRAMME-LEVEL ACCREDITATION**		
	University of Technology		
1.	Electronics and Telecommunication Engineering	2009	AUN-QA
2.	PFIEV Program in Mechanical Engineering - Major: Mechatronics	2010	CTI
		2016	CTI
		(Re-assessment)	CTI
3.	PFIEV Program in Mechanical Engineering - Major: Aviation Engineering	2010	CTI
		2016	CTI
		(Re-assessment)	CTI
4.	PFIEV Program in Mechanical Engineering - Major: Energy Materials (Former name: Advanced Materials)	2010	CTI
		2016	CTI
		(Re-assessment)	CTI
5.	PFIEV Program in Mechanical Engineering - Major: Polymer and Composite Materials	2010	CTI
		2016	CTI
		(Re-assessment)	CTI
6.	PFIEV Program in Electrical Engineering - Major: Telecommunications	2010	CTI
		2016	CTI
		(Re-assessment)	CTI
7.	PFIEV Program in Electrical Engineering - Major: Energy Systems	2010	CTI
		2016	CTI
		(Re-assessment)	CTI
8.	PFIEV Program in Construction Engineering - Major of Civil and Industrial Construction (Former name: Civil and Energy Construction)	2010	CTI
		2016	CTI
		(Re-assessment)	CTI
9.	Mechanical Engineering (Former name at the time of accreditation: Manufacturing Engineering)	2011	AUN-QA
10.	Construction Engineering (Former name at the time of accreditation: Civil and Industrial Construction Engineering	2013	CTI
		2017	CTI
		(Re-assessment)	AUN-QA
11.	Chemical Engineering	2013	AUN-QA
12.	Computer Science	2013	ABET
13.	Computer Engineering	2013	ABET
14.	Control and Automation Engineering	2014	AUN-QA
15.	Industrial Management	2014	AUN-QA
16.	Electrical & Electronic Engineering (Advanced program)	2015	AUN-QA
17.	Industrial Systems Engineering	2015	AUN-QA
18.	Mechanical Engineering	2015	AUN-QA
19.	Electrical Engineering	2016 (*Re-assessment)	AUN-QA

	Electronic and Telecommunication Engineering (*)		
	Control and Automation Engineering (*)		
20.	Environmental engineering	2016	AUN-QA
21.	Master of Business Administration (Major of International Management Consultancy - EMBA - MCI)	2009	FIBAA
		2015 (Re-assessment)	FIBAA
		07/2021	AACSB
22.	Master of Business Administration (Maastricht School of Management - MSM)	2010	AACSB
		2010	AACSB
		2016 (Re-assessment)	IACBE
		2016	AMBA
		2018 (Re-assessment)	AMBA
23.	Construction Engineering (*)	2017	AUN-QA
	Traffic Construction Engineering		AUN-QA
24.	Hydraulic construction engineering		AUN-QA
25.	Marine construction engineering		AUN-QA
26.	Infrastructure engineering		AUN-QA
27.	Construction engineering (High-quality service program)		AUN-QA
28.	Traffic Construction Engineering (High-quality service program)		AUN-QA
29.	Heat Engineering	2018	AUN-QA
30.	MSc in Electronics Engineering	2019	AUN-QA
31.	MSc in Telecommunications Engineering	2020 (*: Re-assessment)	ABET
	Computer Science (*)		
32.	Computer Science (High-quality service program)		
33.	Computer Engineering (*)	2020 (*: Re-assessment)	ABET
	Computer Engineering (High-quality service program)		
34.	Mechanics Engineering	2021	AQAS
35.	Mechanics Engineering (High-quality service program)		
36.	Chemistry Engineering	2021	ASIIN
	Chemistry Engineering (High-quality service program)		
37.	Industrial Systems Engineering	2021	AQAS
38.	Mechatronic Engineering	2021	AQAS
	Mechatronic Engineering (High-quality service program)		
39.	Automotive Engineering	2021	AUN-QA
40.	Automotive Engineering (High-quality service program)		
41.	Petroleum Engineering	2021	AUN-QA
	Petroleum Engineering (High-quality service program)		

42.	Food Technology	2021	ASIIN
43.	Food Technology (High-quality Service Programme)		
44.	Biological Technology	2021	ASIIN
	Industrial Management	2022	FIBAA
45.	Industrial Management (High-quality Service Programme)		
	Engineering Mechanics	2022	ASIIN
46.	Engineering Mechanics (High-quality Service Programme)		
47.	PFIEV Program in Construction Engineering -		
	Major in Urban Water Techniques and Management	2022	CTI
48.	Resources and Environmental Management	2022	ASIIN
49.	Resources and Environmental Management (High-quality Service Programme)		
50.	Technical Physics	2022	ASIIN
51.	Technical Physics (High-quality Service Programme)		
52.	Materials Engineering	2022	AUN-QA
	University of Science		
53.	Information Technology	2009	AUN-QA
54.	Chemistry	2016	AUN-QA
55.	Biology	2017	AUN-QA
56.	Biotechnology (Master's program)	2018	AUN-QA
57.	Biotechnology	2019	AUN-QA
58.	Materials Technology	2020	AUN-QA
59.	Computer Science (Advanced Programme)	2021	AUN-QA
60.	Materials Technology (Master's program)	2022	AUN-QA
	University of Social Sciences & Humanities		
61.	Vietnamese Studies	2011	AUN-QA
62.	English Linguistics & Literature	2013	AUN-QA
63.	International relations	2014	AUN-QA
64.	Journalism	2016	AUN-QA
65.	Vietnamese Literature	2016	AUN-QA
66.	Social Work	2017	AUN-QA
67.	Vietnamese Studies (Master's program)	2019	AUN-QA
68.	Education	2019	AUN-QA
69.	TESOL (Master's program)	2019	AUN-QA
70.	History (BA program)	2020	AUN-QA
71.	Chinese Language (BA program)	2021	AUN-QA
72.	Japanese Studies (BA program)	2021	AUN-QA
73.	Urban Studies	2022	VIETNAM'S MOET

74.	Russian Language	2022	VIETNAM'S MOET
75.	Tourism and Travel Management	2022	AUN-QA
76.	Sociology	2022	AUN-QA
77.	Humanity (Master's program)	2022	VIETNAM'S MOET
78.	Culturology (Master's program)	2022	VIETNAM'S MOET
79.	Korean Studies (BA program)	2022	VIETNAM'S MOET
80.	Archaeology (BA program)	2022	VIETNAM'S MOET
	International University		
81.	Computer Science	2009	AUN-QA
		2017	AUN-QA
82.	Biotechnology	2011	AUN-QA
		2017	AUN-QA
83.	Business Administration	2012	AUN-QA
		2017	AUN-QA
84.	Electronics and Telecommunication	2013	AUN-QA
85.	Industrial Systems Engineering	2015	AUN-QA
86.	Biomedical Engineering	2015	AUN-QA
		2019	ABET
87.	Biotechnology (Master's program)	2016	AUN-QA
88.	Industrial Systems Engineering(Master's program)	2017	AUN-QA
89.	Food Technology	2017	AUN-QA
90.	Banking and Finance	2018	AUN-QA
91.	Construction Engineering	2018	AUN-QA
92.	Media and Electronics Engineering	2019	ABET
93.	Business Administration (Master's program)	2019	AUN-QA
94.	Public Administration (Master's program)	2020	VIETNAM'S MOET
95.	Logistics and Supply Chain Management	2021	AUN-QA
96.	Food Industry	2022	VIETNAM'S MOET
97.	Applied Mathematics	2022	AUN-QA
	University of Economics & Law		
98.	Finance and Banking	2014	AUN-QA
99.	Foreign Economic Relations	2014	AUN-QA
100.	Economics	2016	AUN-QA
101.	Chief Accountant	2016	AUN-QA
102.	Business Administration	2018	AUN-QA
103.	Civil Law	2018	AUN-QA
104.	Economics and Public Management	2019	AUN-QA
105.	Information System Management	2020	AUN-QA

106.	Auditing	2021	AUN-QA
107.	International Trade Law	2022	AUN-QA
	University of Information Technology		
108.	Information Systems	2016	AUN-QA
109.	Communication and Computer Network	2018	AUN-QA
110.	Computer Science	2019	AUN-QA
111.	Software Engineering	2020	AUN-QA
112.	Computer Engineering	2021	AUN-QA
113.	Information Safety	2022	AUN-QA
114.	Information Technology	2022	AUN-QA
	An Giang University		
115.	Food Industry	2021	AUN-QA
116.	Information Technology	2021	AUN-QA
117.	Vietnamese Linguistics and Literature Pedagogy	2021	AUN-QA
118.	English Pedagogy	2021	AUN-QA
119.	Biotechnology	2022	AUN-QA
120.	Software Engineering	2022	AUN-QA
121.	Mathematics Pedagogy	2022	AUN-QA
122.	English Language	2022	AUN-QA

II. SCIENCE AND TECHNOLOGY

Table 15. STATISTICS OF RESEARCH PROJECTS AND FUNDS IN THE PERIOD 2018-2022

	TypeQuantity of Approved research projects and funds (VND Million)									
	2018		**2019**		**2020**		**2021**		**2022**	
	Proj. Qty.	**Total Fund**	**Proj. Qty.**	**Total Fund**	**Proj. Qty.**	**Total Fund**	**Proj. Qty.**	**Total Fund**	**Proj. Qty.**	**Total Fund**
State-level (State-level and Nafosted progs.)	29	26,633	23	59,895	14	17,145	13	55,940	6	31,900
VNUHCM-level	148	45,880	188	51,105	187	57,669	185	52,525	246	87,645
Type A and Type B	37	31,615	53	36,297	60	42,354	46	33,080	91	68,810
Type C	111	14,265	133	14,658	127	15,315	139	19,445	155	18,835
Institutional level	240	8,473	164	6,925	192	8.495	265	14,207	452	17,451
Provincial/ City level	7	18,980	25	42,373	37	61,720	23	38,953	35	21,789
Total of Research Projects and Funds	**424**	**99,966**	**400**	**160,298**	**430**	**145,029**	**486**	**161,625**	**739**	**158,785**
Avg. fund/project	**235,8**		**400,7**		**337,3**		**332,6**		**214,86**	

Table 16. RESEARCH PUBLICATIONS

YEAR	2018	2019	2020	2021	10/2022
1. International journals	**843**	**1,096**	**1,641**	**1,995**	**1,848**
Number of publications in SSCI/ SCIE/Scopus	717	1,011	1,539	1,861	1,811
Percentage of international publications/ Doctorate holder	0.70	0.82	1.23	1,33	-
2. National journals	**694**	**940**	**289**	**762**	**385**
3. International conference proceedings	**1,395**	**1,612**	**301**	**605**	**341**
4. National conference proceedings	**1,583**	**1098**	**327**	**401**	**146**
TOTAL	**4,515**	**4,746**	**2,558**	**3,763**	**2,720**

Table17. REVENUES FROM TECHNOLOGY TRANSFER

Measurement unit: VND Billion

YEAR	REVENUE FROM TECHNOLOGY TRANSFER
2018	254.8
2019	186.4
2020	231.2
2021	220.4
10/2022	154.1

Table18. STATISTICS OF THE STAFF CHAIRING RESEARCHES AND PROJECTS ON SCIENCE & TECHNOLOGY OF STATE-LEVEL AND VNUHCM-LEVEL IN THE PERIOD2018-2022

DISCIPLINE GROUP	QUANTITY OF THE STAFF CHAIRING RESEARCHES/PROJECTS		
	STATE-LEVEL	VNUHCM- LEVEL	TOTAL
Social science & humanities	5	107	112
Economics - Law - Management	6	93	99
Mathematics and computational science	16	74	90
Physics	19	70	89
Chemistry and Chemical Technology	26	106	132
Biology and Biotechnology, Health Sciences, Biomedicine	20	184	204
Energy, Environment and Resources	20	177	197
Engineering, Automation, Traffic Engineering, Construction Engineering	14	122	136
Information Technology, Electricity - Electronics, Telecommunications	19	162	181
Materials Science and Technology	19	118	137
TOTAL	**164**	**1,213**	**1,377**

Table19. STATISTICS OF STAFF PARTICIPATING IN RESEARCHES AND PROJECTS ON SCIENCE AND TECHNOLOGY IN THE PERIOD 2017-2022

DISCIPLINE GROUP	QUANTITY OF THE STAFF PARTICIPATING IN RESEARCHES AND PROJECTS							
	PROF./ASSOC. PROF.		DOCTOR		MASTER		ENGINEER/BACHELOR	
	2017-2021	2022	2017-2021	2022	2017-2021	2022	2017-2021	2022
Social Sciences & Humanities	42	19	112	62	147	57	84	15
Economics - Law - Management	48	14	144	54	195	86	104	13
Computational Science and technology	36	9	70	21	46	20	26	0
Physics	31	15	61	19	100	34	60	16
Chemistry and Chemical Technology	96	17	137	42	158	45	142	44
Biology and Biotechnology, Health Sciences, Biomedical Engineering	79	24	140	70	239	105	251	47
Energy, Environment and Resources	102	21	243	42	346	67	234	25
Mechanics-Automation-Traffic Engineering - Construction Engineering	92	14	195	21	99	24	110	12
Information Technology, Electricity - Electronics, Telecommunications	84	16	251	57	194	70	187	41
Materials Science and Technology	66	27	106	31	170	60	126	23
	676	**176**	**1,459**	**419**	**1,694**	**568**	**1,324**	**236**

Table20. LIST OF EXEMPLARY RESEARCH GROUPS AS OF 2022

ORD.	RESEARCH GROUP NAME	MEMBER UNIVERSITY/AFFILIATE
Social Sciences and Humanities, and Economics - Law - Management		
1.	Research group in pollical history, economy, and society of Southern Vietnam in the process of international integration	University of Social Sciences & Humanities
2.	Research group in Social sciences & Humanities: Social sciences and Humanities in Southern and Central Highlands, research, assessment, and construction of the value system in sustainable development	University of Social Sciences & Humanities
3.	Research group in Southern Sino-Vietnamese	University of Social Sciences & Humanities
4.	Research group in applied psychology	University of Social Sciences & Humanities
5.	Research group in cultural heritage in current society	University of Social Sciences & Humanities

6.	Research group in Journalism and Media	University of Social Sciences & Humanities
7.	Research group in sustainable development of finance and banking	University of Economics & Law
8.	Research group in start-up behavior and management	International University
9.	Research group in automation and optimization of manufacturing systems and Smart Manufacturing	International University
10.	Research group in Logistics system optimization and supply chain	International University
11.	Research group in development, measurement and evaluation of foreign language/second language acquisition	International University
12.	Research group in sustainable economic development in the digital age	An Giang University
13.	Research Group in Southern people, culture and civilization	School of Political and Administration Sciences
14.	Research group in the people's participation in public sector administration	School of Political and Administration Sciences
Natural Sciences		
15	Research group in Computational Mechanics & Optimization	University of Technology
16	Research Group in Simulation of Calculating Construction Mechanics Problems	University of Technology
17	Research Group in Theories of Optimal Problems and Application	International University
18	Research Group in Differential Equations and Dynamics	International University
19	Research Group in Applied Mathematics and Computational Science	International University
20	Research Group in Computational Mechanics	International University
21	Research Group in Optimization and Control; Dynamical System Theory; Random Calculus	University of Information Technology
22	Research Group in Commutative Algebraic	University of Information Technology
23	Research Group in Computational Physics	University of Technology
24	Research Group in Physical Astronomy, Space and Applied Sciences	International University
25	Research Group in Pharmaceutical Chemistry	University of Science
26	Research Group in Development of Process Engineering for Sustainable Agriculture (ProESA)	University of Technology
27	Research Group in Advanced Catalysts for Environmental Technologies & Renewable Resources	University of Technology
Science & Material Technology		
28	Research group in Synthesis and Applications of graphene-based nanocomposite materials	University of Technology
29	Research group in Carbon Materials	University of Technology
30	Research group in Green Electrochemical and Materials Engineering (GEME)	University of Technology

31	Research group in Energy Materials	University of Science
32	Research group in Inkjet and Sensor Technology	Institute for Nanotechnology
33	Research group in Fuel cell and Photonics Devices	Institute for Nanotechnology
34	Research Group in Materials for environmental, energy and biomedical applications	Institute for Nanotechnology
35	Research Group in Rearching and Applying Advanced Data Mining in Clean Energy, Healthcare and Data Storage	Center for Molecular and Nano-Architecture
36	Research Group in Researching and synthesizing biodegradable and drug-loading materials applied in cancer chemotherapy and radiation therapy	Center for Molecular and Nano-Architecture
Biotechnology & Biomedical Science		
37	Research Group in Food Science and Technology	University of Technology
38	Research Group in Automation and Development Solutions to Automation Products in the Fields: Hospital, Seafood, and Food Processing Machines	University of Technology
39	Research Group in Stem Cell	University of Science
40	Research Group in Molecular Biotechnology	University of Science
41	Research Group in Proteomics	International University
42	Research Group in Biologically Active Substances from Mushrooms and Mucous Fungi	International University
43	Research Group in Biological Products	International University
44	Research Group in Genome Reconstruction and Biomedical Regeneration	International University
45	Research Group in Botanical Biotechnology	International University
46	Research Group in Computational Simulation and Multi-Scale Modeling of Complex Physical and Chemical Processes	International University
47	Research Group in Biochemistry and Food Nutrition	International University
48	Research Group in Biomedical Engineering and Medical Equipment	International University
50	Research Group in Biomedical Image and Signal Processing	International University
51	Research Group in Edible Insects in Mekong Delta's System of Sustainable Food	An Giang University
52	Research Group in Edible Mushrooms and Medicinal Mushrooms	An Giang University
53	Research Group in Modeling Analysis Warning of Post-Covid-19 Sequelae	School off Medicine
54	Research Group in Synthesis of Natural Pharmaceutical Compounds	School off Medicine
Resources, Environment, and Energy		
55	Research Group in Green Environmental Technology	University of Technology
56	Research Group in Water Environment Management	University of Technology

57	Research Group in Synthesis and Application of Nanomaterials for Environmental Treatment (NanoEnv)	University of Technology
58	Research Group in Smart Automation Solutions for Sustainable Development and Climate Change Adaptation	University of Technology
59	Research Group in Renewable Energy and Energy Efficiency	University of Technology
60	Research Group in Scientific and Technological Solutions in Managing and Minimizing Disasters and Pollution Risks in Water Environment	International University
61	Research Group in Techniques and Systems of Non-Emission in Industrial and Agricultural Production in Vietnam	Institute for Environment and Resources
62	Research Group in Air Pollution and Climate Change	Institute for Environment and Resources
63	Research Group in Circular Economy Development	Institute for Circular Economy Development
Mechanics - Automation - Traffic Engineering - Civil Engineering		
64	Research Group in Robotics and Logistics	University of Technology
65	Research Group in Bach Khoa 3D Solutions, Technologies and Devices	University of Technology
66	Research Group in Automation of the Process of Welding, Forming, and Materials Processing	University of Technology
67	Research Group in Aero-Hydraulic Laboratory for Industrial Applications	University of Technology
68	Research Group in Mechanics of Materials and Structures	University of Technology
69	Research Group in Researching and Developing Green and Energy Saving Building Materials	University of Technology
Information Technology, Electrical & Electronic Engineering, Telecommunications		
70	Research Group in Intelligent Transport Systems	University of Technology
71	Research Group in Laboratory of Enterprise Software and Processes	University of Technology
72	Research Group in Unlimited Research Group of AI (URA)	University of Technology
73	Research Group in Modeling, Simulation, and Optimization in Data Science	University of Technology
74	Research Group in Power Electronics and Industrial Application	University of Technology
75	Research Group in Optimization in Power Systems	University of Technology
76	Research Group in iHearTech	University of Technology
77	Research Group in RF Integrated Circuits and Systems Lab	University of Technology
78	Research Group in Computer Graphics and Smart Governance	International University
79	Data Mining	International University

80	Future Internet and Smart Networking (FISN)	International University
81	Software Technology and Experimental Data Science	International University
82	Computer Vision and Digital Imaging	International University
83	System Control and Monitoring	International University
84	IoT/6G Network and Security	International University
85	Artificial Intelligence	University of Science
86	Big Data and Deep Learning	University of Information Technology
87	Side by Side - UIT	University of Information Technology
88	Knowledge Technology and Machine Learning	University of Information Technology
89	Smart Marginal Computing	University of Information Technology
90	Natural Language Processing - UIT	University of Information Technology
91	Data Science and Blockchain	University of Information Technology
92	Specially Applied Circuit Design	University of Information Technology
93	Cryptography and Number Theory	University of Information Technology
94	Internet of Things and New Generation Wireless Networks	University of Information Technology
95	Computer Engineering and Artificial Intelligence	University of Information Technology
96	Artificial Intelligence and Applications	An Giang University

III. EXTERNAL RELATIONS AND PROJECT DEVELOPMENT:

Table21A. STATISTICS OF DISPATCHED DELEGATIONS IN 2022

TASK	NUMBER OF PEOPLE	PERCENTAGE (%)
Conference and workshop attendance	20	18,3
Learning, research	38	34,9
Project/program implementation	32	29,4
Search for cooperation opportunities	6	5,5
Teaching	5	4,6
Others	8	7,3
TOTAL	**109**	**100**

Table21B. FOREIGN TRAINING FOR OFFICIALS, LECTURERS, AND STUDENTS IN 2022

COUNTRY	QUANTITY			LEVEL		TOTAL
	OFFICIAL, LECTURER	STUDENT	DOCTORAL & POST-DOCTORAL	GRADUATE	UNDER-GRADUATE	
Asia						
Taiwan	8	-	2	6	-	**8**
Korea	6	15	5	1	15	**21**
Japan	7	2	6	1	2	**9**
Singapore	-	7	-	-	7	**7**
China	1	-	1	-	-	**1**
Thailand	3	1	-	3	1	**4**
TOTAL (1)	**25**	**25**	**14**	**11**	**25**	**50**
Europe						
Lithuania	2	2	-	1	3	**4**
Switzerland	2	4	1	1	4	**6**
France	-	12	-	-	12	**12**
Germany	-	3	-	-	3	**3**
Holland	-	1	-	-	1	**1**
Denmark	-	1	-	-	1	**1**
Spanish	3	-	3	-	-	**3**
Austria	1	-	1	-	-	**1**
Czech Republic	1	-	1	-	-	**1**
Poland	-	1		-	1	**1**
Norway	1	-	1	-	-	**1**
Britain	1	-	-	-	1	**1**

Bulgaria	-	4	-	-	4	**4**
TOTAL (2)	**11**	**28**	**7**	**2**	**30**	**39**
AMERICAS & OCEANIA						
United States	8	1	5	2	2	**9**
Australia	5	-	3	1	1	**5**
New Zealand	2	-	2	-	-	**2**
Canada	1	3	1	-	3	**4**
TOTAL (3)	**16**	**4**	**11**	**3**	**6**	**20**
AFRICA						
Egypt	-	3	-	-	3	**3**
TOTAL (4)	**0**	**3**	**0**	**0**	**3**	**3**
TOTAL = (1) + (2) + (3) + (4)	**52**	**60**	**32**	**16**	**64**	**112**

Table21C. STATISTICS OF VISITING DELEGATIONS IN 2022

ORD.	TASK	2022
1.	Conference	10
2.	Research	6
3.	Teaching/ learning	3
4.	Search for cooperation opportunities	129
5.	Project/program	63
6.	Others	75
	TOTAL	**286**

Table21D. STATISTICS OF FOREIGN LECTURERS AND EXPERTS WORKING IN THE MEMBER UNIVERSITIES/AFFILIATESIN 2022

ORD.	TASK	NUMBER OF PEOPLE	PERCENTAGE (%)
1.	Teaching	126	83.44
2.	Learning and research	18	11.92
3.	Conference and workshop attendance	0	0
4.	Working for projects/ programs	4	2.65
5.	Others	3	1.99
	TOTAL	**151**	**100**

Table22. EXPANSION AND DEVELOPMENT OF NEW PARTNERSHIPS WITH INTERNATIONAL ORGANIZATIONS IN THE 2018-2022 PERIOD

ORD.	COUNTRY	NUMBER OF UNIVERSITIES
	ASIA	
1.	India	04
2.	Bangladesh	01
3.	Cambodia	02
4.	Taiwan	30
5.	Korea	47
6.	Hongkong	02
7.	Indonesia	13
8.	Israel	01
9.	Laos	01
10.	Malaysia	09
11.	Myanmar	01
12.	Japan	31
13.	Philippines	03
14.	Singapore	05
15.	Thailand	11
16.	China	04
	EUROPE	
17.	Britain	08
18.	Austria	01
19.	Poland	09
20.	Belgium	03
21.	Portugal	01
22.	Bulgaria	02
23.	Czech Republic	04
24.	Denmark	01
25.	Germany	14
26.	Holland	03
27.	Hungary	02
28.	Ireland	03
29.	Lithuania	02
30.	Norway	01
31.	Russia	05
32.	Finland	02
33.	France	22
34.	Romania	02
35.	Spain	07
36.	Portugal	01
37.	Switzerland	01
38.	Sweden Sweden	02
39.	Italy	04
	AMERICAS	
40.	Canada	11
41.	United States	23
	OCEANIA	
42.	Australia	14
43.	New Zealand	03
	TOTAL	**316**

Table 23A. INTERNATIONAL PROJECTS UNDER IMPLEMENTATION AT VNUHCM AS OF 2022

ORD.	PROJECT TITLE	SUPPORTING ORGANIZATION	IMPLEMENTING ORGANIZATION	IMPLEMENTATION TIME	FUNDING
1	Project on Developing Vietnam National Universities - Sub-project of VNUHCM	World Bank	VNUHCM	2021-2025	USD 116,100,000
2	Project on Partnership for Higher Education Reform	USAID	VNUHCM	2022-2026	USD 14,200,200
3	Project on Exchanging Cooperative Lecturers with Uminho, Portugal	Erasmus plus (EACEA)	VNUHCM	2018-2022	Grants based on reality
4	Project on Exchanging Students and Cooperative Lecturers with Charles III University of Madrid (UC2M), Spain	Erasmus plus (EACEA)	VNUHCM	2021-2022	Grants based on reality
5	Project on Exchange of cooperative lecturers with A4J, Spain	Erasmus plus (EACEA)	VNUHCM	2020-2025	Grants based on reality
6	Vietnam - Ireland Bilateral Education Exchange (VIBE) Program	Ireland Embassy	University of Technology	2020-2022	EUR 60,000
7	Project on IJL Le CARE-LECZ	French National Research Institute for Sustainable Development (IRD)	University of Technology	2019-2023	EUR 8,000
8	Project on AUN/SEED-Net Phase 4	JICA for AUN/SEED-Net	University of Technology	2018-2023	USD 1,970,000
9	Project on Eramus + DESL	European Commission	University of Technology	2019-2022	EUR 91,804
10	Eramus + ENHANCE	European Commission	University of Technology	2019-2022	EUR 84,325
11	Project on Research Cooperation with Murata Science Foundation (MSF), Japan	Murata Science Foundation (MSF), Japan	University of Technology	2019-2022	JPY 9,000,000

12	Project on GREENUS	European Commission	University of Technology	2021-2023	EUR 128,294
13	Project on CALOHEA	European Commission	University of Technology	2021-2024	EUR 7,157
14	BUILD-IT	USAID	University of Technology	2018-2022	
15	ConterMeasurell	UNEP	University of Technology	2021-2022	USD 5,000
16	Research on Riverine Microplastics Pollution in ASEAN Countries - Case Study in Vietnam	Institute for Global Environmental Strategies	University of Technology	2021-2022	USD 2,000
17	Fostering Professional Human Resources and Enhancing Vocational Training for Women In Difficult Circumstances through the Establishment of the Department of Cosmetic Technology at the University of Technology	Daegu University, Korea	University of Technology	2021-2024	Preparation for approval submission, and promotion of upgrading the PTN infrastructure and expert offices
18	AI / Lot Applications in Environmental Management at Tram Chim National Park	AUS4Innovation	University of Technology	2021-2022	AUD 110,396
19	Prototype Approaches to Renewable Energy Based on Ocean Wave Power	Ireland Republic Embassy	University of Technology	2020-2022	EUR 29,000
20	Agri-Rich: Aerogel Synthesis from Straw and water-orchid in Application for Water Treatment and Thermal Insulation	Newcastle Upon Tyne University	University of Technology	2019-2022	GBP 82,000
21	Synthesis of Cellulose Aerogel from Agricultural Waste for Water Treatment	Newcastle Upon Tyne University	University of Technology	2020-2023	GBP 100,302
22	Research on Biochar Dioxin Treatment	US National Academy of Sciences	University of Technology	2021-2022	VND 1,736,519,400
23	Development of Data Platform Applied for Urban and Rural Areas	TIS Inc	University of Technology	2021-2022	USD 54,000

24	Appearance by Space and Seasonal Transformation of Microplastics Accumulated in the Water Surface Environment of Two Important Reservoirs in the Southern Region	Kurita Foundation	University of Technology	2021-2022	JPY 400,000
25	Bioremediation by Nano-treatment for dioxin dispersion in soils and sediments	National Academy of Sciences	University of Technology	2021-2024	USD 50,183
26	Water Systems with Advanced Technological Applications of Industry 4.0 Aiming at Building Sustainable Communities in the Red River Delta and Phu Yen Province (Phase 2)	University of Technology Sydney	University of Technology	2021-2022	VND 1,385,193,423
27	Integration of Teaching and Learning Environment in the Shared Curriculum Developed in the Context of Digital Industry 4.0 among China, Vietnam, and the United Kingdom	London South Bank University	University of Technology	2021-2024	USD 21,525
28	Researching and Developing Automatic Teaching Methods for Industrial Robots	AJINEXTEK Co.,Lt (AXT) (Korea)	University of Technology	2022	KRW 20,000,000
29	Identification of Gold-Nanoparticle Binding Proteins for their Applications in Biosensors	ASEAN-European Academic University Network (ASEA-UNINET), Austria	University of Science	2022-2023	EUR 3,030
30	A Microbial-Based Index to Assess the Ecological Status of the Lancang-Mekong River Based on Molecular Approaches and DNA Barcoding (My Thuan Station, Vietnam)	National Center for Genetic Engineering and Biotechnology, the Kingdom of Thailand	University of Science	2022-2023	USD 12,200
31	Development and Construction of a Solar-Cell Farm Abroad to Supply Power for Ginseng Sprouts Farm Directed to Foreign Markets	Jeonbuk National University, Korea	University of Science	2022-2024	USD 96,000

32	Plant Species Diversity in Vietnam	Japan's National Institute for Environmental Studies	University of Science	2022-2024	
33	Child Rights Administration - LGBT Children and Adolescents in Vietnam to Access to Educational, Healthcare and Social Services	Save the Children International (SCI)	University of Social Sciences & Humanities	2019-2022	VND 2,403,668,000
34	Project on Teacher Fostering with Information Technology and Media to Integrate Sustainable Education in Teaching and Learning (ICTeEfS)	The University of Frederick, Cyprus	University of Social Sciences & Humanities	2019-2022	EUR 94,965
35	Youth's Participation in Changing Gender Stereotypes and Promoting Gender Equality in Vietnam	Consultative Institute for Socio-Economic Development of Rural and Mountainous Areas	University of Social Sciences & Humanities	2020-2024	VND 665,000,000
36	Social Creativity in Teaching and Research through the Development of International Academic Exchange Networks (SILKEN - Vietnam)	British Council through Glasgow Caledonian University (GCU)	University of Social Sciences & Humanities	2022-2024	GBP 2,000
37	Building a Key University Program for Korean Studies in Vietnam	Korean Studies Research Promotion Service (KSPS) at the Academy of Korean Studies	University of Social Sciences & Humanities	2022-2027	KRW 750,000,000
38	Project on Sharing and Preserving Vietnamese Heritage: Culture and Nature	Ministry for Europe and Foreign Affairs (France)	University of Social Sciences & Humanities	2022-2023	VND 61,560,000
39	Understanding National and Global Moves to Reduce Greenhouse Gas Emissions	European Commission	International University	9/2019-8/2023	EUR 117,500
40	Teacher Training on Information Technology Application Towards Sustainable Education Development in Southeast Asia	ERASMUS+ Program	International University	2019-2023	VND 2,252,740,581

41	Erasmus + KA107 programme Universitat de Girona - International University	ERASMUS+ Program - European Union	International University	2019-2022	EUR 3,580
42	Changes of Microorganisms for Plastics in the Southeast Asian Waters: Dangers and Solutions	NERC-University of Portsmouth	International University	2020-2023	VND 1,873,798,000
43	Developing a Non-invasive Blood Test Method to Detect mRNA Biomarkers of Alzheimer	Vietnam Alzheimer Network Fund	International University	2021-2022	VND 231,175,384
44	Understanding and Implementing Solutions to Challenges in Elderly People's Mental Problems in Vietnam by Connecting with Progressive Countries	Global Research Challenges Fung (University of Hertfordshire Higher Education)	International University	2020-2022	VND 208,149,726
45	National and Global Actions to Reduce Greenhouse Gas Emission - ENGAGE	European Commission (EU)	International University	2019-2023	VND 3,007,882,500
46	Linneaus Palme Scholarship	Jonkoping University, Switzerland	International University	2020-2022	EUR 31,000
47	Movilidad De Educacio'n Superior Entre Pai'ses Del Programa Y Asociados (KA107) Universidad Carlos III of Madrid (UC3M)	European Commission (EU)	International University	2020-2023	EUR 5,240
48	Project on "Introduction and Implementation of Feminist Law"	Rosa Luxemburg Foundation	University of Economics and Law	2022-/2022	EUR 33,382
49	Project on The Digital Consumers - Phase 2	Irish Aid's Development Funding	University of Economics and Law	2020-2022	VND 776,000,000
50	Reform of Southeast Asian University Governance -PURSEA	EACEA	University of Economics and Law	2020-2023	EUR 57,000
51	Project on "Healthy Air: Cobenefit of Air Pollution	COALESCE	University of Economics and Law	2020-2023	EUR 9,540

52	Start-Up Women in Australia and Vietnam: Capacity Building and Relationship Establishment	Department of Foreign Affairs and Trade (DFAT)	University of Economics and Law	2021-2022	AUD 33,578
53	European Union's Fishing Laws - Experience for Vietnam to Perfect its Law on Marine Fisheries	Standing Joint Committee between the Socialist Republic o' Vietnam and Wallonie-Bruxelles	University of Economics and Law	2022-2024	EUR 94,250
54	Strengthening Law and Justice In Vietnam (EU JULE)	Foundation for Justice and Development Initiatives (FJDI)	University of Economics and Law	2021-2022	EUR 54,892
55	Grant Assistance For Grassroots Human Security Projects (GGP)	The Japanese Embassy in HCMC	University of Information Technology	2021-2022	VND 1,799,491,820
56	GCRF Living Deltas Hub - Delta Research	The UK Research and Innovation (UKRI) Global Challenges Research Fund (GCRF) Living Delta Hub	An Giang University	2019-2024	EUR 501,472
57	Assessing Environmental and Social Impacts of Intensive Rice Production and Pesticide Use on the Water Quality of the Lower Mekong River Basin: Case Studies in An Giang (Vietnam) and Chiang Rai (Thailand) - SERUWA Project	SEI - Summer Foundation Net 4 All	An Giang University	2020-2022	USD 14,021
58	Facing or Avoiding Floods - Comparative Research on Migration as a Way to Adapt to Climate Change in the Lower Mekong River Basin	Taiwan University	An Giang University	2020-2022	CNY 112,800
59	Initiatives of Wide-Scale Water Saving to Reduce Unsafe Water Supply for Poor People and Disadvantaged Communities in the Upper Basin of the Mekong Delta (Asia Center) - Sumernet Program	Stiftelsen the Stockholm Environment Institute	An Giang University	2020-2022	SEK 581,168

60	Expanding the Small-Scale Models and Markets of Organic Agriculture for Khmer Women to Improve Their Livelihood, Nutrition, Health, and Post-Impact Recovery of the Covid-19 Pandemic in Tri Ton District, An Giang Province, Vietnam	US4Skill Australia	An Giang University	2021-2022	VND 216,956,250
61	Improving the operational efficiency of the US. Rendezvous	US. Embassy in HCMC	An Giang University	2021-2022	USD 10,015
62	Meaning of Ba Lai Dam for the Agricultural Ecosystem and Household Adaptation in Binh Dai District, Ben Tre Province	SEARCA	An Giang University	2018-2022	USD 13,500
63	Research on the Value Chain and Incomes of Poor Khmer people in Chau Lang Commune, Tri Ton District	SEARCA	An Giang University	2018-2022	USD 14.077
64	Understanding the Relationship between Forest Ecology Service Delivery and Rural Livelihood	SEARCA	An Giang University	2018-2022	USD 13,095
65	Project on Building a Plan and Establishing a Rice Chain Rice (SRP) for Sustainable Farming Smallholders in the Mekong Delta	ACIAR (Australian Centre for International Agricultural Research)	An Giang University	2022-2025	AUD 4,386,725
66	Project on Enhancing Higher Education in Agriculture at VNUHCM	KOICA (Korea)	An Giang University	2022-2028	USD 9,090,000
67	Project on Supporting Health Improvement for Working Environment in Southeast Asia	Wonjin Institute for Occupational and Environmental Health	An Giang University	2022	USD 2,100

68	The Future of Rice Farming in the Mekong Delta in the Middle of Crisis	La Trobe University, Australia	An Giang University	2022-2023	USD 25,956
69	Promoting Access to Environmental Protection Legislation for Women and Girls in the Riversides and Inner Field Canals of Dong Thap Province	Foundation for Justice and Development Initiatives (FJDI)	An Giang University	2021-2022	VND 1,995,229,000
70	Flood Risk Management: Prevention, Adaptation Resilience Strategies in Ho Chi Minh City	Italy's Ministry of Foreign Affairs and International Cooperation, Vietnam's Ministry of Science & Technology	Institute for Environment and Resources	2021-2024	
71	Replicating the Model of Traditional Ecological Season Rice Cultivation and Shrimp Farming in the Mekong Delta, Vietnam by Rufford Foundation	Rufford	Rufford	2020-2021 (implementation extended to 2022)	USD 6,000
72	Research on Gender Knowledge and Community Adaptability for Flood Disasters: A Case Study in Can Tho City (Vietnam) and Cebu City (Philippines)	ANP	ANP	2019-2021 (implementation extended to 2022)	USD 47,465
73	Enhancing the Understanding of Properties and Global Environment Impacts of Plastic Waste on the Water Environment	The US. Naval Research Laboratory	Institute for Environment and Resources	2020-2023	VND 3,200,000,000
74	Analyzing the Impact of Air Pollution and Climate Change on Public Health in Ho Chi Minh City and Finding Solutions	Ireland and Resources	Institute for Environment	2020-2023	USD 500,000

75	HealthyAIR: Modelling the Impact of Air Pollution and Climate Change on Public Health in Ho Chi Minh City for Policy Making and Awareness Creation using Machine Learning	Ireland and Resources	Institute for Environment	2020-2023	VND 3,273,327.056
76	GIS Project	Japan Asia Group & Nippon Koei	Information Technology Park	2022-2025	
77	Information Technology Applications for Centralized Prevention of Infectious Diseases of Korea's National Information Society Agency (NIA)	Korea's National Information Society Agency	Information Technology Park	2022-2023	
78	Enhancing the Approaches, Study Programs, and Teaching in Medical Education and Diseases	Partnership for Health Advancement in Vietnam	School of Medicine	2022-2026	
79	International Survey 2022	TWAEA (Taiwan Assessment and Evaluation Association)	Center for Education Accreditation	2022	

TABLE 23B. ROJECTS IN THE NEGOTIATION PHASE

ORD.	PROJECT TITLE	FUNDING ORGANISATION	LEMENTING MEMBER IMPUNIVERSITY/ AFFILIATE	IMPLEMENTATION TIME	FUNDING
1.	Young Southeast Asian Leaders Initiative - Mekong Leadership Program (YSEALI-MLP)	USAID	VNUHCM	2022-2025	USD 5,514,000
2.	Fostering Professional Human Resources and Enhancing Vocational Training for Women In Difficult Circumstances through the Establishment of the Department of Cosmetic Technology at the University of Technology	Daegu University, Korea	University of Technology	2021-2024	Under discussion with the Partner

IV. PERSONNEL ORGANIZATION

Table24. VNUHCM PERSONNEL

NAME		TOTAL					
		2021 (AS OF DEC. 31, 2021)			2022 (AS OF OCT. 31, 2022)		
		TOTAL	ADMIN. STAFF (*)	PRO. STAFF (*)	TOTAL	ADMIN. STAFF (*)	PRO. STAFF (*)
Job title	**Teaching staff (Lecturer, Senior lecturer, Master lecturer)**	2,865	712	2,153	2,896	703	2,193
	Science and technology staff (research staff, Researcher, Senior researcher, Master researcher, Technician, Engineer, Senior engineer, Master engineer)	632	29	603	650	29	621
	Administrative staff (Officer, Senior Officer, Master Officer)	1,687	243	1,444	1,734	252	1,482
	Service staff (employee, driver, servant...)	478	2	476	467	2	465
	Others (school teachers, physicians, nurses, doctors, officers, archivists, accountants, librarians, editors, screenwriters, translators)	273	42	231	286	38	248
	TOTAL	**5,935**	**1,028**	**4,907**	**6,033**	**1,024**	**5.009**
Title	Prof.	31	9	22	37	11	26
	Assoc. Prof.	311	174	137	312	176	136
Professional level	PhD (not including Prof. & Assoc. Prof.)	1,081	362	718	1,140	359	781
	Master	2,442	383	2,059	2,466	383	2,083
	Bachelor	1,509	95	1,466	1489	91	1,438
	Others	561	4	557	549	4	545
	TOTAL	**5,935**	**1,028**	**4,907**	**6,033**	**1,024**	**5,009**

*Administrative staff: those who are appointed to hold an administrative position with a time limit, responsible for managing and organizing the performance of one or several tasks in a university/affiliate and getposition allowances;

Non-administrative staff: those who only perform professional duties according to the job title in a university/affiliate.

Table 25. STATISTICS OF VNUHCM SENT FOR EDUCATION/BUSINESS ABROAD

ORD.		TOTAL NUMBER OF PEOPLE			
		2021		2022	
		Studying/ working abroad	Returning to Vietnam	Studying/ working abroad	Returning to Vietnam
1.	Attending doctoral programs	31	29	26	34
2.	Attending master programs	6	4	3	7
3.	Attending short-term training courses (less than 01 year)	2	0	73	70
4.	Being interns	1	0	0	1
5.	Participating in the teaching exchange/ research	18	7	59	38
6.	Participating in conferences, workshops, forums...	11	10	128	110
7.	Participating in signing cooperation agreements	1	0	14	11
8.	Others	1	2	97	92
	TOTAL	**71**	**52**	**400**	**363**

Table 26. LIST OF THE STAFF AWARDED THE TITLES OF PROFESSOR AND ASSOCIATE PROFESSOR IN 2022

ORD.	FULL NAME	MAJOR	UNIVERSITY/AFFILIATE
I. Title of Professor			
1.	Tran Doan Son	Mechanics	University of Technology
2.	Do Quang Minh	Chemistry	University of Technology
3.	Nguyen Phuoc Dan	Construction	University of Technology
4.	Tran Quyet Tien	Medicine	School of Medicine
5.	Phan Bach Thang	Physics	Center for Molecular and Nano-Architecture
II. Title of Associate Professor			
1.	Phan Thi Mai Ha	Mechanics	University of Technology
2.	Vo Thi Ngoc Chau	Information Technology	University of Technology
3.	Le Hong Trang	Information Technology	University of Technology
4.	Truong Quang Vinh	Electronics	University of Technology
5.	Lai Quoc Dat	Food Technology	University of Technology
6.	Pham Trung Kien	Chemistry	University of Technology
7.	Nguyen Xuan Huy	Mining	University of Technology
8.	Hoang Anh Hoang	Biology	University of Technology
9.	Tran Thi Thu Hanh	Physics	University of Technology
10.	Pham Vu Hong Son	Construction	University of Technology
11.	Co Thanh Thien	Chemistry	University of Science
12.	Le Viet Hai	Chemistry	University of Science
13.	Dang Truong An	Earth Science	University of Science
14.	Luu Van Quyet	History	University of Social Sciences & Humanities
15.	Huynh Thi Thuy Gian	Economics	University of Economics and Law
16.	Doan Thi Phuong Diep	Law	University of Economics and Law
17.	Ngo Huu Phuoc	Law	University of Economics and Law
18.	Nguyen Nhu Ty	Economics	International University
19.	Nguyen Vu Hong Ha	Chemistry - Food Technology	International University
20.	Le Ngoc Lieu	Chemistry - Food Technology	International University
21.	Nguyen Van Sinh	Information Technology	International University
22.	Vong Binh Long	Biology	International University
23.	Nguyen Van Hop	Mechanics - Dynamics	International University
24.	Nguyen Van Chuong	Agriculture	An Giang University

V. STUDENT AFFAIRS

Table 27. NON-BUDGET SCHOLARSHIPS IN THE 2021-2022 ACADEMIC YEAR

MEMBER UNIVERSITY/AFFILIATE	2021			2022		
	Total of grants	Total of grant turns	Total value (VND)	Total of grants	Total of grant turns	Total value (VND)
University of Technology	94	1,188	8,200,573,000	110	1,320	9,440,615,000
University of Science	34	304	2,257,330,336	21	139	1,651,122,000
University of Social Sciences & Humanities	34	372	2,514,583,345	14	90	801,087,000
International University	10	49	382,852,000	7	66	801,000,000
University of Information Technology	18	91	691,689,040	9	45	396,100,000
University of Economics & Law	25	327	3,937,880,000	34	308	3,025,670,000
An Giang University	24	507	3,339,191,800	26	448	3,047,100,000
School of Medicine	9	29	225,715,000	7	24	343,170,222
TOTAL	**248**	**2,867**	**21,549,814,521**	**228**	**2,440**	**19,505,864,222**

Table 28. LIST OF PUBLICATIONS IN INTERNATIONAL JOURNALS INDEXED IN SCI AND SCIE, AND RANKED Q1 IN 2022 (*)

*(*Based on reports by the member universities and affiliates as of October 31, 2021)*

ORD.	AUTHOR, TITLE, JOURNAL AND VOLUME, PAGE AND PUBLICATION YEAR	IF	ISSN
1.	*Kreibich H., Van Loon A.F., Schröter K., Ward P.J., Mazzoleni M., Sairam N., Abeshu G.W., Agafonova S., AghaKouchak A., Aksoy H., Alvarez-Garreton C., Aznar B., Balkhi L., Barendrecht M.H., Biancamaria S., Bos-Burgering L., Bradley C., Budiyono Y., Buytaert W., Capewell L., Carlson H., Cavus Y., Couasnon A., Coxon G., Daliakopoulos I., de Ruiter M.C., Delus C., Erfurt M., Esposito G., François D., Frappart F., Freer J., Frolova N., Gain A.K., Grillakis M., Grima J.O., Guzmán D.A., Huning L.S., Ionita M., Kharlamov M., Khoi D.N., Kieboom N., Kireeva M., Koutroulis A., Lavado-Casimiro W., Li H.-Y., LLasat M.C., Macdonald D., Ma0d J., Mathew-Richards H., McKenzie A., Mejia A., Mendiondo E.M., Mens M., Mobini S., Mohor G.S., Nagavciuc V., Ngo-Duc T., Thao Nguyen Huynh T., Nhi P.T.T., Petrucci O., Nguyen H.Q., Quintana-Seguí P., Razavi S., Ridolfi E., Riegel J., Sadik M.S., Savelli E., Sazonov A., Sharma S., Sörensen J., Arguello Souza F.A., Stahl K., Steinhausen M., Stoelzle M., Szali'nska W., Tang Q., Tian F., Tokarczyk T., Tovar C., Tran T.V.T., Van Huijgevoort M.H.J., van Vliet M.T.H., Vorogushyn S., Wagener T., Wang Y., Wendt D.E., Wickham E., Yang L., Zambrano-Bigiarini M., Bl#schl G., Di Baldassarre G.,,* **The challenge of unprecedented floods and droughts in risk management,** Nature, 10.1038/s41586-022-04917-5, 2022	69.504	0028-0836
2.	*Kondolf G.M., Schmitt R.J.P., Carling P.A., Goichot M., Keskinen M., Arias M.E., Bizzi S., Castelletti A., Cochrane T.A., Darby S.E., Kummu M., Minderhoud P.S.J., Nguyen D., Nguyen H.T., Nguyen N.T., Oeurng C., Opperman J., Rubin Z., San D.C., Schmeier S., Wild T.,,* **Save the Mekong Delta from drowning,** Science, 10.1126/science.abm5176, 2022	63.714	0036-8075
3.	*Huynh J., Donovan J., Phu N.H., Nghia H.D.T., Thuong N.T.T., Thwaites G.E.,,* **Tuberculous meningitis: progress and remaining questions,** The Lancet Neurology, 10.1016/S1474-4422(21)00435-X, 2022	59.935	1474-4422
4.	*Tran-Thuy T.-M., Yu T.-L., Lin S.D.,,* **How H2O may influence ambient CO oxidation over Au/BN,** Applied Catalysis B: Environmental, 10.1016/j.apcatb.2022.121492, 2022	24.319	0926-3373
5.	*Hoai B.N., Cao T.N., Luong Thi L.A., Nguyen M.N., Duong H.-Q., Than V.T.,,* **Human papillomavirus prevalence and genotype distribution in Vietnamese male patients between 2016 and 2020,** Journal of Medical Virology, 10.1002/jmv.27497, 2022	20.693	0146-6615
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