# Ta Thi Minh Ngoc

ngocttm@ntu.edu.vn

Department of Post-harvest Technology Faculty of Food Technology 02 Nguyen Dinh Chieu Str., Nha Trang City, Vietnam

#### **EDUCATION**

Burgundy University, Dijon, France

Ph.D. in Food Sciences, 2006-2010 MSc. In Food Sciences, 2005 - 2006

# Hanoi University of Technology, Ha Noi, Vietnam

Ing. in Food Technology, 2000 - 2005

### **RESEARCH INTERESTS**

- Encapsulation of bioactives compounds
- Physiological stress on yeast cell
- Biotransformation of aroma and colors components by enzyms and mirooganisms

# **RESEARCH EXPERIENCE**

- Biomass production from fish waste, IFS grant, 2015-2016
- Encapsulation in yeast, Bilateral project, 2011-2014, principal investigator
- Encapsulation of Gac oil, National Project, 2011-2012, participant
- Biotransformation of carotenoids to produce aromas, Lotus project, 2011 2013, participant
- Encapsulation of lutein in yeast, Qualiment, French national project, 2009 2010, participant
- Physiological stress on yeast, Doctoral thesis, Burgundy University, France, 2006-2010

# **TEACHING RESPONSIBILITY**

# Undergraduate

- Production of aroma/ colorant compounds for food uses
- Technology of vegetative origin products
- Food physics

### Graduate

- Mircobio products: Production and Applications in Food Industry
- Food flavors and colorants technology

### **PUBLICATIONS**

### International publications

1. Do TTL, Vu NT, Phan-Thi H, Cao-Hoang L, Ta TMN, Waché Y, Nguyen THT. 2013. Traditional fermented sausage 'Nem chua' as a source of yeast biocatalysts efficient for the production of the aroma compound  $\gamma$ -decalactone. International Journal of Food Science & Technology 49:1099-1105.

- 2. Ta TMN, Cao-Hoang L, Romero-Guido C, Lourdin M, Phan-Thi H, Goudot S, Marechal PA, Wache Y. 2012. A shift to 50 degrees C provokes death in distinct ways for glucose- and oleate-grown cells of Yarrowia lipolytica. Applied Microbiology and Biotechnology 93:2125-34.
- 3. Romero-Guido C, Belo I, Ta TMN, Cao-Hoang L, Alchihab M, Gomes N, Thonart P, Teixeira JA, Destain J, Wache Y. 2011. Biochemistry of lactone formation in yeast and fungi and its utilisation for the production of flavour and fragrance compounds. Applied Microbiology and Biotechnology 89:535-47.
- 4. Ta TMN, Cao-Hoang L, Phan-Thi H, Tran HD, Souffou N, Gresti J, Marechal PA, Cavin JF, Wache Y. 2010. New insights into the effect of medium-chain-length lactones on yeast membranes. Importance of the culture medium. Applied Microbiology and Biotechnology 87:1089-99.

### National publications

- 1. Tran HD, Dao TKT, Ta TMN. 2017. Influence of surfactant and coagulation conditions on the morphology of Gac oil chitosan microcapsules. Journal of Science and Technology of Vietnam, 12, 62 64 (in Vietnamese)
- 2. Tran HD, Nguyen TH, Nguyen TN, Ta TMN. 2014. Influence of adding agar-agar on encapsulation of Gac oil using gelatin in multi-emulsion method. Journal of Science and Technology, 52, 387-392. (in Vietnamese)
- 3. Ta TMN. 2013. Arome production from carotenoids using enzymatic cleavage, Journal of fisheries science and technology 2, 187 190. (in Vietnamese)
- 4. Tran HD, Hoang NA, An TT, Le TS, Ta TMN. 2013. Microencapsulation of Gac oil using spray drying technique, Journal of science and Technology of Vietnam 12, 51 55. (in Vietnamese)
- 5. Tran HD, Ho TTM, Pham TV, Ta TMN. 2012. Influence of culture conditions on yeast membrane diffusion of hydrophobic compounds, Journal of Science and Technology 50, 994 998. (in English)
- 6. Tran HD, Le AN, Ta TMN. 2012. Dispersion of gac oil in aqueous phase: effect of polymer and homogenous conditions, Journal of Science and Technology 50, 988 993. (in English)
- 7. Bui THP, Ta TMN, Nguyen ND, Do TTL, Do TTH, Phan-Thi H, Wache Y, Nguyen THT. 2012. Study on biotransformation of carotenoids from different sources into aroma compounds during cooxidation using xanthine oxidase, Journal of Science and Technology 50, 482 488. (in English)
- 8. Ta TMN. 2010 Biotransformation of lactones for uses in food technologies, Journal of fisheries science and technology 2, 96-100. (in Vietnamese)

# **Conferences and Workshop**

- 1. Agency for French Speaking Universities (AUF) workshop on "Encapsulation technology applied in food, nutrition, aquaculture and breeding" 2015, Nha Trang, Vietnam.
- 2. Tran Hai Dang, Dao Thi Kim Thoa, Do Xuan Loc, Ta Thi Minh Ngoc. Impact of alkaline solution on gac oil chitosan bead formation. XXIII International conference on Bioencapsulation. 2015, Delft, Netherland.
- 3. Ta Thi Minh Ngoc, Tran Hai Dang, Ho Thi Thu Minh, Tran Nguyen Van Nhi. Use of Box-Behnken design to investigate beta-carotene encapsulation in yeast cell. XXIII International conference on Bioencapsulation. 2015, Delft, Netherland.
- 4. Tran HD, Nguyen TH, Nguyen TN, Ta TMN. Influence of adding agar-agar on encapsulation of Gac oil using gelatin in multi-emulsion method. Conference of Science and Technology on Food toward a sustainable food technology development. 2014, Hanoi, Vietnam. (in Vietnamese)
- 5. 3rd International workshop of "Integrated Foresight for Sustainable economic development and Eco-resilience in ASEAN countries". 2013, Hanoi, Vietnam. Discussion group: Food group.

- 6. Ta TMN, Ho TTM. The non-convetional yeast Yarrowia lipolytica and its applications in lipid biotechnology. Conference of Utilization of waste/rest raw materials and by-products in the fish processing industry: Opportunities and Challenges, 2013, Nha Trang, Vietnam. (in English)
- 7. Tran HD, Le TH, An TT, Ta TMN. Effect of carragenan addition in encapsulation of Gac oil using gelatin gelation method. Conference of Utilization of waste/rest raw materials and byproducts in the fish processing industry: Opportunities and Challenges, 2013, Nha Trang, Vietnam. (in English)
- 8. Tran HD, An TT, Ta TMN. Microencapsulation of Gac oil. Conference of Agricultural Engineering and Post-harvest Technology for Asia Sustainability AEPAS, 2013. Hanoi, Vietnam. (in English)
- 9. Ta TMN, Tran HD, Ho TTM, Pham TV. Encapsulation of  $\beta$ -carotene in yeast: influence of culture conditions. XXI international Conference on Bioencapsulation. 2013, Berlin, Germany. (in English)
- 10. Tran HD, An TT, Tran VT, Ta TMN. Microencapsulation of Gac oil in chitosan microcapsules. XXI international Conference on Bioencapsulation. 2013, Berlin, Germany. (in English)
- 11. Tran HD, Le AN, Ta TMN. Dispersion of gac's oil in aqueous phase: effect of polymer and homogenous conditions. 2nd National conference of Young scientists. 2012, Hanoi, Vietnam. (in Vietnamese)
- 12. Tran HD, Ho TTM, Pham TV, Ta TMN. Influence of culture conditions on yeast membrane diffusion of hydrophobic compounds. 2nd National conference of Young scientists. 2012, Hanoi, Vietnam. (in Vietnamese)
- 13. Ta TMN, Wache Y. Encapsulation of interested compounds and application. 3rd Regional Conference in Biotechnology. 2011, Hanoi, Vietnam. (in English)
- 14. Ta TMN, Cao-Hoang L, Cavin JF, Wache Y. Sequence of heat damages toward cell membrane depends on the nutrition medium in the yeast Yarrowia lipolytica. 3rd congres of FEMS. 2009, Gothenburg, Sweeden. (in English)

#### Other:

- Organiser of 6th Training School on Bioencapsulation, held in Nha Trang University, the 4 7th March 2014, in cooperation with Bioencapsulation Research Group (BRG) and Agence Universitaire de la Francophonie (AUF)
- Reviewer for Journal of Fisheries science and technology of Nha Trang University