

Vicas Simona Ioana



WORK EXPERIENCE

- From 2020 -present **Professor**
University of Oradea, Environmental Protection Faculty, Oradea, Romania
- teaching the course of Biochemistry, Organic Chemistry, Additives and ingredients in the food industry,
 - coordination biochemistry, organic chemistry, food additives laboratory classes
 - research activities
- From 2016 -present **Ph.D. Supervisor**
I.O.S.U.D. Doctoral School of Biomedical Sciences, Biology Domain. University of Oradea
- From 2008 – 2020 **Associate professor**
University of Oradea, Environmental Protection Faculty, Oradea, Romania
- teaching the course of Biochemistry, Organic Chemistry, Additives and ingredients in the food industry,
 - coordination biochemistry, organic chemistry, food additives laboratory classes
 - research activities
- From 2003 to 2008 **Lecturer**
University of Oradea, Environmental Protection Faculty, Oradea, Romania
- teaching the course of Biochemistry, Organic Chemistry
 - coordination biochemistry, organic chemistry laboratory classes
 - research activities
- From 2000 to 2003 **Assistant university**
University of Oradea, Environmental Protection Faculty, Oradea, Romania
- coordination biochemistry, organic chemistry laboratory classes
 - research activities
- From 1997 to 2000 **Teaching assistant**
University of Oradea, Environmental Protection Faculty, Oradea, Romania
- coordination biochemistry laboratory classes
 - research activities

EDUCATION AND TRAINING

From 2011- to 2013

Postdoctoral research fellowship

Institute of Biochemistry, Postdoctoral Program EUROPEAN SOCIAL FUND
Cellular and Molecular Biotechnologies for Medical Applications, Bucharest

- *Genomics, Proteomics, Metabolomics si Bioinformatics*: Molecular markers for food authentication

From 2002-to 2007 PhD Degree in Biotechnology

University of Agricultural Science and Veterinary Medicine Cluj Napoca, Romania

- The title of PhD thesis: *Biochemical analysis and evaluation of some flavonoids activity*, (PhD supervisor: Prof. Carmen Socaciu)

From April 2006-to October 2006 Postdoctoral research fellowship

Kobe University, Japan, Faculty of Agriculture, Department of Biofunctional Chemistry, Laboratory of Food & Nutritional Chemistry

- Cytotoxicity assessment of vegetable extracts on suspension tumor cells by MTS assay, Agarose gel electrophoresis of DNA

From 2004-to 2005 Master Degree in Teacher Training

University of Oradea, Romania

From 1995-to 1996 Master Degree in Molecular Biology

- Faculty of Biology, University of Bucharest, Romania

From 1990-to 1995 Bachelor of Science Degree in Biochemistry

- Faculty of Biology, University of Bucharest, Romania

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills Teamwork, good communication skills and organizational capacity analysis.
Handling ability of some research equipments.

Organisational / managerial skills

Project manager of some national projects (6) and members of research national and international projects (12)
Member of organization committees of some national and international scientific events
Member of the Senate of the University of Oradea (2012-2020); 2016-2020-Chair of the Scientific Research Commission of the UO Senate.

Job-related skills

- Food Science - bioactive compounds, functional foods, food additives, chromatographic techniques
- Chemistry (physico-chemical analysis, HPLC analysis), extraction of bioactive compounds from different vegetable matrix, food additives, development of new innovative food products, functional foods
- Obtaining and characterisation of metal nanoparticles using plant extracts as reducing agents.

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

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

Computer skills and competences

Microsoft Office (Word, Excel, Power Point, Access),
 ▪ Origin 7, EndNote, Shimadzu LC Solution Software, Graph Prism 5

Driving licence

B category

ADDITIONAL INFORMATION

Publications (10 selected publications)

1. Memete, A.R.; Sărac, I.; Teusdea, A.C.; Budău, R.; Bei, M.; **Vicas, S.I.** Bioactive Compounds and Antioxidant Capacity of Several Blackberry (*Rubus* spp.) Fruits Cultivars Grown in Romania. *Horticulturae* **2023**, *9*, 556. <https://doi.org/10.3390/horticulturae9050556>
2. Kleszken, E.; Purcarea, C.; Pallag, A.; Ranga, F.; Memete, A.R.; Miere (Groza), F.; **Vicas, S.I.** Phytochemical Profile and Antioxidant Capacity of *Viscum album* L. Subsp. album and Effects on Its Host Trees. *Plants* **2022**, *11*, 30; <https://doi.org/10.3390/plants11223021>
3. **Vicas SI**, Laslo V, Timar AV, et al. Nano Selenium-Enriched Probiotics as Functional Food Products against Cadmium Liver Toxicity. *Materials (Basel)*. **2021** Apr 27;14(9):2257. doi: 10.3390/ma14092257. PMID: 33925590; PMCID: PMC8123892.
4. **Vicas, S.I.**; Laslo, V.; Timar, A.V.; Balta, C.; Herman, H.; Ciceu, A.; Gharbia, S.; Rosu, M.; Mladin, B.; Fritea, L.; et al. Functional Food Product Based on Nanoselenium Enriched *Lactobacillus casei* against Cadmium Kidney Toxicity. *Appl. Sci.* **2021**, *11*, 4220. <https://doi.org/10.3390/app11094220>
5. **Vicas S.I.**, Cavalu S., Laslo V., Tocai M., Costea T., Moldovan L. **2019**. Growth, Photosynthetic Pigments, Phenolic, Glucosinolates Content and Antioxidant Capacity of Broccoli Sprouts in Response to Nanoselenium Particles Supply. *Not Bot Horti Agrobo*, 47(3):821-828
6. Chedea, V.S., **Vicaș, S.I.**, Sticozzi, C., Pessina, F., Frosini, M., Maiolic E, Valacchi G. **2017**. Resveratrol: from diet to topical usage. *Food & Funct.*, *8*, 3879-92
7. **Vicas SI**, Bandici L., Teusdea A, Turcin V., Popa D., Bandici G., **2017**, The bioactive compounds, antioxidant capacity, and color intensity in must and wines derived from grapes processed by pulsed electric field. *CyTA - Journal of Food*, *15* (4), 553-562
8. **Vicas S.I.**, Teusdea A., Carbutar M., Socaci S., Socaci C., **2013**, Glucosinolates Profile and Antioxidant Capacity of Romanian Brassica Vegetables obtained by Organic and Conventional Agricultural Practices", *Plant Foods for Human Nutrition*, *68* (3), 313-21
9. **Vicas S.I.**, Chedea V., Socaci S., **2011** Inhibitory effects of isoflavones on soybean lipoxygenase-1 activity, *Journal of Food Biochemistry*, *35*, 613-627
10. **Vicas S.I.**, Rugină D., Leopold L., Pinteia A., Socaci C., **2011** HPLC Fingerprint of Bioactive Compounds and Antioxidant Activities of *Viscum album* from Different Host Trees, *Notulae Botanicae*, *39* (1), 48-57

Research projects

Project manager (6 projects)

Research grant INO – TRANSFER – UO no. 250/2022 Innovative technology for obtaining a functional food product based on meat without synthetic additives

Research grant INO – TRANSFER – UO no. 309/2021 In vitro studies on the evaluation of the protective effects on dermal fibroblasts and epidermal keratinocytes subjected to oxidative stress of plant extracts rich in flavonoids embedded in nanocapsules.

PN-III-P2-2.1-PED-2016-1846/2017 Nano Selenium - Enriched Probiotics as Functional Food Products Against Heavy Metals Toxicity

PN-II-IN-CI-2012-1-0295 Optimisation of a food supplement with antioxidant and antitumor properties

PN-II-IN-CI-2012-1-0327 Obtaining tea from non-conventional plant origin sources rich in bioactive compounds

PN – II – ID – PCE – 2008 – 2, In vitro evaluation of antioxidant and anticancer effects of some European mistletoe (*Viscum album*) extracts characterized through taxonomic markers

Member in research projects (more than 10 projects)

Project FDI_2022-0058 - "Development of multidisciplinary research and innovation capacities using emerging technologies_CIMTE"

PN-III-P2-2.1-CI-2017-0064 – Technological transfer for obtaining innovative therapeutic products based on nanopropolis

PN-III-P2-2.1-CI-2017-0428 The optimization of technological process in order to obtain innovative natural supplements with positive impact on human health

PN-II-PT-PCCA-2013-4-2225 Electromagnetic methods for improving processes winery.

PN-II-IN-CI-2013-1-0015 Development of nutritional supplements from vegetable products containing bioactive compounds with antioxidant capacity

PN-II-IN-CI-2012-1-025 5 Establishing the technology for obtaining fruit juices with high antioxidant properties

Conferences

- Vicas S.I.**, Laslo V., Klezken E., Memete A.R., Fertig T.E., Marta D.S. In vitro antioxidant and antigenotoxic potential of *Viscum album* L. subsp. *album*. The Annual International Conference of RSBMB Cluj-Napoca, 13-15 September, **2023** Cluj-Napoca, Romania
- Vicas S.I.**, Cavalu S., Hermenean A., Green synthesis of nanoselenium particles as a functional products against in vitro and in vivo cadmium toxicity. 15th Edition of the Conference "New Trends in Chemistry Research", 21-22 September, **2023** Timisoara
- Vicas SI**, Teusdea AC, Dzugan M., Socaciu C., **2014**, HPLC screening of sprouts glucosinolates from commercial broccoli cultivars related to the germination time, Glucosinolates & Beyond, Proceeding/ **3rd International Glucosinolates Conference, Wageningen**, The Netherlands, Poster 50, p115
- Vicas S.I.**, Carmen Socaciu, **2011**, HPLC Techniques used to Identify and Quantify Glucosinolates - A Class of S-Containing Phytochemicals from Brassicaceae Sp., The Annual International Conference of the RSBMB & **The Conference on "Cellular and Molecular Biotechnologies on Medical Applications"**, Sept 28th-30th, Craiova, Romania, (P24).
- Vicaș S.**, Rugina D., Prokisch J., Socaciu C., **2009**, Comparative antioxidant activity of European Mistletoe (*Viscum album*) from different host trees, The FEBS Journal –Life's molecular interaction, vol.276 (1), p. 130 – 34 th **FEBS Congress**, July 4-9, 2009, Prague Czech Republic (P8-2972)
- Hashimoto T., **Vicaș S.**, Suzuki T., Sambongi K., Kanazawa K., **2007**, Benalu teh induces apoptosis in Jurkat T cells, **The 3rd International Conference on O-CHAT (Tea) Culture and Science, Health Benefits**, Shizuoka, Japan, November 2-4 p.101 (HB-P-702).
- Vicaș S.**, Okamoto M., Hashimoto T., Suzuki T., Sambongi K., Kanazawa K., **2007**, Benalu teh activates drug-metabolizing phase II enzymes, The 3rd International Conference on O-CHAT (Tea) Culture and Science, Health Benefits, Shizuoka, Japan, November 2-4, p.102 (HB-P-703).
- Vicaș S.**, Hashimoto T., Okamoto M., Suzuki T., Sambongi K., Nobuchi M., Kanazawa K., **2006**, Coffee cherry extract increase the activity of glutathione – S-transferase and quinone reductase in mice, **The Kadota Fund International Forum (KIF): The Scientific Substantiation of Functional Foods: Human Studies toward the Global Standard**, November 21-22, p.45 (P 10).

Citations

Hirsch index: 19 (Web of Science)

>600 citations

International book chapters

- Bandici L., Teusdea A.C., Oradan A.C., Bandici G.E., Vlad A.M. **Vicaș S.I.**, **2021**, Grape Pomace Generation Using Pulsed Electric Field Technology in Grape Pomace in Health and Disease Prevention. Chedea V.S., PhD. (Editor), Nova Science Publisher, ISBN: 978-1-68507-409-8, DOI:<https://doi.org/10.52305/HINI5835>
- Vicas SI.**, Teusdea A., Popa D., Bandici G., Bandici L., **(2016)**. Obtaining high quality white and red wines by homogenization and treating grapes in pulsed electric field. Environmental Influence on the food quality and human health. M. Dzugan, A. pastemakiewicz, M. Wesolowska (Eds.). ISBN 978-83-7996-409-3, pp.73-84.
- Vicas SI.**, Teusdea A., Laslo V. **(2015)** The changes of some secondary metabolites from fruits and vegetables grown under organic and conventional agricultural practices, in Green Education for a Green Economy, Ed. Universitatii din Oradea, ISBN 978-606-10-1512-2 , pp.147-159.
- Vicas S. I.**, Rugina D., Socaciu C. **(2012)**. Antioxidant Activity of European Mistletoe (*Viscum album*), Phytochemicals as Nutraceuticals - Global Approaches to Their Role in Nutrition and Health, Dr Venketeshwer Rao (Ed.), ISBN: 978-953-51-0203-8, InTech.
- Chedea Veronica Sanda, **Vicaș S. I.**, Carmen Socaciu, Tsutomu Nagaya, Henry Joseph Oduor Ogola, Kazushige Yokota, Kohji Nishimura and Mitsuo Jisaka. **(2012)**. Lipoxygenase-Quercetin Interaction: A Kinetic Study Through Biochemical and Spectroscopy Approaches, Biochemical Testing, Dr. Jose C. Jimenez-Lopez (Ed.), ISBN: 978-953-51-0249-6, InTech.

Prof. Dr. Habil. Simona Ioana VICAS

Oradea,
02 February 2024