

## CURRICULUM VITAE

### PERSONAL INFORMATION

**Name, surname:** HĂDADE, Niculina Daniela (former name: BOGDAN)  
**Address:** Faculty of Chemistry and Chemical Engineering, Supramolecular Organic and Organometallic Chemistry Centre, Babeş-Bolyai University of Cluj-Napoca, 11 Arany Janos Street, 400028-Cluj-Napoca, Romania  
**Telefon:** +40 (0) 264 593 833; int. 5661  
**E-mail:** [nbogdan@chem.ubbcluj.ro](mailto:nbogdan@chem.ubbcluj.ro)

### EDUCATION

**10.2002-07.2006:** Ph.D – joint between Babeş-Bolyai University of Cluj-Napoca, Romania and University of Rouen, France.  
Ph.D thesis: "Synthèse, analyse structurale et réactivité de nouveaux cyclophanes".  
Scientific supervisors: Prof. Ion GROSU, Prof. Gérard PLÉ.  
Jury: **Prof. Dr. Ionel Cătălin POPESCU** (UBB) - president; **DR I Dr. Chantal ANDRAUD** (I'ENS-Lyon) - referee; **CS I Dr. Cornelia UNCUTA** (C. C. O. "C. D. Nenițescu", - referee; **Prof. Dr. Ion GROSU** (UBB); **Prof. Dr. Gérard PLÉ** (Université de Rouen); **MC Dr. Yvan RAMONDENC** (Université de Rouen); **Prof. Dr. Patricia MELNYK** (Université du Droit et de la Santé de Lille); **Prof. Dr. Sorin MAGER** (UBB).  
Honours: UBB: "Very good", University of Rouen: "*Très Honorable avec Félicitations du Jury*"

**10.1997–07.1998:** M.Sc in Organic Chemistry;  
Dissertation thesis: "*Synthesis and stereochemistry of new 1,3-dioxanes derived from terephthaldehyde*";

**10.1993–07.1997:** B.Sc - Faculty of Chemistry and Chemical Engineering, Babeş-Bolyai University of Cluj-Napoca.

### POSTGRADUATE POSITIONS

**04.2014:** Associate Professor at Babeş-Bolyai University of Cluj-Napoca, Faculty of Chemistry and Chemical Engineering

**11.2013-04.2014:** Researcher (CSIII) at Babeş-Bolyai University of Cluj-Napoca, Faculty of Chemistry and Chemical Engineering

**08.2010-10.2013** Researcher (Team Leader - project TE314/2010) at Babeş-Bolyai University of Cluj-Napoca, Faculty of Chemistry and Chemical Engineering

**09.2006–06.2010:** Post-Doctorate, Marie Curie Excellence Team, Technical University of Munich, Germany

**10.1999-10.2002:** Tutor/Teaching assistant, Medical and Pharmacy School, University of Oradea

**02.1999-07.1999:** Chemist, European Drinks S.R.L., Rieni, Bihor county, Romania.

**SCIENTIFIC EXPERIENCE:**

- **Areas of scientific interest**
- *Organic Chemistry*
  - *Supramolecular Chemistry*
  - *Constitutional Dynamic Chemistry*
  - *Conformational analysis*
  - *Peptide synthesis*
  - *NMR and MS applications*
  - *Self-assembly and self-organization. Molecular interactions*
  - *Surface chemistry*
  - *Activity-based probes, enzyme inhibition*
  - *Biologically active compounds*
  - *Microarray*

**MANAGERIAL EXPERIENCE**

- Leader of 3 national research grants
- Member of 8 national research grants
- Member of 3 international research grants

**VARIA**

- **Foreign languages:** French (writing, speaking, reading) – very good  
English (writing, speaking, reading) – very good
- **IT:** *Software:* ChemDraw, MestreNova, ACD-Labs, Diamond, Mercury, Excalibur, Microsoft Office (Word, Excel, PowerPoint) etc. *Database:* SciFinder, Reaxys, JabRef.
- ResearcherID: F-9489-2011;
- Member of the Romanian Chemical Society;
- Member of CNCS chemistry committee - January 2011 - February 2012;
- Scientific referee for *Current Organic Chemistry, Letters in Organic Chemistry, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Mini-Reviews in Medicinal Chemistry, Studia Univ. Babeş-Bolyai Chemia, Revue Roumaine de Chimie, Arabian Journal of Chemistry*.
- **Research scholarships awarded by competition**
  - **AUF scholarship**, awarded by Agence Universitaire de la Francophonie, during **2004-2006**
  - **MILC** (Mobilite Internationale Liee aux Cooperations) scholarship, awarded by Haute Normandie region, during **2003-2004**
- **Bd scholarship**, awarded by CNCSIS during **2003-2005** (CNCSIS Bd217).

Cluj Napoca  
30.04.2019

Dr. Niculina Daniela HĂDADE

## LIST OF PUBLICATIONS

### 2018

1. *Poly [3, 4-dihydroxybenzhydrazide]: A Polydopamine Analogue?* A. Petran, **N. D. Hădade**, C. Filip, X. Filip, A. Bende, A. Popa, J. Liebscher, *Macromol. Chem. Phys.*, **2018**, 219, 1700564, DOI: 10.1002/macp.201700564
2. *Spirobifluorene-based Porous Organic Polymers as Efficient Porous Supports for Pd and Pt for Selective Hydrogenation*, M. M. Trandafir, L. Pop, **N. D. Hădade**, I. Hristea, C. M. Teodorescu, F. Krumeich J. A. Van Bokhoven, I. Grosu, V. I. Parvulescu, *ChemCatChem*, **2018**, 10, 1867–3880. DOI:10.1002/cctc.201801247
3. *A three-armed cryptand with triazine and pyridine units: synthesis, structure and complexation with polycyclic aromatic compounds*, C. Lar, A. Woiczechowski-Pop, A. Bende, I. G. Grosu, N. Miklášová, E. Bogdan, **N. D. Hădade**, A. Terec, I. Grosu, *Beilstein J. Org. Chem.* **2018**, 14, 1370–1377. DOI:10.3762/bjoc.14.115
4. *Conformational-induced light emission switching of N-acylhydrazone systems* A. G. Coman, A. Paun, C. C. Popescu, **N. D. Hădade**, C. C. Anghel, A. M. Mădălan, P. Ioniță, M. Matache *New J. Chem.*, **2018**, 42, 14111–14119. DOI: 10.1039/C8NJ01880D.
5. *Naphthalenediimide – A Unique Motif in Macroyclic and Interlocked Supramolecular Structures* A. Diac, M. Matache, I. Grosu, **N. D. Hădade**, *Adv. Synth. Catal.* **2018**, 360, 817–845. DOI: 10.1002/adsc.201701362.

### 2017

6. “Click” access to multilayer functionalized Au surface: A terpyridine patterning example F. A Martin, D. Marconi, S. Neamtu, T. Radu, M. Florescu, R. Turcu, C. Lar, **N. D. Hădade**, I. Grosu, I. Turcu *Mater. Sci. Eng. C Mater Biol Appl.* **2017**, 75, 1343–1350. DOI: 10.1016/j.msec.2017.03.033.
7. Modulating short tryptophan-and arginine-rich peptides activity by substitution with histidine M. Bacalum, L. Janosi, F. Zorila, A.-M. Tepes, C. Ionescu, E. Bogdan, **N. D. Hădade**, L. Craciun, I. Grosu, I. Turcu, M. Radu, *Biochim. Biophys. Acta* **2017**, 1861, 1844–1854. DOI:10.1016/j.bbagen.2017.03.024.
8. Synthesis of novel profluorescent nitroxides as dual luminescent-paramagnetic active probes A. G Coman, C. C Paraschivescu, A. Paun, A. Diac, **N. D Hădade**, L. Jouffret, A. Gautier, M. Matache, P. Ionita, *New J. Chem.* **2017**, 41, 7472–7480. DOI: 10.1039/C7NJ01698K.
9. Poly (benzofuran-co-arylacetic acid)—a new type of highly functionalized polymers A. Nan, A. Bunge, M. Cîrcu, A. Petran, **N. D. Hădade**, X. Filip *Polym. Chem.* **2017**, 8, 3504–3514. DOI:10.1039/C7PY00523G.
10. Coordination polymers constructed from tetrahedral-shaped adamantine tectons T. Mocanu, L. Pop, **N. D. Hădade**, S. Shova, I. Grosu, M. Andruh, *CrystEngComm* **2017**, 19, 27–31, DOI:10.1039/C6CE02146H.
11. Synthesis and ESI(+)–MS complexation studies of new 24- and 36-membered cyclic peptides M. C. Pășcanu, E. Bogdan, A. Terec, I. Grosu, **N. D. Hădade\***, *Rev. Roum. Chim.* **2017**, 62, 349–355.

### 2016

12. 1, 3, 4-Oxadiazoles as luminescent materials for organic light emitting diodes via cross-coupling reactions A. Paun, **N. D. Hădade**, C. C. Paraschivescu, M. Matache, *J. Mat. Chem. C*, **2016**, 4, 8596–8610. DOI: 10.1039/C6TC03003C.
13. An adamantine-based COF: stability, adsorption capability, and behaviour as a catalyst and support for Pd and Au for the hydrogenation of nitrostyrene M. M. Trandafir, L. Pop, **N. D. Hădade**, M. Florea, F.

Neațu, C. M. Teodorescu, B. Duraki, J. A van Bokhoven, I. Grosu, V. I. Pârvulescu, H. Garcia *Catal. Sci. Technol.* **2016**, 6, 8344–8354. DOI: 10.1039/C6CY01631F.

14. *New Acyloxymethyl Ketones: Useful Probes for Cysteine Protease Profiling* A. G Coman, C. C Paraschivescu, **N. D. Hădade**, A. Juncu, O. Vlaicu, C.-I. Popescu, M. Matache, *Synthesis*, **2016**, 48, 3917–3923. DOI: 10.1055/s-0035-1562781.
15. *The 1, 3-dioxane motif—a useful tool in monitoring molecular and supramolecular architectures* E. Bogdan, **N. D. Hădade**, A. Terec, I. Grosu, *Tetrahedron Lett.*, **2016**, 57, 2683–2691. DOI: 10.1016/j.tetlet.2016.05.024.
16. *Occurrence of charge-assisted hydrogen bonding in bis-amidine complexes generating macrocycles* L. Pop, **N. D. Hădade**, A. van der Lee, M. Barboiu, I. Grosu, Y.-M. Legrand *Cryst. Growth Des.* **2016**, 16, 3271–3278. DOI: 10.1021/acs.cgd.6b00246.
17. *Supramolecular anion recognition by β-HCH* M. I Rednic, R. A. Varga, A. Bende, I. G. Grosu, M. Miclăuș, **N. D. Hădade**, A. Terec, E. Bogdan, I. Grosu, *Chem. Commun.*, **2016**, 52, 12322–12325. DOI: 10.1039/C6CC06842A.

#### 2015

18. *Cryptands with 2, 4, 6-tris (p-phenylene)-1, 3, 5-triazine central units and oligoethyleneoxide bridges: synthesis, structure and complexation abilities* C. V. Crișan, A. Terec, **N. D. Hădade**, I. Grosu, *Tetrahedron*, **2015**, 71, 6888–6893. DOI: 10.1016/j.tet.2015.07.019.
19. *CuAAC Synthesis of Tetragonal Building Blocks Decorated with Nucleobases* L. Pop, M. L. Golban, **N. D. Hădade**, C. Socaci, I. Grosu, *Synthesis*, **2015**, 47, 2799–2804. DOI: 10.1055/s-0034-1378782,
20. *Exclusive Hydrophobic Self-Assembly of Adaptive Solid-State Networks of Octasubstituted 9, 9'-Spirobi fluorenes* L. Pop, F. Dumitru, **N. D. Hădade**, Y.-M. Legrand, A. van der Lee, M. Barboiu, I. Grosu, *Org. Lett.* **2015**, 17, 3494–3497. DOI: 10.1021/acs.orglett.5b01576.
21. *Podands with 3, 7, 10-trisubstituted phenothiazine units: synthesis and structural analysis* M. I. Rednic, S. Szima, E. Bogdan, **N. D. Hădade**, A. Terec, I. Grosu *Rev. Roum. Chim.* **2015**, 60, 637–642.
22. *Symmetrical and non-symmetrical 2, 5-diaryl-1, 3, 4-oxadiazoles: synthesis and photophysical properties* C. C Paraschivescu, **N. D. Hădade**, A. G Coman, A. Gautier, F. Cisnetti, M. Matache, *Tetrahedron Lett.*, **2015**, 56, 3961–3964. DOI: 10.1016/j.tetlet.2015.05.005.
23. *Macrocycles embedding phenothiazine or similar nitrogen and/or sulphur containing heterocycles* M. I. Rednic, N. D. Hădade, E. Bogdan, I. Grosu, *J. Incl. Phenom. Macrocycl. Chem.*, **2015**, 81, 263–293. DOI: 10.1007/s10847-014-0455-x

#### 2014

24. *Novel Nucleobase-Decorated Tripodands: Synthesis and Supramolecular Properties*. M. Golban, V. Pascanu, **N. D. Hădade**, L. Pop, C. Socaci, I. Grosu *Synthesis* **2014**, 46, 1229–1235. DOI: 10.1055/s-0033-1340833.
25. *Selective Host Molecules Obtained by Dynamic Adaptive Chemistry* M. Matache, E. Bogdan, **N. D. Hădade**,\* *Chem. Eur. J.* **2014**, 20, 2106–2131, DOI: 10.1002/chem.201303504..

#### 2013

26. *Luminogenic "clickable" lanthanide complexes for protein labeling* N. Candelon, **N. D. Hădade**,\* M. Matache, J.-L. Canet, F. Cisnetti, D. P. Funeriu,\* L. Nauton, A. Gautier\* *Chem. Commun.* **2013**, 49, 9206–9208. DOI: 10.1039/c3cc44391d.
27. *Cryptands with 1,3,5-Tris(1',3'-dioxan-2'-yl)-benzene Units: Synthesis and Structural Investigations* M. Cîrcu, A. Soran, **N. D. Hădade**, M. Rednic, A. Terec, I. Grosu *J. Org. Chem.* **2013**, 78, 8722–8729. DOI: 10.1021/jo401432y.
28. *Structure of Polydopamine: A Never-Ending Story?* J. Liebscher, R. Mrówczyński , H. A. Scheidt , C. Filip, **N. D. Hădade**, R. Turcu , A. Bende, S. Beck *Langmuir* **2013**, 29, 10539–10548. DOI: 10.1021/la4020288.
29. *Unexpected Formation of N-(1-(2-Aryl-hydrazono)isoindolin-2-yl)benzamides and Their Conversion into 1,2-(Bis-1,3,4-oxadiazol-2-yl)benzenes* C. C. Paraschivescu, M. Matache,\* C. Dobrotă, A. Nicolescu, C.

Maxim, C. Deleanu, I. C. Fărcășanu, **N. D. Hădade\*** *J. Org. Chem.* **2013**, *78*, 2670–2679. DOI: 10.1021/jo400023z.

30. *Macrocycles with a phenothiazine core: synthesis, structural analysis, and electronic properties* I. Medrut, R. Turdean, R. Gropeanu, F. Pop, L. Toupet, **N. D. Hădade**, E. Bogdan, I. Grosu *Tetrahedron Lett.* **2013**, *54*, 1107–1111. DOI: 10.1016/j.tetlet.2012.12.068.

**2012**

31. *A general solid phase method for the synthesis of sequence independent peptidyl-fluoromethyl ketones* G.-D. Roiban, M. Matache, **N. D. Hădade**,\* D. P. Funeriu\* *Org. Biomol. Chem.* **2012**, *10*, 4516–4523. DOI: 10.1039/c2ob25096a.
32. *Synthesis and structural analysis of some new arylbromide decorated azobenzene derivatives* I. Kocsis, **N. Hădade**, I. Grosu *Studia Univ. Babeș-Bolyai Chemia* **2012**, *LVII*, 101–107.
33. *Glycine fluoromethylketones as SENP specific activity based probes* C. Dobrotă, D. Fasci, **N. D. Hădade**, G.-D. Roiban, C. Pop, V. M. Meier, I. Dumitru, M. Matache, G. S. Salvesen, D. P. Funeriu *ChemBioChem* **2012**, *13*, 80–84. DOI: 10.1002/cbic.201100645.

**2011**

34. *Metal Ion Mediated Self-Assembly Directed Formation of Protein Arrays*. **N. D. Bogdan**, M. Matache, G.-D. Roiban, C. Dobrotă, V. M. Meier D. P. Funeriu *Biomacromolecules* **2011**, *12*, 3400–3405. DOI: 10.1021/bm200833k.
35. *Recent Developments in the Reactivity of the Biginelli Compounds*. M. Matache, C. Dobrota, **N. D. Bogdan**,\* D. P. Funeriu\* *Curr. Org. Synth.* **2011**, *8*, 356–373.

**2010**

36. *Protein-inorganic Arrays Construction: Design and Synthesis of the Building Blocks*. **N. D. Bogdan**, M. Matache, V. M. Meier, C. Dobrotă, I. Dumitru, G. D. Roiban, D. P. Funeriu *Chem. Eur. J.* **2010**, *16*, 2170–2180. DOI: 10.1002/chem.200902649.

**2009**

37. *Synthesis of fused dihydro-pyrimido[4,3-d]coumarins using Biginelli multicomponent reaction as key step*. M. Matache, C. Dobrota, **N. D. Bogdan**, I. Dumitru, L. L. Ruta, C. C. Paraschivescu, I. C. Farcasanu, I. Baciu, D. P. Funeriu *Tetrahedron* **2009**, *65*, 5949–5957. DOI: 10.1016/j.tet.2009.05.088. IF2017: 2.651.
38. *[4.n]Cyclophanes*. **N. Bogdan**, I. Grosu *Curr. Org. Chem.* **2009**, 502–531. IF2017: 1.924.

**2008**

39. *New [4.4]Cyclophanes: Molecular Parallelograms, Triangles, Rhombus, Pentagon and Supramolecular Constructions*. **N. Bogdan**,\* E. Condamine, L. Toupet, Y. Ramondenc, E. Bogdan I. Grosu,\* *J. Org. Chem.*, **2008**, *73*, 5831–5838. DOI: 10.1021/jo8006489.
40. *Temperature induced rotation in a [4.4]cyclophane*. **N. Bogdan**,\* E. Condamine, L. Toupet, Y. Ramondenc, I. Silaghi-Dumitrescu, I. Grosu\* *Tetrahedron Lett.* **2008**, *49*, 5204–5207. DOI: 10.1016/j.tetlet.2008.06.045.
41. *Synthesis and stereochemistry of some new spiro and polyspiro-1,3-dithiane derivatives*. Ş. A. Gâz, E. Condamine, **N. Bogdan**, A. Terec, E. Bogdan, Y. Ramondenc, I. Grosu *Tetrahedron* **2008**, *64*, 7295–7300. DOI: 10.1016/j.tet.2008.05.065.

**2007**

42. *New [4.4]Cyclophane Diketals, Monoketones and Diketones: Design, Synthesis and Structural Analysis*. **N. Bogdan**, I. Grosu, E. Condamine, L. Toupet, Y. Ramondenc, I. Silaghi-Dumitrescu, G. Plé, E. Bogdan *Eur. J. Org. Chem.* **2007**, 4674–4687. DOI: 10.1002/ejoc.200700343.

**2006**

43. *Molecular Rotors: Design, Synthesis, Structural Analysis and Silver Complex of New [7.7]Cyclophanes*, **N. Bogdan**, I. Grosu, G. Benoît, L. Toupet, Y. Ramondenc, E. Condamine, I. Silaghi-Dumitrescu, G. Plé *Org. Lett.* **2006**, *8*, 2619–2622. DOI: 10.1021/o10610845.

**44.** *Synthesis and Structural Analysis of Some New Precursors of Macrocyclic Cyclophanes: 1,4-Bis(2-R-5-R<sup>1</sup>-1,3-Dioxan-2-yl)benzene Derivatives.* **N. Bogdan**, A. S. Gâz, F. Pop, E. Bogdan, A. Terec, L. David, I. Grosu, *Stud. Univ. Babeş-Bolyai Chem.*, **2006**, 51, 3–12.

**45.** *Synthesis and Structural Analysis of Some New Precursors of Macrocyclic Cyclophanes: 1,4-Bis(2-R-5,5-dimethyl-1,3-Dioxan-2-yl)benzene* **N. Bogdan**, F. Pop, A. S. Gâz, E. Bogdan, A. Terec, L. David, I. Grosu *Studia Univ. Babeş-Bolyai Chemia*, **2006**, 51, 13–20.

**2004**

**46.** *Synthesis and stereochemistry of some new 1,3-oxathianes obtained from 1,4-dimercaptothreitol.* L. Muntean, I. Grosu, D. Demeter, **N. Bogdan**, S. Mager, *Studia Univ. Babeş-Bolyai Chemia*, **2004**, 49, 121–124.

**2002**

**47.** *Synthesis and Stereochemistry of Some New 2,4-Disubstituted-1,3-Dioxanes.* A. Terec, L. Muntean, S. Tötös, **N. Bogdan**, C. Florian, S. Mager, I. Grosu, *Studia Univ. Babeş-Bolyai Chemia*, **2002**, 47, 187–193.