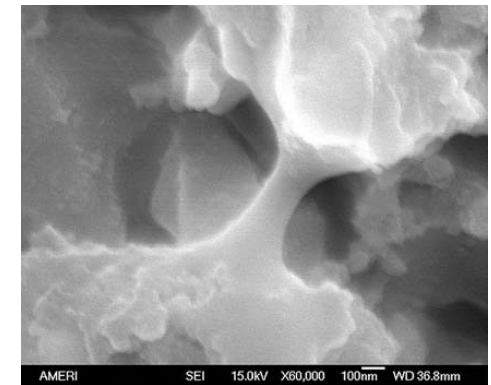
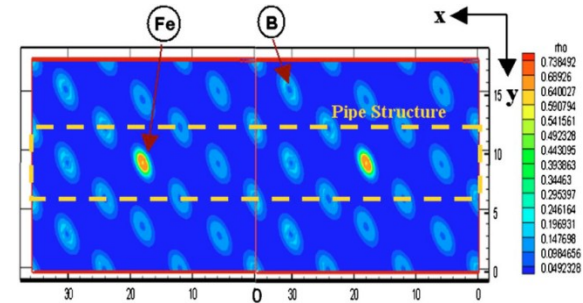
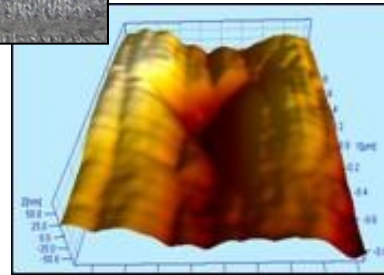


Faculty Profiles



DEPARTMENT OF MATERIALS SCIENCE & ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY KANPUR

DEPARTMENT OF MATERIALS SCIENCE & ENGINEERING



Kantesh Balani

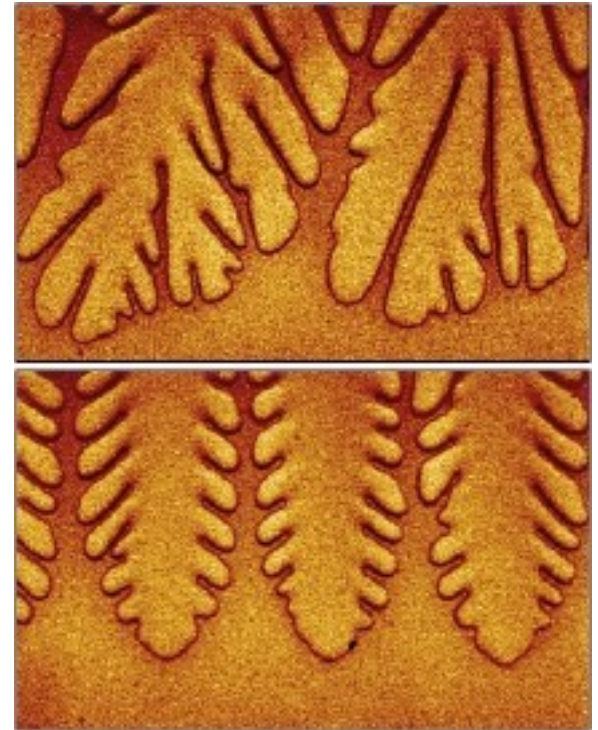
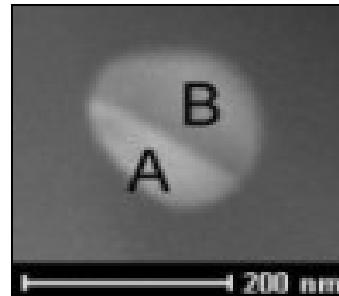
Ph.D. (Florida International University, Miami, USA)

Specialization: Biomaterials, Computational Modeling, CNT Reinforced Nanocomposites, Nanomechanics & Tribology

Areas of Interest: Bone Implant Materials, Molecular Modeling of Interfaces, Nanocomposites, Multi Length Scale Abridgment



DEPARTMENT OF MATERIALS SCIENCE & ENGINEERING



Krishanu Biswas

Ph.D. (I.I.Sc. Bangalore)

Specialization: Nanomaterials, Phase Transformation, Electron microscopy, Bioceramics

Areas of Interest: Alloy Nanoparticles, Phase Transformation, Electron Microscopy, Materials for catalysis

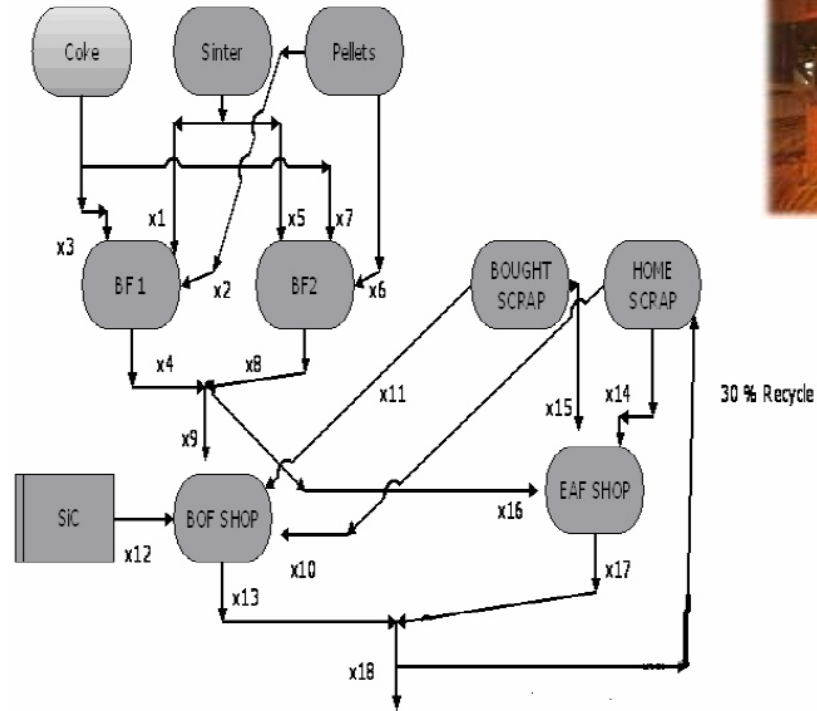


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Brahma Deo

Ph.D. (University of Burdwan)

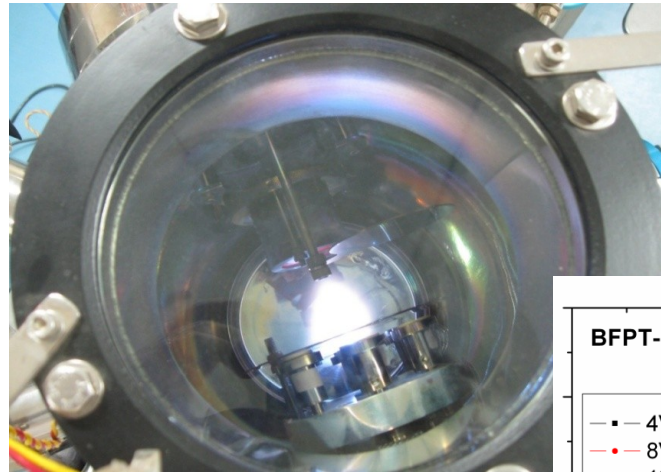


Specialization: Iron and Steel Making

Areas of Interest: Process Control and Modelling of BOF, AOD, VOD, Blast Furnace, Ladle Management, FEM, ANN, GAS

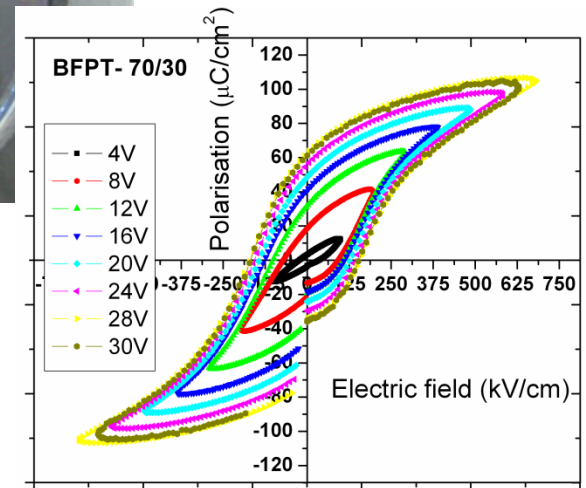


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Ashish Garg

Ph.D. (University of Cambridge, U.K.)

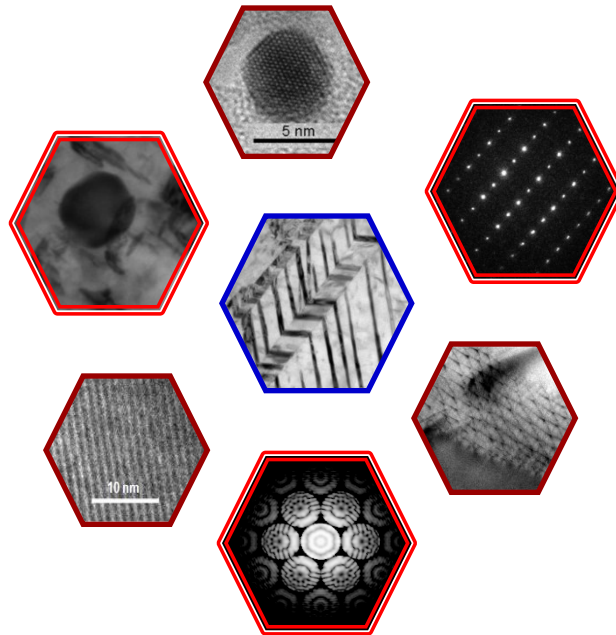


Specialization: Electronic Materials and Devices

Areas of Interest: Ferroic and Multiferroic Materials, Solar Cells, Thin Film Growth of Materials, Device Processing



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Gouthama

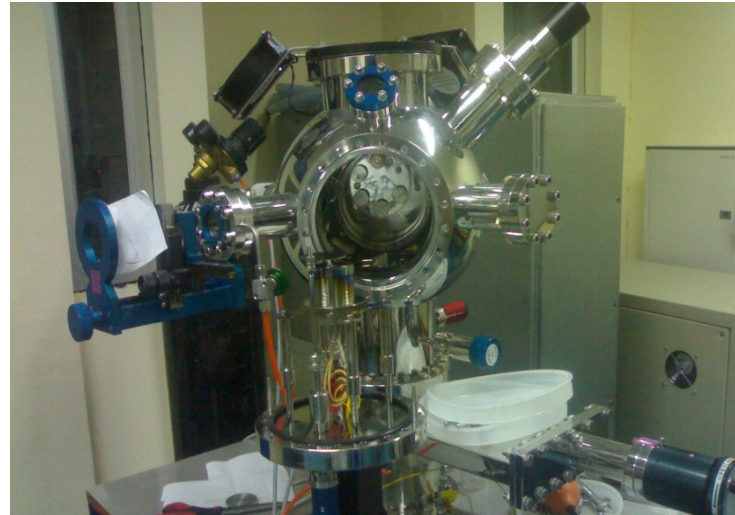
Ph.D. (I.I.Sc. Bangalore)

Specialization: Electron Microscopy, Physical & Mechanical Metallurgy

Areas of Interest: Structure Property Correlation, Shape Memory Alloys, Grain Boundary Engineering, Severe Deformation Processing



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Pulsed Laser Deposition Unit

Deepak Gupta

Ph.D. (University of California, Berkeley, USA)

Specialization: Device Materials

Areas of Interest: Organic Electronics: OLED/PLED, Displays, TFTs and Ultraviolet Electronics, Oxide and Transparent Semiconductors, Materials Development: Electronic and Optical, Defects in Semiconductors, Modeling and Simulation of Materials and Processes



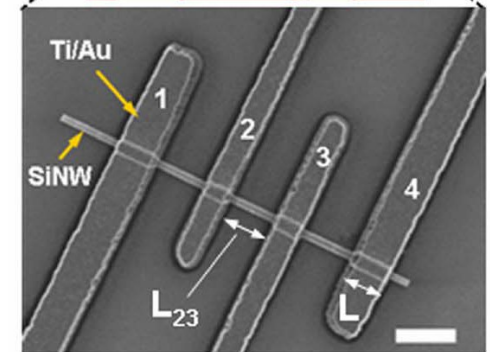
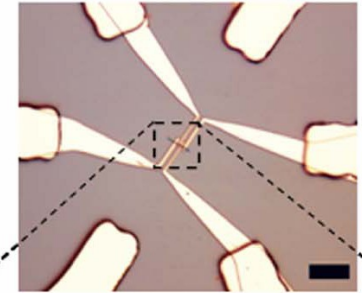
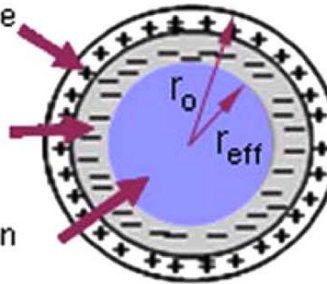
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Fixed positive charge near the interface of NW-oxide

Cylindrical shell of depletion region inside the NW

Conducting region inside the NW



Sarang Ingole

Ph.D. (Arizona State University, Tempe, Arizona, USA)

Specialization: Semiconductor materials, Micro and Nano-fabrication, Electrical Characterization of Materials

Areas of Interest: Materials for photovoltaic applications and energy storage, Self and directed assembly of nanomaterials, Electrochemical synthesis and deposition of materials



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Monica Katiyar

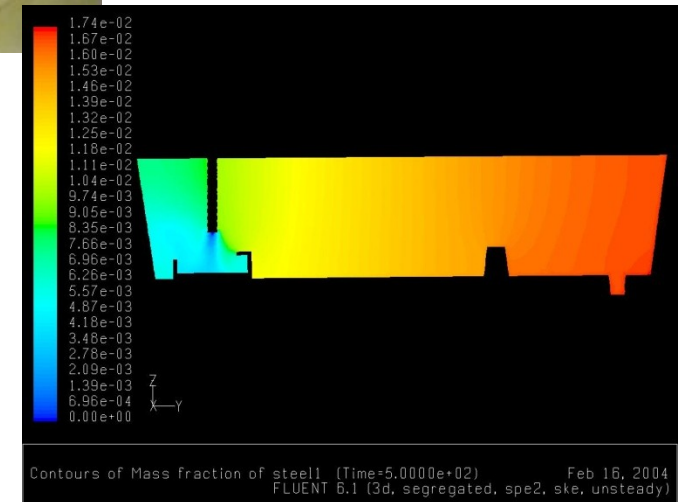
Ph.D. (University of Illinois at Urbana-Champaign, USA)

Specialization: Opto-Electronic Materials and Devices

Areas of Interest: Electronic Materials and Devices, Organic Electronics, Thin Film Transistors, Memory Devices, Solid State Lighting, Sensors, Printable Electronics, Spintronic Materials



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Dipak Mazumdar

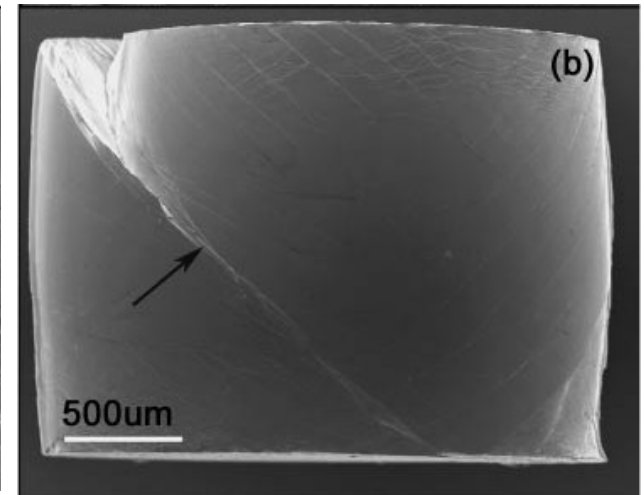
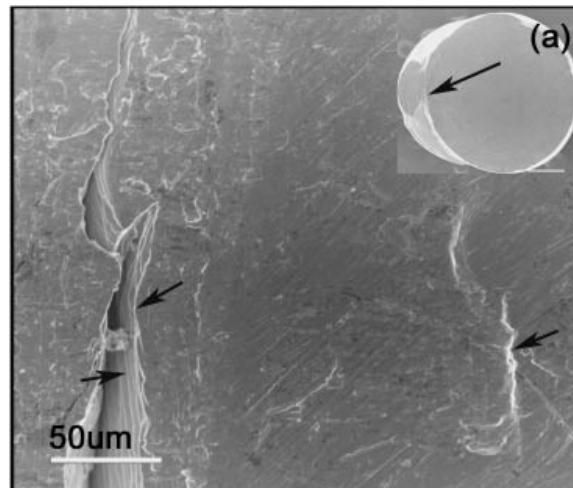
Ph.D. (McGill University, Montreal, Canada)

Specialization: Steelmaking, Modeling

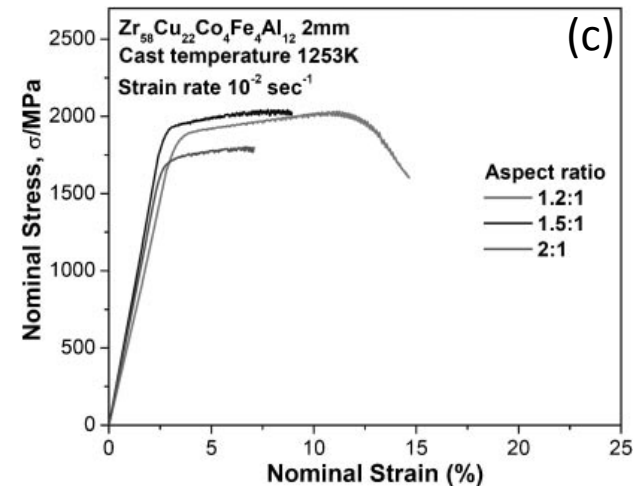
Areas of Interest: Process Metallurgy



DEPARTMENT OF MATERIALS SCIENCE & ENGINEERING



Zr₅₈Cu₂₂Co₄Fe₄Al₁₂ alloy
cast from 1323K (a) the top
surface, (b) side view, and (c)
stress strain curve



Kallol Mondal

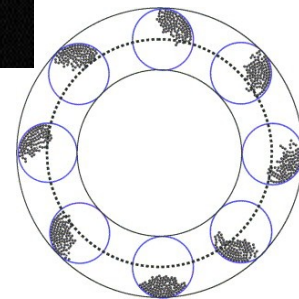
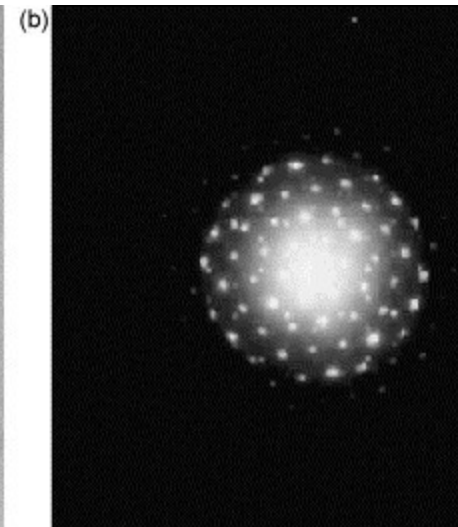
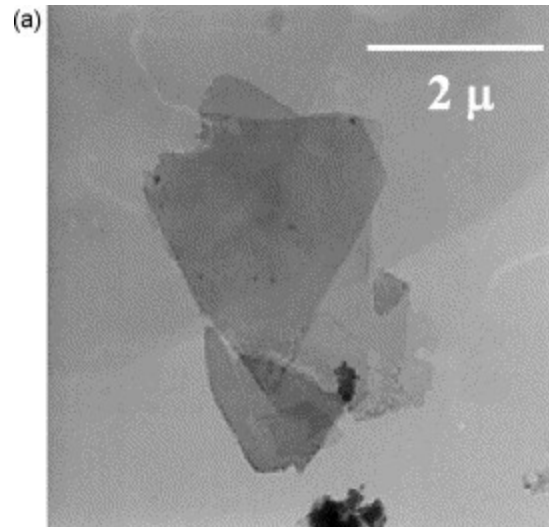
Ph.D. (I.I.T. Kharagpur)

Specialization: Physical Metallurgy, Glassy Alloys

Areas of Interest: Glassy Alloys, Nanocrystalline Alloys, Coating



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Sandeep Sangal

Ph.D. (University of Manitoba, Canada)

Specialization: Physical and Mechanical Metallurgy

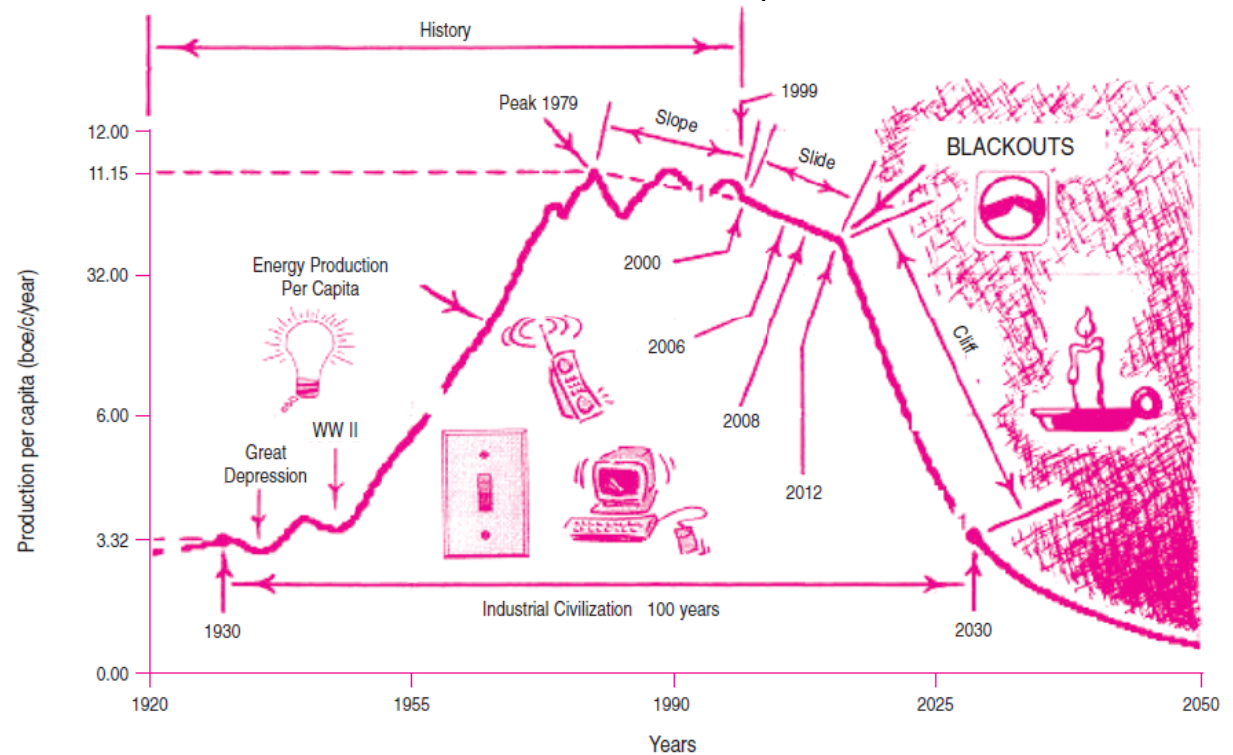
Areas of Interest: Structure-Property Correlations, Microstructural Characterization, Stereology, Image Processing, Development of Web-Based Educational Aids



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Global Oil Production Per Capita Per Year



Rajiv Shekhar

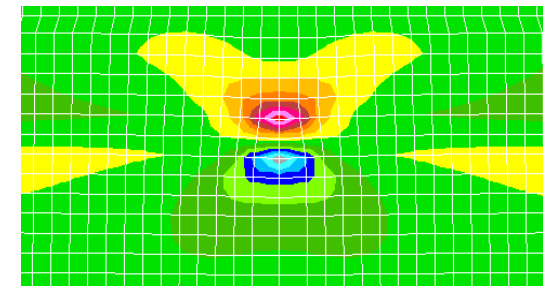
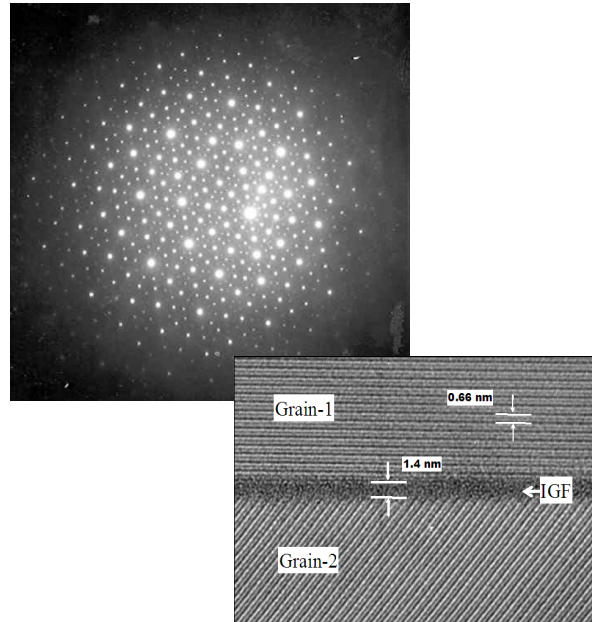
Ph.D. (University of California, Berkeley, USA)

Specialization: Electrochemical Materials Processing

Areas of Interest: Molten Salt Electrolysis, Electrodeposition



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Anandh Subramaniam

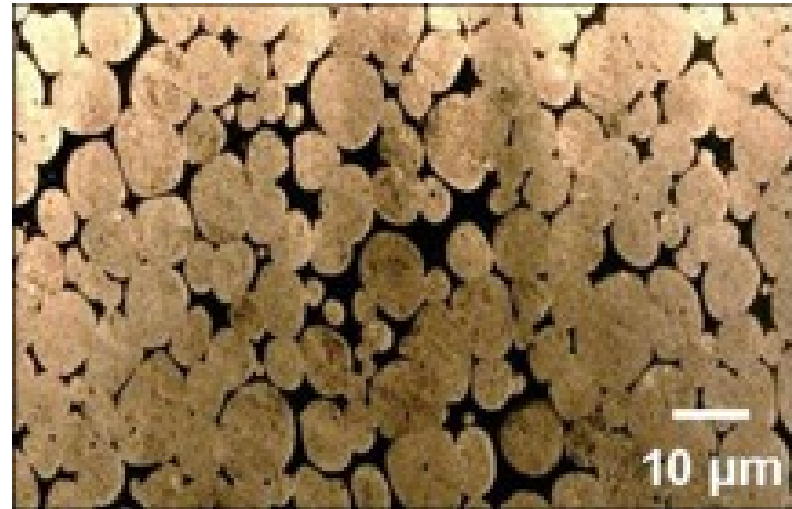
Ph.D. (I.I.Sc. Bangalore)

Specialization: Physical Metallurgy & Materials Science

Areas of Interest: Nanomaterials, Quasicrystals, Amorphous Materials, Metastable Materials, Epitaxial Systems, Interfaces in Materials, Symmetry, Crystallography, Transmission Electron Microscopy, Finite Element Method.



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Anish Upadhyaya

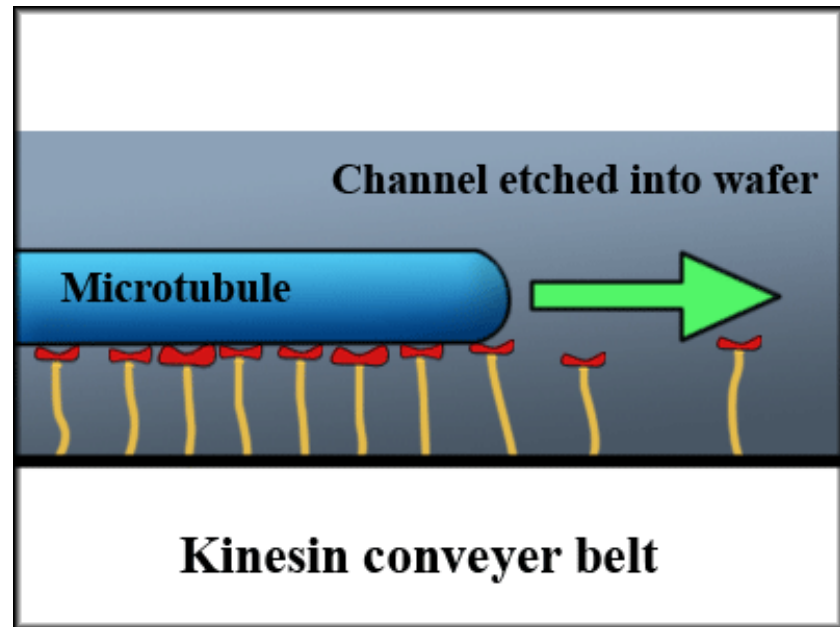
Ph.D. (Penn State, USA)

Specialization: Powder Metallurgy, Sintering of Ferrous & Non-Ferrous Alloys & Composites

Areas of Interest: Materials Processing, Powder Metallurgy, Sintered Particulate Alloys & Composites, Microwave Processing



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Vivek Verma

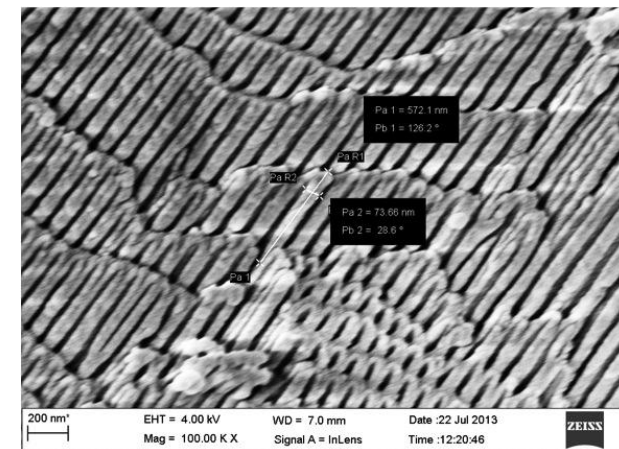
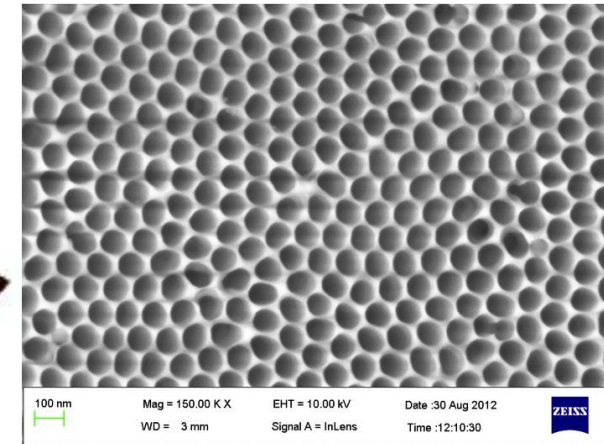
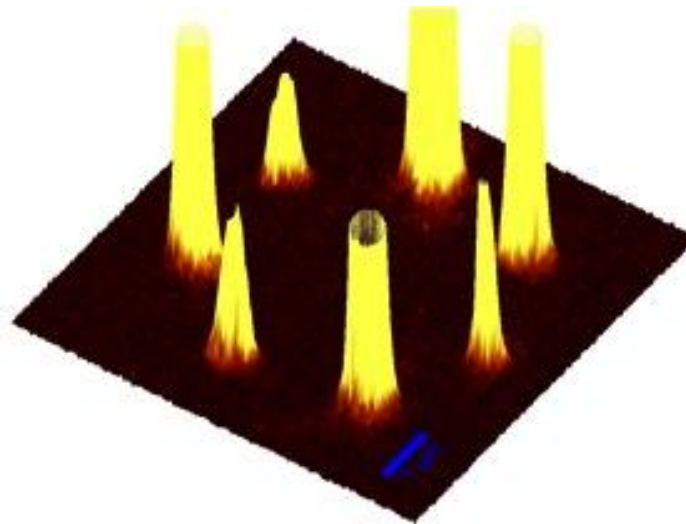
Ph.D. (Pennsylvania State University, USA)

Specialization: Biomaterials, Composites, Semiconductors

Areas of Interest: Protein patterning, hybrid synthetic devices, micro-fabrication, nanocomposites



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Tanmoy Maiti

Ph.D. (Pennsylvania State University, USA)

Specialization: Electronic materials and devices, Nanophotonics

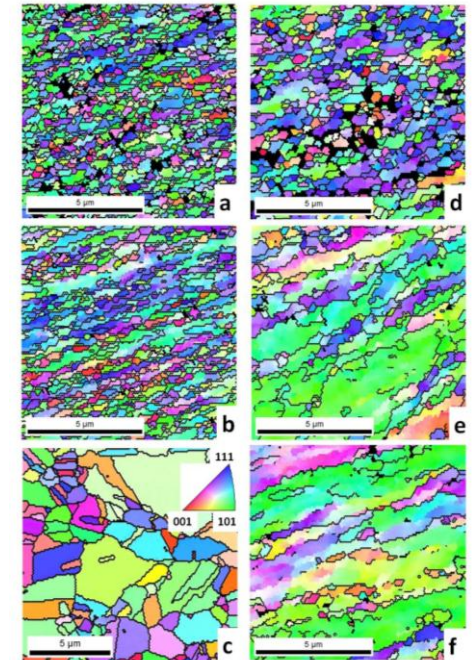
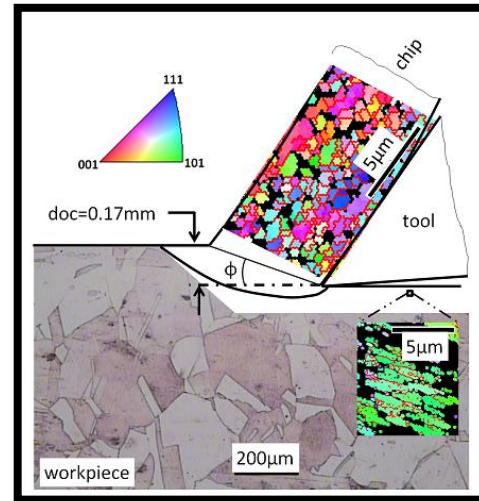
Areas of Interest: Nano-fabrication, Plasmonics, Semiconductor Devices, Ferroelectrics.





Shashank Shekhar

Ph.D. (Purdue University, USA)



Specialization: Severe Plastic Deformation, Grain boundaries, triple junctions
Areas of Interest: Thermomechanical Processing, Grain boundary engineering, Machining, Surface engineering

