

Faculty Vitae

1. Name
<ul style="list-style-type: none">- Tran Thi Nhu Trang- Dean
2. Education
<ul style="list-style-type: none">- 10/2007 – 09/2009: Research fellow at IRSTEA – Bordeaux Centre (France)- 09/2003 – 09/2006: PhD student at Université Claude Bernard Lyon 1 and Service Central d'Analyse du CNRS (National Centre for Scientific Research), presently Institut des Sciences Analytiques (ISA Lyon - France)- 1997 – 1999: Master of Science at VNUHCM - University of Science and Center of Analytical Services and Experimentation HCM (Vietnam)- 1992 – 1996: Bachelor of Chemistry at VNUHCM - University of Science (Vietnam)
3. Academic experience
<ul style="list-style-type: none">- 2018 - present: Dean, Faculty of Environmental and Food Engineering, Nguyen Tat Thanh University, Vietnam- 2017 – 2018: Visiting Lecturer, Toulouse Institut National Polytechnique (Toulouse INP – France)- 2016: Visiting Lecturer, François-Rabelais University (Tours – France)- 1999 - 2018: Lecturer/ Head - Department, University of Science, Vietnam National University Ho Chi Minh City, Vietnam
4. Non-academic experience
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5. Certifications or professional registrations
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6. Membership in professional organizations
<ul style="list-style-type: none">- Vietnam Academy of Science and Technology (VAST)- Center of Analytical Services and Experimentation HCM city (CASE)- French National Research Institute for Sustainable Development (IRD)- Toulouse Institut National Polytechnique (INP-ENSIACET, France)- Institute of Analytical Sciences (ISA, Lyon, France)- Providence University (Taiwan)- Vietnam Seaculture Association for seafood quality control and traceability- Vietnam Tea Association for tea quality control and traceability- Waters Pacific Pte Ltd for analytical techniques and applicatio
7. Honors and awards
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8. Service activities
<ul style="list-style-type: none">- Lecture courses: Liquid and gas chromatography; Qualitative and quantitative chemistry; Electrochemistry; Food analysis; Mass spectrometry; Separation and purification methods for organic compounds; Food analysis; Analytical Chemistry- Supervisor/Co-supervisor of 40 Bachelor, 20 Master, 2 PhD. students and 1 Post-Doc
9. Areas of research
<ul style="list-style-type: none">- Research and development of new analytical methods for pollutants in various matrices (air, water, soil, sediment, plant, food, biological fluid, etc.)- Multi-residue determination of contaminants in food and environment- Nutrients in food- Authenticity of natural and synthetic compounds- Evaluation of greenhouse gas emission for climate change

10. Publications, presentations, creative works

International Journals (ISI):

- 1) Trace metal dynamics in a tropical mangrove tidal creek: influence of porewater seepage (Can Gio, Vietnam); N Thành-Nho, C Marchand, E Strady, T Van Vinh, P Taillardat, ...; *Frontiers in Environmental Science*
- 2) Chitosan-based nanocomposites for glyphosate detection using surface plasmon resonance sensor; MH Do, B Dubreuil, J Peydecastaing, G Vaca-Medina, **TT Nhu-Trang**, ...; *Sensors* 20 (20), 5942
- 3) Determination of 400 pesticide residues in green tea leaves by UPLC-MS/MS and GC-MS/MS combined with QuEChERS extraction and mixed-mode SPE clean-up method; TK Ly, TD Ho, P Behra, **TT Nhu-Trang**; *Food chemistry* 326, 126928
- 4) Short-term changes in the quality of suspended particulate matter in a human impacted and mangrove dominated tropicalestuary (Can Gio, Vietnam); F David, C Marchand, N Thiney, **TT Nhu-Trang**, T Méziane; *Continental Shelf Research* 178, 59-67
- 5) Characteristics of airborne bacteria and fungi in the atmosphere in Ho Chi Minh city, Vietnam- A case study over three years; VD Hai, SMT Hoang, NTQ Hung, NM Ky, B Gwi-Nam, P Ki-hong, ...; *International biodeterioration & biodegradation* 145, 104819
- 6) Bioaccumulation of some trace elements in tropical mangrove plants and snails (Can Gio, Vietnam); N Thanh-Nho, C Marchand, E Strady, N Huu-Phat, **TT Nhu-Trang**; *Environmental Pollution* 248, 635-645
- 7) Metals geochemistry and ecological risk assessment in a tropical mangrove (Can Gio, Vietnam); N Thanh-Nho, C Marchand, E Strady, TV Vinh, **TT Nhu-Trang**; *Chemosphere* 219, 365-382
- 8) Carbon biogeochemistry and CO₂ emissions in a human impacted and mangrove dominated tropical estuary (Can Gio, Vietnam); F David, T Meziane, **NT Tran-Thi**, VT Van, N Thanh-Nho, P Taillardat, ...; *Biogeochemistry* 138 (3), 261-275
- 9) Trace metals partitioning between particulate and dissolved phases along a tropical mangrove estuary (Can Gio, Vietnam); N Thanh-Nho, E Strady, **TT Nhu-Trang**, F David, C Marchand; *Chemosphere* 196, 311-322
- 10) Changes in soil characteristics and C dynamics after mangrove clearing (Vietnam); S Grellier, JL Janeau, ND Hoai, CNT Kim, QLT Phuong, TPT Thu, ...; *Science of the Total Environment* 593, 654-663
- 11) Molecularly imprinted polymer-based electrochemical sensor for the sensitive detection of glyphosate herbicide; MH Do, A Florea, C Farre, A Bonhomme, F Bessueille, F Vocanson, ...; *International Journal of Environmental Analytical Chemistry* 95 (15), 1489-1501
- 12) Evaluation of titanium dioxide as a binding phase for the passive sampling of glyphosate and aminomethyl phosphonic acid in anaquatic environment; V Fauvelle, **TT Nhu-Trang**, T Feret, K Madarassou, J Randon, N Mazzella; *Analytical chemistry* 87 (12), 6004-6009
- 13) Deuterium/hydrogen ratio analysis of thymol, carvacrol, γ - terpinene and p-cymene in thyme, savory and oregano essential oils by gas chromatography–pyrolysis–isotope ratio mass ...; **TT Nhu-Trang**, H Casabianca, MF Grenier-Loustalot; *Journal of Chromatography A* 1132 (1-2), 219-227
- 14) Authenticity control of essential oils containing citronellal and citral by chiral and stable-isotope gas-chromatographic analysis; **TT Nhu-Trang**, H Casabianca, MF Grenier-Loustalot; *Analytical and bioanalytical chemistry* 386 (7), 2141-2152

International Journals (non-ISI):

- 1) Comparison of chemical composition of essential oils obtained by hydro distillation and microwave-assisted extraction of Japanese mint (*Mentha arvensis* L.) grown in Vietnam; T Bui-Phuc, **TT Nhu-Trang**, N Cong-Hau; *IOP Conference Series: Materials Science and Engineering* 991 (1), 012039

- 2) Hiệu ứng tổ hợp của hai monomer chức năng trong tổng hợp polymer in dầu phân tử cho chiết pha rắn chọn lọc ciprofloxacin; Tú Đồng, TLT Thiện, LD Phương, ĐH Yến, TTN Trang
- 3) Development of analytical methods of multi-pesticide residues for controlling the tea quality, from tea plantation to consumer; T kiet Ly; Toulouse, INPT
- 4) Xác định dư lượng thuốc bảo vệ thực vật chứa nhóm ammoni tứ cấp trong gạo bằng phương pháp sắc ký lỏng siêu hiệu năng ghép nối đầu dò khối phổ (UPLC-MS/MS); NN Quỳnh, TTN Trang
- 5) Nghiên cứu xác định chất diệt cỏ 2, 4 – dichlorophenoxyacetic acid trong nước bằng phương pháp điện hóa sử dụng điện cực glassy carbon biến tính bề mặt bằng polypyrrole; NH Nguyễn, ĐM Huy, TTN Trang
- 6) Nghiên cứu phương pháp xác định trực tiếp glyphosate, glufosinate và chất chuyển hóa của chúng trong nước và gạo bằng phương pháp sắc ký lỏng siêu hiệu năng ghép nối đầu dò...; TLT Thiện, TTN Trang
- 7) Nghiên cứu phát triển kỹ thuật lấy mẫu thụ động POCIS cho các chất bảo vệ thực vật phân cực trong nước nhằm quan trắc và đánh giá chất lượng môi trường nước mặt - Research and ...; TNT Trần, TN Nguyễn; Trường Đại học Khoa học Tự nhiên
- 8) Développement d'une analyse multi-résidus d'herbicides acides et d'un nouveau capteur passif dédié à l'échantillonnage de micropolluants anioniques dans les eaux de surface; NTT Thi; irstea
- 9) Développement d'une méthode de dosage HPLC-MS/MS et HPLC-Fluorescence pour analyser le glyphosate et l'AMPA dans l'eau; NTT Thi, N Mazzella, F Delmas; 38ème Congrès du Groupe Français des Pesticides (GFP), 11
- 10) Analyses mutli-isotopiques ($^{13}\text{C}/^{12}\text{C}$, $^2\text{H}/^1\text{H}$) par spectrométrie de masse des rapports isotopiques et analyse énanti-sélective: application aux arômes pour le contrôle de l ...; T Thi, N Trang; Lyon 1

National Journals:

- 1) Development of an automated sampling and measurement equipment to determine the greenhouse gas methane on the waterair surface of urban canals; **TTN Tran**, DT Nguyen, HM Do, AQ Trieu, DH Tran, VD Tran, NT Mai; Science and Technology Development Journal-Natural Sciences 1 (6), 149-162
- 1) Development of molecularly imprinted polymer based chemical sensor for determination of salbutamol; **TTNT**, Nguyen Hoang Nguyen, Do Minh Huy, Tran Van Man; Vietnam Journal of Chemistry 55 (3e), 150-155
- 2) Surveying emissions of greenhouse gas CO₂ in the canals of Ho Chi Minh city by floating chamber method; **TTN Tran**, NT Nguyen, HM Do, DT Nguyen; Science & Technology Development Journal- Science of The Earth & Environment...
- 3) Multi-residue analysis of polar pesticides in surface water and sediment by high performance liquid chromatography; HLS Truong, TTT Nguyen, HN Tran, **TTN Tran**; Science and Technology Development Journal 18 (2), 159-165
- 4) Development of passive sampler POCIS for the analysis of polar pesticides in surface water; **TTN Tran**, TT Pham, HLS Truong; Science and Technology Development Journal 18 (2), 132-144
- 5) Multiresidue determination of phenicol, fluoroquinolone and sulfonamide antibiotics in fish by ultra performance liquid chromatography – tandem mass spectrometry; HTHD Nguyen Thi Lanh, **Tran Thi Nhu Trang**; Vietnam Journal of Science and Technology 51 (5B), 200-204
- 6) Assessment of polar pesticide pollution in surface water by high performance liquid chromatography – UV detection; TLSH Pham Thi Ty, **Tran Thi Nhu Trang**, Le Thi Hong Tan, Dang Le Hoang Yen; Vietnam Journal of Science and Technology 51 (5B), 319-323

- 7) Study on a new reversed-phase column based on organic/inorganic hybrid materials for the analysis of glyphosate and AMPA by HPLC-ESI-MS/MS; **FD Tran-Thi Nhu-Trang**, Nicolas Mazzella; Vietnam Journal of Analytical Sciences 18 (4), 286-294
- 8) Simultaneous determination of quilonone residues in meat, shrimp and fish by liquid chromatography tandem mass spectrometry; TT Tran, **TTN Tran**; Science and Technology Development Journal 16 (2), 39-46

Conferences

- 1) Developemnt of methods of pesticide residues analysis in Vietnamese tea by LC/MS/MS and GC/MS/MS combined with QuEChERS extraction and cleanup method, Applied to the quality ...; CVN Ho Tuan Dat, Ly Tuan Kiet, **Tran-Thi Nhu-Trang**, Phu Minh Tan, Le Thanh Tam; Analytica Vietnam Conference Proceeding
- 2) Analyses of polar pesticides and glyphosate in Mekong Delta; **NT Tran-Thi**, MH Do, LSH Truong, TT Nguyen, T Nguyen, QH Chau, ...; ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY 253
- 3) Développement et validation d'une méthode permettant le dosage du glyphosate et de l'AMPA dans les eaux surface par HPLC-ESI-MS/MS; **NTT Thi**, N Mazzella, F Delmas; XXXIXème congrès du Groupe Français des Pesticides, p.-p.
- 4) Développement et validation d'une méthode permettant le dosage du glyphosate et de l'AMPA dans les eaux surface par HPLC-ESI-MS/MS; **NT TRAN-THI**, N MAZZELLA, B DELEST, F DELMAS, UR REBX; XXXIXème congrès. Groupe Français des Pesticides, Toulouse
- 5) Développement d'une méthode de dosage HPLC-MS/MS et HPLC-Fluorescence pour analyser le glyphosate et l'AMPA dans l'eau; **NTT Thi**, N Mazzella, F Delmas; 38ème Congrès du Groupe Français des Pesticides (GFP), 11
- 6) Improving the solid phase extraction procedure for the determination of glyphosate and AMPA in environmental water by LC-ESI-MS/MS; **NTT Thi**, N Mazzella, F Delmas; 35th International Symposium on Environmental Analytical Chemistry (ISEAC 35 ...)
- 7) Development of purification procedures and HPLC-MS/MS method for the determination of glyphosate and AMPA in environmental water; **NTT Thi**, N Mazzella, F Delmas; 5th European Conference on Pesticides and Related Organic Micropollutants in ...

11. Professional development activities

- Carrying out/participating in scientific research projects:
 - 1) "Building a database and tools for the quality evaluation and traceability of teas produced in Vietnam", DOST HCMC (2020-2022)
 - 2) "Assessment of total content and major species of polyphenolic compounds in various Vietnamese teas", NTTU 2020
 - 3) "Study on antioxidant compounds in tea and medicinal plants", collaboration project with Toulouse National Polytechnic Institute (France) (2017-2019)
 - 4) "Developing the determination methods of pesticide multi-residues in tea for controlling the quality from tea plantations to consumer", CASE-DOST HCMC (2016-2020)
 - 5) "Molecular imprinted polymers (MIP) for solid phase extraction (SPE)", GUST-VAST (2018-2021)
 - 6) "Study on electropolymerization mechanism of chemical sensors based on a molecularly imprinted polymer (MIP) with gold, glassy carbon and screen-printed electrodes" funded by The World Academy of Sciences (TWAS) – UNESCO (2016-2018)
 - 7) "Assessment of the greenhouse gas emissions of CO₂ and CH₄ with automatic gas sampling and measuring equipment manufactured in Vietnam", DOST HCM (2014-2016)
 - 8) "Research and development of passive sampling techniques POCIS for polar pesticides in water to monitor and evaluate the quality of surface water in Saigon-Dong Nai and Mekong Delta rivers" funded by VNUHCM (2014-2015)

- 9) "Ability of mangroves to fix atmospheric greenhouse gaz (Can Gio, Mekong River, Vietnam)", IRD (2013- 2017)
- 10) "NUCOWS: NUtrient cycles and COntaminants in WaterS in Southeast Asia", USTH (2013-2015)
- 11) "Study on glyphosate determination by SPE and LC-ESI-MS/MS", VNUHCM (2012-2013)

12. Teaching competence

- Liquid and gas chromatography
- Qualitative and quantitative chemistry
- Electrochemistry
- Food analysis
- Mass spectrometry
- Separation and purification methods for organic compounds
- Analytical Chemistry