#### **SECTION-VIII**

# (Mining, Metallurgical and Materials Engineering)

### **ACADEMIA**

S.No.	Name	Year	Specialization
		of birth	
1.	Balani, Kantesh	1978	Carbon Nanotube Based Biocomposites, Ultra High Temperature Ceramics, Nanomechanics and Nanotribology
2.	Basu, B	1973	Biomaterials; Engineering Ceramics
3.	Bhattacharya, BB	1942	Exploration Geophysics, Exploration Antarctica
4.	Bhattacharya, J	1958	Reliability and Quality Engineering; Environmental Science & Engineering
5.	Bhowmick, AK	1954	Polymer Science and Engineering, Composite Materials, Sustainable Technology
6.	Chattopadhyay, K	1950	Physical Metallurgy and Materials Science/ Alloy Development for high temperature and extreme environment, energy materials
7.	Chokshi, Atul H	1958	Metallurgical & Material Science & Engineering
8.	Eswarahalli, Dwarakadasa Sundararajan	1941	Physical Metallurgy, Thermal Treatment, Microscopy, Electronic Materials, Thin Film Devices
9.	Ghosh, Ahindra	1937	Ironmaking, Steelmaking & Casting, Thermodynamics & Kinetics
10.	Jacob, KT	1944	Materials Engineering, Thermodynamics, Phase Equilibria, Fuel Cells, Corrosion, Extractive Metallurgy
11.	Jayaganthan, R	1968	Additive Manufacturing, Fatigue & Fracture Mechanics, FEA, Battery Pack Engg, Prototype Design & Development for Structural Applications, Generative AI for Manufacturing & Life Cycle assessment of Structural Components
12.	Jayaram, Vikram	1956	Materials Engineering, Small Scale Mechanical Testing, Processing, Ceramics
13.	Kamaraj, M	1961	Surface Coatings: HVAF, HVOF, Development of AM Bio- implant Materials/ Coatings, Failure Analysis of Industrial Components
14.	Kashyap, BP	1948	Deformation Behaviour including Creep and Superplasticity; Thermo-mechanical Processing and Microstructural Evolution
15.	Katiyar, Monica	1967	Processing and development of electronic materials
16.	Lele, S	1943	Physical Metallurgy and Materials Science & Engineering
17.	Maiti, Pralay	1968	Energy materials; Biomaterial; controlled drug release; cancer; wound healing; nanocomposites; biodegradable polymer
18.	Manna, Indranil	1961	Materials Engineering, Phase Transformation, Surface Engineering, Bainitic Steel, Nanofluid
19.	Majumdar, Jyotsna	1969	Corrosion and High Temperature Oxidation Friction and Wear Laser Materials Processing Surface modification and coating
20.	Mazumdar, D	1958	Steelmaking, Mathematical Modelling
21.	Mitra, Rahul	1966	High Temperature Materials; Mechanical Behaviour of Materials
22.	Mukhopadhyay, NK	1962	Physical Metallurgy, Quasicrystals & Complex Intermetallics, Nanomaterials, High Entropy Alloys, Electron Microscopy, Mechanical Alloying, Micro- & nano-indentation

23.	Murty, BS	1964	Phase Transformation; Nano Materials
24.	Narasinga Rao,Tata	1963	Electrochemical sensors, photocatalysis, solar cells, Li-ion battery, Supercapacitors, Thin films, powder metallurgy, Nanomaterials
25.	Natarajan, KA	1942	Mineral Processing, Biometallurgy
26.	Padmanabhan, KA	1945	Mechanical Metallurgy; Superplasticity, Plasticity; Metal Forming; Nanostructured Materials; Structure-Property Correlations
27.	Pal, AJ	1960	Semiconductor Devices; Organic Electronics
28.	Panigrahi, DC	1961	Subsurface Mine Environmental Engineering; Mining Engineering
29.	Prasad, YVRK	1944	Metallurgical Engineering
30.	Raichur, Ashok M	1966	Nanotechnology; Biomaterials
31.	Ramamurty, U	1967	Mechanical Behaviour of Materials; Fracture & Fatigue
32.	Ranganathan, S	1941	Physical Metallurgy and Materials Science
33.	Rao, CNR	1934	Solid State Chemistry, Materials Chemistry; Photocatalysis, Electrocatalysis, Atomic Layer Deposition, Nano Science etc.
34.	Rao, KP	1950	Welding; Surfacing
35.	Ravishankar, N	1970	Nanomaterials; Electron Microsopy
36.	Ray, RK	1942	Physical Metallurgy, Crystallographic Texture
37.	Ray, Subrata	1947	Metallurgical and Materials engineering with specialization in Cast composites and Energy Materials
38.	Samajdar, Indradev	1964	Crystallographic Texture; Thermomechanical Processing
39.	Singh, Shiv Brat	1970	Physical Metallurgy of steels, Phase Transformation, Thermomechanical processing.
40.	Surappa, MK	1951	Solidification Processing of Metal Matrix Composites; Tribology of Metal Matrix Composites
41.	Suwas, S	1969	Materials Processing; Crystallographic Texture

# <u>R&D</u>

S.No.	Name	Year of	Specialization
		birth	
1.	Balaramamoorthy, K	1933	Quality Assurance/NDT; Nuclear Fuel Fabrication
2.	Banerjee, D	1952	Materials Engineering
3.	Barshilia, Harish C	1969	Nanoscience and nanotechnology; Surface engineering
4.	Basu, RN	1960	Solid Oxide Fuel Cell; Material Science & Technology
5.	Bhanu Sankara Rao, K	1949	Mechanical Metallurgy, Physical Metallurgy
6.	Bhat, TB	1949	High strength materials; Armour materials
7.	Biswal, SK	1961	Mineral Beneficiation; Pelletisation
8.	Bose, DK	1942	Process Metallurgy of Refractory & Reactive Metals,
			Production of Uranium Metal
9.	Chattoraj, Indranil	1962	Hydrogen Embrittlement; Localized Corrosion
10.	Dey, GK	1957	Zirconium based alloys; Electron Microscopy
11.	Ganguly, C	1946	Plutonium Metallurgy, Nuclear Fuels, Ceramics & Glass
12.	Ghosh, RN	1948	Physical Metallurgy and Mechanical Metallurgy
13.	Gokhale, AA	1955	Metallurgical Engineering, Materials Processing
14.	Gopalan, R	1960	Energy storage materials; Magnetic materials

15.	Gupta, AK	1951	Hot working of Metals; Materials Engineering
16.	Gupta, CK	1939	Chemical Process Metallurgy, Processing of Advanced Materials
17.	Gupta, RN	1942	Geotech Engineering
18.	Jayakumar, T	1955	Non-Destructive Evaluation; Engineering Failure Analysis
19.	Joshi, Shrikant V	1960	Surface Engineering; Laser Materials Processing
20.	Kamat, SV	1964	Mechanical Behaviour of Materials; Thin Films
21.	Kapoor, Komal	1967	Nuclear Fuel fabrication, development of special tubes, QA & characterization of nuclear materials
22.	Krishnadas Nair, CG	1941	Metallurgical Engg, Aerospace Engg, Management, Research, Design, Manufacturing, Industry & University
23.	Kumar, Vikas	1959	Metallurgical Engineering; Mechanical Metallurgy
24.	Kutumbarao, VV	1944	Mechanical Metalurgy, Aluminium Process Metallurgy
25.	Madhusudhan Reddy, G	1963	Materials Joining & Friction Stir Processing of Materials
26.	Maiti, HS	1947	Materials Science, Glass and Ceramics
27.	Malakondaiah, G	1951	Mechanical Metallurgy, Speciality Steels
28.	Mannan, SL	1946	Mechanical Metallurgy; Materials Development
29.	Mehrotra, SP	1947	Mineral Processing, Extractive Metallurgy
30.	Mishra, BK	1959	Particulate Technology; Minerals Technology
31.	Mudali, U Kamachi	1960	Corrosion; Nuclear Materials
32.	Mukherjee,Subroto	1963	Plasma Surface Engineering; Plasma Based Biomedical Applications
33.	Mukhopadhyay, AK	1959	Research Design, Development and Industrial Scale Production of Aluminium Alloy; Physical and Process Metallurgy
34.	Narayana Murty, SVS	1969	Aerospace Materials, Deformation Processing, Mechanical Behaviour of materials, Microstructural Characterisation, Ultra-high temperature Materials
35.	Pradip	1956	Rare earth minerals flotation, mineral processing, extractive metallurgy, nanotechnology, molecular modelling,particulate processing systems, integrated computational materials engineering, advanced ceramics, waste recycling, eco-cements
36.	Rama Rao, P	1937	Physical and Mechanical Metallurgy
37.	Ramachandran, V	1932	Mechanical Metallurgy, Failure Analysis & Accident Investigation
38.	Ramakrishnan, N	1957	Material Science; Computer Modelling & Simulation
39.	Ray, SK	1947	Materials Mechanics
40.	Ghosh Chowdhury, Sandip	1968	Materials and Metallurgical Engineering
41.	Sharma, SC	1962	High Temperature Materials and Thermal Protection Systems; Advanced Ceramics
42.	Srikanth, S	1960	Metallurgical Thermodynamics; Extractive Metallurgy
43.	Srivastava, AK	1965	Metallurgy, Materials Science, Electron Microscopy & Spectroscopy, Nano Technology, Waste to Wealth

44.	Srivastava, Dinesh	1961	Nuclear Fuel Fabrication Research Studies of Nuclear Materials Development of Novel Fabrication Process for Reactor Components Process optimization of Nuclear Power Reactor Components Deformation & Phase Transformation studies in Zirconium based Alloys Laser Material Processing Materials Characterization
45.	Subbarao, EC	1928	Materials Science, R&D Mangement
46.	Sundararajan, G	1953	Surface Engineering, Plastic Deformation and Fracture
47.	Tarafder, S	1961	Fracture mechanics; Structural Integrity Assessment
48.	Tewari, Raghvendra	1966	Physical metallurgy and Phase transformations of nuclear structural materials, Radiation damage of materials, Advance material characterization techniques, Advance manufacturing techniques
49.	Venugopal, S	1955	Metal forming; In-Sodium Testing
50.	Waghmare, UV	1968	Computational Materials Science Engineering; Smart Materials

# **INDUSTRY**

S.No.	Name	Year of birth	Specialization
1.	Banerjee, Shilowbhadra	1939	Metallurgical and Materials Engineering
2.	Basu, Biswajit	1959	Digital Engineering; Metals and Materials Technology
3.	Shah, Bhadresh K	1965	Metallurgical Engineering, Hi-Chrome casting
4.	Bhaskar, T.	1968	Alloy & Specialty Steel -Manufacturing & Development of New Products
5.	Bhattacharjee, D.	1964	Technology Leader in Iron & Steel and sustainability, Metallurgical thermodynamics, Phase transformations, Dislocation theory, Fracture & Fatigue, Computational methods in Metallurgy, Magnetic Materials
6.	Chatterjee, AK	1941	Materials Science
7.	Deb, Debashis	1960	Vacuum Investment casting of thin- walled hollow, aeroengine turbine blades made from nickel base superalloys
8.	Srinivasan, Dheepa	1968	Additive Manufacturing, Thermal Spray Coatings, Gas turbine High Temperature Materials and Manufacturing, Advanced Characterization
9.	Gowrishankar, N	1944	Ferrous & Non-ferrous Foundry Technology; Steel Heat Treatment & Surface Engineering
10.	Mohanty, SS	1956	Machine Design; Steel Making and Finishing
11.	Kapur, PC	1935	Mineral Processing; Particle Science & Technology
12.	Kumar, Mukesh	1958	Non Ferros Metallurgy; Iron and Steel; Project Management; Decarbonization and Sustainability; ESG
13.	Likhi, DK	1960	Metallurgical Engineering; Strategic Materials Technology
14.	Mishra, Sanak	1945	Electronic, Electrical, Magnetic, and Mechanical Behaviour of Metals; Steel Technology
15.	Mukherjee, T	1942	Metallurgy of Iron & Steel and Plant Management
16.	Mukherjee, TK	1945	Extraction Metallurgy of Non-ferrous Metals; Mining and separation of heavy minerals and value addition
17.	Muthuraman, B	1944	Metallurgy, Marketing & Finance
18.	Narayana Rao, M	1955	Materials Development and Fabrication

19.	Nerurkar, HM	1948	Metallurgy; Leadership
20.	Ramaswamy, V	1939	Physical Metallurgy, Materials Science
21.	Roongta, SK	1950	Metals; Infrastructure/Power
22.	Sharma, NK	1945	Mining Engineering
23.	Singh, PK	1958	Metallurgy; Project Management; Quality & Process Control; and Iron Making: BF Technology
24.	Singh, RKP	1947	Failure Analysis, Product Development, Application Engineering, Six Sigma for Quality Management
25.	Singhal, LK	1943	Stainless Steel
26.	Suraj Sahay, Satyam	1968	Analytics, Modeling and Optimization Integrated Computational Materials Engineering Physical Metallurgy
27.	Venugopalan, T	1952	Process and Product Metallurgy of Iron and Steel, Galvanizing, High Strength Steels

#### FOREIGN FELLOWSHIP

S.No.	Name	Year of birth	Specialization
1.	Bhadeshia, HKDH	1953	Metallurgy; Materials Modelling
2.	Eckert, Jürgen	1962	Metastable metallic materials; Nanostructured high performance materials; Metallic glasses and composites, Materials for energy applications and microelectronics; Additive Manufacturing
3.	Forssberg, KSE	1943	Mineral Processing
4.	Fuerstenau, Douglas Winston	1928	Mineral and Particulate Processing; Applied Surface Chemistry
5.	Gleiter, HD	1938	Nanoscience and Nanotechnology Materials science and Engineering
6.	Hahn, Horst	1952	Nanostructured & High entropy materials; Energy Storage & Printed electronics
7.	Kim, Hyoung Seop	1963	Metallurgical Engineering, Additive Manufacturing
8.	Kroning, Michael	1944	Non-Destructive Testing
9.	Lee, Jae-chun	1957	Hydrometallurgy; Metal Recycling
10.	Lee, William Edward	1958	Ceramics; Nuclear
11.	Moudgil, Brij Mohan	1945	Particulate processing, Colloid and Surface Chemistry Applied to Mineral & Ceramic Processing, and Advanced Materials
12.	Nickel, H	1930	High Temperature Alloys and Structural Ceramics; Nuclear & Non-nuclear energy plants
13.	Ramakrishna, Seeram	1964	Materials Engineering; Nanotechnology
14.	Ramesh, Ramamoorthy	1960	Energy efficient electronics; ferroelectric and magne- toelectric memory and computing; functional oxides
15.	Rath, Bhakta B	1934	Teaching, Research on Structure and Properties of Matters
16.	Ravindran, C	1945	Near-Net Shape Casting Processes; Light Alloys of Magnesium and Aluminium
17.	Roos, EJ	1945	Strength of Materials and Materials Science
18.	Somasundaran, P	1939	Mineral Engineering
19.	Prof. Subra Suresh	1956	Mechanical Properties of Materials; Cell & Molecular Biomechanics
20.	Taylor, Kathleen C.	1942	Catalysis; Materials Science & Engineering
21.	Tummala, Rao R	1942	Electronics and Materials Science

#### INAE YOUNG ASSOCIATES ON ROLL

S.No.	Name	Specialisation
1.	Acharyya, Swati Ghosh	Corrosion Science and Engineering
2.	Chakraborty, Poulami	Liquid Metal Corrosion, Materials for Fusion & Advanced
		Nuclear Reactors
3.	Chandran, Achu	Printed Electronic Materials & Devices, Piezo-Tribo
		Nanogenerators, Wearable Tactile Sensors and Liquid Crystal
		based Optical Devices
4.	Chaunsali, Rajesh	Solid/Structural Mechanics, Metamaterials, Wave Physics,
		Vibration Control, and Instabilities
5.	Das, Arka Jyoti	Underground mining methods (Coal and Metal Mines), Rock
		Mechanics, Numerical Simulation
6.	Devi, Pooja	Materials, Catalysis, Electrochemistry, MXenes, Chemical
		Sensors
7.	Duvvuri, S.	Aerospace Engineering, Aerodynamics, Turbulence, Supersonic
		and Hypersonic Flight
8.	Donthula, Harish	Alloy design, Structure property-correlation studies and
		electron microscopy techniques
9.	Ghorai, Uttam Kumar	Materials Science & Engineering, Nanoscience &
		Nanotechnology
10.	Gupta, Shourya Dutta	Plasmonics, Nanophotonics, Nanofabrication, Sensing, Active
		optical modulators
11.	Khandelwal, Mudrika	Nanofibrous Composites
12.	Krishna, KVM	Development of thermo mechanical processing of nuclear
		engineering components, characterization and modeling of
		deformation, solid state phase transformation
13.	Kumar, Praveen	Mechanical behaviour of materials with emphasis on electric
		field and length scale effects
14.	Mukhopadhyay, Amartya	Engineering ceramics and composites, Materials for
		electrochemical energy storage
15.	Sardana, Neha	Metamaterials, Plasmonics, Nanomaterials, DFT, Raman,
16.	Shukla, Anoop Kumar	Sensing, EMI shielding, Coatings
17.	_	Materials Engineering  Dayslopment of page structured steels
17.	Singh, Aparna  Prokosh, Tonyi	Development of nano-structured steels  Aircraft Design Hamanad Systems HAV Morphing Aircraft
18.	Prakash, Tanvi	Aircraft Design, Unmanned Systems, UAV, Morphing Aircraft,
10	Timer Charles Californ	New Product Development
19.	Tiwary, Chandra Sekhar	Metallurgical and Materials Engineering