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| University POLITEHNICA of BucharestCouncil for University Doctoral Studies |  | Doctoral School ofIndustrial Engineeringand Robotics |

Department: \*D\*; Doctoral field\*DF\*: Industrial Engineering\*IE\*,
Mechanical Engineering\*ME\*, Engineering and Management\*EMg\*

Doctoral Scientific Areas

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| **No.** | **PhD Advisor** | **D** | **DF** | **Scientific Areas** |
| 1 | Prof.univ.dr.ing. BENDIC Vasile | RSP | IE | • Management and systems engineering• Manufacturing processes and systems • Product development |
| 2 | Prof.univ.dr.ing. CONSTANTIN George | RSP | IE | • Advanced manufacturing systems• Manufacturing processes• Advanced modeling, simulation and optimization techniques |
| 3 | Prof.univ.dr.ing. COTEȚ Costel Emil | RSP | IE | • Smart manufacturing• Digital twining in industrial engineering• Product Lifecycle Management |
| 4 | Prof.univ.dr.ing. DORIN Alexandru | RSP | IE | • Industrial Robot Modular Design• Optimizing Devices for Driving Robots Systems |
| 5 | Prof.univ.dr.ing. GHIONEA Adrian | RSP | IE | • Machine Tool Performance and Precision• Maintenance Management• Industrial Logistics• Manufacturing Systems |
| 6 | Prof.univ.dr.ing. MOHORA Cristina | RSP | IE | • Material Flow Modelling and Simulation;• Vibration and Noise;• Assistive Devices. |
| 7 | Prof. univ. dr. ing. NIȚOI Dan | RSP | II | • Ultrasonics. Applications in engineering and medicine• Modelling and simulation• Materials Technology. Smart materials • Sustainable development and eco-technologies |
| 8 | Prof.univ.dr.ing. PREDINCEA Nicolae | RSP | IE | • Thermal Field for Applications Using Industrial Robots• Product Lifecycle Management• Kinematics of Machine Tool |
| 9 | Prof.univ.dr.ing. PUPĂZĂ Cristina | RSP | IE | • Advanced Computer Aided Engineering;• Industry 4.0;• Machine learning. |
| 10 | Prof.univ.dr.ing. VELICU Ștefan | RSP | IE | • Manufacturing Systems• Materials Processing• Industrial Logistics |
| 11 | Prof.univ.dr.ing. ZAPCIU Miron  | RSP | IE | • Machine dynamics and vibrations• Process control in industry• Robotics and Manufacturing Systems |
| 12 | Prof.univ.dr.ing. DOICIN Cristian | TCM | IE | • Product Development• Manufacturing Processes and Systems• Systems Engineering and Management• Engineering Economics |
| 13 | Prof.univ.dr.ing. DRĂGĂNESCU Florian | TCM | IE | • Product Development• Manufacturing Processes and Systems• Machining and Machinability |
| 14 | Prof.univ.dr.ing. GHEORGHE Marian | TCM | IE | • Integrative Processes, Systems, Technology • Product Development• Machinability, Machining, Control, Assembly• Manufacturing, Production and Recycling |
| 15 | Prof.univ.dr.ing. GHICULESCU Liviu Daniel | TCM | IE | • Nonconventional Technologies and Specific Technological Systems • Micro and Nanotechnologies • Strategic and Quality Management, Innovation and Technological Transfer |
| 16 | Prof.univ.dr.ing. IONESCU Nicolae | TCM | IE | • Nonconventional Machining Processes and Systems• Manufacturing Processes and Systems• Product Development• Creativity and Intellectual Property |
| 17 | Prof.univ.dr.ing. MILITARU Constantin | TCM | IE | • Quality Engineering and Management• Product and Processes Quality• Quality Management Systems |
| 18 | Prof.univ.dr.ing. NEAGU Corneliu | TCM | IE | • Production Programming and Control• Product Development• Systems Engineering and Management• Manufacturing Processes and Systems |
| 19 | Prof.univ.dr.ing. OPRAN Constantin Gheorghe | TCM | IE | • Engineering of Composites Products• Engineering of Polymeric Products• Intelligent manufacturing of advanced materials products |
| 20 | Prof.univ.dr.ing. STURZU Aurel | TCM | IE | • Geometric Control Process and Devices• Geometric Control Systems• Manufacturing Processes and Systems |
| 21 | Prof.univ.dr.ing. VIŞAN Aurelian | TCM | IE | • Nonconventional Machining Processes and Systems• Manufacturing Processes and Systems• Product Development |
| 22 | Prof.univ.dr.ing. SOLOMON Gheorghe | ICTI | IE | • Welding Processes and Control• Quality Management• Occupational Health and Safety Management |
| 23 | Prof.univ.dr.ing. SEVERIN Irina  | ICTI | IE | • Advanced Composite Systems • Integrated Management Systems• Quality Engineering & Management |
| 24 | Prof.univ.dr.ing. VOICULESCU Ionelia | ICTI | IE | • Materials Science and Processing• Welding Processes• Heat Treatments |
| 25 | Prof.univ.dr.ing. CHIVU Oana Roxana | ICTI | IE | • Occupational health and safety management• Manufacturing processes and Systems• Quality management |
| 26 | Prof.univ.dr.ing. AMZA Cătălin Gheorghe | ICTI | IE | • Additive manufacturing• Industrial image processing• Quality inspection of industrial products• Virtual and augmented reality for industrial applications |
| 27 | Prof.univ.dr.ing. RONTESCU Corneliu | ICTI | IE | • Welding Processes and Control• Materials and Products Reconditioning |
| 28 | Prof.univ.dr.ing. ANTONESCU Păun | TMR | IE | • Topological structure of mechanisms and manipulators• Kinematics and dynamics of mechanisms and machines• Serial and parallel industrial robots |
| 29 | Prof.univ.dr.ing. SIMIONESCU Ion | TMR | IE | • Optimum Design of Industrial Robots• Mechanisms and Machineries Design• Optimal Synthesis of Mechanisms |
| 30 | Prof.univ.dr.ing. TEMPEA Iosif | TMR | IE | • Analysis and Synthesis of Mechanisms Applied in Industry • Modeling and Simulation of Robotic Mechanisms |
| 31 | Prof.univ.dr.ing. SIMION Ionel | GIDI | IE | • Industrial Design• Computer Aided Design• Computer Graphics |
| 32 | Prof.univ.dr.ing. CĂNĂNĂU Sorin | OMT | IE | • Mechanical transmissions with gears• Tribology• FEM analysis of mechanical structures |
| 33 | Prof. univ. dr. ing. RECE Laurențiu | UTCB-TM | IE | • Development of numerical control systems.• Development of innovative products.• Modern industrialization of innovative products. |
| 34 | Prof.univ.dr.ing. OLARU Adrian | RSP | ME | • Assisted research of the Robot’s dynamics• Modelling and simulation with LabVIEW• Software platform for the assisted research of the Forward kinematics and Inverse dynamics of robots• Controlling and automation manufacturing systems• Neural Networks solving the Inverse kinematics in Robotics• Humanoid robots |
| 35 | Prof.univ.dr.ing. POPESCU Diana | RSP | ME | • Assembly/disassembly process modeling• Additive Manufacturing • Industrial robots |
| 36 | Prof.univ.dr.ing. BLUMENFELD Maty | RM | ME | • Materials Strength• Finite Elements Method |
| 37 | Prof.univ.dr.ing. CONSTANTINESCU Dan Mihai | RM | ME | • Fracture mechanics and fatigue• Interface damage and failure• Mechanical behavior of composites/ nanocomposites, foams, and ceramics |
| 38 | Prof.univ.dr.ing. JIGA Gheorghe Gabriel | RM | ME | • Layered composite structures;• Experimental stress analysis;• Sandwich structures;• Impact on composite structures. |
| 39 | Prof.univ.dr.ing. HADĂR Anton  | RM | ME | • Stress and strain optimization for mechanical structures statically or dynamically loaded;• Mechanical structures based on composite materials. |
| 40 | Prof.univ.dr.ing. RADEŞ Mircea | RM | ME | • Machine dynamics• Mechanical vibration• FEM in dynamic analysis of mechanical structures |
| 41 | Prof.univ.dr.ing. SEMENESCU Augustin | IE-SIM | EMg | • Industrial Processes, Equipment and Management;• Modeling, Simulation and Innovation for Industrial Processes and Product Development;• Innovative Medical Devices and Materials;• Metallic Materials Producing and Processing; |
| 42 | Prof.univ.dr.ing. ȚÎȚU Aurel Mihail  | IIM-ULBS | EMg | • Engineering and quality management;• Intellectual property management, innovation and technology transfer;• KAIZEN systems and LEAN systems;• Experimental research and data processing;• Engineering and management of nonconventional technologies. |
| 43 | Prof.univ.dr.ing. IOANA Adrian | IE-SIM | EMg | • Quality management in the metal materials industry• Strategic management specific to industrial engineering• Optimal management of aggregates in the materials industry• Automation and robotization in the materials industry• Specific management of educational systems |
| 44 | Prof.univ.dr.ing. CĂRUȚAȘU Nicoleta Luminița | RSP | EMg | • Occupational Health and Safety Management;• Logistics; |
| 45 | Prof. univ. dr. ing. MARIN Alexandru | HMHIM - Energetică | EMg | • Renewable energy and environmental protection• Fluid power and electro-hydraulic servo-systems • Intellectual property rights protection & management and capitalization of intangible assets• Innovation and knowledge / technology transfer |