

Curriculum Vitae

INFORMAŢII PERSONALE

Alexandra Corina CONSTANDACHE



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WORK EXPERIENCE

February 2022 – May 2022

Internship - ERASMUS+

École nationale supérieure de chimie de Rennes

Sex Female | Date of birth Nationality Romanian

11 Allée de Beaulieu, 35708 Rennes, Franţa; Tel: +33 2 23 23 80 00, E-mail: contact@ensc-rennes.fr

• Studying of eco-materials with photocatalytic properties in wastewater treatment.

Business or sector The team of chemistry and engineering processes (CIP)

March 2020 - June 2020

Internship - ERASMUS+

École nationale supérieure de chimie de Rennes

11 Allée de Beaulieu, 35708 Rennes, Franța; Tel: +33 2 23 23 80 00, E-mail: contact@ensc-rennes.fr

 Studying of nanocomposite magnetic materials with photocatalytic properties in wastewater treatment.

Business or sector The team of chemistry and engineering processes (CIP)

September 2018 – September 2019

Scrientific Research Assistant

The National Institute for Research and Development in Environmental Protection – INCDPM

294 Splaiul Independenței, 6th District, 060031, Bucharest, Romania; Tel: +40 021 305 26 00, E-mail: incdpm@incdpm.ro

• Documentation regarding the UV treatment methods of waste water from animal husbandry.

Business or sector The laboratory department

February 2018 - May 2018

Internship – ERASMUS+

École nationale supérieure de chimie de Rennes

11 Allée de Beaulieu, 35708 Rennes, Franta; Tel: +33 2 23 23 80 00, E-mail: contact@ensc-rennes.fr

Studying and designing sustainable processes dedicated to reducing pollution, as well as analytical
methodologies for evaluating the pollutants tracked and characterizing the interfaces to determine
the performance of these processes.

Business or sector The team of chemistry and engineering processes (CIP)

May 2017 - August 2017

Internship

The National Institute for Research and Development in Environmental Protection – INCDPM

294 Splaiul Independenței, 6th District, 060031, Bucharest, Romania; Tel: +40 021 305 26 00, E-mail: incdpm@incdpm.ro

 Studies and research in the laboratory for synthesis and characterization of oxide nanomaterials (ZnO, TiO₂) with applications in water treatment and soil remediation.

Business or sector Nanomaterials and Buildings Impact against Environment

October 2015 - May 2017

Internship

The Center for Research and Eco – Metallurgical Expertise ECOMET in Faculty of Materials Science and Engineering , University POLITEHNICA of Bucharest

313 Splaiul Independenței, room JF 002, 6th District, 060042, Bucharest, Romania; Tel: +40 21 402 95 92, E-mail: ecomet@ecomet.pub.ro

 Testing of innovative materials used in the removal processes of target pollutants (heavy metals, organic compounds).

Business or sector Nanostructured Materials, Special Alloys and Mechano-Metallurgical Expertise

EDUCATION AND TRAINING

October 2020 - present

PhD's Degree - Environmental engineering

Doctoral School of Biotechnical Systems Engineering, University POLITEHNICA of Bucharest, Romania

• "Photocatalytic nanostructured materials used in wastewater decontamination"

October 2018 - June 2020

Master's Degree – Environmental protection in the metal materials industry

Faculty of Materials Science and Engineering, University POLITEHNICA of Bucharest, Romania

• "Use of Fe₃O₄@ SiO₂@TiO₂ nanostructured materials (with photocatalytic properties) in processes of advanced degradation of persistent organic pollutants"

October 2014 - July 2018

Bachelor's Degree – Engineering and Environmental Protection in Industry

Faculty of Materials Science and Engineering, University POLITEHNICA of Bucharest, Romania

• "Removal of persistent organic pollutants from wastewaters using photocatalysis with ZnO"

PERSONAL SKILLS

Mother tongue

Romanian

Other language(s)

| UNDERS' | UNDERSTANDING | | SPEAKING | |
|-----------|---------------|--------------------|-------------------|----|
| Listening | Reading | Spoken interaction | Spoken production | |
| B1 | B2 | B1 | B1 | B2 |
| | | | | |
| A1 | B1 | A1 | A1 | A1 |
| | | | | |

French

English

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

Communication skills

Good communication skills gained through my experience as intern and hostess.

Organisational / managerial skills

- Excellent organisational skills and teamwork gained through my experience at internships;
- Leadership (currently responsible for a team of 29 people).

Digital skills

- Very good knowledge of Microsoft Office Programs (Excel, Word, PowerPoint and Access) gained during the European Computer Driving Licence courses;
- Good command of photo editing software gained during the high school;
- Good knowledge of C and C++ programming languages.

Other skills

• Love to travel and experience different cultures.

Driving licence

В



ADDITIONAL INFORMATION

Publications

- E. Matei, A. A. Şăulean, M. Râpă, A. Constandache, A. M. Predescu, G. Coman, A. C. Berbecaru & C. Predescu, ZnO nanostructured matrix as nexus catalysts for the removal of emerging pollutants, Environmental Science and Pollution Research (2023) (IF 5.8, Q1);
- A. C. CONSTANDACHE, L. FAVIER, L. COVALIU, A. A. ŞĂULEAN, A. M. PREDESCU, C. PREDESCU and E. MATEI, MORPHOLOGICAL AND STRUCTURAL INVESTIGATIONS OF ZnO RESULTED FROM GREEN SYNTHESIS, U.P.B. Sci. Bull., Series B, Vol. 85, Iss. 2, (2023) (IF 0.5);
- Covaliu-Mierla C.I., Matei E., Stoian O., Covaliu L., Constandache A.C., Iovu H., Paraschiv G., TiO2– Based Nanofibrous Membranes for Environmental Protection, Membranes (2022), 12, 236 (IF 4.2, Q2):
- C Tociu, Gy Deák, C Maria, A A Ivanov, I E Ciobotaru, E Marcu, F Marinescu, C Cimpoeru, I Savin and A C Constandache, Advanced treatment solutions intended for the reuse of livestock wastewater in agricultural applications, IOP Conf. Ser.: Mater. Sci. Eng. 572 012109, (2019).

Honours and awards

 I, II and mention awards at Session of Student Scientific Communications, Section of Engineering and Environmental Protection in Industry, Faculty of Materials Science and Engineering, University POLITEHNICA of Bucharest, 2015-2017, Romania;

Certifications

- HTML Professional Competency Certificate, 2014, Focsani, Romania;
- Certificate of Course Completion "Database Design and Programming With SQL" for satisfactory completion of all coursework and training, ORACLE Academy, 2014, Focsani, Romania;
- ECDL Core Certificate for successfully passed all modules required for the granting of the European Computer Driving Licence Core, 2012, Focsani, Romania;
- Certificate of Course Completion "IT Essentials: PC Hardware and Software", CISCO Networking Academy, 2011, Focsani, Romania;
- Certificate of Seminars Completion of web technologies "Limitele si aspiratiile Web-ului", 2010, Focsani, Romania.