europass

Adina-Nicoleta Trandas

Nationality: Romanian **Date of birth:** 06/09/1999

Email address: adina.trandas@upb.ro

WORK EXPERIENCE

Faculty of Chemical Engineering and Biotechnologies, NUSTPB – Bucharest, Romania

City: Bucharest | **Country:** Romania

University teaching assistant

[11/2024 – Current]

- Guiding and supervising laboratory practical works for courses: Polymer Materials Science, Biocompatibility and Pharmaceutical Testing, Polymer Materials Biocompatibility and Analysis Methods, and Tissue Engineering and Artificial Organs.
- Duties: preparing lab materials, assisting with experimental procedures, ensuring laboratory safety, and supporting course instructors

Research Institute "CAMPUS", National University of Science and Technology Politehnica Bucharest – Bucharest, Romania

City: Bucharest | **Country:** Romania

Engineer

[11/2022 – 11/2024]

The work primarily requires operating and maintenance activities of the equipment in the research laboratories, alongside with substance and material management activities.

EDUCATION AND TRAINING

PhD Student

Chemical Engineering and Bioengineering Doctoral School, NUSTPB [11/2024 – Current]

Field(s) of study: Chemical Engineering | **Thesis:** 3D printed chitosan-based nanocomposite hydrogels with synergistic chemo-photothermal effect for cancer treatment

Master's Degree

Faculty of Medical Engineering, National University of Science and Technology Politehnica Bucharest [10/2022 – 06/2024]

City: Bucharest | **Country:** Romania | **Thesis:** Nanocomposite chitosan-based hydrogels with reduced graphene oxide for chemo-photothermal therapy

Bachelor's Degree

Faculty of Medical Engineering, National University of Science and Technology Politehnica Bucharest [09/2018 – 06/2022]

City: Bucharest | **Country:** Romania | **Thesis:** Influence of zinc oxide thin film deposition on the osteointegration of metallic orthopedic implants

INTERNSHIP

[06/2021 – 09/2021]

Internship stage at the National Institute of Research and Development in Microtechnologies, IMT Bucharest

During this internship period, I have worked directly with thin film deposition and electrochemical processes such as the transfer of graphene sheets onto Si/SiO2 substrates through electrochemical delamination, and zinc oxide thin film deposition onto glass substrates using DC sputtering. I have also assisted to the direct use of thin film deposition equipments (RF magnetron sputtering equipment, atomic layer deposition) and the characterization techniques of thin films.

PUBLICATIONS

[2023]

Properties of europium and silver doped bioglass thin films obtained by two deposition methods: Biointerfaces for bioinert implants

A.-N. Trandaș et al., 2023, Materials Chemistry and Physics, vol. 309, p. 128396

[2021]

Liquid-liquid capillary rise

I. Rasuceanu, C. Patrascu, I. Magos, N. Trandas, and C. Balan, “Liquid-liquid capillary rise,” IOP Conference Series: Earth and Environmental Science, vol. 664, no. 1, p. 012002, May 2021, doi: 10.1088/1755-1315/664/1/012002.

CONFERENCES AND SEMINARS

[26/06/2025 – 11/07/2025] Ferrol, Spain

“Industry 4.0 techniques applied to experimental testing in engineering” Blended Intensive Programme - University of Coruna

Courses: Additive Manufacturing & 3D Design, Arduino Sensoring & Data Acquisiton, Experimental Methods in Polymer Development

[02/06/2025 – 05/06/2025] Brasov, Romania

4th International Conference on Bioengineering and Polymer Science

Poster presentation: "Tri-Polymer Chitosan/Gelatin/κ-Carrageenan Hydrogels: Toward Stable and 3D-Printable Bioinks for Tissue Engineering"

[22/05/2025 – 23/05/2025]

4th EELISA Joint Call "Educating sustainability in chemistry programs using transdisciplinary challenge-based learning"

[07/05/2025 – 09/05/2025] Spain

3rd EELISA Joint Call "Solving Biomaterials Challenges Proposed by Medical Experts", Universidad Politecnica de Madrid

Evaluation of final presentations of groups of students took part in the courses and the workshops in the program.

[04/09/2024 – 07/09/2024]

The 23rd International Conference on Chemistry and Chemical Engineering (RICCCE 23)

Oral Presentation: "Nanocomposite chitosan-based hydrogels with reduced graphene oxide for potential application in chemo-photothermal therapy”

[16/05/2024 – 17/05/2024] Madrid, Spain

2nd EELISA Joint Call "New applications of biomaterials", Universidad Politecnica de Madrid
Evaluation of final presentations of groups of students took part in the courses and the workshops in the program.

[10/05/2024]
Student Scientific Communication Session, Faculty of Chemical Engineering and Biotechnologies, University Politehnica of Bucharest
Participation - Presentation: "Injectable nanocomposite hydrogels based on chitosan and modified graphene oxide"

[16/03/2024 – 22/03/2024] Prague, Czechia
ATHENS Intensive Course "Introduction to Vibrational Spectroscopy" - Erasmus Short mobility, Czech Technical University in Prague

[05/10/2023 – 06/10/2023]
The 8th Edition of The International Conference "From Science to Guidance and Practice"
Workshop participation - "GPP. Improving results through Good Pipetting Practices"

[04/07/2023 – 06/07/2023]
Optical Nanoscopy Workshop on Bio, Carbon-based and Photonic Nanomaterials 2023, neaSPEC

[04/10/2023]
The 8th Edition of The International Conference „Materials Characterization”

[07/06/2023 – 10/06/2023] Bucharest
3rd International Conference on Bioengineering and Polymer Science
During this conference, I have participated with the poster presentation titled "Composite injectable hydrogels based on chitosan and graphene oxide with applications in photothermal therapy".

[05/05/2023]
Student Scientific Communication Session, Faculty of Medical Engineering, University Politehnica of Bucharest
2nd Place Award - Presentation: "Investigation of properties of thin films based on Europium and silver doped bioglass, obtained through pulsed laser deposition and spin coating"

Participation - Presentation: "Injectable hydrogels based on chitosan and graphene oxide for photothermal therapy"

[18/04/2023 – 22/06/2023]
Molecular Biology - DNA Replication and Repair, Intensive Course, MIT - Massachusetts Institute of Technology

[25/01/2023 – 28/01/2023] Bucharest, Romania
Winter School of Bioengineering, EELISA European University & University Politehnica of Bucharest

[14/05/2021]
Student Scientific Communication Session, Faculty of Medical Engineering, University Politehnica of Bucharest
3rd place award - Presentation: "Initiation of flow through hydrophilic and hydrophobic surfaces"

[08/05/2020]
Student Scientific Communication Session, Faculty of Medical Engineering, University Politehnica of Bucharest
Honorary award - Presentation: "Capillarity in the context of two layered liquids"

[01/11/2019 – 22/11/2019]

Introductive Course for 3D Modelling in Autodesk Inventor, University Politehnica of Bucharest

AFFILIATIONS

[2024 – Current]

Faculty of Chemical Engineering and Biotechnologies, NUSTPB

[2022 – Current]

APMG - Advanced Polymer Materials Research Center