The Council elected the following as Fellows of the Academy w.e.f. November 1, 2019.

- Dr. V Sundar, Professor, Department of Ocean Engineering, Indian Institute of Technology Madras, Chennai.
- 2 Mr. Alok Bhowmick, Managing Director, B&S Engineering Consultants Pvt. Ltd., Noida.
- Prof. Vijay Natarajan, Professor, Department of Computer Science and Automation, Indian Institute of Science, Bangalore.
- 4 Prof. Supratik Chakraborty, Department of Computer Science and Engineering, Indian Institute of Technology Bombay, Mumbai.
- 5 Dr. Manik Varma, Principal Researcher, Microsoft Research India, Bangalore.
- 6 Prof. SG Deshmukh, Director, ABV-IIITM Gwalior.
- Prof. Sameer Khandekar, Sir M Visvesvaraya Chair, Department of Mechanical Engineering, Indian Institute of Technology Kanpur
- 8 Dr. NC Murmu, Senior Principal Scientist and Head, Surface Engineering and Tribology Group, CSIR-Central Mechanical Engineering Research Institute, Durgapur
- 9 Prof. Parag R Gogate, Professor, Department of Chemical Engineering, Institute of Chemical Technology, Mumbai
- Prof. Sachin C Patwardhan, Department of Chemical Engineering, Indian Institute of Technology Bombay, Mumbai
- Dr. Guruswamy Kumaraswamy, Scientist 'F', CSIR-National Chemical Laboratory, Pune
- Prof. Bidyadhar Subudhi, Department of Electrical Engineering, National Institute of Technology Rourkela
- Prof. SA Khaparde, Emeritus Fellow, Department of Electrical Engineering, Indian Institute of Technology Bombay, Powai.
- Prof. AG Ramakrishnan, Department of Electrical Engineering, Indian Institute of Science, Bangalore
- Prof. D Manjunath, Institute Chair Professor, Department of Electrical Engineering, Indian Institute of Technology Bombay, Mumbai.

- Prof. Nandita Dasgupta, Department of Electrical Engineering, Indian Institute of Technology Madras, Chennai.
- Dr. D Roy Mahapatra, Associate Professor & DRDO Chair, Department of Aerospace Engineering, Indian Institute of Science, Bangalore.
- Prof. Radhakant Padhi, Department of Aerospace Engineering, Indian Institute of Science, Bangalore.
- Dr. L Venkatakrishnan, Chief Scientist and Head Experimental Aerodynamics Division, CSIR-National Aerospace Laboratories, Bangalore.
- 20 Prof. N Ravishankar, Materials Research Centre, Indian Institute of Science, Bangalore.
- 21 Prof. Satyam Suwas, Department of Materials Engineering, Indian Institute of Science, Bangalore.
- Dr. Vikas Kumar, Distinguished Scientist and Director, Defence Metallurgical Research Laboratory, Hyderabad.
- Prof. K Srinivas Reddy, Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai.
- Mr. MS Unnikrishnan, Managing Director and CEO, Thermax Limited, Pune.
- Dr. Bibek Bandyopadhyay, Visiting Professor, Indian Institute of Engineering Science and Technology (IIEST), Shibpur and Senior Adviser, International Institute of Energy Conservation, New Delhi.
- Prof. Pramod Kumar Jain, Director, Indian Institute of Technology (BHU), Varanasi.
- Dr. Sanjay Bajpai, Adviser/Scientist 'G' and Head, Technology Mission Division, Department of Science and Technology, New Delhi.
- Mr. Ranajit Kumar, Outstanding Scientist & Head, Nuclear Controls & Planning Wing, Department of Atomic Energy, Mumbai.
- Mr. MV Gowtama, CMD, Navratna Defence PSU Bharat Electronics Ltd., Bangalore.
- Mr. SS Mohanty, Vice-Chairman & MD, Neelachal Ispat Nigam Limited (NINL), Bhubaneswar, Odisha.
- Dr. Ramachandra Naidu Galla, Founder & Chairman, Amara Raja Group, Karkambadi, Chittoor District, Andhra Pradesh.

The Council elected the following as Foreign Fellows of the Academy

- Prof. Timothy Charles Lieuwen, Professor and David S. Lewis, Jr. Chair, Department of Aerospace Engineering & Department of Mechanical Engineering and Executive Director, Strategic Energy Institute, Georgia Institute of Technology, USA.
- Prof. Liang-Shih Fan, Distinguished University Professor, C. John Easton Professor in Engineering and Professor of Chemical and Biomolecular Engineering, The Ohio State University, USA.
- Prof. Muthukumaran Packirisamy, Professor and Concordia Research Chair, Dept of Mechanical Engineering, Concordia University, Montreal, Canada