## Expertise ULMEANU Mihaela-Elena

The main achievements and expertise which demonstrate leadership and ability to independently conduct management, research and academic activities are presented hereafter:

- **Project manager** of 6 research projects: GNaCARUT 14/06.10.2023, 2023 2024; 2018-1-RO01-KA203-04951, 2018-2021; 275CI/2018, 2018; PN-III-P1-1.1-MC-2017-1482, Contract no. 303/14.12.2017, 2017 2018; UPB-GEX, Contract no. 50/25.09.2017, 2017-2018; PN-III-P1-1.1-MCD-2016-0081, Contract No. 33/1.11.2016, 2016.
- **Author and co-author** of **4** patents in the medical field, namely: Patent RO 133123 B1 din 28/05/2021; Patent RO 13370 B1 din 26/02/2021; Patent RO 132372 B1 from 30.05.2019; Patent RO 132417 from 30/10/2019. **Author and co-author** of **5** patent applications.
- **Team member** in **8** international projects and **6** national projects, amongst which can be mentioned: E-learning Course on Mobile Robotics for Adult Education: the fourth Industrial Revolution (2019-1-TR01-KA204-074485); Curriculum development of Master's Degree Program in Industrial Engineering of Thailand Sustainable Smart Industry (586137-EPP-1-2017-1-TH-EPPKA); Reinforcing Non-University Sector at the Tertiary Level in Engineering and Technology to Support Thailand Sustainable Smart Industry (619325-EPP-1-2020-1-TH-EPPKA2-CBHE-JP).
- Author and co-author of 31 ISI research articles, of which two Q1 and four Q2 articles, in journals like: Bioengineering-Basel (Q2); Journal of Orthopaedics and Traumatology (Q2); Sustainability (Q2); International Journal Of Bioprinting (Q1); Materials (Q2); Applied Mathematical Modelling (Q1)
- **Author** of a doctoral and a postdoctoral thesis in the field of industrial engineering, dealing with aspects regarding the development of new and medical products with the help of additive technologies.
- **Author and co-author** of **five** books and book chapters, in fields such as additive manufacturing, robotics, educational strategies: Development of Additive Manufactured Products Applications of Technical Functional Analysis (Book); Teaching robotics for hybrid education: current and future landscape (book chapter, international publisher); Robotics in STEM education (book chapter, international publisher).
- Author and co-author of two educational books on product development and design.
- International Reviewer for: 11 ISI journals and 2 ISI conferences: POLCOM; IBIMA.
- **Member** in the scientific committee of the ISI conference *Progress on Design Techniques and Manufacturing Technologies for Advanced Products and Processes in the Modern Era* POLCOM;
- **Chair** for the international conference *The 16th Rapid Design, Prototyping & Manufacturing Conference* RDPM 2019, 4th–5th April 2019, Brunel University, London.
- **Invited Speaker** at the international conference Modern Technologies in Industrial Engineering ModTech 2023.
- Over 100 awards received at national and international exhibitions and invention fairs.
- Founding member of the Additive Manufacturing Association of Romania.
- **Head** of the Industrial Engineering master's degree program (taught in English).

The abovementioned achievements stand out due to internationally recognized results that merge industrial engineering with educational and medical applications. The achievements of Dr. Ulmeanu contribute to demonstrating her abilities to: successfully implement a research project; lead and work in a team; conduct research with relevant and recognized results; write scientific articles in Q1 and Q2 indexed journals. Involvement in the academic and scientific community is demonstrated by serving as a reviewer for journals, membership in scientific committees, and speaking at conferences, as well as by engagement in the Romanian Additive Manufacturing Association, ensuring the successful achievement of any research and academic endeavours.