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## Mission

To train highly qualified manpower, carry out research and technology transfer, and provide services in various areas to meet the demand of socioeconomic development, with fisheries as the major strength.

## Vision

To become a prestigious university in training, research, and technology transfer, a leader in Southeast Asia in fisheries science and some selected areas in marine economy by 2030.



Khanh Hoa Science and Technology Council has conducted an acceptance review of the project: "Research in building the technology process of producing the artificial jump snail breed Strombus canarium (Linnaeus, 1758) at Khanh Hoa" by M.Sc. Vu Trong Dai, Institute of Aquaculture – Nha Trang University (NTU).

In order to develop dog conch culturing industry, after 2 years of research, the project has successfully developed the artificial hatching process of dog conch in natural condition of Khanh Hoa province. From 3 times of pilot production, the project has gained 640.000 level 1 seeds in size 2-3mm and 63.203 level 2 seeds in size 8-12mm in stable living condition. The seeds of dog conch were handed over to Cam Lam Industry-Agriculture- Forestry Extension

Centre, Khanh Hoa province to transfer to farmers to farm in grow-out ponds and marine cages. Besides, the production technology has been transferred to 3 mollusk breeding farms at Vinh Luong commune, Nha Trang city. Some have selfproduced 22.000 seeds at level 2.

 $T^{\rm he \ research \ team \ also}_{\rm manual \ and \ organized}$ 

## SUCCESS IN RESEARCH AND TRANSFER ARTIFICIAL SEEDS OF DOG CONCH HATCHING TECHNOLOGY

training courses for locals working in aquaculture hatching industry.

The project contributes knowledge and technology of high economic value aquatic animal. As a result, this helps supply sufficient seeds for farmers to develop dog conch growth-out culture industry in the province.



#### SUCCESSFUL DEVELOPMENT OF NATURAL CLEANER PRODUCTS

fter 3 years of research, Dr. Ha Thi Hai Yen-Faculty of Food Technology, NTU has introduced several cleaning products containing natural ingredients such as shampoo (extracted from locust combined with essential oils of holy basil, betel nut, lemongrass, grapefruit, etc.), hand soap (extracted from soapnut, betel leaf, mint, etc.), dish soap (extracted from soapnut and essential oil of lemongrass, mint, orange, etc.) Those products are safe for health and environment and have received many good feedbacks from customers.

Despite the small production scale, she is extremely enthusiastic in creating eco-friendly products. She keeps researching about the process of extraction and tries to extend more kinds of products such as floor cleaner, laundry detergent, etc. She also cooperates with some primary schools to organize classes to share about eco-friendly products. Her natural cleaning products were recognized as one of seven outstanding start-up ideas



and products by Khanh Hoa Women's Union at "Women's Start-up Day 2019"

#### NTU START-UP IDEAS CONTEST 2019

The start-up competition with topic "Green solution for sustainable development" is an initiative of the V2WORK project started from July, 2019 attracted students, alumni and staff to participate.

In the finale, 6 projects have been reported to the jury board. The project of NTU alumni named "BioOne - green product for fishery,

animal husbandry, veterinary medicine and environmental treatment in Vietnam" has won the 2<sup>nd</sup> prize (no 1<sup>st</sup> prize). The aim of the project is to develop, manufacture and deliver probiotics, enzyme products instead of antibiotic and poisonous chemicals to effectively prevent diseases, solve environmental pollution in aquatic product processing and animal husbandry in Vietnam. Consequently, it helps develop materials that suit domestic demand and ecosystem conditions, and supply materials not only for agriculture industry but also for probiotic manufacturers and probiotic



based animal feed companies.

The two 3<sup>rd</sup> prizes belonged to the projects "The high technology hydroponic system" and "Commercialism products from cactus" while the consolations went to projects "Snakehead intensive farming model", "Young generation with plastic waste recycling" and "Fruit Canvas". The project "The high technology hydroponic system" won the people's choice award.

## NTU TO HOST THE 56<sup>™</sup> CONFERENCE OF SCIENCE AND TECHNOLOGY CLUB OF TECHNICAL UNIVERSITIES 2020

The 56<sup>th</sup> Conference of Science and Technology club of Technical Universities (STCTU) will be hosted in NTU in May 2020. This information was announced in the 55<sup>th</sup> Conference held in Ben Tre Province in November 2019.



NTU and 25 members of the club participated in the 55<sup>th</sup> conference on entrepreneurship and innovation. This is a forum for universities to exchange, share experience with each other and learn from reputable experts, facilitate cooperation between scientists in the STC and relevant departments in the Mekong Delta region in order to solve science and technology tasks in this region as well as other provinces nationwide.

STCTU is an organization of Science & Technology of Vietnamese universities with 26 members in the fields of industrial engineering and computer science, information technology and media, transportation, water resources, construction, environment, etc. STCTU has the mission to connect research conducted by its members to address scientific and technological tasks of provinces all over the country.

#### World Bank

#### Rhode Island University, USA

• Both sides agreed on deploying research groups between the two universities and focusing on solutions to develop marine economy; Promoting the exchange of lecturers and students.

• Rhode Island University will send experts working in Southeast Asia countries such as Indonesia, Philippines... to exchange more specific cooperation, focusing on coastal spatial planning.

• Rhode Island University will send experts through the Fulbright program to work at NTU.

#### National Chi Nan University, Taiwan

• Discussing cooperation opportunities for undergraduate and graduate

training, student exchange, and scientific research. It is known that National Chi Nan University has plenty of short-term and long-term programs for international students with many valuable scholarships.



#### Liberec Technical University, Czech Republic

• Cooperating with NTU in developing research on composite nanomaterials,

plasma processing, thin Nano film making, and biotechnology

• Cooperating in training, students and lecturers exchange



#### Lien Hoa Group

• Having joint trainings (Group's experts will participate in sharing knowledge and practical experience for students - Lecturers of

NTU will be responsible for training staff and employees of the Group)

• Cooperating in researching and developing bioproducts; development and exploitation of NTU's research in production.



PROMOTE NEW PARTNERSHIPS

cooperation Discussing opportunities for the "Sustainable project Development of Fisheries", applying the research which is the strength of NTU in the field of fisheries solve issues to on postharvest preservation, fishing management, etc.

• For WB's funding, NTU will provide WB's experts with research results on linkage in tuna harvesting and preservation of Faculty of Economic; research and proposals on setting up auction mechanisms to support fishermen; solutions to increase the value of postharvest aquatic products.

#### Signing a cooperation agreement with Military Commercial Joint Stock Bank

• Cooperating in practice, internships, recruiting students

Attending seminars, career exchanges and training for students



• Sponsoring for community activities

• Sponsoring 01 year of operation (20 million VND) for "Banking and Finance -Accounting - Auditing" Club

Signing a cooperation agreement with Esuhai Co., Ltd.

• Establishing cooperation in Japanese language training and working skills, recruiting graduates to work in Japan through the program "Japan Employment" organized by Esuhai



• Coordinating in student enrollment, job placement, and career orientation in Japan. After studying and working, these students could apply skills and experiences learnt from Japan to better meet the requirements of the job in Vietnam.

• Organizing activities such as: recruiting senior engineers to work in Japan; following up the student enrollment, career orientation seminars, and skills training courses

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## THE 10<sup>™</sup> INTERNATIONAL LINKAGE PROGRAM (ILP) GOVERNANCE COUNCIL ANNUAL MEETING

NTU participated in the 10<sup>th</sup> Annual Meeting of ILP's Governance Council at the University of Malaysia Terengganu (UMT) on November 23-24, 2019 with representatives of member universities.

t the meeting, the members worked on relevant issues of ILP, such as reviewing reports on training and student exchange activities in the academic year 2018-2019, updating the training program, approving new lecturers and new subjects, updating new training regulations, examining awards of graduation certificates to eligible students, evaluating the program, students survey., etc.

The board also reviewed and approved the participation of a new member, Chiayi University - Taiwan. Accordingly, the membership joining ceremony will be held in Chiayi - Taiwan in March 2020. A good news is that Chiayi University had received approval for 12 Taiwanese Government scholarships for students of ILP.



NTU joined ILP in 2016. Up to now, 14 students have received the program's scholarships and 6 students have been granted certificates of completion.



## DEPUTY MINISTER OF AGRICULTURE AND RURAL DEVELOPMENT VISITS NTU

It the meeting with Deputy Minister Phung Duc Tien, leaders of NTU made many recommendations related development to the of high quality human for fisheries resources industry. Some of them are enhancing the regulations on qualifications for officials and employees working in fisheries organizations, granting financial support, making special examptions to increase enrollment in fisheries programs based on the need of the local regions, collaborating with the Ministry of Education and Training to consider projects on building a specific training

mechanism for fisheries sectors, assigning NTU to carry out research projects, guiding developing а framework to build marine development economic strategies, etc. the Deputy encouraged Minister NTU to continue focusing on research activities in agriculture, joining with agencies and organizations in the industry for creating a network to promote strength of collectives and together propose projects to solve problems such as the shortage of seeds, aquatic products prevention and treatment, post-harvest preservation, etc.



More than 200 officials working on education quality assurance and accreditation from more than 150 organizations nationwide attended the national conference on Higher Education Quality Assurance and Testing in in Vietnam and the world.

Consuring and accrediting university quality is an Cimportant task, but many universities lack experience

## EMPHASIS ON UNIVERSITY QUALITY ASSURANCE AND ACCREDITATION

in implementing it. Besides, there are still many issues that need to be further improved. An overview of the current relevant legal policies and mechanisms was provided to help the staff understand the general context in Vietnam, thereby providing methods, sharing lessons learned with each other in order to improve the quality and effectiveness of

education. This also causes universities to review their entire operations in a systematic manner, thereby making adjustment according to required standards, approaching standards of the region and the world. The ultimate goal is to consolidate the foundation for high-quality human resource training to actively integrate and compete with regional and world labors in the 4.0 era.

#### TRAINING ON RESPONSIBLE LABOR MANAGEMENT IN FISHERIES

he training for . course students on Labor management in fisheries enterprises organized by the Institute of **Fisheries** Science Technology and on attracted many students lecturers and participate. to The course was delivered by two senior experts Mr. Tran Minh Tri and Ms. Pham Nguyen Cuong from the International Labor

Organization (ILO) and the Vietnam Chamber of Commerce and Industry (VCCI) on Labor management - Salary and Hour Management. They shared their knowledge of Labor management in **Fisheries** Enterprises, ILO's labor management regulations standards and Labor management regulations in the Labor Law of Vietnam as well standards of as

corporate social responsibility in labor management and employment. The two experts also discussed and answered the students' questions in the field of labor management in the fisheries sector. The training course helped students to improve professional awareness and gain practical in-depth insights into the field.





# INTENSIVE TRAINING ON INTELLECTUAL PROPERTY FOR UNIVERSITY LECTURERS

Twenty two lecturers from NTU, Khanh Hoa University and Nha Trang National College of Pedagogy attended an intensive training course on intellectual property for university lecturers. It was held at NTU by HCMC University of Law from 7 to 10 November 2019. Through the course, the participants learned about general Intellectual Property, Intellectual



Property protection, as well as its exploitation and commercialization. The Intellectual Property matter is concerned a lot by lectures, especially for their research projects and products.

#### **PROFESSIONAL TRAINING COURSE FOR SHIP REGISTRATION**



The training course for ship registration 2019 coorganized by the Ministry of Agriculture and Rural Development- Directorate of Fisheries and NTU took place from November 14 to December 7, 2019. 134 participants from the Department of Agriculture and Rural Development, the Sub-Department of Registry, Fisheries nationwide and lecturers of Faculty of Transportation, NTU attended. The course provided the participants with knowledge related to fishing vessel registration such as new regulations on fishing vessel registration, operation management and quality of fishing vessels, etc. The participants received certificates, which they can use to apply for permit, ship registrar seal to legally work in the field.

#### TRAINING ON FIRST-AID SKILLS FOR STUDENTS

Students from Faculty of Foreign Languages, NTU participated in a first-aid skill training course organized by St John Ambulance (Australia). Students had opportunities to practice first-aid skills in cases of burning, drowning, serious bleeding, concussion, suffocation, fracture, etc. All students attending the course have received certification from St John Ambulance - Australia.





#### NTU'S STUDENT AMBASSADOR PROGRAM

Student Ambassador Program - a familiar program in foreign universities, but quite new in Vietnamese ones - has been launched by NTU for testing. The program is a chance for talented and enthusiastic students to represent NTU's students in key campaigns, activities, events. The student ambassadors also play an important role as a bridge between students and the University.

Ctarting from May 2019, the student ambassadors were trained

• for communication skills, planning skills and teamwork skills, etc. They also took part in some activities such as welcoming

oversea students, supporting many events, participating in environmental protection campaigns, as well as contributing to promote NTU's image. From these activities, they have accumulated a lot of experience, knowledge and confidence, improved soft skills, especially communication and foreign language skills.



#### IT'S TIME TO ACT!



The "It's time to act" program was co-organized on December 8, 2019 by Nguyen Huu Huy Hoang - the member of The Young Southeast Asian Leaders Initiative (YSEALI), Teenager Storms and NTU, sponsored by the US General Consulate in Ho Chi Minh city.

Through the activity, nearly 100 students from schools in Khanh Hoa province learned about YSEALI's short-term scholarships, tips for scholarship application and practical experience. They also participated in group games on the topics about the Earth, greenhouse gases or building a paradise island which helped students know well about the advantages and disadvantages of the greenhouse effect, human impacts on the environment, thereby raising awareness and promoting actions to preserve the environment.

## UP TO 600 MILLION VND TO BE AWARDED TO NTU STUDENTS' START-UP IDEAS

On October 23, 2019, Mr. Johnathan Hanh Nguyen, Chairman of the Imex Pan Pacific Group (IPPG), and Mr. Peeyush Sharma, General Director of Coca Cola Vietnam had a meeting with more than 1,000 students and lecturers of the NTU about starting up a business and corporate's social responsibility.



T he business leaders inspired students with stories of their own career and life, reminded the responsibilities of young people and businesses to the country and gave many tips on starting a business. To promote the start-up movement, Mr. Johnathan Hanh Nguyen strongly suggested a start-up contest with a total award of 600 million VND and a campaign to clean Nha Trang beach with more than 15,000 NTU students. In addition, IPPG presented 500 million VND and Coca Cola Vietnam Company donated 200 million to the Study Encouragement Fund of NTU.

## TRAINING ON ACTIVE CITIZENS - SOCIAL ENTERPRISE



The Active citizens of the Active citizens of the Active citizens of the British Council and NTU. The activities in the course allowed the students to experience the learning journey (The Arts of River), interact with active social businesses, know how to use project management tools to formulate a project for society, create a plan for solving social problems based on the approach of social enterprises. The program aims at equipping the students with knowledge and skills of social entrepreneurship, helping the students formulate and implement social projects.

#### NTU WON THE SECOND PRIZE IN THE CONTEST "THE SECOND JOURNEY OF TIRES"

The playground model of NTU outstood among more than 100 competitors from 21 provinces to win the Second Prize in the nationwide contest "The second journey of tires". The project "Playground for children" was designed and constructed by NTU's students at Cam Thinh Tay 2 Primary School, Cam Thinh Tay Commune, Cam Ranh City. The project was funded by the Australian Consulate General in Ho Chi Minh City with a total investment of over 100 million VND. The playground consists of items such as monkey ladders, aerial swings, balancing suspension bridges, and traditional games such as seesaw, swing, and rope climbing.

II The second journey of tires" contest required the reuse of tires and other materials in building playgrounds for children, in response to the movement of plastic waste prevention launched by the Prime Minister. After 3 months of deploying on social networks, the competition received positive responses from a large number of youth in Vietnam. The contest attracted 1.6 million interactions on social networks with 101 playgrounds for the young and children being built.

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NTU celebrated the **60<sup>th</sup> Anniversary** 



Students of Faculty of Information Technology won the 3rd prize in Digital Race Contest 2019 ( the national self-driving car programming competition)

Approximately 60 articles were published in international journals, nearly 1.5 times increase as compared to 2018.

# **NTU's** Hightlights in 2019

Opening quality high 3 undergraduate programs: Bilingual English Vietnamese programs Business Administration, Hotel in Information Management, and Technology

The year of the start-up and doing research movement with start-up ideas contest, funding for start-up by corporates, and active forums, talk shows sharing about entrepreneurship and doing research

NTU received the Emulation Flag by Ministry of Training and Education in the movement "Innovation and creativity in teaching and learning" in the academic year 2018 - 2019 and was recognized as an outstanding collective.





**UPCOMING EVENTS** 



1. Seminar on Environmental and Marine Studies between Nha Trang University and Pukyong National University (February 12, 2020) 2. Opening ceremony for Access Micro Scholarship Program (March, 2020) 3. Meeting of ASEANFEN Management Board to plan for 2020 Conference at NTU (March, 2020)



## LISTS OF ISI, SCI, SCIE ARTICLES IN INTERNATIONAL JOURNALS THE $4^{\mbox{\tiny TH}}$ QUARTER, 2019

				Journal						SCI, SSCI,
No	Article	Sponsored by	Author	Name of Journal	(IF)	Scimago Ranking (Q1, Q2, Q3, Q4)	Date	Link of article	Fields	SCIE, ESCI, SCOPUS Index
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Fragility Assessment of a Container Crane under Seismic Excitation Considering Uplift and Derailment Behavior	- Ministry of Oceans and Fisheries, Korea; - Ministry of Education, Korea	Tran Quang Huy (First author), Jungwon Huh, Nhu Son Doan, Van Ha Mac, Jin- Hee Ahn	Applied Sciences ISSN: 2076-3417	2.217	Q1	01/11/2019	https://doi. org/10.3390/ app9214660	Engineering and Technology	SCIE
2	Mixed iota and kappa carrageenan gels in presence of both calcium and potassium ions		Bui Tran Nu Thanh Viet (First author), Nguyen Trong Bach (Co-author), Taco Nicolai, Frédéric Renou	Carbohydrate Polymer ISSN: 0144-8617	6.044	Q1	01/11/2019	https://www. sciencedirect.com/ science/article/pii/	Food Science	SCI
3	Population genomics of the peripheral freshwater fish <i>Polynemus</i> <i>melanochir</i> (Perciformes, Polynemidae) in a changing Mekong Delta.	PEER project 2-7, article no 3	Dang Thuy Binh (First author), Vu Dang Ha Quyen, E. E. Biesack, Doan Vu Thinh (Co-author), O. T. Truong, T. L. Tran, A. S. Ackiss, B. L. Stockwell, K. E. Carpenter	Conservation Genetics, 1 – 12. ISSN: 1566-0621	2.282	Q2	10/2019	DOI:10.1007/ s10592-019- 01189-x	Bio diversity and Conservation	SCIE
4	Genome-wide SNP analyses reveal population structure of Portunus pelagicus along Vietnam coastline	NORHED project (Postdoc)	Dang Thuy Binh (First author). Rahman MA, Tran SQ, Glenner H	PLoS ONE 14(11): e0224473. ISSN: 1932-6203	2.776	Q1	05/11/2019	https://doi. org/10.1371/jour- nal.pone.0224473	Bio diversity and Conservation	SCIE
5	Optimization of ultrasound-assisted extraction conditions for phenolic compounds and antioxidant capacity from Tuckeroo ( <i>Cupaniopsis</i> <i>anacardioides</i> ) fruit		Pham Ngoc Minh Quynh (First author), Quan V. Vuong, Michael C. Bowyer and Christopher J. Scarlett.	Journal Separation Science and Technology ISSN: 0149-6395	1.354	Q2	02/10/2019	https://doi.org/10. 1080/01496395.20 19.1673413	Chemistry	SCIE
6	Antidiabetic and antioxidant activities of red seaweed <i>Laurencia</i> <i>dendroidea</i>	Nafosted Fund project	Nguyen The Han (First author), Nguyen Thi Huyen, Nguyen Van Minh (Co-author), Nguyen Thi Lan Phuong, Tran Thi Van Anh, Do Anh Duy, Sang Moo Kim	Asian Pacific Journal of Tropical Biomedicine ISSN: 2221-1691	1.587	Q2	11/12/2019	http://www. apjtb.org/article. asp?issn=2221- 1691;year=2019;vo lume=9;issue=12;s page=501;epage=5 09;aulast=Nguyen	Bio Technology	SCIE
7	Anti-proliferative capacity of combined extracts from Paramignya	No	Nguyen Van Tang	Journal of Cancer Research and Therapeutics ISSN: 0973-1482	1.392	Q3	12/2019	http://www.can- cerjournal.net/ aheadofprint.asp https://www. researchgate. net/publica- tion/335419241_ Anti-proliferative_ capacity_of_com- bined_extracts_ from_Paramignya_ trimera_and_ Phyllanthus_ama- rus_agaisnt_pan- creatic_cancer_ cell_lines	Medicine	SCIE
8	In vitro anti- pancreatic cancer activity of HPLC- derived fractions from <i>Helicteres</i> <i>hirsuta</i> Lour. stem		Pham Hong Ngoc Thuy (First author), Quan Van Vuong, Michael C. Bowyer, Christopher J. Scarlett	Molecular Biology Reports ISSN: 0301-4851	2.107	Q2	03/11/2019	https://doi. org/10.1007/ s11033-019- 05180-0	Food Science, Biology, Biochemistry, Microbiology	SCI

9	Application of triple-layer remote phosphor configuration results in the color quality and luminous efficiency enhancement of WLEDs	Bui Thuc Minh (First author), Phan Xuan Le, Dinh Hoang Bach, Nguyen Doan Quoc Anh	TELKOMNIKA	1.02	Q2	12/2019	http://journal.uad. ac.id/index.php/ TELKOMNIKA/arti- cle/view/13335	Electrical and Electronic Engineering	SCOPUS
10	The usage of dual-layer remote phosphor configurations in enhancing color quality and luminous flux of WLEDs	Bui Thuc Minh (First author), Phan Xuan Le, Dinh Hoang Bach, Nguyen Doan Quoc Anh	TELKOMNIKA	1.02	Q2	12/2019	http://journal.uad. ac.id/index.php/ TELKOMNIKA/arti- cle/view/13093	Electrical and Electronic Engineering	SCOPUS
11	Benefits of triple- layer remote phosphor structure in improving color quality and luminous flux of white LED	Bui Thuc Minh (First author), Phan Xuan Le, Dinh Hoang Bach, Nguyen Doan Quoc Anh	TELKOMNIKA	1.02	Q2	12/2019	http://journal.uad. ac.id/index.php/ TELKOMNIKA/arti- cle/view/13094	Electrical and Electronic Engineering	SCOPUS
12	Global value chain and food safety and quality standards of Vietnam pangasius exports	Nguyen Thi Tram Anh (First author), Curtis M. Jolly	Aquaculture Reports ISSN: 2352-5134	1.887	Q1	10/12 2019	https://www. sciencedirect.com/ science/article/pii/	Economics	SCIE
13	Collective action governance and benefits distribution in the sturgeon value chain in Lâm Đồng province, Vietnam	Nguyen Thi Tram Anh (First author), Nguyen Thi Kim Anh ( <i>Co-author</i> ), Truong Cong Hao, Curtis M.Jolly	Aquaculture ISSN: 0044-8486	3.022	Q1	23/11/ 2019	https://www. sciencedirect. com/science/ article/abs/pii/	Economics	SCI
14	The effect of warming on pesticide toxicity is reversed between developmental stages in the mosquito Culex pipiens	Tran Thanh Tam (First author), Dinh Van Khuong (Co-author, Janssens, L. and Stoks, R.	Science of The Total Environment ISSN: 0048-9697	5.589	Q1	19/11/2019	https://www. sciencedirect.com/ science/article/pii/	Environment	SCI