

Faculty Vitae

1. Name
<ul style="list-style-type: none">- Full name: NGUYEN CONG HAU- Full-time
2. Education
<ul style="list-style-type: none">- Master of Science: Analytical Chemistry<ul style="list-style-type: none">• Major: Analytical Chemistry• University of Science, Ho Chi Minh City Vietnam National University (US-HCMC VNU)• Year: 28/02/2020- Bachelor: Chemistry<ul style="list-style-type: none">• Major: Analytical Chemistry• University of Science, Ho Chi Minh City Vietnam National University (US-HCMC VNU)• Year: 30/09/2016
3. Academic experience
<ul style="list-style-type: none">- University of Science, Ho Chi Minh City Vietnam National University (US-HCMC VNU)- Address: 227 Nguyen Van Cu Street, Ward 4, District 5, Ho Chi Minh City- Faculty of Chemistry- Position:<ul style="list-style-type: none">• Researcher• Teaching assistant- Working time: 10/2016 – 08/2018- Nguyen Tat Thanh University- Address: 300A Nguyen Tat Thanh Road, Ward 13, District 4, Ho Chi Minh City- Faculty of Environmental and Food Engineering- Position:<ul style="list-style-type: none">• Lecturer• Researcher- Working time: 08/2018 – now
4. Non-academic experience
<ul style="list-style-type: none">- Cooperatively working at Warrantek Joint Stock Company- Cooperatively working at REDSTAR-CMS (Red Star Vietnam Company Limited)
5. Certifications or professional registrations
<ul style="list-style-type: none">- Certificate of training course “Problem Solving and Decision Making Skill”- Certificate of training course “Speed Thinking Method”- Certificate of Level B Chinese- Certificate of HSK 4 Chinese- Certificate of training course “Intellectual Property”- Pedagogical certificate for University Education- IELTS 6.0- TOEIC 840- Certificate of Achievement “Change management at the Workplace and in Implementing OBE”- Certificate of Achievement “Applied Approach to Designing and Implementing Outcomes-Based Education (OBE) Framework- Certification of training course “Design and Application of Rubric for Course Evaluation to Meet the Learning Outcomes”
6. Membership in professional organizations

7. Honors and awards
8. Service activities
<ul style="list-style-type: none"> - Teaching: General Chemistry, General Chemistry Laboratory, Analytical Chemistry 1, Analytical Chemistry Laboratory 1, Food Analysis 1, Food Analysis 2, English in Food Technology 1, Separation and Purification of Organic Compounds - Training “Basic Atomic Spectrometry” Course at SaigonCert Certification and Inspection Joint Stock Company - Research activities: <ul style="list-style-type: none"> • Supervision of university students to conduct scientific research • Scientific research projects funded by Nguyen Tat Thanh University <ul style="list-style-type: none"> ✓ Assessment of antioxidant capacities by various chemical reaction mechanisms in specific tea products in Vietnam, 2021 (Principal Investigator) ✓ Assessment of total content and major species of polyphenolic compounds in tea infusion prepared from various Vietnamese teas, 2021 (Member) ✓ Electrochemical method development for determining rosuvastatin in pharmaceutical products, 2021 (Member) ✓ Assessment of multi-elemental compositions in tea infusions from several tea types in Vietnam, 2020 (Principal Investigator) ✓ Assessment of total polyphenol contents and their species in several tea types in Vietnam, 2020 (Member) ✓ Determination of trace metals’ chemical fractions and assessment of their ecological risks in tea-tree plantation soils in Central Highland, Vietnam, 2020 (Member) ✓ Investigation and evaluation of Japanese mint (<i>Mentha Arvensis</i> L.) essential oils from different regions in southern Vietnam, 2020 (Member) • Scientific research projects funded by Department of Science and Technology, DOST Ho Chi Minh City “Building the database and tools for the assessment and authenticity of various tea types produced in Vietnam”, 2020-2022 (Scientific Secretary and Senior Member)
9. Areas of research
<ul style="list-style-type: none"> - Method development for determining elements, pesticide residues in environmental water, agricultural soils, sediments, plants, and food employing modern instrument analytical methods, including high performance liquid chromatography coupled with ultraviolet/diode array detectors (HPLC-UV/DAD), fluorescence detector (HPLC-FLD), refractive index detector (HPLC-RID); ultra-high performance liquid chromatography coupled with (tandem) mass spectrometry (UHPLC-MS, UHPLC-MS/MS); gas chromatography coupled with flame ionization detector (GC-FID), (tandem) mass spectrometry (GC-MS, GC-MS/MS); preparative chromatography; atomic absorption spectrometry (AAS); optical emission spectrometry (OES); molecular absorption spectrometry (UV-Vis); inductively coupled plasma mass spectrometry (ICP-MS) and optical emission spectroscopy (ICP-OES); several electrochemical methods. - Assessment of nutrients in tea and coffee products such as catechins, amino acids, and antioxidant capacities. - Geochemistry of elements in soils and sediments. - Non-targeted for metabolite analysis in food products. - Application of multivariate statistical analysis for food classification and authenticity.
10. Publications, presentations, creative works
International Journals:

- N Thanh-Nho, C Marchand, E Strady, T Van Vinh, P Taillardat, **N Cong-Hau** and T-T Nhu-Trang (2020). Trace Metal Dynamics in a Tropical Mangrove Tidal Creek: Influence of Porewater Seepage (Can Gio, Vietnam). *Frontiers in Environmental Science*
- T Bui-Phuc, T T Nhu-Trang and **N Cong-Hau** (2020). Comparison of chemical composition of essential oils obtained by hydro-distillation and microwave-assisted extraction of Japanese mint (*Mentha arvensis* L.) grown in Vietnam. *IOP Conference Series: Materials Science and Engineering*

National Journals:

- **Nguyen Cong-Hau**, Le-Thi Anh-Dao, Nguyen Pham Nhu-Quynh, Nguyen Thanh-Nho (2021). Analytical method validation and investigation into the effects of brewing temperature on total polyphenol contents in tea infusions prepared from several Vietnamese tea products. *Ho Chi Minh City University of Education Journal of Science*
- Le-Thi Anh-Dao, Do Thi Hong-Dao, **Nguyen Cong-Hau** (2021). Simultaneous determination of neonicotinoid pesticides in tea-tree plantation soil by ultra-performance liquid chromatography tandem mass spectrometry. *Ho Chi Minh City University of Education Journal of Science*
- Le-Thi Anh-Dao, **Nguyen Cong-Hau** (2020). Assessment of multi-elemental concentrations in various tea types cultivated in Vietnam. *Journal of Science and Technology-NTTU*
- Tran Bui-Phuc, **Nguyen Cong-Hau** (2020). Investigation and assessment of the quality of Japanese mint essential oil (*Mentha Arvensis*) originated from various geographical regions in the southern part of Vietnam. *Journal of Science and Technology-NTTU*
- Tran Bui-Phuc, **Nguyen Cong-Hau** (2020). A study on the hydro-distillation of peppermint essential oil from Japanese peppermint grown in Lam Dong Province and its application in the production of peppermint scented candle. *Vietnam Trade and Industry Review*
- Le-Thi Anh-Dao, **Nguyen Cong-Hau** (2020). Examining some basic physical chemical parameters related to shrimp farming water quality in Can Gio District. *Vietnam Trade and Industry Review*
- Tran Bui-Phuc, **Nguyen Cong-Hau** (2020). Examining the distillation process of mint essential oil which is extracted from Japanese mint grown in Binh Thuan Province by using a pilot-scale distillation system. *Vietnam Trade and Industry Review*
- **Nguyen Cong-Hau**, Le-Thi Anh-Dao (2020). Method development for the determination of acrylamide in potato chips by gas chromatography-mass spectrometry. *Vietnam Trade and Industry Review*
- Le-Thi Huynh-Mai, **Nguyen Cong-Hau**, Huynh Quan Thanh, Nguyen Van Dong (2018). A home-made purge and trap-thermos desorption-gas chromatograph coupled with atomic fluorescence detector for the determination of ultra-trace methylmercury. *Science and technology development journal: Natural sciences*

Proceeding of conferences/ International workshops:

- Tran Thi Nhu-Trang, **Nguyen Cong-Hau**, Nguyen Thanh-Nho, Do Minh-Huy, Nguyen Quoc-Duy, Trieu Quoc-An, Nguyen Thi Van-Linh, Tran Binh-Hau, Le Thi Anh-Dao (2021). Building databases and tools for quality assessment, management and traceability of Vietnamese teas. Oral communication in VNUHCM-US-Conf 2020
- Cao Thi Mi Mi, Tran Bui-Phuc, **Nguyen Cong-Hau** and T-T Nhu-Trang (2019) Proc. Conf. on Technological Universities with Mekong Innovation Hub (Be Tre Province) (Ho Chi Minh City: Publisher Science and Engineering). vol. 55, 501-508
- Nguyen Thu-Huong, Ngo Thanh-Long, Le Huynh Nhat-Linh, Nguyen Thi Minh-Hien, **Nguyen Cong-Hau**, Nguyen Huu-Quang (2018). Physicochemical parameters and mineral components

in Vietnam honey as a promising tool for classifying geographical origin of honey. A poster in 11th Scientific Conference, University of Science, HCMC National University, Vietnam

11. Professional development activities

- Participated in Scientific Conference XI at University of Science, Ho Chi Minh City Vietnam National University (US, HCMC VNU)
- Participated in Scientific Conference XII at University of Science, Ho Chi Minh City Vietnam National University (US, HCMC VNU)
- Completed the training course “Design and Application of Rubric for Course Evaluation to Meet the Learning Outcomes”
- Completed the training course “Speed Thinking Method”
- Completed the course to achieve “Pedagogical certificate for University Education”
- Completed the training course “Intellectual Property” in 2017
- Completed the training on “Change management at the Workplace and in Implementing OBE”
- Completed the training on “Applied Approach to Designing and Implementing Outcomes-Based Education (OBE) Framework”
- Participated in the language examination to achieve IELTS 6.0 Certificate
- Participated in the language examination to achieve TOEIC 840 Certificate
- Participated in the language examination to achieve Level B Chinese
- Participated in the language examination to achieve HSK4/6 Chinese
- Completed the master degree in Analytical Chemistry
- Scholarship applications for PhD study
- Participated in “National workshop on payment for mangrove environmental services in Viet Nam”
- Participated in Techmart Post-Harvest Technology

12. Teaching competence

- Properly completed the teaching responsibilities regarding the regulated standard hours, improving teaching methods to bring efficiency and interest to learners
- Member of SAR Group for the Department of Food Technology
- Supervisors for university students to carry out the graduation thesis in Food Technology, Chemical Engineering, and Environment and Resources Management