


CURRICULUM VITAE

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| Assoc.Prof. NGUYEN Hoang Anh Address: Faculty of Food Science and Technology, Vietnam National University of Agriculture, Trau Quy, GiaLam Hanoi, Vietnam Tel: 0084.978973346 Fax: 0084.438276554 E-mail: hoanganhcntp@vnua.edu.vn | |  | |
| Qualifications | | | |
| <i>Degree</i> | <i>University</i> | <i>Specialization</i> | <i>Graduation year</i> |
| PhD | University of Natural resources and Life Science, Vienna, Austria | Food Biotechnology | 2012 |
| Master | Vrije Universiteit Brussels (VUB), Brussels, Belgium | Molecular Biology | 2006 |
| Bachelor | Hanoi University of Science, Vietnam national University | Biology | 2000 |
| Professional experience | | | |
| <i>Duration</i> | <i>Place</i> | <i>Responsibility</i> | <i>Address</i> |
| 5/2001 – 9/2004 | Department of Biochemistry and Nutrition, Faculty of Food science and Technology | Lecturer | Hanoi |
| 11/2003- 1/2004 | Louvain la Neuve University | Visiting Researcher | Belgium |
| 10/2004- 9/2006 | Vrije Universiteit Brussels (VUB) | Master student | Belgium |
| 10/2006- 10/2008 | Department of Biochemistry and Food Biotechnology, Faculty of Food science and Technology, Hanoi University of Agriculture | Head of Department | Hanoi |
| 11/2008 – 1/ 2012 | University of Natural resources and Life Science | PhD student | Vienna, Austria |
| 11/2010-12/2010 | Laboratory of Biotransformation, Institute of Microbiology | Visiting Researcher | Praha, Czech Republic |
| 2/2012 to 2018 | Faculty of food science and technology, Vietnam National University of Agriculture | Lecturer, Vice Dean of Faculty, Head: Central Lab of Food | Hanoi |

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| | | Science and Technology | |
| 2018 up to now | Faculty of food science and technology, Vietnam National University of Agriculture | Lecturer, Dean of Faculty, Head: Central Lab of Food Science and Technology | Hanoi |
| Teaching responsibilities | | | |
| <i>Courses for undergraduate programs:</i> General Biochemistry, Food Biotechnology, Molecular Biological and Immunological Techniques in Food Analysis. | | | |
| <i>Courses for master programs:</i> Advanced Biochemistry, Advanced Biochemistry and Food Biotechnology, Food contaminant analysis | | | |
| Research areas | | | |
| <ul style="list-style-type: none"> - Isolation, selection and application of food grade microorganisms (Lactic acid bacteria, Bacillus, Fungi) in food production in order to improve food safety and quality - Production of enzymes from food grade wild type/recombinant microorganisms and application of enzymes in food production - Isolation, selection of food grade bacteria producing antimicrobial peptides, and production and application of bacteria/ peptides in food preservation. - Food analysis | | | |
| Projects | | | |
| <i>Project titles</i> | | <i>Duration</i> | <i>Sponsor</i> |
| <u>Leader of projects</u> | | | |
| - B2007-11-56: Optimization of culture conditions and enzyme purification to produce Fructosyltransferase and apply in production of functional fructooligosaccharide (FOS) | | 2007-2008 | Ministry of Education and Training |
| - T2007-07-51: Determining optimal conditions of β -D-fructofuranosidase activity for production of functional Fructooligosaccharid (FOS) from sucrose | | 2007 | Hanoi University of Agriculture |
| - VN02/2013, Vietnam – Austrian Scientific and Technological cooperation program: “Food-grade xylanase expression systems for bioconversion of xylan wastes from Vietnamese corncob into valuable prebiotic xylo-oligosaccharides”. | | 2013 - 2015 | Vietnam Ministry of Science and technology, and BMWF of Austria |
| - VN/2015, Vietnam – Austrian Scientific and Technological cooperation program: “Food-grade expression systems for high level expression of enzymes applied in production of prebiotic oligosaccharides”. | | 2015 - 2016 | Vietnam Ministry of Science and technology, and BMWF of Austria |

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| - Screening and identification of food grade Bacteria and Fungi producing protease and lactase from different sources of Vietnam | 2016 2017 | - | Research agreement between Biovet J.CS and Vietnam National University of Agriculture |
| - Beta-galactosidase of food grade bacteria: from screening to production and preliminary application | 2017 2018 | - | Viet Nam - Belgium Project |
| T2017-08-57: Beta-galactosidases of food-grade bacteria: from screening to production and preliminary application | 2017 2018 | - | Vietnam National University of Agriculture |
| 08/2020/TN: Study on the histamine degradation process in traditional fish sauce by using immobilized whole bacterial cells | 2020 2023 | - | National Foundation for Science and technology Development (Nafosted) |
| <u>Member of projects</u> | | | |
| -B2013.01.05: Production of N-acetyl-D-glucosamine from colloidal chitin using endochitinase and hexosaminidase | 2013 2015 | - | Ministry of Education and Training |
| -106.16 – 2012.23: Identification of the function and the regulation of genes expressed in <i>Bacillus licheniformis</i> under phosphate starvation conditions for the construction of nutrient regulated expression systems | 2016 | - | National Foundation for Science and technology Development (Nafosted) |
| -Extraction of essential oil from <i>Perilla frutescens</i> leaves and application in fresh fork preservation | 2013 2015 | - | Vietnam national University of Agriculture |
| - Screening, characterization and production of antimicrobial peptides produced by GRAS (Generally reconized as safe) bacteria from vietnamese fermeted food | 2015 - 2017 | - | Vietnam – Belgium Project |
| - Coordination member: Implementation of International Master Program "Master in Food Technology, Safety and Quality Management | 2013 2018 | - | ARES- CUD, Belgium |
| - Application of Biotechnoly in animal feed production for Hanoi area from waste beer yeast | 2016 | - | Hanoi Department of Science and |

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| - Reseach on process of fruit brewing Technology | 2017 2017 2018 | - | Technology Hanoi Department of Science and Technology |
| - Application of microbiological technology in reduction of histamin content of traditional fish sources | 2018 2020 | - | Ministry of industry and trade of the socialist republic of Vietnam |

Publications

- 1) Duc Doan Nguyen, Vicky Ann Solah, Stuart Keith Johnson, **Hoang Anh Nguyen**, Thi Lam Doan Nguyen, Thi Lan Huong Tran, Thi Khuyen Maic, Francesco Busettid. Identification and quantification of beta-casomorphin peptides naturally yielded in raw milk by liquid chromatography-tandem mass spectrometry 2019. LWT - Food Science and Technology, 111, 465-469.
- 2) Trần Thị Thu Hằng, **Nguyễn Hoàng Anh**, Nguyễn Thị Tinh, Bùi Thị Thu Hiền, Chu Đình Bình. Determination of histamine using high performance liquid chromatography: application in reaseach on degradation of histamine in fish sauce by bacteria. Journal of analytical sciences, 2019, 24(4B).
- 3) Nguyễn Thị Huyen, Tran Van Toan, **Nguyen Hoang Anh**, Pham Hong Thai. The effects of some factors on the joyal jelly yield and quality of honeybee subspecies *Apis Mellifera ligustica* in Hung Yen province, Vietnam. Journal of Animal Husbandry Sciences and Technics 2019, 241, 70-75.
- 4) Nguyen Thi Lam Doan, **Nguyen Hoang Anh**. *Bacillus* with potential probiotic properties from chicken intestine. Vietnam Journal of Agricultural Sciences 2018, 16(7), 689 – 697.
<http://tapchi.vnua.edu.vn/wp-content/uploads/2019/01/T%E1%BA%A1p-ch%C3%AD-s%E1%BB%91-7.65-73.pdf>
- 5) Yen Linh Thao Dang, Thu Hang Thi Tran, Lam Doan Thi Nguyen, **Anh Hoang Nguyen**, Thanh Thuy Thi Nguyen. Isolation and Screening of Histamine-Producing Bacteria from the First Six Months of the Cat Hai Fish Sauce Fermentation Process. Vietnam Journal of Agricultural Sciences 2019, 1 (3), 220-229.
<https://vjas.vnua.edu.vn/index.php?journal=vjas&page=article&op=view&path%5B%5D=45&path%5B%5D=25>
- 6) Le Thi Thao, **Nguyen Hoang Anh**, Tran Thi Dieu Thuy, Nguyen Van Giang. Journal of Agricultral and rural development 2018, 2, 88 – 94.
http://www.tapchikhoahocnongnghiep.vn/uploads/news/2018_03/12.pdf
- 7) Trinh Thi Thu Thuy, Nguyen Quoc Trung, Tong Van Hai, **Nguyen Hoang Anh**. Production and Characterization of Lignin Peroxidase from White Rot Fungal Strain T14. Vietnam Journal of Agricultural Science 2018, 8, 763 – 771.
<http://tapchi.vnua.edu.vn/wp-content/uploads/2019/02/tap-chi-so-8.6.61.pdf>
- 8) Ho Tuan Anh, **Nguyen Hoang Anh**. Application of bio-product from *Bacillus subtilis* and industrial enzymes for hydrolyzing beer yeast. Journal of Vietnam Agricultural Science and Technology 2017, 82(9), 86-89.
- 9) **Hoang Anh Nguyen**. Expression of chitinase gene from *Bacillus licheniformis* DSM13 in *E.coli* T7 and biochemical characterisation of recombinant enzyme. Journal of Agricultural Science 2017, 15(9), 1230 – 1238.
<http://www1.vnua.edu.vn/tapchi/upload/9-2017/12.pdf>
- 10) **Hoang Anh Nguyen**, Thi Lan Vu. Isolation, selection and identification of *Aspergillus oryzae* from some traditional fermented foods producing high salt tolerant neutral protease. Journal of Agricultural

Science 2017, 15(9), 1213 – 1220.

<http://www1.vnua.edu.vn/tapchi/upload/9-2017/10.pdf>

11) **Nguyen Hoang Anh**, Tran Thi Na. Selection and Identification of Bacillus Producing Enzyme Thermostable β -Galactosidase. Journal of Agricultural Science 2017, 15(8), 1070 – 1076.

<http://www1.vnua.edu.vn/tapchi/upload/8-2017/9.pdf>

12) **Nguyen Hoang Anh**, Nguyen Van Giang. Selection, Identification of Bacillus.spp.Producing protease, and Determination of enzyme thermostability. Journal of Agricultural Science 2017. 15(8), 1062 – 1069.

<http://www1.vnua.edu.vn/tapchi/upload/8-2017/8.pdf>

13) Phạm Thuy Trang, **Nguyen Hoang Anh**, Nguyen Van Giang. Effects of cultural parameters on extracellular invertase production of *Saccharomyces cerevisiae* strains 259 and 263. Journal of Vietnam Agricultural Science and Technology 2017, 8(81): 72 – 77

14) **Nguyen Hoang Anh**, Nguyen Van Giang, Le Thanh Ha. Production of N-Acetyl-glucosamine from chitin by using recombinant endochitinase and β -hexosaminidase. Journal of Vietnam Agricultural Science and Technology 2017, 8(81): 109 – 114.

15) Nguyen Hoang Anh, Ho Tuan Anh. Selection of lactic acid bacteria producing acidic tolerant enzyme β -galactosidase (pH 2 - 3). Journal of Vietnam Agricultural Science and Technology 2017, 7(80): 79-83.

16) Nguyen Thanh Trung, Nguyen Minh Hung, Nguyen Huy Thuan, Trinh Thanh Trung, Nguyen Quoc Trung, Trinh Thi Thu Thuy, **Nguyen Hoang Anh**. Isolation and characterization of the phytase gene promoter from *Bacillus licheniformis* DSM13. Journal of Agricultural Science 2017, 15 (3): 298 – 305

<http://www1.vnua.edu.vn/tapchi/Upload/3-2017/13.pdf>

17) Mai-Lan Pham, Tatjana Leister, **Hoang Anh Nguyen**, Cuong Do-Bien, Anh Pham-Tuan, Dietmar Haltrich, Montarop Yamabhai, Thu-Ha Nguyen, Tien-Thanh Nguyen. Immobilization of galactosidases from *Lactobacillus* on chitin using a chitin-binding domain. *J Agric Food Chem* 2017, 65 (14): 2965–2976.

<https://www.ncbi.nlm.nih.gov/pubmed/28319379>

18) **Nguyen Hoang Anh**, Nguyen Thi Thanh Thuy, Nguyen Vinh Hoang: Isolation, Selection of β - Glucanase Producing Bacillus spp. from Cow Rumens and Primary Characterization of Enzyme. Journal of Agricultural Science 2017, 15 (1): 85 – 91.

<http://www1.vnua.edu.vn/tapchi/Upload/1-2017/10.pdf>

19) Nguyen Thi Thanh Thuy, **Nguyen Hoang Anh**, Nguyen Vinh Hoang: Screening and characterization of β -glucanase produced by *Bacillus* spp isolated from Muong Khuong Chili sauce. International conference on Agriculture Development in the context of international intergration: Opportunities and challenges. Agricultural University Press, 2016 (ISBN 978-604-924-245-8): 228 - 235

20) Nguyen Thi Thanh Thuy, Vu Thi Huyen Trang, Vu Quynh Huong, Trinh Thi Thu Thuy, Nguyen Thi Lam Doan, Tran Thi Na, **Nguyen Hoang Anh**: Isolation, identification, and preliminary characterization of *Bacillus subtilis* with broad – range antibacterial activity from Muong Khuong chilli sauce. Journal of Science and development 2016, 14 (7): 1009-1015.

<http://www1.vnua.edu.vn/tapchi/Upload/992016-bai%201.pdf>

21) Pham Thi Diu, Nguyen Thi Lam Doan, Nguyen Thi Thanh Thuy, **Nguyen Hoang Anh**: antimicrobial activity and preliminary characterization of peptides produced by lactic acid bacteria isolated from some vietnamese fermented foods. Journal of Science and development 2016, 14 (7): 1044-1051.

<http://www1.vnua.edu.vn/tapchi/Upload/992016-bai5.pdf>

22) Nguyen Thi Lam Doan, Hoang Thi Van, Nguyen Thi Thanh Thuy, **Nguyen Hoang Anh**: isolation and selection of lactic acid bacteria from vietnamese fermented pork meat product with antimicrobial activity and characterization of bacteriocin. Journal of Science and development 2016, 14(7): 1089-1099.

<http://www1.vnua.edu.vn/tapchi/Upload/1392016-so%20CNTP5kam%20doan.pdf>

23) Tien Thanh Nguyen, **Hoang Anh Nguyen**, Thu Ha Nguyen, Dietmar Haltrich, Sakacin-based expression vectors for *Lactobacillus* cell factories. Proceeding of conference: innovation of food engineering and bioengineering: from research to industry Hanoi Oct, 2016, 148 – 156.

24) Nguyen Thanh Trung, Nguyen Minh Hung, Nguyen Huy Thuan, **Nguyen Hoang Anh**, Le Thi Hoi, Thomas Schweder, Britta Jürgen: A Phosphate Starvation-1 Inducible Ribonuclease of *Bacillus licheniformis*. *Journal of Microbiology and Biotechnology* 2016.

<https://www.ncbi.nlm.nih.gov/pubmed/27160576>

25) Barbara Geiger, Hoang-Minh Nguyen, Stefanie Wenig, **Hoang Anh Nguyen**, Cindy Lorenz, Roman Kittl, Geir Mathiesen, Vincent G.H. Eijsink, Dietmar Haltrich, Thu-Ha Nguyen: From by-product to valuable components: Efficient enzymatic conversion of lactose in whey using β -galactosidase from *Streptococcus thermophilus*. *Biochemical Engineering journal* 2016.

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26) **Nguyen HA**, Nguyen TH, Haltrich D: Human milk Oligosaccharides: chemical structure, Functions and enzymatic synthesis. *J Science and Development* 2012, 5 (10): 693 – 706

<http://www1.vnua.edu.vn/tapchi/Upload/19112012-tap%20chi%20cntp%20ban%20in%201.pdf>

27) **Nguyen HA**, Nguyen TH, Nguyen TT, Peterbauer CK, Mathiesen G, Haltrich D: Chitinase from *Bacillus licheniformis* DSM13: Expression in *Lactobacillus plantarum* WCFS1 and biochemical characterisation. *J Protein expression and Purification* 2011, 59 (10): 5617-5624.

<https://www.ncbi.nlm.nih.gov/pubmed/22037312>

28) **Nguyen HA**, Nguyen TH, Kren V, Eijsink VG, Haltrich D, Peterbauer CK: Heterologous Expression and Characterization of an N-Acetyl- β -D-hexosaminidase from *Lactococcus lactis* ssp. *lactis* IL1403. *J Agric Food Chem* 2012, 60 (12): 3275-81.

<https://www.ncbi.nlm.nih.gov/pubmed/22356128>

29) Nguyen TT, **Nguyen HA**, Lozel Arreola R, Mlynek G, Djinovic-Carugo K, Mathiesen G, Nguyen TH, Haltrich D: Homodimeric β -galactosidase from *Lactobacillus delbrueckii* subsp. *bulgaricus* DSM 20081: expression in *Lactobacillus plantarum* and biochemical characterization. *J Agric Food Chem* 2012, 60 (7): 1713-172.

<https://www.ncbi.nlm.nih.gov/pubmed/22283494>

30) Iqbal S, Nguyen TH, **Nguyen HA**, Nguyen TT, Maischberger T, Kittl R, Haltrich D: Characterization of a Heterodimeric GH2 beta-Galactosidase from *Lactobacillus sakei* Lb790 and Formation of Prebiotic Galacto-oligosaccharides. *J Agric Food Chem* 2011, 59(8):3803-3811.

<https://www.ncbi.nlm.nih.gov/pubmed/21405014>

31) **Nguyen Hoang Anh**, Ngo Xuan Manh, Nguyen Huong Thuy, Ngo Xuan Trung: Determining optimal conditions of β -D-fructofuranosidase activity for production of functional Fructooligosaccharid (FOS) from sucrose. *J Science and Development* 2008, 6 (3): 2890 – 293.

http://www1.vnua.edu.vn/tapchi/Upload/2282008-Bai%2013%20_sua%20in_.pdf

32) Ngo Xuan Manh, **Nguyen Hoang Anh**, Nguyen Van Lam, Tran Thi Lan Huong: Application of enzyme amylase in production of maltose syrup from cassava starch. Ứng dụng các enzyme amylase trong sản xuất đường maltose (mạch nha) từ tinh bột sắn. *Biochemistry* 2005, 1.

Conferences

1) ECHEMENDIA BLANCO Dannele, **Nguyen Hoang Anh**, VAN DRIESSCHE EDILBERT, DE GREVE HENRI, BEECKMANS SONIA: Expression and partial characterization of the seed lectins from *Pterocarpus indicus* and *Pterocarpus echinatus*. Abstracts of the 194th meeting of the Belgian Society of Biochemistry and Molecular Biology 2006: 47 – 47.

2) ECHEMENDIA BLANCO Dannele, **Nguyen Hoang Anh**, VAN DRIESSCHE EDILBERT, DE GREVE HENRI, BEECKMANS SONIA: Sequencing of the seed lectin encoding gene from three *Pterocarpus* spp. Abstracts of the 194th meeting of the Belgian Society of Biochemistry and Molecular Biology 2006: 48 – 48.

- 3) ECHEMENDIA BLANCO Dannele, **Nguyen Hoang Anh**, VAN DRIESSCHE EDILBERT, DE GREVE HENRI, BEECKMANS SONIA: Sequencing, modeling and heterologous expression of Pterocarpus lectins. International Lectin Meeting - Interlec 23, UK 2008.
- 4) **Nguyen Hoang Anh**, Nguyen Tien Thanh, Le Thanh Hà. Chitinase from *Bacillus licheniformis* DSMZ13: Expression in *E.coli* T7 and Biochemical characterization. Vbfoodnet conference, november 24 – 26, 2015, Nhatrang University, Vietnam. Best poster award
- 5) **Nguyen Hoàng Anh**, Thu-Ha Nguyen, Dietmar Haltrich. Prebiotic oligosaccharides resembling Human milk oligosaccharides: From enzyme production to enzymatic synthesis. The 41th Congress on Science and Technology of Thailand (STT41), . Session S9: Molecular Biotechnology, november 6 – 8, 2015, Suranaree University of Technology, Nakhon Rachasima, Thailand. Invited speaker.
- 6) **Nguyen Hoàng Anh**, Thu-Ha Nguyen, Dietmar Haltrich. Prebiotic oligosaccharides: from enzyme production to enzymatic synthesis. The 1st joint Symposium on Biotechnology between Vietnam National University of Agriculture, Vietnam and Gyeongsang National University, Korea. Hanoi, 14 – 15th Jauary 2016
- 7) Nguyen Thi Hong, Vu Thi Lan, Pham Thi Diu, Le My Hanh, Nguyen Vinh Hoang, Nguyen Thi Thanh Thuy, **Nguyen Hoang Anh**. Vegetable supply chain in Dong Anh district, Hanoi city in terms of nutrition quality and product safety, and consumer health. A4NH Vietnam Partner Day “*Sharing progress and planning ahead for collaborative research*”, Hanoi, Vietnam, 20-23 March 2018.
- 8) Nguyen Thi Hong, Nguyen Thi Dien, Pham Thi Diu, **Nguyen Hoang Anh**. Selection, identification of lactic acid bacteria producing cold active β -galactosidase for enzyme hydrolysis of lactose in fresh milk. The 1st International Conference on “Innovative Food Ingredients and Food Safety” 12-13 September 2018, Bangkok, Thailand.

Books

- Ngo Xuan Manh, **Nguyen Hoang Anh**, Nguyen Thị Lam Đoàn, Nguyen Van Lam (2013). Food Biotechnology, Agricultural University Press

Hanoi, 7/7/2020



Hoang Anh NGUYEN