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Scientific Officer (SO/F)

Thin Films and Coating Section

Surface and Nanoscience Division

Materials Science Group

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Field of Specialization

Nano-materials and nano-structured coating synthesis, Laser Processing of Materials, Thin film fabrication of oxide and nitride ceramics, Solid Oxide Fuel Cells, Microwave Assisted Synthesis and Sintering, High Temperature Experimental Thermodynamics, Transport Properties of Ceramic Oxides, Structure Property Correlation (thermodynamic and transport properties), and Electrochemistry.

Current Research Interests

Synthesis of nanostructured coatings and thin films using various techniques viz. pulsed laser deposition (PLD), Laser pyrolysis, Laser assisted open atmosphere chemical vapour deposition, combustion chemical vapour deposition and electrochemical techniques, their characterization, structure property correlation studies and application in photovoltaic and photo-catalytic activities.