

## Europass Curriculum Vitae

#### Personal information

First name(s) / Surname(s) Oprescu (married Sirbu) Elena-Emilia

Address(es) Ploieşti, Prahova (Romania)

Mobile

Fax(es)

E-mail(s) oprescuemilia@gmail.com; elena.oprescu@upg-ploiesti.ro

Nationality Romanian

Date of birth 14 March 1984

Gender Female

Work experience

Dates 2016-present

Main activities and responsibilities | Teaching activity at Chemistry Department, research activity in the field of biomass

processing

Name and address of employer | Petroleum - Gas University of Ploieşti, Faculty of Petroleum Technology and Petrochemistry,

Bucharest Blvd., no. 39, code 100680, Ploiesti, Romania

The type of activity | Public university, education, research

Dates 2019-present

Occupation or position held Scientific researcher second degree

Main activities and responsibilities Research activity in the field of biofuels

Name and address of employer | Alternative bioresources and biofuels Team, from National Institute for Research and Development in

Chemistry and Petrochemistry ICECHIM, 202 Spl. Independentei, 060021, Bucharest, Romania -part

time.

The type of activity Research

Dates 2013-2016

Main activities and responsibilities 
Teaching activity at Chemistry Department, research activity in the field of biomass

processing

Name and address of employer | Petroleum – Gas University of Ploieşti, Faculty of Petroleum Technology and Petrochemistry,

Bucharest Blvd., no. 39, code 100680, Ploiesti, Romania

The type of activity | Public university, education, research

Dates | 2013-2019

Occupation or position held Scientific researcher third degree

Main activities and responsibilities Research activity in the field of biofuels

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Chemistry and Petrochemistry ICECHIM, Bucharest, 202 Spl. Independentei, 060021, Bucharest,

Romania-part time.

The type of activity Research

Dates 2010-2013

Occupation or position held | Scientific researcher

Main activities and responsibilities | Research activity in the field of biofuels

Name and address of employer | Alternative bioresources and biofuels Team, from National Institute for Research and Development in

Chemistry and Petrochemistry ICECHIM, 202 Spl. Independentei, 060021, Bucharest, Romania

The type of activity Research

Dates | 2007-2010

Occupation or position held Research Assistant

Main activities and responsibilities | Research activity in the field of biofuels

Name and address of employer | Alternative bioresources and biofuels Team, from National Institute for Research and Development in

Chemistry and Petrochemistry ICECHIM, 202 Spl. Independentei, 060021, Bucharest, Romania

The type of activity Research

### **Education and training**

Dates | September 2022

Title of qualification awarded Habilitation in the field of Chemical Engineering

Principal subjects / occupational skills Habilitation thesis title: "Research in the field of biomass processing".

covered

Name and type of organisation providing education and training Petroleum – Gas University of Ploieşti, Faculty of Petroleum Technology and Petrochemistry, Bucharest Blvd., no. 39, code 100680, Ploiesti, Romania

Dates 2009 - 2013

Title of qualification awarded | PhD degree in the field of Chemical Engineering

Principal subjects / occupational skills

Covered PhD thesis title: "Glycerol valorification as additives/components for diesel fuels"

Name and type of organisation providing education and training Petroleum – Gas University of Ploieşti, Faculty of Petroleum Technology and Petrochemistry, Bucharest Blvd., no. 39, code 100680, Ploiesti, Romania

Dates 2007 - 2009

Title of qualification awarded Master degree

Principal subjects / occupational skills | Dissertation thesis title: "Thiosemicarbazone used as chelating agents of heavy metals in the analysis of environmental samples"

Name and type of organisation University of Bucharest, Faculty of Chemistry, 4-12 Regina Elisabeta Blvd., sector 3, 030018,

providing education and training | Bucharest, Romania | Bucharest, Romania

Dates | 2004-2007

Title of qualification awarded Bachelor degree in Chemistry

Principal subjects / occupational skills covered Bachelor thesis title: "Complex combinations of copper salts with thiosemicarbazones

Name and type of organisation providing education and training University of Bucharest, Faculty of Chemistry, 4-12 Regina Elisabeta Blvd., sector 3, 030018, Bucharest, Romania

# Personal skills and competences

Mother tongue(s) Romanian

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#### Other language(s)

# Self-assessment European level (\*)

**English** 

#### **English**

	Unders	Understanding			Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production				
C1	Proficient user	C1	Proficient user	В2	Independent user	B2	Independent user	C1	Proficient user	

(\*) Common European Framework of Reference (CEF) level

Social skills and competences

sociable, communicative, reliable, conscientious, responsible and very creative person

Computer skills and competences

Microsoft office, Internet, Adobe Professional, Bio-Rad, Origin

Additional Information

#### Didactic activity:

- Tutoring PhD students 3 PhD students
- Coordination of master's dissertations 10 dissertation theses
- Coordination of Bachelor theses 9 bachelor theses
- Courses: Organic Chemistry 2 (year of study: 2, semester: 1, bachelor program), Organic Chemistry 3 (year of study: 2, semester: 1, bachelor program) at study program Safety and Food Control; Polymers (year of study: 4, semester: 2, bachelor program) at study program: Petroleum Processing and Petrochemistry; Spectrometric methods for studying the structure and composition of products (year of study: 1, semester: 2, master programme); By-product recycling management (year of study: 2, semester: 2, master programme) at study program Product Quality and Environmental Factors Control and Bioresources (year of study: 2, semester: 1, master programme) at study program Advanced Technologies for Petroleum Processing
- •Laboratory: Organic Chemistry 2 (year of study: 2, semester: 1, bachelor program), Organic Chemistry 3 (year of study: 2, semester: 1, bachelor program) at study program Safety and Food Control; Polymers (year of study: 4, semester: 2, bachelor program) at study program: Petroleum Processing and Petrochemistry; Spectrometric methods for studying the structure and composition of products (year of study: 1, semester: 2, master programme); By-product recycling management (year of study: 2, semester: 2, master programme) at study program Product Quality and Environmental Factors Control and Bioresources (year of study: 2, semester: 1, master programme) at study program Advanced Technologies for Petroleum Processing Pollutants Analysis ((year of study: 1, semester: 1, master programme) at study program Advanced Technologies in Environmental Protection Engineering.

#### Awards and distinctions:

- 3 gold medals (RO Patent application no. a 2015 -0803/09.11.2015 Proinvent, Cluj, 2016, Gold Medal; RO Patent 126,669 INVENTIKA- 2010,WO/2015/069129- Brussels INNOVA-EURECA, Gold Medal and Special Prize of Thailand delegation); medal PRO INVENT 2022 (RO Patent 134949) at the 20th edition of the International Exhibition of Research, Innovations and Inventions, Cluj, Romania;
- UEFISCDI awards for research results 6

Affiliations to Professional Societies: Member of the Romanian Chemical Society

#### Other professional activities:

- Member of the Faculty Council of Faculty of Petroleum Technology and Petrochemistry (2020-2024)
- The head of the voting commission of Faculty of Petroleum Technology and Petrochemistry (2020-2024)
- Member of the Organizing Committee of the 4<sup>th</sup> International Colloquium Energy and Environmental Protection Conference (2020)

#### Research activity

- the professional activity has been focused on applied research regarding complex exploitation of renewable resources, particularly in: development of environmental technologies and green products; chemical processing of biomass to obtain biofuels of second and third generation; glycerol conversion into additives/components for diesel fuels and ecological solvents, preparation and characterization of various catalytic systems; chemical analysis of organic compounds

#### Experience gained as director/member in the national and international research projects:

• Project leader (November 2020- November 2022- 181 TE /2020): "Value added products from microalgae biomass applying biorefinery concepts".

- Project leader (May 2018- April 2020):" Synergistic conversion of algae: from biodiesel and its additives to syngas" Project number: 104 PD/2018, competition PN-III-P1-1.1-PD-2016
- Postdoctoral project (April 2014 December 2015): "Valorification of products and by-products resulting from biomass processing "- Project number: POSDRU/159/1.5/S/134398.
- Project Responsible (April 2018- May 2021):"Energetic efficiency biogas plants improvement by integrated system: biogas-microalgae-biofuels in frame of biorefinery concept (Algal Biogas Concept Energy)" (AlgaeBiogazConcept Energy)"- Project number: 32 PCCDI/2018- Project Responsible no 4: "Energy recovery of solid digestate from biogas plants", competition PN-III-P1-1.2-PCCDI-2017-0541.
- Project Responsible, (2015), PN.09.09.02.12, "Ecological fluids with industrial applications".
- Project Responsible, (2013-2014),PN.09.09.02.10/ "Biofuels from waste, obtained by non-alkaline catalysis reactions".

#### Experience gained as team member in:

- PNII-PCCA 65-2014 / "Integrated green technology system for producing advanced biofuels"-AdvBioFuels, (2014-2016).
- PNII-PCCA 162-2014 / "Interdisciplinary research on the use of elastic type products based on collage to treat rapeseed crops to increase productivity, and reduce crop losses RAPESTIK", (2014-2016).
- PN II PCCA 44-2012 / "Integrated system for producing synthetic aviation fuel from algal biomass" ALGAL-SAF (2012-2016).
- PN II PCCA 112-2012 / "Interdisciplinary research on seed treatment with collagen hydrolysates for quality indicators increasing, pesticide reduction and sustainable development of agriculture production"- GERMOSTIM (2012-2016).
- PN II 69 CI-2012– Innovation Cheques / "Ecological solvent from inedible fats" 2012.
- PN II 32 104-2008 / "Biodegradable coolant and lubricating fluid with multiple function BIOFLUM" , (2008-2011).
- PN II 31064-2007 / "Technologies for green chemistry products, from fat matters GLI-CO", (2007-2010).
- PN II 61006-2007 / "New microorganisms capable of enzymatic synthesis of active therapeutic biopolymers, using glycerin (by-product of biodiesel obtaining)", (2007-2010).
- CEEX 252 / "Biofertilizers and growth stimulators for sustainable crop plants, additives produced by protein byproducts bio-refining", (2006-2008).
- CEEX 709 / "The transesterification of triglycerides in heterogeneous catalysis assisted unconventional energy: ultrasonic and microwave", (2006-2008).
- CEEX 2-2005 / "Complex exploitation of some renewable natural resources to obtain biofuels, glycerine and ecological solvents BIOTECH", (2005-2008).

Number of papers indexed by ISI Web of Science : 35; National patents: 9

26.06.2024

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