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Topics in Mechanical Engineering and Materials Science

•Tribology, joining; mechanical behavior; environmental effects, machining; nonconventional machining, materials processing; constitutive relations; and microstructure property relationships.

•Kinematics and dynamics of rigid bodies, theory of machines and mechanisms, vibration and balancing of machine parts, stability of mechanical systems, mechanics of continuum, strength of materials, fatigue of materials,

•Hydromechanics, aerodynamics, thermodynamics, heat transfer, thermo fluids, nanofluids, energy systems, renewable and alternative energy, engine, fuels, and experimental methods in dynamics.

•Nanomaterial, material synthesis and characterization, Elastic behavior; plastic behavior; high-temperature creep, fatigue, and fracture; Metals, polymers, ceramics, intermetallics, and their composites. Composites and Polymer Materials, Smart/Intelligent Materials/Intelligent Systems, Metal Alloy Materials, Iron and Steel, Building Materials, Composite Materials,

- Materials Forming, Coatings and Surface Engineering, Characterization of Materials, Mechanical Behavior & Fracture, Testing and Evaluation of Materials

- Industrial Robotics and Automation, Intelligent Control, Neuro-control, Fuzzy Control, Industrial Automation, and Process Control

- Distributed Control System

- Embedded systems in automobiles, Control System Modeling and Simulation Techniques, Virtual Instrumentation, Advanced Measurement, and Machine Vision System, Transmission and Control of Fluid

- Dynamics, Vibration and Control, Robotics Biomimetics, Automation

- Elements and Materials, Laser Technology, and Laser Processing

- Biological, Biomechanical, and Biomedical Materials, Functional Materials

- Organic Materials, Physics, Chemistry, Mechanics, and Applications in Materials Science, Semiconductor Materials, Thin Film, and Coatings

- Structural Analysis, Micro Electromechanical Systems (MEMS)

- Friction Stir Welding (FSW), Crystal growth of advanced materials

Fluid Mechanics, Applied Mathematics and Mechanics, Biomechanics, Heat Transfer, Solid Mechanics

Refrigeration and Air Conditioning, Renewable Energy Technology

Materials Engineering, Composite Materials, Marine Engineering, Petroleum and Mineral Resources Engineering, Textile Engineering, Industrial Engineering

Operational Research, Manufacturing Processes, Machine Design, Quality Control

Mechanical Maintenance, Tribology, CAD/CAM, Aeronautical Engineering

Production Engineering, Welding Technology, Metallurgy

Rock Mechanics and Mining Sciences, Solid and Structural Mechanics

Theoretical and Applied Fracture Mechanics