

PERSONAL INFORMATION

Andrea Bunea

📍 Mănăştur Street, no. 3-5, 400372 Cluj-Napoca (România)

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POZITION Professor, PhD

PROFESIONAL EXPERIENCE

-
- 2017-present **Professor**
University of Agricultural Science and Veterinary Medicine, Animal Science and Biotechnology Faculty. Mănăştur Street, no 3-5, 400372 Cluj-Napoca (România); <http://www.usamvcluj.ro>
Field: Chemistry, Biochemistry 1, Biochemistry 2, Enzymology, courses and practical works
Teaching and scientific activity
- 2013–2017 **Associate Professor**
University of Agricultural Science and Veterinary Medicine, Animal Science and Biotechnology Faculty. Mănăştur Street, no 3-5, 400372 Cluj-Napoca (România); <http://www.usamvcluj.ro>
Field: Chemistry, Biochemistry 1, Biochemistry 2, Enzymology, courses and practical works
Teaching and scientific activity
- 2005–2013 **Lecturer**
University of Agricultural Science and Veterinary Medicine, Animal Science and Biotechnology Faculty. Mănăştur Street, no 3-5, 400372 Cluj-Napoca (România); <http://www.usamvcluj.ro>
Field: Chemistry, Biochemistry 1, Biochemistry 2, Enzymology, courses and practical works
Field: Special Enzymology, course and practical work
Teaching and scientific activity
- 2001–2005 **Teaching assistant**
University of Agricultural Science and Veterinary Medicine, Animal Science and Biotechnology Faculty. Mănăştur Street, no 3-5, 400372 Cluj-Napoca (România); <http://www.usamvcluj.ro>
Field: Chemistry and Biochemistry, Special Enzymology, courses and practical works
Teaching and scientific activity
- 1999–2001 **Preparatory**
University of Agricultural Science and Veterinary Medicine, Animal Science and Biotechnology Faculty. Mănăştur Street, no 3-5, 400372 Cluj-Napoca (România); <http://www.usamvcluj.ro>
Field: Chemistry and Biochemistry – practical work

Teaching and scientific activity

EDUCATION

- 2000–2006 **PhD in Biotechnology** Nivelul 8 CEC
University of Agricultural Science and Veterinary Medicine, Animal Science and Biotechnology Faculty. Mănăştur Street, no 3-5, 400372 Cluj-Napoca (România);
Biochemistry, Spectroscopy, Liquid chromatography
- 01/2002–04/2002 **Doctoral fellowship** Nivelul 8 CEC
Bremen University, Biophysic Department, Bremen (Germany)
Extraction, separation and quantification of natural compounds
- 05/2003-07/2003 **Doctoral fellowship** Nivelul 8 CEC
University form Gent, Food Safety and Quality Department, Belgium
Extraction, quantification and separation of natural compounds from different vegetal sources
- 05/2004-07/2004 **Doctoral fellowship** Nivelul 8 CEC
University form Gent, Food Safety and Quality Department, Belgium
Extraction, quantification and separation of natural compounds from different vegetal sources
- 05/2005-07/2005 **Doctoral fellowship** Nivelul 8 CEC
University form Gent, Food Safety and Quality Department, Belgium
Extraction, quantification and separation of natural compounds from different vegetal sources

PERSONAL COMPETENCES

Native language Romanian

OTHER LANGUAGES

	UNDERSTANDING		SPEAKING		WRITING
	LISTENING	READING	CONVERSATION	ORAL	WRITTEN EXPRESION
English	B2	B2	C1	C1	B2

Communication competences Team spirit, organisational skills
Good communication skills

Ability to adapt to multicultural environments, gained through experience working abroad

Organisational / managerial skills

Project manager – coordination of research projects (2)
 Vicedean for research - 2016-2020
 Viicerector for quality assurance 2020-present
 Organisation of scientific sympozion:

- Internațional Symposium UASVM 2016, 2017, 2018
- Internațional Symposium „Pigments in Food” – 2016

Job-related skills

Chromatographic analysis – CC, HPLC, GC, GC/MS
 Spectroscopy
 General biochemistry, Enzymatic activity determination, antioxidants methods

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Experienced	Experienced	Experienced	Experienced	Experienced

Levels: [Basic user](#) - [Independent user](#) - [Proficient user](#)
[Digital competences - Self-assessment grid](#)

ADDITIONAL INFORMATION

AFILIATIONS

Member in scientific and professional societies

- Romanian Chemistry Society
- Romanian Biochemistry and Molecular Biology Society
- European Plant Science Organisation

Scientific Reviewer: J Agric Food Chem, Food Chem, Food Res Int, Notulae Botanicae

SCIENTIFIC ACTIVITY

Publications

- 50 articles in ISI Journals with impact factor
- 65 articles published in other databases
- Citations (excluding self-citations): 1089 (According with WOS)
- Chaptors in books published in internationals publishing houses: 1
- Participations at international Conferences: over 20
- Hirsch index 18 (WOS)
- ResearcherID: Author ID: 56962720300; <http://orcid.org/0000-0002-2358-485X>
- Award ASAS "Ion Adameșteanu" – Book "Stresul oxidativ și antioxidanți naturali" 2015

ANNEXES

Anexa 1 – Selective list of publications and research grants

Books and chapter in books:

1. **Andrea Bunea**, Procyanidins: Structure and occurrence, 2016, Nova Science Publishers, 19 pages
2. Sanda Andrei, Andrea Bunea, **Adela Pinte**a, Stresul oxidativ și antioxidanți naturali, Editura AcademicPres Cluj, 2014, ISBN: 978-973-744-354-0S
3. **Andrea Bunea**. Enzimele și aplicațiile lor biotehnologice, 2013. Editura AcademicPres. ISBN 978-973-744-306-9

Selective list of publications:

1. I.Grosu, L. Toupet, G. Ple, S. Mager, E. Mesaros, **Andrea Varga**, Elena Bogdan, **2000** - Synthesis and Stereochemistry of Novel Dibrominated 1,5-Dioxaspiro[5.5]undecane Derivatives , Monatshefte fur Chemie-Chemical Monthly, vol 131, p. 277-286.
2. Adela Pintea, Andrea Varga, Piotr Stepnowski, Carmen Socaciu, Monica Culea, Horst A. Diehl, **2005**- Chromatographic analysis of carotenol fatty acid esters in *Physalis alkekengi* and *Hippophae rhamnoides*. Pytochemical Analysis, Vol 16 (3):188-195
3. **Andrea Bunea**, Mirjana Andjelkovic, Carmen Socaciu, Otilia Bobis, Madalina Neacsu, Roland Verhé & John Van Camp, **2008** – Total and individual carotenoids and phenolic acids in fresh, refrigerated and processed spinach (*Spinacia oleracea* L.), Food chemistry 108:649-656
4. **Andrea Bunea**, Dumitrița O. Rugina, Adela M. Pintea, Zorița Sconta, Claudiu I. Bunea, Carmen Socaciu, **2011** - Comparative Polyphenolic Content and Antioxidant Activities of Some Wild and Cultivated Blueberries from Romania, X. Not Bot Hort Agrobot, 39 (2).
5. Adela Pintea, Dumitrița Rugină, Raluca Pop, **Andrea Bunea**, Carmen Socaciu, Diehl, H.A., **2011** - Antioxidant effect of trans-resveratrol in cultured human retinal pigment epithelial cells, Journal of Ocular Pharmacology and Therapeutics, 27(4), 315-321.
6. Adela Pintea, Dumitrița Olivia Rugina, Raluca Pop, **Andrea Bunea**, Carmen Socaciu, **2011** - Xanthophylls protect against induced oxidation in cultured human retinal pigment epithelial cells, Journal of Food Composition and Analysis, 24 (2011), 830-836.
7. **Andrea Bunea**, Dumitrița Rugină, Adela Pintea, Sanda Andrei, Raluca Pop, Claudiu Bunea, Constantin Bele, **2012** - Carotenoid and fatty acids profile of bilberries and cultivated blueberries from Romania. Chemical Papers, 66(10), 935-939.
8. Dumitrița Rugină, Zorița Sconta, Loredana Leopold, Andrea Bunea, Adela Pintea, Carmen Socaciu, **2012** - Antioxidant activities of chokeberry extracts and the antiproliferative potential of their anthocyanin fraction on HeLa human cervical tumor cells. Journal of Medicinal Food, 15(8), 700-706.
9. **Andrea Bunea**, Carmen Socaciu, Adela Pintea. Xanthophyll Esters in Fruits and Vegetables, **2014**. Not Bot Horti Agrobot, 42(2):310-324.
10. **Andrea Bunea**, Dumitrița Rugină, Zorița Sconta, Raluca Pop, Adela Pintea, Carmen Socaciu, Flaviu Tăbăran, Karin Struijs, John VanCamp, **2013**. Anthocyanin determination in blueberry extracts from various cultivars and their antiproliferative and apoptotic properties in B16-F10 metastatic murine melanoma cells. Pytochemistry, 95, 436-444.
11. Madalina Neacsu, Andrea Varga, Carmen Socaciu, John van Camp – Analysis of antioxidant phytochemicals from Brussel Sprout, Comm. Appl. Biol. Sci, Gent University, 69/2, 2004.
12. Bunea, A., Rugină, D., Copaciu, F., Dulf, F., Veres, A., Socaci, S., Pintea, A. (2020). Comparative analysis of some bioactive compounds in leaves of different Aloe species. BMC Chemistry, 14(1) Article Number: 67.
13. Melnic Vasile, Andrea Bunea, Chira Romeo Ioan, Bunea Claudiu Ioan, Sonia Socaci, Mitre Viorel. Phytochemical Content and Antioxidant Activity of Malus domestica Borkh Peel Extracts. MOLECULES Volume26 Issue24 Article Number7636 DOI10.3390/molecules26247636.
14. Bunea, A., Rugină, D., Copaciu, F., Dulf, F., Veres, A., Socaci, S., Pintea, A. (2020). Comparative analysis of some bioactive compounds in leaves of different Aloe species. BMC Chemistry, 14(1) Article Number: 67.
15. Villacis-Chiriboga, J ; Jacobs, G ; Van Camp, J., Ruales, J, Marcillo-Parra, V ; Bohm, V; Bunea, A Cirlini, M ; Craft, N. Interlaboratory exercise for the analysis of carotenoids and related compounds in dried mango fruit (*Mangifera indica* L.). Journal of Food Composition and Analysis, Volume111 Article Number104616. DOI10.1016/j.jfca.2022.104616

National Projects:

Programul/Proiectul	Function	Sume	Type of financing	Period
Grant de cercetare CNCSIS, program de tip AT, nr.64, cod: 62- Separarea, caracterizarea și hidroliza enzimatică a unor esteri de carotenoide cu aplicații biomedicale	Project Manager	40.000 lei	CNCSIS Tip AT	2003-2004
Grant de cercetare CNCSIS, program de tip TE, nr.168- Testarea proprietăților antioxidante, antiproliferative și proapoptotice ale extractului polifenolic din afine pe culturi celulare tumorale	Project manager	692.064 lei	CNCSIS Tip TE	2010-2013

Member in the team of international projects

NATO Res. Project Ref.LST.CLG. 977807 - "Extraction and Incorporation procedures for Carotenoid Pigments in Different Food and Drug matrices"	2001-2002
Project Flandra-Romania: Universitatea Gent, Departamentul de Siguranța și Calitate Alimentară, Belgia. Extracția, dozarea și separarea compușilor naturali din anumite surse vegetale	2003-2005
Project FDI- Comisia 5- CNFIS-FDI 2021-0250	Project manager
Project FDI- Comisia 5- CNFIS-FDI-2022-0231	Project manager
Project FDI- Comisia 5- CNFIS-FDI 2023-0036	Project manager

Cluj-Napoca, 10.02.2024

Prof.dr. Andrea Bunea

