

PERSONAL INFORMATION

BĂLȚATU Mădălina Simona

**Lecturer on Faculty of Materials Science and Engineering,
"Gheorghe Asachi" Technical University of Iasi**



 Bulevardul Profesor Dimitrie Mangeron 65, Iași, 700259, Romania,
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<https://simitit.ro/>

<http://orcid.org/0000-0002-5278-8958>

ResearcherID: AAC-8405-2019

Scopus Author ID: 57194827195

Sexul Female | Data nașterii 29/07/1989 | Naționalitatea Romanian

WORK EXPERIENCE

Higher Education

January 2020 - present

Lecturer PhD.Eng - Higher education, teaching professional, research & development
"Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science & Engineering, Dimitrie Mangeron, no. 63, 700050, Iași, România.
University management activities. Responsibilities: initiating projects with national and international funding; quality assurance in the educational process; courses, projects, didactic laboratories.

September 2015 – January 2020

Assistant Professor PhD.Eng - Higher education, teaching professional, research & development
"Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science & Engineering, Dimitrie Mangeron, no. 63, 700050, Iași, România.
University management activities. Responsibilities: initiating projects with national and international funding; quality assurance in the educational process; courses, projects, didactic laboratories.
Type or sector of activity: Higher education

R&D EXPERIENCE

October 2020-present

Manager at SIMTIT ENGINEERING SRL: the company deals with obtaining, characterizing and marketing biocompatible materials.
<https://simitit.ro/>

EDUCATION AND TRAINING

May 2022 - present

Postdoctoral Researcher in the Advanced Research Postdoctoral Training Program
"Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science & Engineering, Dimitrie Mangeron, no. 63, 700050, Iași, România.

September 2014 – June 2017

Ph.D. Degree, Materials Science and Engineering / Materials Engineering
"Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science & Engineering, Dimitrie Mangeron, no. 63, 700050, Iași, România.

October 2012- June 2014

Master degree, Modern Technologies/Industrial Systems
"Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science & Engineering, Dimitrie Mangeron, no. 63, 700050, Iași, România.

october 2008 – une 2012

Engineer Diploma, Specialization Mechanical Engineering
"Gheorghe Asachi" Technical University of Iasi, Faculty of Materials Science & Engineering, Dimitrie Mangeron, no. 63, 700050, Iași, România.

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Limba engleză	C2	C2	C1	C1	C1
Limba franceză	B1	B1	B1	B1	A2

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

PERSONAL SKILLS

Communication skills

- Sociable, quick integration into a new team, efficient, positive thinking;
- Ability to work in a team, honesty, commitment and responsibility;
- Adaptability and flexibility to the schedule and work rhythm of the group, self-improvement skills;
- Excellent communication skills acquired following the presentations at the conferences I attended and following the sessions of scientific circles.

Organisational / managerial skills

- Project and team management experience: Director in 3 internal grants.
- Member of the organizing committee of prestigious international events:
 - EUROINVENT – The European Exhibition of Creativity and Innovation, which promotes creativity in all its forms, period 2015-2023;
 - ICIR - International Conference on Innovative Research, period 2015-2023.
- Member of the editorial team of the indexed magazine BDI - European Journal of Materials Science And Engineering.
- Ability to analyze, evaluate and self-assess scientific activity, make decisions under stress and meet deadlines.

Technical skills and competences

- Excellent skills and technical skills obtained through laboratory work carried out within the metallic biomaterials research group (sample preparation and characterization);
- Concerns concretized and highlighted within the list of works in fields of competence: Biomaterials: material characterization, testing and expertise; medical devices; surface properties; tissue-implant interaction phenomena, Materials science, Heat treatments, Heating equipment and installations.

Digital competence

- Skills to use Microsoft Office (Word, Excel, PowerPoint); Visual Basic, Delphi, Windows Autodesk products.

Driver's license

- Driving license category B.

PROJECTS WON AS PRINCIPAL INVESTIGATOR

2019-2020

"Obtaining original biocompatible alloys used in medical prosthetics (NewTiT)",

- **Project director: Balțatu Mădălina Simona**
- Internal Grant Contract no. GnaC2018_48/2019
- Project value: 28,000 lei

2018-2020

"Ecological procedures for processing metallic biomaterials",

- **Project manager: Balțatu Mădălina Simona**
- TUIASI-COMPETE project, financed by the Ministry of Research and Innovation within the PNCDI III competition, Program 1 - Development of the national research and development system, Subprogramme 1.2 - Institutional performance - Institutional development projects - Projects for funding excellence in R&D;
- Project director: Loghin Maria Carmen
- Project value: 134,000 lei
- Project duration: 2018 – 2020

2021

Project to support publishing capacity - PUBLICATIONS, competition organized within TUIASI,

- **Project director: Balțatu Mădălina Simona**
- Internal Grant Contract GI/P38/2021
- Project value: 45,000 lei

RESULTS OF THE ACTIVITY RESEARCH

Publications

- **58 articles (ANNEX 1)**
 - ❖ 34 articles published in journals with an impact factor > 0.5: (Coatings, Bioengineering, Materials and Corrosion, Materials Chemistry and Physic, Journal of the Mechanical Behavior of Biomedical Materials, Revista de Chimie, Materials, Advanced Materials Research, International Journal of Modern Manufacturing Technologies, Micromachines, Applied Sciences, Acta Physica Polonica A, Archives of Metallurgy and Materials).
 - ❖ 7 ISI Proceedings, 17 BDI
 - ❖ 18 articles published as first author and 15 as corresponding author
- **6 books** (4 books published by internationally recognized publishing houses and 2 books published by nationally recognized publishing houses)
- **4 internationally recognized book chapters** (IntechOpen)
- **5 patent applications**

International recognition

- **Citations: 429** (Web of Science); **515** (Scopus); **647** (Google Scholar)
- **H-index: 14** (Web of Science), **14** (Scopus), **16** (Google Scholar)

National and international cooperation

- **Research projects (16 projects):** Director/Responsible in 3 national projects; Member in 5 international projects and member in 8 national projects (ANNEX 2)
- **Participation in several international invention fairs** (IWA Week, INOVA CROATIA, Euroinvent, Euroinvent Book Salon, Pi-Envex, iCAN, ICE-USV, INVENTCOR, ISIF, Thailand Inventors Day, 1 IDEA 1 WORLD (111W), BIIS etc. .)
- **Prizes obtained:** EUROINVENT Grand Prize 2021, 34 gold medals, 8 silver medals, 2 bronze medals, 22 special prizes (ANNEX 3)
- **Participation in international conferences (ANNEX 4)**

Researcher activities

- **Guest Editor:**
 - **MICROMACHINES (MDPI):** *Special Issue "Implantable Biocompatible Alloys Devices and Application"*
https://www.mdpi.com/journal/micromachines/special_issues/Implantable_Biocompatible
 - **COATINGS (MDPI):** *Special Issue "Application, Processing and Testing of Modern Biomaterials"*
https://www.mdpi.com/journal/coatings/special_issues/bio_application_process_test
 - **APPLIED SCIENCES (MDPI):** *Special Issue "Modern Biomaterials: Latest Advances and Prospects"*
https://www.mdpi.com/journal/applsci/special_issues/bio_medical_material
 - **CRYSTALS (MDPI):** *Special Issue "Advances in New Functional Biomaterials for Medical Applications"*
https://www.mdpi.com/journal/crystals/special_issues/biomaterials_crystals
 - **BIOENGINEERING (MDPI):** *Special Issue "Recent Prospects on Functional Biomaterials"*
https://www.mdpi.com/journal/bioengineering/special_issues/S7N59A886L
 - **MATERIALS (MDPI):** *Special Issue "Latest Research on Biocompatible Alloys"*
https://www.mdpi.com/journal/materials/special_issues/E8TW87KN3Q
 - **METALS (MDPI):** *Special Issue "Future Trends in Metallic Biomaterials"*
https://www.mdpi.com/journal/metals/special_issues/U5N5J7Z05R
 - **MATERIALS (MDPI):** *Special issue "New Trends in Sustainable Building Materials"*
https://www.mdpi.com/journal/materials/special_issues/W44A0NF2E1
- **Domain Editor (MDPI),** Topic: *Cutting-Edge Research Trends in (Non)Metallic Materials: Design, Testing and Application*, https://www.mdpi.com/topics/Metallic_Materials
- **Member of the advisory committee for topics (MDPI):** Micromachines, Coatings, Materials, Applied Sciences, Crystals, Polymers, Metals, Bioengineering
- **Member of the editorial teams:**
 - **International Journal of Bioanalysis & Biomedicine:** <https://www.scireslit.com/>
 - **European Journal of Materials Science and Engineering:** <https://ejmse.ro/>
 - **Medicine and Materials:** <https://medicineandmaterials.com/>
 - **Journal of Biomaterials:** <http://www.journalofbiomaterials.org/editorialboard>
- **Reviewer (over 307 reviews):** <https://www.webofscience.com/wos/author/record/AAC-8405-2019>: Materials, Coatings, Archives of Metallurgy and Materials, Applied Sciences, Journal of Functional Biomaterials, International Journal of Molecular Sciences, Metals, Alloys, Bioengineering, Journal of Composites Sciences, Micromachines, Sensors, Sustainability, Polymers, BioTech, Biomedicines, Biomimetics, Dentistry Journal, Medicina, Scientific Reports, Biomolecules, Buildings, Crystals, Internal Journal of Agricultural Sciences and Food Technology, International Journal of Environmental Research and Public Health, Processes, Silicon.
- **Significant awards:**
 - **Special Mention at the 2023 Competition "Rada Mihalcea for Young Researchers in Science and Engineering"** Awards 31.07.2023
 - **The Excellence Award, 2022**, offered by the "Gheorghe Asachi" Technical University in Iasi, *For the "Young researcher with the best performance in scientific research" category from the period 2019-2021
 - **"Best Oral Presentation" Award**, 9th International Conference on Materials Science and Technologies Bucharest-ROMAT 2022, Romania, November 24-25, 2022, Bucharest, Romania

- **EUROINVENT SCIENTIFIC "GRAND PRIZE" 2021**, European Exhibition of Creativity and Innovation, Iasi, Romania
- **EUROINVENT 2021 Special Award for Scientific Excellence**, offered by the Scientific Senate of the Dan Voiculescu Foundation for the Development of Romania, on the occasion of the 13th edition of EUROINVENT 2021, Iași, Romania
- **"Best Poster Presentation" award, 2016**, International Conference on Materials Science and Technologies-ROMAT 2016, November 9-12, 2016, Bucharest, Romania

Member of professional associations

- Forum of Romanian Inventors
- Romanian Society of Biomaterials
- General Association of Romanian Engineers
- Modtech Iași Professional Association
- Association of Casters from Romania

MEMBER IN COMMITTEES AT THE FACULTY LEVEL

- Member of the commission for the development of internal evaluation reports for the master's degree at the Department of Materials Processing Technologies and Equipment, Faculty of Materials Science and Engineering, TUIASI
- Member of the admission committee of the Faculty of Materials Science and Engineering, TUIASI
- Member of the commissions for completion of bachelor and master studies, Department of Materials Processing Technologies and Equipment, Faculty of Materials Science and Engineering, TUIASI, period 2018-2021
- Member of the accreditation committee of the master's program Industrial Systems for Modern Technologies, Department of Materials Processing Technologies and Equipment, Faculty of Materials Science and Engineering, TUIASI

COMPLETED DEVELOPMENT AND PROFESSIONAL TRAINING COURSES

1. Certificate of entrepreneurial training within the project "From theory to practice through simulated enterprise", POSDRU/90/2.1/S/58123; Volunteer at the simulated company IS Renew: 2011-2012;
2. Graduation certificates of the Department for the Training of Teaching Staff for psycho-pedagogical modules I (2008-2011) and II (2012-2013)
3. Invention courses "Inventica" 2017-2018
4. Metallography course organized by Struers Romania 2019
5. Continuous internal evaluation system of the quality of education - barometer of university strategic management - CALINTINT - BAROMANAG (New methods of teaching and learning) 2019-2020
6. Metallography course organized by Struers Romania 2021
7. Entrepreneurial Skills Course, Danke 2022

ANNEXES

- ANNEX 1 – List of publications
- ANNEX 2 – Participation as a member/director in research projects
- ANNEX 3 – Awards
- ANNEX 4 – Participation in international conferences

Date: **03.01.2024**Lecturer PhD. Eng. **Mădălina Simona BĂLȚATU**