



## Europass Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Gabriela SOREANU, PhD Eng., Associate Professor**

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Nationality Romanian

Date of birth 14/02/1972

Gender Female

### Professional experience

Dates Since 2021

Occupation or position held Associate Professor

Name and address of employer Technical University "Gheorghe Asachi" of Iasi, Faculty of Chemical Engineering and Environmental Protection

Dates Since 2013

Occupation or position held Lecturer

Name and address of employer Technical University "Gheorghe Asachi" of Iasi, Faculty of Chemical Engineering and Environmental Protection

Dates Since 2002

Occupation or position held Teaching assistant

Name and address of employer Technical University "Gheorghe Asachi" of Iasi, Faculty of Chemical Engineering and Environmental Protection

Dates 2001

Occupation or position held Research assistant

Name and address of employer Technical University "Gheorghe Asachi" of Iasi, Faculty of Chemical Engineering and Environmental Protection

### Education

Dates 1996-2000

Title of qualification awarded PhD in Chemical Engineering

Principal subjects/occupational skills covered/Specialisation Optimisation of chemical processes

Name and type of organisation providing education and training Technical University "Gheorghe Asachi" of Iasi, Faculty of Chemical Engineering and Environmental Protection

Dates	1995-1996
Title of qualification awarded	MSc in Chemistry
Principal subjects/occupational skills covered/Specialisation	Unconventional methods of wood and other vegetal resources chemical processing
Name and type of organisation providing education and training	Technical University "Gheorghe Asachi" of Iasi, Faculty of Chemical Engineering and Environmental Protection
Dates	1990-1995
Title of qualification awarded	BSc in Chemical Engineering
Principal subjects/occupational skills covered/Specialisation	Technology of cellulose, paper and fibers
Name and type of organisation providing education and training	Technical University "Gheorghe Asachi" of Iasi, Faculty of Chemical Engineering and Environmental Protection

### Relevant formation stages

Dates	2004-2007
Title of qualification awarded	NSERC (The Natural Sciences and Engineering Research Council of Canada) <b>postdoctoral fellow</b>
Principal subjects/occupational skills covered/Project field	<b>Biotreatment of hydrogen sulphide from biogas</b>
Name and type of organisation providing education and training	Environment Canada, Wastewater Technology Centre, Burlington, ON, Canada
Dates	2002-2003
Title of qualification awarded	<b>Postdoctoral fellow</b> and teaching assistant
Principal subjects/occupational skills covered/Project field	<b>Biofiltration of volatile organic compounds from air</b>
Name and type of organisation providing education and training	Université de Sherbrooke, Faculté de Génie, Sherbrooke, QC, Canada

### International and national grants within the last 5 years

- Project PCE 39/2021, Program PN-III-P4/ Fundamental and frontier research (UEFISCDI), 2021-2023 (director), title: Biofiltration of air from urban automotive underground spaces / BIO-AUTO;
- Project 301PED/2020, Program PN-III-P2-2.1/ Competitiveness through research, development and innovation (UEFISCDI), 2020-2022 (director), title: Biotrickling filtration upgrade in the context of atmospheric protection and climate change / BIO-UP;
- Project RDI-STAR 157/2017, RDI Program for Space Technology and Advanced Research-STAR (Romanian Space Agency-ROSA), 2017-2019 (**director**), title: Sustainable biochemical method for air revitalization in spacecrafts / BIO-MARS;
- Project ERANET 107 / 01.05.2019, 2019-2021 (**team member**), title: Closing the Water Cycle Gap with Harmonised Actions for Sustainable Management of Water Resources/Water Harmony;
- Bilateral project of research Romania-Norway RO14/EEA Grants, National Research Authority, no. 18 BIL/2017 (**director**), title: Bioconcepts in environmental protection and management: promoter of bilateral relationship between Romanian and Norwegian research entities;
- Grant awarded within Program of international competition, University of Castilla La Mancha, **Spain**, june 2017 (1 month) (**investigator principal**), research: Energetic valorization of biomass;
- Grant awarded within Program of international competition, University of Castilla La Mancha, **Spain**, september 2016 (1 month)(**investigator principal**), research: Energetic valorization of biomass;
- Grant awarded within Program of international competition, University of Castilla La Mancha, **Spain**, co-founded by European Funds for Regional Development, july 2015 (1 month) (**principal investigator**), research: Energetic valorization of biomass;
- Grant 305P/23.02.2016, Technical University "Gheorghe Asachi" of Iasi, Romania, 2016 (**director**): Study concerning the measurements of gas emissions issued from the building heating systems in the urban area of Iasi municipality;
- Project PN-II-PT-PCCA-2013-4-2165, National Partnership Program, 2014-2016 (**team member**), title: Autonom antibacterial venting and luminating modular green system for curtain wall/ VALMGreen.

**Other achievements related to expertise and international visibility**

- Co-director of PhD thesis at **University of Castilla La Mancha (Spain)** – 2016 to 2019;
- PhD Thesis Referee Committee Member, **University of Castilla La Mancha (Spain)** – July 2017, July 2018;
- **Editorial board member** of *Nanotechnology for Environmental Engineering* (**Springer** journal) – since 2015; **advisory panel member**, *Sustainability* (**MDPI** journal) – since 2020;
- **Invited professor**, **University of Castilla La Mancha (Spain)** – June 2014, July 2015;
- **Invited expert**, **AUF** federal meeting (The Agence Universitaire de la Francophonie) (Bulgary) – March 2012;
- **Academic responsible** for interinstitutional agreements (**Université de Sherbrooke –Canada, University of León –Spain, University of Nantes - France**) within Erasmus program –2015 to 2021;
- **Scientific reviewer** for many ISI quoted journals (since 2008): *Bioresource Technology*, *Chemical Engineering Journal*, *Journal of Environmental Engineering and Science*, *Applied Microbiology and Biotechnology*, *Journal of Biotechnology*, *Environmental Technology*, *Journal of Hazardous Materials*, *International Journal of Chemical Reactor Engineering*, *Process Biochemistry*, *International Journal of Chemical Engineering*, *Journal of Zhejiang University Science*, *Journal of Chemical Technology and Biotechnology*, *Process Safety and Environmental Protection*, *Journal of Agricultural Science*, *Environmental Science and Technology*, *Desalination and Water Treatment*, *CLEAN - Soil, Air, Water; Air Quality, Atmosphere & Health*, *Applied Biochemistry and Biotechnology*, *Chemosphere*, *Biosystems Engineering*, *Environmental Science and Pollution Research*, *Applied Biochemistry and Biotechnology*, *Fuel*, *Biochemical Engineering Journal*

**Didactical activity**

Pollution prevention and environmental protection;  
 Optimisation of technological processes;  
 Technologies of acquisition, monitoring and diagnosis of environmental quality;  
 Environmental monitoring;  
 Green technologies for atmospheric protection (international lecture)

**Research interests**

Biological treatment of gaseous fluxes;  
 Processing of liquid fluxes and energetical valorisation of biomass;  
 Modelling and optimisation of processes in chemical and environmental engineering

**Scientific portfolio**

Books: 12 (1 co-edited Elsevier book, 2 Elsevier book chapters, 1 InTech book chapter)  
 Articles in journals and conference proceedings: 56 (**38 in ISI journals\***, 8 in conference proceeding)  
 Patents: 3  
**Cumulated IF > 115\***  
 (\* based on updated impact factors)

Scientific visibility: **Hirsh index (h) = 15**

**Awards and medals for research-innovation (selected)**

2016 - Salon Bruxelles-INNOVA 2016 (**Gold medal**)  
 2009 – Salon International des Inventions de Genève, Switzerland (**Gold Medal**);  
 2008 – The Belgian and International Trade Fair for Technological Innovation – INNOVA, Brussels, Belgium (**Gold Medal**)

**International collaborations**

Environment Canada, Université de Sherbrooke, University of Guelph, Research and Development Institute for the Agri-Environment Québec, University of Castilla La Mancha, University of Leon, Norwegian University of Life Sciences, University of Nantes

**Personal skills and competences**

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment  
*European level (\*)*

**French language**

**English language**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient User	C2	Proficient User	C1	Proficient User	C1	Proficient User	C1	Proficient User
C1	Proficient User	C2	Proficient User	C1	Proficient User	C1	Proficient User	C1	Proficient User

(\*) *Common European Framework of Reference for Languages*

**Technical skills and competences**

Process engineering, conception and exploitation of equipments in environmental engineering

Organisational skills and competences	<p><b>Organization of scientific events:</b></p> <ul style="list-style-type: none"> <li>- <b>Co-Chair</b> workshops ("Promotion of Romanian Research Networking towards ESA's Programs", Iasi, Romania, february 2018; "New RDI initiatives under STAR Programme in order to meet ESA's objectives", Iasi, Romania, november 2019)</li> <li>- <b>Chair</b> of the international conference organising committee (CSA 2015 Joint International Conference, Iasi, Romania, october 2015)</li> <li>- Member of the secretary committee of International and national conferences (ZFICPM2009-2012; ICEEM2002, 2015, 2017)</li> </ul> <p><b>Scientific coordination of students:</b></p> <ul style="list-style-type: none"> <li>- Coordination of BSc and MSc Thesis</li> <li>- <b>Coordination of PhD thesis: 1 (co-director, 2016-2019, UCLM-Spain)</b></li> </ul> <p><b>Management of research projects:</b></p> <ul style="list-style-type: none"> <li>- <b>Certificate</b> in Project Management (Canada)</li> <li>- BIO-SPACE LIFE Laboratory Head (TUIASI)</li> </ul>
Social skills and competences	Running of individual and team activities, in the frame of multidisciplinary and multicultural environments (e.g. Environment Canada, Université de Sherbrooke)
Driving licence	Yes

### List of Publications (selected)

#### Selected relevant publications for the project field

1. **Soreanu G., Dumont E.** (eds.) (2020). From Biofiltration to Promising Options in Gaseous Fluxes Biotreatment: Recent Developments, New Trends, Advances, and Opportunities. **Elsevier**. ISBN 9780128190647.
2. **Soreanu G., Cretescu I., Diaconu M., Cojocaru C., Ignat M., Samoila P., Harabagiu V.** (2021). Investigation of a biosystem based on *Arthrospira platensis* for air revitalisation in spacecrafts: Performance evaluation through response surface methodology. **Chemosphere** 264, Part 2, doi.org/10.1016/j.chemosphere.2020.128465. **IF=5.778**
3. **Soreanu G., Tomaszewicz M., Fernandez-Lopez M., Valverde J.L., Zuwata J., Sanchez-Silva L.** (2017). CO<sub>2</sub> gasification process performance for energetic valorization of microalgae. **Energy** 119: 37-43. **IF=6.082**
4. Parascanu M.M., Sandoval-Salas F., **Soreanu G., Valverde J.L., Sanchez-Silva L.** (2017) Valorization of Mexican biomasses through pyrolysis, combustion and gasification processes. **Renewable and Sustainable Energy Reviews** 71: 509-522. **IF=12.110**
5. **Soreanu G.** (2016). Insights into siloxane removal from biogas in biotrickling filters via process mapping-based analysis. **Chemosphere** 146: 539-546. **IF=5.778**
6. Raschitor A., **Soreanu G., Fernandez-Marchante C.M., Lobato J., Cañizares P., Cretescu I., Rodrigo M.A.** (2015). Bioelectro-Claus processes using MFC technology: Influence of co-substrate. **Bioresource Technology** 189: 94-98. **IF=7.539**
7. **Soreanu G., Dixon M., Darlington A.** (2013). Botanical biofiltration of indoor gaseous pollutants – A mini-review. **Chemical Engineering Journal** 229: 585-594. (**article is feature on the cover of the issue**) **IF=10.652**
8. **Soreanu G., Falletta P., Béland M., Edmonson K., Ventresca B., Seto P.** (2010). Empirical modelling and dual-performance optimisation of a hydrogen sulphide removal process for biogas treatment. **Bioresource Technology** 101(23): 9387-9390. **IF=7.539**
9. Dastous P.A., Nikiema J., **Soreanu G., Bibeau L., Heitz M.** (2008). Elimination of methanol and ethanol by biofiltration: An Experimental Study. **Water Air and Soil Pollution - Focus** 8(3): 275-286. **IF=1.900**
10. **Soreanu G., Béland M., Falletta P., Edmonson K., Seto P.** (2008). Laboratory pilot scale study for H<sub>2</sub>S removal from biogas in an anoxic biotrickling filter. **Water Science and Technology** 57(2): 201-207. **IF=1.638**

**Cumulative IF = 59.016**, for the above selected publications

Date	October 2021	Assoc.Prof.dr.eng. Gabriela Soreanu
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