



## Curriculum vitae Europass

### Dr. DORINA PODAR

#### Associate Professor

Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca, Romania

Director of Research Centre for Systems Biology, Biodiversity and Bioresources (3B)  
<http://centru3b.centre.ubbcluj.ro/>



#### Personal information

---

Mother name / name **PODAR DORINA**  
Address 1 Mihail Kogălniceanu St., Babeş-Bolyai University, P63, 400084 Cluj-Napoca, Romania  
Telephone +40-744972052  
Fax) +40-264405300  
E-mail dorina.podar@ubbcluj.ro  
Nationality Romanian

---

#### Occupation and work **Associate Professor** **2018 - present**

---

##### Work experience

**Period 2012 - 2018**  
Position **Lecturer**  
Activities and responsibilities Teaching and research  
Company Babeş-Bolyai University, Cluj-Napoca, 1 M. Kogălniceanu St., Romania  
Type of activity Education - Academia

**Period 2004 - 2012**  
Position **Assistant lecturer**  
Activities and responsibilities Teaching and research  
Company Babeş-Bolyai University, Cluj-Napoca, 1 M. Kogălniceanu St., Romania  
Type of activity Education - Academia

**Period 2000 - 2001**  
Position **Science teacher**  
Activities and responsibilities Teaching and tutorials  
Company Framlingham College, College Road, Framlingham, Woodbridge IP13 9EY, UK  
Type of activity Education

**Period 1998 - 2001**  
Position **Biology and Chemistry teacher**  
Activities and responsibilities Teaching and tutorials  
Company School no. 3, 4 Retezat St., Cluj-Napoca, Romania  
Type of activity Education

---

## Education and formation

---

**Period** 2007 – 2009 (31 months)  
**Qualification** Postdoctoral researcher  
**Research** Cation Diffusion Facilitators (CDFs) in *Hordeum vulgare* cv. Golden Promise as part of EU-PHIME project: Public Health Impact of long-term, low-level Mixed Element Exposure in susceptible population strata, in Prof. Dale Sanders' laboratory.  
**Institution** University of York, York, UK  
**Level of classification** Level 6 postdoctoral

---

**Period** 2005 – 2006 (12 months)  
**Qualification** Postdoctoral researcher  
**Research** Postdoctoral Fellowship from Belgian Federal Science Policy Office - Characterization of HMA4, a pump possibly implicated in the hyperaccumulation of Cd and Zn in plants, in Prof. Nathalie Verbruggen's laboratory. .  
**Institution** Université Libre de Bruxelles, Brussels, Belgium  
**Level of classification** Level 6 postdoctoral

---

**Period** 1999 - 2005  
**Qualification** PhD – Biology, distinction *Cum laude*  
**Research** PhD thesis The influence of heavy metals on physiological aspects to some plant species important for phytoremediation, under Prof. Mihai Trifu's supervision.  
**Institution** Babeş-Bolyai University, Cluj-Napoca, Romania  
**Level of classification** Level 6 post-graduate

---

### During PhD studies

**Period** 2004  
**Research project - director**  
**Research grant** from the Romanian Ministry of Research and Education for PhD Students Uptake of Cd by plants. Implications for human health risk assessment, (CNCSIS Td 46 as director).  
Babeş-Bolyai University, Cluj-Napoca, Romania  
Level 6 post-graduate

---

**Period** 2002 – 2003 (12 months)  
PhD fellow (PhD Fellow - Marie Curie Fellowship)  
**Marie Curie Fellowship** Processes controlling the mobility, persistence and availability of toxic substances in soil and aquatic systems (EC Contract: HPMT-CT-2000-00181), under Prof. Michael H. Ramsey's supervision.  
Sussex University, Brighton, UK  
Level 6 post-graduate

---

**Period** 2000 (4 months)  
PhD Fellow  
**Research project** The influence of heavy metals and elevated CO<sub>2</sub> concentration on *Zea mays* and *Helianthus annuus* plants, under Prof. Zoltan Tuba's supervision.  
Szent István University, Gödöllő, Hungary  
Level 6 post-graduate

---

<b>Period</b>	<b>1998-1999</b>
Qualification / diploma	M.Sci
Specialization	Cellular and Molecular Biology
Institution	Babeş-Bolyai University, Cluj-Napoca, Romania
Level of classification	Level 6 post-graduate
<b>Period</b>	<b>1994-1998</b>
Qualification / diploma	Batchelor
Specialization	Biology and Chemistry
Institution	Babeş-Bolyai University, Cluj-Napoca, Romania
Level of classification	Level 5 – Batchelor degree
<b>Formation courses</b>	<p><b>Professional formation</b></p> <p><b>2018</b> Seminar "Analysis of Gene Expression and Regulation on Several Levels" – Promega.</p> <p><b>2015</b> "DNA Metabarcoding" Babeş-Bolyai University, Cluj-Napoca, RO</p> <p><b>2007</b> "Confocal Microscopy Course - beyond simple optical imaging" University of York, UK.</p> <p><b>2007</b> "Working safely with ionising radiation: general introductory session and open source session" University of York, UK.</p> <p><b>2004</b> "Antioxidants in health, disease and food safety – practical assessment" FEBS/VLAG International Advanced Course, Wageningen, Olanda.</p> <p><b>2002</b> "Environmental Geochemistry Course" – Centre of Environmental Research, University of Sussex, UK.</p> <p><b>2000</b> "Current aspects of the ecotoxicology of heavy metals in soil" - International Seminar, Szent Istvan University, Gödöllő, Hungary.</p> <p><b>Teaching formation</b></p> <p><b>2021</b> "Advanced Academic Teaching Skills Course" Babeş-Bolyai University, Cluj-Napoca, RO</p> <p><b>2021</b> "Future Course" Sykes, Cluj-Napoca, RO</p> <p><b>2020-</b> Sincron and asincron in on line teaching – principles and strategies. Babeş-Bolyai University, Cluj-Napoca, RO.</p> <p><b>2019</b> "Gamification in teaching" Babeş-Bolyai University, Cluj-Napoca, RO</p> <p><b>2017</b> "Using computational resources for teaching" Babeş-Bolyai University, Cluj-Napoca, RO</p> <p><b>2017</b> "Teaching trainer" Babeş-Bolyai University, Cluj-Napoca, RO</p> <p><b>2015</b> "Evaluator of professional competences", Babeş-Bolyai University, Cluj-Napoca, RO, RO</p> <p><b>2013</b> "Biology didactics", Ministry of Education, Neptun, RO</p> <p><b>2008</b> "How to give a scientific conference presentation" University of York, UK</p>
<b>Certificates</b>	Evaluator of professional competences – expert (Certificate by National Authority for Qualification)

- 
- Prizes** **2021** - 1<sup>st</sup> Prize – poster - 6<sup>th</sup> International Symposium Young Researcher in Sciences, Cluj-Napoca, Romania (Grimm Mihai – student, Dorina Podar – coordinator).
- 2021** – Bronz medal - International Conference of Young Scientists (ICYS), eleva Ioana Mihacea (Liceul Gh. Șincai, Cluj).
- 2019** –Excellentia Award, Babeș-Bolyai University Student Council
- 2018** – Short list nominalization BELMA Frankfurt for Biology for 5<sup>th</sup> form  
[tps://www.news.ro/cultura-media/un-manual-romanesc-de-geografie-editat-de-art-klett-a-fost-premiat-la-targul-international-de-carte-de-la-frankfurt-1922402011002018101718575022](https://www.news.ro/cultura-media/un-manual-romanesc-de-geografie-editat-de-art-klett-a-fost-premiat-la-targul-international-de-carte-de-la-frankfurt-1922402011002018101718575022)
- 2017** – 3<sup>rd</sup> Prize – poster - Biogeography of the Carpathians (2<sup>nd</sup> Interdisciplinary Symposium), Cluj-Napoca, Romania (Balazs Zoltan – student, Dorina Podar – coordinator).
- 2017** – 1<sup>st</sup> Prize – poster - 4<sup>th</sup> International Symposium Young Researcher in Biosciences, Cluj-Napoca, Romania (Galea Diana – student, Dorina Podar – coordinator).
- 2016** – 3<sup>rd</sup> Prize – poster - 8<sup>th</sup> National Congress with International Participation of RSCB, Oradea, Romania (Podar și colab.).
- 2014** – 1<sup>st</sup> Prize- Best presentation award- 1<sup>st</sup> International Symposium Young Researcher in Biosciences, Cluj-Napoca, Romania (Veres Dorottya – masterand, Dorina Podar – coordonator).
- 

**Personal skills**

Mother tongue	<b>Romanian</b>					
Foreign languages	Common European Framework of Reference for Languages					
Autoevaluation	<b>Understanding</b>		<b>Speaking</b>		<b>Writing</b>	
<i>European level (*)</i>	Listing	Reading	Spoken interaction	Spoken production	Writing	
<b>English</b>	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1	Proficient user
<b>French</b>	B2 Independent user	B2 Independent user	B2 Independent user	B2 Independent user	A2	Basic user

**Communication skills** Efficient communication, team working, initiative, adaptive.

---

**Organisational / managerial skills** Director and member in research projects.

---

- 
- Job-related skills**
- **Plant physiology** and **ecophysiology** general techniques: chlorophyll fluorescence; CO<sub>2</sub>-gas exchange techniques; stomata conductance; determination of carbohydrates, proteins and pigments; mineral analysis of plants material, aqueous two phases partitioning for membrane proteins extraction.
  - **Plant transformation:** *Arabidopsis*, *Thlaspi*, *Hordeum*, *Oryza*.
  - **Cellular Biology** *in vitro* culture of bacteria, yeasts, plant cells and tissues; preparation of bacterial and yeast competent cells and their transformation using various plasmid vectors.
  - **Molecular biology** techniques: DNA, RNA and proteins extraction and purification; site-directed mutagenesis; cloning; chimeric construction; heterologous expression of proteins in bacteria, yeast, protoplast, protein expression and purification from bacterial systems by affinity chromatography; production of fusion proteins; PCR (RT-PCR, semi-quantitative PCR, PCR screening), RNAi silencing; Western blot analysis; 1D-electrophoresis; transformation of plants via *Agrobacterium*; *in silico* analysis of DNA and amino acid sequences.
  - **Microscopy:** use of optical microscope, confocal microscope: use of different fluorescent probes, basic imaging, spectral unmixing/imaging, colocalization, FRAP, FRET.
  - **Geochemistry** general methods: soil and water sampling; soil characterisation; determination of CEC; organic matter content; uses of Eh-pH diagrams.
  - **Analytical techniques:** spectrometry; ICP-AES; ICP-MS; AAS; gas chromatography..

---

**Computer skills** Basic knowledge in Microsoft Office software packages

- 
- Teaching professional skills**
- 2018 – present Associate Prof.**  
Babes-Bolyai University, Cluj-Napoca, Romania
- 2009- 2012 Lecturer**  
Babeş-Bolyai University, Cluj-Napoca, Romania  
Lecturer of Histology and Anatomy of Plants  
Biochemistry and Molecular Biology of Plants  
Plant Physiology and Molecular Biology
- 2008 - 2010** Postdoctoral researcher - University of York, York, UK
- Supervision of two undergraduate students in Biochemistry and Applied Biology and of a PhD Student in Plant Membrane Transport
- 2004 – 2006** Assistant lecturer  
Babeş-Bolyai University, Cluj-Napoca, Romania
- Lecturer of Histology and Anatomy of Plants
  - Organised teaching content for laboratories in: Plant Physiology and Ecophysiology.
  - Set and marked assignments & exams.
  - Managed and supervised B.Sc. theses;
  - Involved in various administrative activities.
- 2001 – 2002 – Science teacher**  
Framlingham College, Framlingham, UK
- Science assistant teacher (K4 and A level).
- 1998 – 2001** Biology and Chemistry teacher  
Middle School No. 3, Cluj-Napoca, Romania
- Teaching Biology and Chemistry.
-

---

**Projects for students, faculty  
and institutions**

- 2020** – DBU Fellowship for my student Emanuela Dana Tiodar
- 2020** – SciFest – Plant colours (plenary presentation)
- 2019**- Workshop for students "Searching the information in the databases"  
(27th of March)  
Plant immunity – presentation for students (16<sup>th</sup> of April)
- 2016-2019** – Organizing student internship in Terapia Company (4 students  
in 2016, 12 students in 2017, 10 students in 2018, 2019)
- 2017-2019** – Supervising high school student Ioana Mihacea (Gh. Sincai,  
High school, Cluj-Napoca) for International Conference of Young  
Scientists (ICYS), Malaysia.  
Member in the National jury – in Life Sciences section for the  
selection of students for International Conference of Young  
Scientists (ICYS).
- 2017- 2018** – Excellence fellowship for research for my students (Galea  
Diana and Balázs Zoltan)
- 2016**- Member of Jury - Life Science (ICYS) International Conference of  
Young Scientists\_16-22 April\_2016
- 2015**- \*\*\* Vice-president in the National Committee for Biology Olympiad
- 2015**- Interviews with alumni – journal BIOME
- 2014**- Relating employers with student Programme (Cord Blood Centre,  
Terapia, XPE Pharma)
- 2010**-\*\*\* Faculty admission concurs Emil Racoviță
- 2010**-\*\*\* National Biology Olympiad training

---

<b>Research projects</b>	<p><b>Director:</b></p> <p><b>2020-2022</b> "Decontamination of heavy metal polluted soils by exploiting plant rhizosphere interactions"; National grant PN-III-P2-2.1-PED-2019-5254; contract no.: 390PED/2020; budget: 600.000 lei = 120.000 EUR)</p> <p><b>2020-2024</b> "Trace metal metabolism in plants" EU COST Action CA19116; without budget for salaries; project director: Prof Hendrik Küpper, Czeck Republic</p> <p><b>2015-2017</b> "Remediation potential of native facultative metallophytes and the associated rhizosphere microbiota", national grant CNCSIS-UEFISCSU PN-II-RU-TE- 2014-4-2727 (550 000 Lei = 125.000 EUR)</p> <p><b>2010-2012</b> "Plant Cation Diffusion Facilitator Transporter Family – investigation of metal recognition, binding and transport sites." National grant CNCSIS-UEFISCSU PNII – PD 424/125/2010.</p> <p><b>2004-2005</b> Influence of zinc and pH of soil on uptake of Cd by lettuce. Implications on human health risk assessment models. National grant Td 46/2004 -CNCSIS.</p> <p><b>Member:</b></p> <p><b>2018-2021</b> "<i>Partnership for the transfer of innovative technologies and advanced materials in visual art domain (production, conservation, restauration.</i>" UBB-TeMATIC-Art project co-financed by FEDR through the Operational Programme for Competitivity, project ID P_40_374, beneficiar: Babeş-Bolyai University.</p> <p><b>2015-2016</b> "<i>Methodological guide for monitoring antibiotics and antibiotic resistance in the environment as a support instrument for better management of the quality of surface waters [EnviroAMR]</i>", Project ID 66230 director Dr. Cristian Coman, National Institute for Biological Research.</p> <p><b>2015-2017</b> "<i>Biodiversity and adaptation mechanisms to saline stress of native plants in Romania</i>", national grant CNCSIS-UEFISCSU PN-II-RU-TE- 2014-4-831. Director Dr. Szekely Gyongyi.</p> <p><b>2014-2016</b> "<i>Opening new avenues to model the DYNamics of Species aSsemblages by integrating Ecology and Evolution a case study from the mountain ecosystems of the Alps and the Carpathians (ODYSSEE)</i>", international grant PN-II-ID-JRP-RO-FR-2012, no. 15/01.01.2014, director Dr. Mihai Puşcaş, Botanical Garden "Alexandru Borza", Babeş-Bolyai University.</p> <p><b>2012-2014</b> "<i>Comparative study of genes expressed under osmotic stress in Arabidopsis thaliana and phytoplankton communities from saline lakes in Romania</i>", national grant PN-II-CT-RO-H-2012, director Dr. Gyongyi Szekely, Babeş-Bolyai University.</p> <p><b>2006-2008</b> "<i>Research planning and upgrading green spaces in Romania with favourable impact on the environment.</i>" 2006-2008 CEEX Agral no.29/2006, director Dr. Cristina Dobrotă, Babeş-Bolyai University.</p> <p><b>2006-2008</b> "<i>Evaluation of ecophysiological and cyto-genotoxic effects of some xenobiotic present in the polluted aquatic ecosystems.</i>" 2006-2008 CEEX, no. 06-11-61/2006, director Dr. Adela Hamagyi, National Institute for Biological Research, Partner Babeş-Bolyai University coordinated by Dr. Anca Keul.</p> <p><b>2004-2006</b> "The effect of ground magnetic anomalies on biodiversity and on preservation of extinct forms of life", national grant PNCDI, director Reader Dr. Cristina Dobrotă, Babeş-Bolyai University.</p>
<b>Reviewer</b>	Plant Cell, Nature Scientific Report, BMC-Plant Biology, Physiologia Plantarum, Plants, Flora, American Journal of Botany, Journal of Waste Management, Geostandards and Geanalytical Research, Studia Biology, Studia Geologia, Annals Biology Iasi

---

---

**Professional affiliations** Society of Experimental Biology (SEB)  
Romanian Society of Biochemistry and Molecular Biology (RSBMB) – FEBS  
Federation of European Societies of Plant Biology (FESPB)  
European Plant Science Organization (EPSO)  
Romanian Society of Bioinformatics

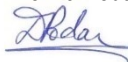
---

**Annexes** **Annex 1:** Publication and conference list

---

27.01.2022

Dr. Dorina Podar





## ANEXE 1

### PUBLICATIONS (PODAR DORINA, previous SABĂU DORINA)

---

#### ISI Papers as principal author:

1. **Podar D**, Maathuis FJM. 2022. Primary nutrient sensors in plants. *iScience*, 25(4): 104029. [10.1016/j.isci.2022.104029](https://doi.org/10.1016/j.isci.2022.104029)
2. Stanton C, Sander D, Krämer U, **Podar D**. 2022. Zinc in plant: Integrating homeostasis and biofortification. *Molecular Plant*. 15(1):65-85. [10.1016/j.molp.2021.12.008](https://doi.org/10.1016/j.molp.2021.12.008)
3. **Podar D**, Maathuis FJM. 2021. The role of roots and rhizosphere in providing tolerance to toxic metals and metalloids. *Plant, Cell & Environment*, 45(3):719-736. [10.1111/pce.14188](https://doi.org/10.1111/pce.14188)
4. Văcar CL, Covaci E, Chakraborty S, Li B, Weindorf DC, Frențiu T, Pârvu M, **Podar D**. 2021 Heavy Metal-Resistant Filamentous Fungi as Potential Mercury Bioremediators. *J. Fungi*, 7(5), 386. [10.3390/jof7050386](https://doi.org/10.3390/jof7050386)
5. Tiodar ED, Văcar CL, **Podar D**. 2021 Phytoremediation and Microorganisms-Assisted Phytoremediation of Mercury-Contaminated Soils: Challenges and Perspectives. *Int. J. Environ. Res. Public Health*, 18, 2435. [10.3390/ijerph18052435](https://doi.org/10.3390/ijerph18052435)
6. **Podar D**, Macalik K, Réti KO, Martonos I, Török E, Carpa R, Weindorf DC, Csiszár J, Székely G 2019 Morphological, physiological and biochemical aspects of salt tolerance of halophyte *Petrosimonia triandra* grown in natural habitat. *Physiol. Mol. Biol. Plants*, 25(6):1335-1347. [10.1007/s12298-019-00697-x](https://doi.org/10.1007/s12298-019-00697-x)
7. Menguer P, Vincent T, Miller AJ, Brown JKM, Vincze E, Borg S, Preben BH, Sanders D, **Podar D**. 2018 Improving zinc accumulation in barley endosperm using HvMTP1 transition metal transporter. *Plant Biotechnol. J.*, 16(1): 63-71. [10.1111/pbi.12749](https://doi.org/10.1111/pbi.12749)
8. **Podar D**, Scherer J, Noordally Z, Herzyk P, Nies D, Sanders D. 2012 Metal selectivity determinants in a family of transition metal transporters. *J. Biol. Chem.* 287: 3185-3196. [10.1074/jbc.M111.305649](https://doi.org/10.1074/jbc.M111.305649)
9. **Podar D**, Sanders D. 2010 Biofortification of barley grains by cell-type-specific expression of a vacuolar metal transporter, *Romanian Biotechnol. Lett.*, 15(2): 117-119.
10. **Podar D**, Ramsey MH. 2005 Effect of alkaline pH and associated Zn on the concentration and total uptake of Cd by lettuce: comparison with predictions from the CLEA model, *Sci. Tot. Environ.*, 347: 53-63. [10.1016/j.scitotenv.2004.11.024](https://doi.org/10.1016/j.scitotenv.2004.11.024)
11. **Podar D**, Ramsey MH, Hutchings MJ. 2004 The effect of cadmium, zinc and substrate heterogeneity on yield, shoot metal concentration and metal uptake by *Brassica juncea*: implications for human health risk assessment and phytoremediation, *New Phytol.*, 163: 313-324. [10.1111/j.1469-8137.2004.01122.x](https://doi.org/10.1111/j.1469-8137.2004.01122.x)

#### ISI Papers as co-author:

12. Balázs HE, Schmid CAO, Cruzeiro C, **Podar D**, Szatmari P-M, Buegger F, Hufnagel G, Radl V, Schroeder P. 2021 Post-reclamation microbial diversity and functions in hexachlorocyclohexane (HCH) contaminated soil in relation to spontaneous HCH tolerant vegetation, *Sci. Tot. Environ.*, 144653. [10.1016/j.scitotenv.2020.144653](https://doi.org/10.1016/j.scitotenv.2020.144653)
13. Ciorîță A, Tripon SC, Mircea IG, Podar D, Barbu-Tudoran L, Mircea C, Pârvu M. 2021 The Morphological and Anatomical Traits of the Leaf in Representative Vinca Species Observed on Indoor- and Outdoor-Grown Plants. *Plants*, 10(4):622. [10.3390/plants10040622](https://doi.org/10.3390/plants10040622)
14. Butiuc-Keul A, Carpa R, **Podar D**, Szekeres E, Muntean V, Iordache D, Farkas A. 2021 Antibiotic Resistance in *Pseudomonas* spp. Through the Urban Water Cycle. *Curr Microbiol* 78: 1227-1237. [10.1007/s00284-021-02389-w](https://doi.org/10.1007/s00284-021-02389-w)

15. Turtureanu PD, Bec S, Hurdu B, Saillard A, Šibík J, Balázs ZR, Barros C, Novikov A, Renaud J, **Podar D**, Thuiller W, Pușcaș M, Choler P. **2020** Biogeography of intraspecific trait variability in matgrass (*Nardus stricta*): high phenotypic variation at the local scale exceeds large scale variability patterns. *Perspectives in Plant Ecology, Evolution and Systematics*, 46:125555. [10.1016/j.ppees.2020.125555](https://doi.org/10.1016/j.ppees.2020.125555)
16. Farkas A, Mereuti F, Butiuc-Keul A, **Podar D**, Roba C, Bălc R. **2020** Effects of Long-Term exposure to Heavy Metals upon Rhizosphere Bacteria from Baia Mare Area (Maramureș County, Romania). *Geomicrobiology Journal* 37(9): 867-876. [10.1080/01490451.2020.1795319](https://doi.org/10.1080/01490451.2020.1795319)
17. Balázs HE, Schmid CAO, **Podar D**, Hufnagel G, Radl V, Schroeder P. **2020** Development of microbial communities in organochlorine pesticide contaminated soil: a post-reclamation perspective. *Applied Soil Ecology*, 150:103467. [10.1016/j.apsoil.2019.103467](https://doi.org/10.1016/j.apsoil.2019.103467)
18. Gargiulo R, Pironon S, Zheleznaya E, Sanchez MD, Balázs ZR, **Podar D**, Wilkinson T, Jäkäläniemi A, Kull T, Väre H, Fay MF. **2019** Phylogeography and post-glacial dynamics in the clonal-sexual orchid *Cypripedium calceolus*. *Journal of Biogeography*, 46(3): 526-538. <https://doi.org/10.1111/jbi.13528>
19. McGladdery C, Weindorf DC, Chakraborty S, Li B, Paulette L, **Podar D**, Pearson D, Kusi NYO, Duda B. **2018** Elemental assessment of vegetation via portable X-ray fluorescence (PXRF) spectrometry, *Journal of Environmental Management*, 210: 210-225. [10.1016/j.jenvman.2018.01.003](https://doi.org/10.1016/j.jenvman.2018.01.003)
20. Balázs EH, Schmid CAO, Feher I, **Podar D**, Szatmari P-M, Marinceș O, Balázs ZR, Schröder P. **2018** HCH phytoremediation potential of native plant species from a contaminated urban site in Turda, Romania, *Journal of Environmental Management*, 223: 286-296. [10.1016/j.jenvman.2018.06.018](https://doi.org/10.1016/j.jenvman.2018.06.018)
21. Mot AC, Puscas C, Miclea C, Naumova-Letia G, Dorneanu S, **Podar D**, Dissmeyer N, Silaghi-Dumitrescu R. **2018** Redox control and autooxidation of class 1, 2 and 3 phytooglobins from *Arabidopsis thaliana*. *Scientific Reports*, 13714. [10.1038/s41598-018-31922-4](https://doi.org/10.1038/s41598-018-31922-4)
22. Farkas A, Butiuc-Keul A, Ciatarăș D, Crăciunaș C, **Podar D**, Dragan-Bularda M. **2013** Microbiological contamination and resistance genes in biofilms occurring during the drinking water treatment process, *Science of the Total Environment*, 443: 932-938. [10.1016/j.scitotenv.2004.11.024](https://doi.org/10.1016/j.scitotenv.2004.11.024)
23. Naszradi T, Badacsonyi A, Keresztényi I, Podar D, Csintalan Zs, Tuba Z. **2007** Comparison of two metal surveys by moss *Tortula ruralis* in Budapest, Hungary, *Environmental Monitoring and Assessment*, **134**(1-3): 279-285. [10.1007/s10661-007-9617-2](https://doi.org/10.1007/s10661-007-9617-2)

#### Romanian Journals:

24. Fábrián I, Török E, **Podar D**, Székely Gy. **2018** Plant ascorbate peroxidase: molecular phylogeny and role in oxidative stress. *Studia Universitatis Babeș-Bolyai, Biologia*, LXIII(2): 153-168.
25. Balázs ZR, Roman A, Balázs HE, Căpraș D, **Podar D**. **2016** Rediscovery of *Cypripedium calceolus* L. in the vicinity of Cluj-Napoca (Romania) after 80 years. *Botanical Contribution*, LI: 43-53.
26. Rigo G, Székely G, **Podar D**, Ayaydin F, Zsigmond L, Kovacs H, Kiraly A, Szabados Lz, Koncz Cs, Cseplo A. **2014** The role of *Arabidopsis* genes involved in abiotic (osmotic, oxidative and gravitropic) stress response regulations. *Studia Universitatis Babeș-Bolyai, Biologia*, LIX: 63-70.
27. Lung I, **Podar D**, Soran ML, Stan M. **2013** Quantification of Total Flavonoids and Phenolic Acids from Microwave Irradiated and Non-irradiated Plants, *Advances in Research* 1(1): 1-10.
28. **Podar D**, **2010** Plant transporters involved in heavy metal homeostasis. *ELBA Bioflux* 2(2):82-87.
29. **Podar D**, Dobrota C, Trifu M. **2004** Uptake of heavy metals by maize (*Zea mays*) plants cultivated on mine spoils, *Studia Universitatis Babeș-Bolyai, Biologia*, 49(1): 45-60.

30. Dobrota C, Sabau D. **2000** Plants as heavy metals hyperaccumulators and their role in phytoremediation, microbiology, mineral exploration and phytomining, *Evolution and Adaptation*, **T.6**: 143-147

#### Other journals:

31. **Podar D**, Dobrota C, Gadea S, Macovei L. **2000** The accumulation of carbohydrates and heavy metals in the vegetative organs of *Zea mays*. In: Abstracts of the Annual International Session of Scientific Debates, Timisoara, 32(2): 691-696.
32. Macovei L, Gadea S, Dobrota C, **Podar D**. **2000** The influence of biological active substance “crossing” on some physiological processes and on respiratory enzymes at beans. In: Abstracts of the Annual International Session of Scientific Debates, 32(3): 813-818.
33. Dobrota C, Sabau-**Podar D**, Macovei L, Gadea S. **2000** The influence of heavy metals on growth and development of maize plants, In: *Papers of the Symposium Agriculture and alimentation – now and in future*, Vol. I, pp: 6-9, Ed. Academic Pres, Cluj-Napoca.
34. Dobrota C, Sabau-**Podar D**, Macovei L, Gadea S. **2000** The influence of low temperatures on carnation (*Dianthus sp.*) cell culture, In: *Papers of the Symposium Agriculture and alimentation – now and in future*, Vol. I, pp: 10-14, Ed. Academic Pres, Cluj-Napoca.
35. Macovei L, Gadea S, Tamas E, Dobrota C, Sabau-**Podar D**, Dragos-Faragau M. **2000** Influence of biological active substance “crossing” to the physiological processes at three types of leguminous plants, In: *Papers of the Symposium Agriculture and alimentation – now and in future*, Vol. I, pp: 21-24, Ed. Academic Pres, Cluj-Napoca.
36. Gadea S, Macovei L, Tamas E, Dobrota C, Sabau-**Podar D**, Dragos-Faragau M. **2000** The influence of the hormone balance on the organogenetic reaction *in vitro* of hop minicuttings, In: *Papers of the Symposium Agriculture and alimentation – now and in future*, Vol. I, pp: 25-27, Ed. Academic Pres, Cluj-Napoca.

#### Chapters:

37. **Podar D**. **2012** Chapter 2: Plant Growth and Cultivation, in *Plant Mineral Nutrients: Methods and Protocols*, Ed. Maathuis, FJM., Vol. 953: 23-45, Humana Press, Springer Science + Business Media, LLC, New York, USA (due 31 October 2012). DOI: 10.1007/978-1-62703-152-3\_2. Methods in Molecular biology. (<http://www.springer.com/life+sciences/plant+sciences/book/978-1-62703-151-6>)
38. Maathuis FJM, **Podar D**. **2011** Chapter 13 – Efficient uptake and utilization of cations: K/Ca/Mg in *The Molecular Basis of Nutrient Use Efficiency in Crops*, Eds Hawkesford MJ. & Barraclough PD., Wiley-Blackwell [doi:10.1002/9780470960707.ch13](https://doi.org/10.1002/9780470960707.ch13).

#### Books:

39. Pop-Păcurar I, **Podar D**, Domi D. **2018** Caiet de lucrări practice Biologie cls a VI-a, Editorial ART Group, București, ISBN 978-606-003-112-3.
40. Pop-Păcurar I, **Podar D**. **2017** Biology cls a V-a, Editorial ART Group, București, ISBN 978-606-710-357-1.