



## Europass Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Nicoleta Gabriela HĂDĂRUGĂ**  
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E-mail nico\_hadaruga@yahoo.com  
Nationality Romanian  
Date of birth October 1971  
Gender Female

### Desired employment / Occupational field

**Banat's University of Agricultural Sciences and Veterinary Medicine, Timișoara  
Associate Professor Doctor Engineer**

### Work experience

|                                      |   |
|--------------------------------------|---|
| Dates                                | <b>2008 to present</b>  |
| Occupation or position held          | Associate Professor Dr. Eng.<br>Vice-Dean of the Faculty of Agroalimentary Products Technology, Banat's University of Agricultural Sciences and Veterinary Medicine of Timișoara (from 2012)  |
| Main activities and responsibilities | <i>Courses:</i> Quality control of vegetable food products, Bioflavors, Natural extracts and additives, Adulterating legislation and evaluation in food industry<br><i>Scientific secretary</i> of the Faculty of Agroalimentary Products Technology (2008-2012)  |
| Name and address of employer         | Banat's University of Agricultural Sciences and Veterinary Medicine of Timișoara, Calea Aradului 119, 300645-Timișoara; Faculty of Agroalimentary Products Technology; Department of Food Science   |
| Type of business or sector           | Higher education  |
| Dates                                | <b>2005 – 2008</b>  |
| Occupation or position held          | Assistant Professor Dr. Eng.  |
| Main activities and responsibilities | <i>Courses:</i> Quality control of vegetable food products, Flavors and flavor systems, Bioflavors<br><i>Experimental practice coordinator:</i> Quality control of vegetable food products, Flavors and flavor systems, Bioflavors<br><i>Department coordinator:</i> The Quality Evaluation in University Education |
| Name and address of employer         | Banat's University of Agricultural Sciences and Veterinary Medicine of Timișoara, Calea Aradului 119, 300645-Timișoara; Faculty of Agroalimentary Products Technology; Department of Agroalimentary Products Control and Expertise  |
| Type of business or sector           | Higher education  |
| Dates                                | <b>1999 – 2005</b>  |
| Occupation or position held          | Teaching Assistant Eng.   |

|  |   |
|--|---|
| Main activities and responsibilities                           | <i>Courses:</i> Flavors and Flavor Systems, Bioflavors<br><i>Experimental practice coordinator:</i> Quality control of vegetable food products, Quality control of natural food extracts and additives, Flavors and flavor systems, Spices and spice systems, Bioflavors, Isolation of bioactive compounds from plants, Technology of food additives, Meat and meat products technology, Food products rheology, Food physics |
| Name and address of employer                                   | Banat's University of Agricultural Sciences and Veterinary Medicine of Timișoara, Calea Aradului 119, 300645-Timișoara; Faculty of Agroalimentary Products Technology; Department of Agroalimentary Products Control and Expertise  |
| Type of business or sector                                     | Higher education  |
| <b>Education and training</b>                                  |   |
| <b>2005</b>  |   |
| Dates  | <b>2005</b>   |
| Title of qualification awarded                                 | Ph.D. (in Engineering Sciences / Chemical Engineering)  |
| Principal subjects/occupational skills covered                 | Protection and controlled release of bioactive compounds (Scientific promoter: Prof. Dr. Eng. Alfa Xenia LUPEA)   |
| Name and type of organisation providing education and training | "Politehnica" University of Timișoara (IOD)   |
| Level in national or international classification              | ISCED5  |
| <b>1998-1999</b>   |   |
| Dates  | <b>1998-1999</b>  |
| Title of qualification awarded                                 | Master of Science (M.Sc.)   |
| Principal subjects/occupational skills covered                 | <i>Speciality:</i> Natural Extracts and Additives   |
| Name and type of organisation providing education and training | Banat's University of Agricultural Sciences and Veterinary Medicine of Timișoara, Calea Aradului 119, 300645-Timișoara; Faculty of Agroalimentary Products Technology   |
| Level in national or international classification              | ISCED5  |
| <b>1993-1998</b>   |   |
| Dates  | <b>1993-1998</b>  |
| Title of qualification awarded                                 | Bachelor of Science (B.Sc.)   |
| Principal subjects/occupational skills covered                 | <i>Speciality:</i> Agroalimentary Products Technology   |
| Name and type of organisation providing education and training | Banat's University of Agricultural Sciences and Veterinary Medicine of Timișoara, Calea Aradului 119, 300645-Timișoara; Faculty of Agroalimentary Products Technology   |
| Level in national or international classification              | ISCED5  |
| <b>1991-1993</b>   |   |
| Dates  | <b>1991-1993</b>  |
| Title of qualification awarded                                 | Technical Designer  |
| Principal subjects/occupational skills covered                 | <i>Speciality:</i> Design of Leather Goods and Relatives  |
| Name and type of organisation providing education and training | Highschool of Textile Industry of Timișoara   |
| <b>1991</b>  |   |
| Dates  | <b>1991</b>   |
| Title of qualification awarded                                 | Software operator   |
| Principal subjects/occupational skills covered                 | <i>Speciality:</i> Operating on computer systems IBM PC/XT/AT   |
| Name and type of organisation providing education and training | Young People House of Timișoara   |
| <b>1986-1990</b>   |   |
| Dates  | <b>1986-1990</b>  |
| Title of qualification awarded                                 | Highschool Diploma  |
| Principal subjects/occupational skills covered                 | <i>Speciality:</i> Electrotechnics  |

Name and type of organisation providing education and training

Industrial Highschool of Baia de Arieş, Alba

**Personal skills and competences**

Mother tongue(s)

**Romanian**

Other language(s)

Self-assessment

European level (\*)

**English**

**German**

| Understanding |                  |         |                  | Speaking           |                  |                   |                  | Writing |                  |
|---------------|------------------|---------|------------------|--------------------|------------------|-------------------|------------------|---------|------------------|
| Listening     |                  | Reading |                  | Spoken interaction |                  | Spoken production |                  |         |                  |
| B2            | Independent user | B2      | Independent user | B2                 | Independent user | B2                | Independent user | B2      | Independent user |
| A2            | Basic user       | A2      | Basic user       | A2                 | Basic user       | A2                | Basic user       | A2      | Basic user       |

(\*) [Common European Framework of Reference for Languages](#)

Social skills and competences

Dynamic communicator with good teaching, mentoring, relationship-building, and problem-solving abilities

Organisational skills and competences

Organizing, coordination, and management skills:  
 - scientific research programs, organizing of scientific conferences  
 - scientific coordination of licence and master theses  
 - research and didactic labs in the university agroalimentary field

Technical skills and competences

- experience in isolation, purifying, and semisynthesis of odorant/flavoring compounds, natural compounds and natural systems with biological activity  
 - nanoencapsulation of bioactive compounds and systems in cyclodextrins and liposomes  
 - advanced physico-chemical analyses (GC-MS/FID chromatography, HPLC-UV-VIS/DAD/RI chromatography, UV-VIS spectrophotometry, thermal analyses TG/DTG/DSC, Karl Fischer analysis etc.)

Computer skills and competences

- Microsoft Windows (Windows 7, Vista, XP, 2000) operating systems  
 - Microsoft Office (Word, Excel, Power Point, Visio)  
 - Adobe Acrobat package  
 - Advanced chemistry programs (ISIS Base&Draw, Chem Office, ACD, HyperChem packages)  
 - Instrumental data acquisition programs (GC-MS intruments, HPLC Chemstation and ChromPass, Lambda 25, UV-Vis Analyst etc.)  
 - Statistical programs (Statistica, TableCurve, Origin, The Unscrambler packages)  
 - WEB browsers

Artistic skills and competences

- Fashion design, shoes, and leather goods design  
 - Computer aided design  
 - Painting

Other skills and competences

- Music, travels, literature

Driving licence

Category B

## Additional information

### Editor-in-Chief:

Journal of Agroalimentary Processes and Technologies (Agroprint - Timișoara)

### Reviewer:

Journal of Inclusion Phenomena and Macrocyclic Chemistry (Springer)

International Journal of Food Properties (Taylor & Francis)

### Member of national scientific societies/professional affiliation:

- 1) The Romanian Chemistry Society, 2004 to present
- 2) The Association for Multidisciplinary Research from the West Side of Romania, 2000 to present
- 3) Association of Food Industry Specialists from Romania (ASIAR), 2009 to present

### Book chapters (foreign publishers):

- 1) Clemons, P.A.; Olah, M.; Rad, R.; Ostopovici, L.; Bora, A.; **Hădărugă, N.G.**; Hădărugă, D.; Moldovan, R.; Fuliș, A.; Mracec, M.; Oprea, T.I., Expanding the Genetic Code. Chemical Informatics; In: *Chemical Biology: From Small Molecules to Systems Biology and Drug Design*, Wiley-VCH, New York, 2007, pp. 723-788, ISBN-10: 3527311505, ISBN-13: 9783527311507
- 2) Olah, M.; Mracec, Maria.; Ostopovici, Liliana; Rad, Ramona; Bora, Alina; **Hădărugă, Nicoleta G.**; Olah, Ionela; Banda, Magdalena; Simon, Z.; Mracec, M.; Oprea, T.I., "WOMBAT: World of Molecular Bioactivity". In: Oprea, T.I. (ed.), *Cheminformatics in Drug Discovery*, Wiley-VCH, New York, 2004, pp. 223-239, ISBN 978-3-527-30753-1

### Journal articles – selection (ISI foreign publishers):

- 1) **Hădărugă, N.G.**; Hădărugă, D.I.; Isengard, H.-D., Water content of natural cyclodextrins and their essential oil complexes: a comparative study between Karl Fischer titration and thermal methods, *Food Chemistry* **2012**, 132(4), 1651-1659, doi: 10.1016/j.foodchem.2011.11.003 (**ISI 3.655**)
- 2) Hădărugă, D.I.; **Hădărugă, N.G.**; Bandur, G.; Isengard, H.-D., Water content of flavonoid/cyclodextrin nanoparticles: relationship with the structural descriptors of biologically active compounds, *Food Chemistry* **2012**, 132(4), 1741-1748, doi: 10.1016/j.foodchem.2011.06.004 (**ISI 3.655**)
- 3) **Hădărugă, N.G.**; Hădărugă, D.I.; Isengard, H.-D., "Surface water" and "strong-bonded water" in cyclodextrins: a Karl Fischer titration approach, *Journal of Inclusion Phenomena and Macrocyclic Chemistry* **2012**, Online First, doi: 10.1007/s10847-012-0143-7; ISSN (Print): 0923-0750, ISSN (Online): 1573-1111 (**ISI 1.886**)
- 4) Riviș, A.; **Hădărugă, N.G.**; Gârban, Z.; Hădărugă, D.I., Titanocene / cyclodextrin supramolecular systems: a theoretical approach, *Chemistry Central Journal* **2012**, 6, 129, doi: 10.1186/1752-153X-6-129 (**ISI 3.280**)
- 5) Hermenean, A.; Popescu, C.; Ardelean, A.; Stan, M.; **Hădărugă, N.G.**; Mihali, C.-V.; Costache, M.; Dinischiotu, A., Hepatoprotective Effects of *Berberis vulgaris* L. Extract/ $\beta$ -Cyclodextrin on Carbon Tetrachloride-Induced Acute Toxicity in Mice, *International Journal of Molecular Sciences* **2012**, 13, 9014-9034, ISSN: 1422-0067, doi: 10.3390/ijms13079014 (**ISI 2.598**)
- 6) **Hădărugă, N.G.**, *Ficaria verna* Huds. extracts and their  $\beta$ -cyclodextrin supramolecular systems, *Chemistry Central Journal* **2012**, 6:16, ISSN 1752-153X, doi: 10.1186/1752-153X-6-16 (**ISI 3.280**)
- 7) **Hădărugă, N.G.**; Gharibeh Branic, A.; Hădărugă, D.I.; Gruia, G.; Pleșa, C.; Costescu, C.; Ardelean, A.; Lupea, A.X., Comparative study on *Juniperus communis* and *Juniperus virginiana* essential oils: TLC and GC analyses, *Journal of Planar Chromatography - Modern TLC* **2011**, 24(2), 130-135, doi: 10.1556/JPC.24.2011.2.9, ISSN 0933-4173 (**ISI 0.767**)
- 8) Hădărugă, D.I.; **Hădărugă, N.G.**; Butnaru, G.; Tatu, C.; Gruia, A., Bioactive microparticles (10): Thermal and oxidative stability of nicotine and its complex with  $\beta$ -cyclodextrin, *Journal of Inclusion Phenomena and Macrocyclic Chemistry* **2010**, 68(1), 155-164, doi: 10.1007/s10847-010-9761-0; ISSN 0923-0750 (**ISI 1.220**)
- 9) **Hădărugă, N.G.**; Hădărugă, D.I.; Păunescu, V.; Tatu, C.; Ordodi, L.; Bandur, G.; Lupea, A.X., Bioactive Nanoparticles (6). Thermal Stability of Linoleic Acid /  $\alpha$ - and  $\beta$ -Cyclodextrin Complexes, *Food Chemistry* **2006**, 99(3), 500-508; doi: 10.1016/j.foodchem.2005.08.012, ISSN 0308-8146 (**ISI 3.458**)

*International Conferences – selection:*

- 1) Hădărugă, D.I.; **Hădărugă, N.G.**; Corpaș, L.; Isengard, H.-D., Karl Fischer water titration of cyclodextrins: parameter optimization, The 7<sup>th</sup> International Conference on Water in Food (EuroFoodWater2012), Helsinki, Finland, June 3-5, 2012 (to be published in *Food Chemistry* **2012** (ISI 3.655)), *Book of Abstracts*, Oral communication OC19, pp. 31, <http://www.efw2012.eurofoodwater.eu/index.php>
- 2) Corpaș, L.; **Hădărugă, N.G.**; Riviș, A.; Hădărugă, D.I.; Isengard, H.-D., Water content of wheat flour and bread products by Karl Fischer titration: a PCA multivariate approach, The 7<sup>th</sup> International Conference on Water in Food (EuroFoodWater2012), Helsinki, Finland, June 3-5, 2012 (to be published in *Food Chemistry* **2012** (ISI 3.655)), *Book of Abstracts*, Poster presentation (The best poster – oral presentation) P20, pp. 60, <http://www.efw2012.eurofoodwater.eu/index.php>
- 3) **Hădărugă, N.G.**; Pînzaru, I.A.; Corpaș, L.; Hădărugă, N.G.; Isengard, H.-D., Karl Fischer water content of saturated and unsaturated fatty acid /  $\alpha$ - and  $\beta$ -cyclodextrin supramolecular systems: correlation with structural parameters, The 7<sup>th</sup> International Conference on Water in Food (EuroFoodWater2012), Helsinki, Finland, June 3-5, 2012 (to be published in *Food Chemistry* **2012** (ISI 3.458)), *Book of Abstracts*, Poster presentation P21, pp. 61, <http://www.efw2012.eurofoodwater.eu/index.php>
- 4) Hădărugă, D.I.; **Hădărugă, N.G.**; Isengard, H.-D., “Surface water” and “strong-bonded water” in cyclodextrins: a Karl Fischer titration approach, *The 2<sup>nd</sup> European Conference on Cyclodextrins*, Asti, Italy, October 2-4, 2011 (Published in *Journal of Inclusion Phenomena and Macrocyclic Chemistry* **2012**, (ISI 1.886)), <http://www.cdtec.unito.it/eurocd2011/>
- 5) **Hădărugă, N.G.**; Hădărugă, D.I.; Gârban, Z., Metallocene / cyclodextrin supramolecular systems: a theoretical approach, *The 2<sup>nd</sup> European Conference on Cyclodextrins*, Asti, Italy, October 2-4, 2011, <http://www.cdtec.unito.it/eurocd2011/>
- 6) Hădărugă, D.I.; Pînzaru, I.A.; **Hădărugă, N.G.**; Peter, F., New flavonoid derivative (silybin, rutin-fatty acid bioconjugates) / cyclodextrin supramolecular systems with potential hepatoprotective activity, *The 2<sup>nd</sup> European Conference on Cyclodextrins*, Asti, Italy, October 2-4, 2011, <http://www.cdtec.unito.it/eurocd2011/>
- 7) Hădărugă, D.I.; **Hădărugă, N.G.**; Bandur, G.; Isengard, H.-D., Water content of flavonoid/cyclodextrin nanoparticles, The 6<sup>th</sup> International Conference on Water in Food, Reims, France, 21-23 March **2010**, *Book of Abstracts*, pp. 17
- 8) **Hădărugă, N.G.**; Hădărugă, D.I.; Isengard, H.-D., Water content of natural cyclodextrins and their essential oil complexes: a comparative study between Karl Fischer titration and thermal methods, The 6<sup>th</sup> International Conference on Water in Food, Reims, France, 21-23 March **2010**, *Book of Abstracts*, pp. 67
- 9) Oprea, T.I.; Olah, M.; Mracec, Maria; Rad, Ramona; Ostopovici, Ramona; Bora, Alina; **Hădărugă, Nicoleta G.**; Bologa, C.G., Mapping Bioactivity Space for Fragment-Based Lead Discovery, *Proceedings of the 229<sup>th</sup> American Chemical Society National Meeting*, San Diego, CA, March 13-17, **2005**
- 10) Oprea, T.I.; Kappler, M.A.; Allu, T.K.; Mracec, Maria; Olah, M.; Rad, Ramona; Ostopovici, Liliana; Bora, Alina; **Hădărugă, Nicoleta G.**; Baroni, M.; Zamora, I.; Berellini, G.; Aristei, Yasmin; Cruciani, Gabrielle; Bologa, C.G.; Edwards, B.S.; Sklar, L.A.; Balakin, K.V.; Savchuk, N.; Brown, D.; Larson, R.S., “Mining Large Chemical Spaces in Lead and Drug Discovery”, *Proceedings of the 15<sup>th</sup> European Symposium on Quantitative Structure-Activity Relationships & Molecular Modelling “QSAR & Molecular Modelling in Rational Design of Bioactive Molecules”*, Istanbul, Turkey, September 5-10, **2004**, 531-535, ISBN: 975-00782-0-9

*Grants – selection:*

- 1) Biomedical application of metallic compounds – Metallomics, Education & Research Ministry, National Program II, PCCE\_Idei, N° 140 / 2008, Years 2010-2013, Value: 700 000 Lei (Director Partner 8)
- 2) Complex Researches on the Obtaining and Magnetic Properties of  $\text{Co}_8\text{Fe}_{3.8}\text{O}_4$  Ferrimagnetic Nanoparticle Systems with Potential Antineoplastic Activity, Education & Research Ministry, National Program II, PN II, contr. N° 3239 / 2007-2010, Value: 17 000 Lei (Director Partner 4)
- 3) Stabilization of the Bioactive Compounds from Compositae Family by Cyclodextrin Nanoencapsulation, Education & Research Ministry, Grant A, CNCISIS code 326, contr. N° 44GR /2007-2008, Value: 53 900 Lei (Director)

*Research fellowships:*

“Cyclodextrin nanoparticles: water determination using classical Karl Fischer method”, Universität Hohenheim, Institut für Lebensmittelwissenschaft und Biotechnologie, Hohenheim, Germany, August to September 2008

*Research prizes – selection for the year 2012 (UEFISCDI article type):*

- 1) UEFISCDI Code: **PN-II-RU-PRECISI-2012-6-0007** (prize for the paper: “Water content of flavonoid/cyclodextrin nanoparticles: relationship with the structural descriptors of biologically active compounds”, *Food Chemistry* **2012**, 132(4), 1651-1659, doi: 10.1016/j.foodchem.2011.06.004 (ISI 3.655))
- 2) UEFISCDI Code: **PN-II-RU-PRECISI-2012-6-0013** (prize for the paper: “Water content of natural cyclodextrins and their essential oil complexes: a comparative study between Karl Fischer titration and thermal methods”, *Food Chemistry* **2012**, 132(4), 1741-1748, doi: 10.1016/j.foodchem.2011.11.003 (ISI 3.655))
- 3) UEFISCDI Code: **PN-II-RU-PRECISI-2012-6-0559** (prize for the paper: “*Ficaria verna* Huds. extracts and their beta-cyclodextrin supramolecular systems”, *Chemistry Central Journal* **2012**, 6, 16, doi: 10.1186/1752-153X-6-16 (ISI 3.281))

**Annexes**

Lists of Journal articles, Proceedings papers, Journal citations and other scientific materials can be obtained upon request