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The World Academy
of Sciences

Members Inducted in 2025



17th TWAS General Conference
29 September–2 October 2025
Rio de Janeiro, Brazil.

Members Inducted in 2025

TWAS Fellows elected 74 new members to the Academy effective in 2025:

- Anurag AGRAWAL (India)
- Abdul Latif AHMAD (Malaysia)
- Mushtaq AHMAD (Pakistan)
- Liaquat ALI (Bangladesh)
- Ahmad Zaharin ARIS (Malaysia)
- Ramy Karam AZIZ (Egypt)
- K C BANSAL (India)
- Rafael BELLO PÉREZ (Cuba)
- Adel BELOUCHRANI (Algeria)
- Vladimir Armando BESADA PÉREZ (Cuba)
- Mohd Basyaruddin BIN ABDUL RAHMAN (Malaysia)
- Maria Valnice BOLDRIN ZANONI (Brazil)
- Celia Regina CARLINI (Brazil)
- Dipshikha CHAKRAVORTTY (India)
- Subhasis CHAUDHURI (India)
- CHEN Chunying (China)
- CHEN Sylvia Xiaohua (China)
- Rana DAJANI (Jordan)
- Odir Antonio DELLAGOSTIN (Brazil)
- Donald Bruce DINGWELL (Germany)
- Lalla Btissam DRISSI (Morocco)
- Hichem ELEUCH (the United Arab Emirates)
- Khalil EZZINBI (Morocco)
- FAN Chunhai (China)
- FAN Maohong (the United States of America)
- Mounir GHOGHO (Morocco)
- Steven Michael GOODMAN (Madagascar)
- Mazen HASNA (Qatar)
- HE Zuhua (China)
- M. Anwar HOSSAIN (Bangladesh)
- Rahinah IBRAHIM (Malaysia)
- Raymond Compton JAGESSAR (Guyana)
- JIA Jinfeng (China)
- JIN Kuijuan (China)
- Bal Krishna JOSHI (Nepal)
- Vahid KARIMIPOUR (Islamic Republic of Iran)
- Devang KHAKHAR (India)
- Sardar KHAN (Pakistan)
- Marcelo KNOBEL (Italy)
- Giridhar KULKARNI (India)
- Alison Emslie LEWIS (South Africa)
- LI Hui (China)
- Tapas Kumar MAJI (India)
- Marcos Rodolfo MICHEL LOPEZ (Plurinational State of Bolivia)
- Muhammad Golam MORSHED (Canada)
- Yacob MULUGETTA (the United Kingdom of Great Britain and Northern Ireland)
- Aliya NAHEED (Bangladesh)
- Sheila NATHAN (Malaysia)
- The Hoang NGUYEN (Viet Nam)
- Thi Thanh Mai NGUYEN (Viet Nam)
- Ntobeko Ayanda Bubele NTUSI (South Africa)
- Salah OBAYYA (Egypt)
- Mayowa Ojo OWOLABI (Nigeria)
- Suzana PEREIRA NUNES (Saudi Arabia)
- QIN Chuan (China)
- Raja Noor Zaliha RAHMAN (Malaysia)

- Antonio José ROQUE DA SILVA (Brazil)
- Maria Aparecida Soares RUAS (Brazil)
- Paulo SALDIVA (Brazil)
- Ravigadevi SAMBANTHAMURTHI (Malaysia)
- Muhammad Raza SHAH (Pakistan)
- Milena B. P. SOARES (Brazil)
- SUN Hang (China)
- Raymond R. TAN (the Philippines)
- Francisco de Assis TENÓRIO DE CARVALHO (Brazil)
- Ricardo Ivan Ferreira TRINDADE (Brazil)
- Yuri TSCHINKEL (the United States of America)
- Shahlo TURDIKULOVA (Uzbekistan)
- Chandra VENKATARAMAN (India)
- Anna WIENHARD (Germany)
- Harald WINKLER (South Africa)
- Seikh Mohammad YUSUF (India)
- ZHU Tong (China)
- Liesl Johanna ZÜHLKE (South Africa)

This publication incorporates information received from TWAS Fellows as of 16 August 2025. Updates received thereafter are reflected in TWAS Directory of Fellows and Young Affiliates only [twas.org/directory].

Anurag AGRAWAL

Ashoka University
Haryana, India

Membership Section 03. Medical & Health Sciences

Born in Delhi, India, on 17 February 1972.

Agrawal is dean of the Center for BioSciences and Health Research, Trivedi School of Biosciences, Ashoka University (India), and a former director of the Institute of Genomics and Integrative Biology, a national laboratory of the Council of Scientific and Industrial Research, India. After completing his medical education at the All India Institute of Medical Sciences, Delhi, he further trained in internal medicine, pulmonary disease and critical care at Baylor College of Medicine, Houston (United States of America), earning a PhD in physiology from Delhi University. His primary research is in respiratory biology, with other interests in a new vision of health and healthcare seen through the lenses of emerging technologies. He serves on numerous national and global advisory groups, most recently chairing the World Health Organization technical advisory group for viral evolution. He received the Shanti Swaroop Bhatnagar Prize in 2014, the Sun Pharma Foundation award in 2020, and is a Fellow of the Indian National Science Academy, National Academy of Science, Indian Academy of Science, and the National Academy of Medical Sciences.



Abdul Latif AHMAD

School of Chemical Engineering
Universiti Sains Malaysia
Nibong Tebal, Pulau Pinang, Malaysia

Membership Section 05. Engineering

Born in Kuala Lumpur, Malaysia, on 4 January 1967.

A globally renowned expert in membrane science and technology, Ahmad has made significant contributions to the field of chemical engineering. He has held key leadership roles at Universiti Sains Malaysia, including dean of the School of Chemical Engineering, research dean, director of Nexus Engineering and Board of Governance. A chartered engineer and Fellow of IChemE (United Kingdom of Great Britain and Northern Ireland), he is frequently appointed by IChemE to accredit Chemical Engineering Programme in Europe, Australia, New Zealand, Sri Lanka, Indonesia, Singapore, and Malaysia. His research excellence shows through over 35 million Malaysian ringgit in research grants, more than 570 indexed journal publications with over 27,000 citations, and an h-index of 76. He is recipient of Prince Sultan bin Abdulaziz International Prize for Water (2006), Khwarizmi International Award (2007), IChemE Novel Engineering Solution Award (2008), TWAS Prize in Engineering Sciences (2012), Rotary Research Gold Medal Award (2012), and the Merdeka Award (2014). Recognized as a highly cited researcher (2017–2022) by Clarivate Analytics, he is a tenacious educator, who has successfully graduated 59 PhD and 84 master's degree students.



Mushtaq AHMAD

Department of Plant Sciences
Quaid-i-Azam University
Islamabad, Pakistan



Membership Section 02. Biological Sciences

Born in Attock, Punjab, India, on 10 March 1979.

Ahmad is a globally recognized plant scientist with expertise in agro-biological resources, biodiversity, biotechnology, and biomass energy. He has authored over 1,000 publications, including 60 international books and book chapters, with approximately 23,050 citations and an h-index of 75. A dedicated mentor, he has supervised 48 postdoctoral researchers and PhD students, and over 185 scholars across all levels. He is the recipient of awards from prestigious organizations, including: the International Union for Conservation of Nature, the Organization of Islamic Cooperation, the Inter-governmental Platform on Biodiversity and Ecosystem Services, the National Academy of Sciences (United States of America), the Asian Federation of Biotechnology (Japan), the President's International Fellowship Initiative-Chinese Academy of Sciences, the Medicinal Plant Networks (United Kingdom of Great Britain and Northern Ireland), Pakistan Academy of Sciences, Northwest A&F University China, The Scientific and Technological Research Council of Türkiye, Mevlana Exchange Program (Türkiye); and Pakistan Bureau of Statistics, Botanical Society of Pakistan, Higher Education Commission, Ministry of Science and Technology, in Pakistan. His honours include: Honorary Professorship in China and Uzbekistan, Tamgha-e-Imtiaz (Pakistan's Highest Civil Award). He is ranked among the top 2% scientists in the world (United States of America).

Liaquat ALI

Pothikrit Foundation
Paribagh, Dhaka, Bangladesh



Membership Section 03. Medical & Health Sciences

Born in Chapai Nawabganj, Bangladesh, on 28 January 1957.

Ali is the honorary chief scientist and advisor of the Pothikrit Institute of Health Studies (PIHS) in Dhaka, Bangladesh, and the chair of Pothikrit Foundation, a PIHS parent non-profit organisation working for socioeconomic development and liberal cultural environment. He earned his PhD in 1990 from Uppsala University, Sweden. He was a professor of medical biochemistry and cell biology in institutes at Dhaka University, vice-chancellor at Bangladesh University of Health Sciences, president of the Bangladesh Society of Medical Biochemists, secretary-general of the Bangladesh Endocrine Society, a public health advisor of the government during COVID-19 pandemic, and a reviewer-designer of the 4th and 5th health sector programmes. As a short-term consultant, he has served various organizations like the World Health Organization (WHO), United Nations Children's Fund (UNICEF), and the United States Agency for International Development. He is now an expert member of the Primary Health Care Forum of WHO South-East Asia, and a distinguished visiting scientist of COMSTECH, Organisation of Islamic Cooperation. He has been honoured by organizations like the Bangladesh Academy of Sciences, the Islamic World Academy of Sciences, the Indian Public Health Association, and the Indian Association for the Study of Asian Traditional Medicine.

Ahmad Zaharin ARIS

Department of Environment, Faculty of Forestry and Environment
Universiti Putra Malaysia
Serdang, Selangor, Malaysia



Membership Section 07. Earth, Climate & Environmental Sciences

Born in Penang, Malaysia, on 5 June 1983.

Aris is a senior professor in the Department of Environmental Science and Technology, Universiti Putra Malaysia. His research focuses on hydrochemistry, environmental chemistry, and environmental forensics—with special emphasis on the development of analytical methods and the identification, behaviour, remediation, and health implications of metals and emerging pollutants in the environment. In recognition of his contributions, he has received numerous awards, including Malaysia Scopus Research Excellence Awards (Groundbreaking Contributions) 2024, and Malaysia winner for the Asia-Pacific Economic Cooperation (APEC) Science Prize for Innovation, Research and Education (ASPIRE) (2022, 2019). His pioneering work has shaped environmental policies and guidelines both at national and international level in areas related to water quality, public health, and environmental forensics. Zaharin leads multidisciplinary research initiatives and environmental translational research, working closely with policymakers to turn scientific findings into outcomes through public engagement. He also serves actively as an advisor, chair, and member of various governmental and private-sector committees at local and international levels.

Ramy Karam AZIZ

Department of Microbiology and Immunology, Faculty of Pharmacy
Cairo University
Cairo, Egypt



Membership Section 02. Biological Sciences

Born in Cairo, Egypt, on 9 April 1972.

Aziz is a professor at the Department of Microbiology and Immunology, Faculty of Pharmacy, Cairo University—which he chaired from 2016–2021, and the head of MARC Bioscience Research Laboratories in Giza, Egypt. From 2021–2024, he has directed the Microbiology and Immunology Research Programme at the Children's Cancer Hospital of Egypt. In 2005, he received his PhD in microbiology and immunology from the University of Tennessee, Health Science Center in Memphis, and carried out postdoctoral research at the University of Chicago, San Diego State University, and University of California, San Diego (2008–2013), United States of America. He collaborates with the Argonne National Laboratory. His research spans microbiology and immunology, genomics of microbial pathogens and phages, and microbiomics. He is a pioneer of pharmacomicrobiomics, a discipline that studies drug-microbiome interactions. He has published more than 120 peer-reviewed articles, a book, nine book sections, and is maintaining two bioinformatics databases. His work has been nationally and internationally acknowledged through awards from TWAS, COMSTEC, and Shoman Awards. He is ranked among the 1% most productive authors in the SCOPUS database (based on c-score).

K. C. BANSAL

Gurgaon, Haryana, India

Membership Section 01. Agriculture, Nutrition & Food Systems Sciences

Born in Hisar, Haryana State, India, on 24 April 1955.

Bansal earned his PhD in 1988 from the Indian Agricultural Research Institute (IARI), India, and carried out his postdoctorate at Harvard University (United States of America), in 1992. He is adjunct professor at the Centre for Crop and Food Innovation, Murdoch University, in Perth, Australia, and serves on the board of directors of the Global Plant Council, the board of trustees of the MS Swaminathan Research Foundation, Chennai, and the research advisory council of IARI, New Delhi, India. He is the first recipient of the Norman Borlaug Chair (2010). He served as elected secretary of the National Academy of Agricultural Sciences, India, from 2021 to 2023, as the director of the premier Indian Council of Agricultural Research institute, National Bureau of Plant Genetic Resources, Department of Agricultural Research and Education, Government of India, New Delhi from 2010–2016, and as elected vice-chair from Asia for the 15th regular session of the Commission on Genetic Resources for Food and Agriculture of the United Nations (2013–2015). He played a visionary and key role in formulating the World Bank project on National Agricultural Higher Education, which has been implemented across 75 agricultural universities in the country, since 2017.



Rafael BELLO PÉREZ

Universidad Central “Marta Abreu” de las Villas
Santa Clara, Cuba

Membership Section 06. Information and Data Sciences & Technologies

Born in Camaguey, Cuba, on 11 April 1958.

Bello Pérez has a strong academic foundation in computer science, complemented by doctoral studies in mathematics. A member of the Cuban Academy of Sciences, Bello Pérez serves as a faculty member in the Department of Computer Sciences, where they lead the PhD Programme in computer sciences and informatics. He teaches courses in artificial intelligence (AI) at both undergraduate and postgraduate levels, and has authored over 300 scientific papers published in national and international journals, as well as several books. Their ongoing research focuses on advancing the field of AI, with current interests focused on explainable AI (XAI), responsible AI, and other emerging AI methodologies.



Adel BELOUCHRANI

Ecole Nationale Polytechnique
Algiers, Algeria

Membership Section 06. Information and Data Sciences & Technologies

Born in Algiers, Algeria, on 5 May 1967.

Belouchrani received his engineering degree from the National Polytechnic School (ENP), Algiers, Algeria (1991), a Master of Science degree in signal processing from the Grenoble Institute of Technology, France (1992), and a PhD in signal and image processing from Télécom Paris, France (1995). From 1995 to 1996, he was a postdoctoral Fellow at the University of California at Berkeley, United States of America (US) and a research associate at Villanova University, Villanova, Pennsylvania, US (1996–1997). At ENP, he served as an associate professor (1998–2005), and as a full professor since 2006. He is among the pioneers to propel the field of blind source separation. He led the work on non-stationary signals impinging on antenna arrays by introducing new concepts. A founding member of the Algerian Academy of Science and Technology, he is among the world's top 2% scientists, according to Stanford University, US. He received a fellowship from the US National Academy of Sciences to conduct research at Brown University, Rhode Island, US, in 2016. He is a Fellow of the Institute of Electrical and Electronics Engineers since 2020.



Vladimir Armando BESADA PÉREZ

Center for Genetic Engineering and Biotechnology (CIGB)
Havana, Cuba

Membership Section 04. Chemical Sciences

Born in La Habana, Cuba, on 28 December 1962.

Besada Pérez is a professor and coordinator of master's degree courses in mass spectrometry, biochemistry and proteomics at University of Havana and the Technological University Jose Antonio Echegarria. He earned a PhD in 1995 from the University of Havana, with a thesis on 'Characterization of recombinant proteins by mass spectrometry'. Recently, he was involved in the characterization of the Cuban COVID-19 vaccines. He has organized international meetings, courses and workshops in Cuba. He collaborates with laboratories in Europe, Asia and South America, has co-authored more than 100 publications, and is the owner of more than 10 patents. His work has also supported projects at major Cuban biotechnological institutions like the Centre for Neurosciences of Cuba, National Centre for Scientific Research, National Centre for Bioproducts, University of Havana, Centre for Engineering and Industrial Development, Institute of Pharmacy and Food, and Institute of Agricultural and Forestry Development. He has been awarded almost 15 times by the Cuban Academy of Science, and has received the Carlos J. Finlay Medal (2016), Order Lázaro Peña (first level) and the Hombres de Ciencia Medal.



Mohd Basyaruddin BIN ABDUL RAHMAN

Department of Chemistry, Faculty of Science
 Universiti Putra Malaysia
 Serdang, Selangor Darul Ehsan, Malaysia



Membership Section 04. Chemical Sciences

Born in Penang, Malaysia, on 12 September 1972.

Bin Abdul Rahman is a senior professor of chemistry at Universiti Putra Malaysia, who was appointed as a distinguished visiting scholar at the University of California, Berkeley, United States of America (US). He received his PhD in catalysis chemistry at Southampton University, United Kingdom of Great Britain and Northern Ireland (UK) and was a postdoctoral Fellow in structural biology (Edinburgh University, UK). He has secured more than 32 million Malaysian Ringgit worth of research grants worldwide in biocatalysis, computational chemistry and nanodelivery. Additionally he has published more than 300 papers, presented over 450 papers, graduated more than 80 postgraduates. To his credit he also has more than 25 patents and more than 100 awards. He has received recognitions as a young scientist from international bodies and was named the Face of Science at Malaysia for his contribution to engaging youth in science. He was the founding chairman of the Malaysian Young Scientists Network and held positions like deanship and directorship at various institutions. He is currently the governing board chair of the International Science, Technology and Innovation Centre of the United Nations Educational, Scientific and Cultural Organization, and coordinates and mentors in professional academic training, and in STEM and sustainability outreach activities nationwide and globally.

Maria Valnice BOLDRIN ZANONI

São Paulo State University (UNESP)
 São Paulo, Brazil



Membership Section 04. Chemical Sciences

Born in Tupi Paulista, Sao Paulo State, Brazil, on 2 December 1957.

Boldrin Zanoni is a full professor at the Institute of Chemistry, São Paulo State University (UNESP), Araraquara, Brazil. She earned her master's degree and PhD in chemical sciences from the University of São Paulo in 1985 and 1989, respectively, specializing in environmental electrochemistry. She completed her postdoctoral fellowships in chemistry at the University of Loughborough, United Kingdom of Great Britain and Northern Ireland (UK) (1992–1994), and the University of Wisconsin, Madison, United States of America (2002), and was an academic visitor at Oxford University, UK, in 2008. From 2010 to 2018, she served as an advisor for research development at UNESP. She is a member of the Brazilian Academy of Sciences and the Brazilian Academy of the State of São Paulo. Since 2021, she has served as vice-president for graduate studies at UNESP. Throughout her career, she has received numerous awards and honours that confirm her outstanding contributions to chemistry. Her scientific expertise includes the detection and treatment of micropollutants and CO reduction. To date, she has supervised more than 75 master's, PhD, and postdoctoral researchers, and has published 321 papers, 5 books, and 14 book chapters.

Celia Regina CARLINI

Universidade Federal do Rio Grande do Sul (UFRGS)
Center of Biotechnology
Porto Alegre, RS, Brazil



Membership Section 02. Biological Sciences

Born in São Paulo, Brazil, on 10 February 1956.

Carlini earned her PhD from the Federal University of São Paulo, Brazil, in 1985. She was appointed professor at the Federal University of Rio de Janeiro and the Federal University of Rio Grande do Sul (UFRGS), and was a senior researcher at the Brain Institute of the Pontifical Catholic University of Rio Grande do Sul. After her retirement, in 2022, she worked as an invited professor at UFRGS and the Federal University of Health Sciences, Porto Alegre. She is a member of the Brazilian Academy of Sciences and a research productivity fellow of the Brazilian CNPq (National Council for Scientific and Technological Development). Carlini was a pioneer in proving the non-enzymatic properties of ureases, including their insecticidal, antifungal, pro-inflammatory, and neurotoxic effects in rodents. Now, she studies how the ureases produced by *Helicobacter pylori* and *Proteus mirabilis* might contribute to the onset of Alzheimer's and Parkinson's diseases. She was a referee for more than 60 international journals, science and technology funding agencies, and a member of the editorial board of *Toxicom* for 20 years, section editor of the *Brazilian Journal of Medical and Biological Research*. Since 2020, she is an executive editor of *Current Neuropharmacology*.

Dipshikha CHAKRAVORTTY

Department of Microbiology and Cell Biology
Indian Institute of Science
Bangalore, India



Membership Section 02. Biological Sciences

Born in Jabalpur, Madhya Pradesh, India, on 16 September 1968.

Chakravorty is a professor in the Department of Microbiology and Cell Biology, Indian Institute of Science (IISc) Bangalore, India. Dipshikha received her PhD from the Department of Biotechnology (DBT)-National Center of Cell, Pune in 1999. She worked at Aichi University, Japan, and later received a Humboldt Fellowship to work at Friedrich Alexander University, Germany. Her research focuses on molecular pathogenesis, infectious diseases, vaccine development and novel delivery systems. She has received many awards, including Prof. Rustom Choksi Award for Excellence in Research in Science/Engineering, DAE (Department of Atomic Energy) Outstanding Investigator award, Astra Chair Professorship, DBT-National Bioscience Award, National Academy of Sciences, India (NASI)-Reliance Industries Platinum Jubilee award, Tata Innovation Fellowship, P.A. Kurup Endowment Award by the Society of Biological Chemists (India), Yogmaya Devi Award for Research in Biomedical Science for outstanding work, S.K Chatterjee Award of the Indian Institutes of Technology. She is a Fellow of the National Academy of Science, India, Indian National Science Academy, Delhi, and Indian Academy of Sciences, Bangalore. To date, she has mentored 28 PhD students, who are now reputed faculty members.

Subhasis CHAUDHURI

Department of Electrical Engineering
Indian Institute of Technology Bombay
Powai, Mumbai, India

Membership Section 06. Information and Data Sciences & Technologies

Born in Bahutali, India, on 1 March 1963.

Chaudhuri is a K.N. Bajaj chair professor in the Department of Electrical Engineering at the Indian Institute of Technology (IIT) Bombay. He earned his Bachelor of Technology in electronics and communication engineering at IIT Kharagpur (1985), his Master of Science at the University of Calgary, Canada (1987), and his PhD (1990), both in electrical engineering, at the University of California San Diego (UCSD), United States of America (US). For his research excellence, he has received major national awards including the Shanti Swarup Bhatnagar Prize, Swarnajayanti Fellowship, J.C. Bose National Fellowship, G.D. Birla Award and the National Academy of Sciences, India (NASI)-Reliance Award. Chaudhuri was honoured with the title of TUM Ambassador by Technical University Munich, Germany. He is a Fellow of the Indian National Science Academy, Indian Academy of Sciences, Indian National Academy of Engineering, National Academy of Science, India, and the Institute of Electrical and Electronics Engineers (US). He has been recognized as a distinguished alumnus of IIT Kharagpur and UCSD. He has received a Doctor of Science degree (honoris causa) by Burdwan University. His areas of research include computer vision, machine learning, and computational haptics.



CHEN Chunying

National Center for Nanoscience and Technology of China
Zhongguancun, Beijing, China

Membership Section 04. Chemical Sciences

Born in Changchun, China, on 25 June 1969.

Chen is a professor at the National Center for Nanoscience and Technology of China. She engages in the research of analytical chemistry of nanomaterials within biological systems, and their chemical biological effects. Her research addresses key challenges regarding the biomedical properties and functions of nanomaterials, focusing on the structural properties of medical nanomaterials, their chemical biological behaviour, and the mechanisms of nano-biological interface interactions. Through her systematic studies, she has guided the development of applications such as nanoadjuvants and drug delivery systems. She has published over 400 peer-reviewed articles in scientific journals including *Nature Nanotechnology*, *Nature Methods*, *Nature Protocols*, *Nature Communications*, *Science Advances*, *PNAS*, *JACS* and *Angewandte Chemie*. She has received numerous awards, including the second prize of the National Natural Science Award, National May Day Female Pacesetter, Distinguished Women in Chemistry or Chemical Engineering by the International Union of Pure and Applied Chemistry, TWAS Award in Chemistry, Royal Society of Chemistry Environment Prize. She is currently an executive editor of *ACS Nano* and an editorial board member of several journals.



CHEN Sylvia Xiaohua

Department of Applied Social Sciences
The Hong Kong Polytechnic University
Hung Hom, Kowloon, Hong Kong, China



Membership Section 10. Economic & Social Sciences, Humanities & Arts

Born in Guangzhou, China, on 31 December 1967.

Chen is chair professor of social and cultural psychology in the Department of Applied Social Sciences, associate dean of the Faculty of Health and Social Sciences, director of the Yan Oi Tong Au Suet Ming Child Development Centre, and co-founder of the Mental Health Research Centre at the Hong Kong Polytechnic University. She is a Fellow of the Hong Kong Academy of the Humanities, Association for Psychological Science, and Society for Personality and Social Psychology, a senior Fellow of the Higher Education Academy (now Advance HE), United Kingdom of Great Britain and Northern Ireland, a chartered psychologist of the British Psychological Society, and a registered psychologist and Fellow of the Hong Kong Psychological Society. She has served as president of the Asian Association of Social Psychology, editor-in-chief of the *Journal of Cross-Cultural Psychology*, and general editor of Cambridge University Press Culture and Psychology series. She received various academic awards, including the Outstanding International Psychologist Award (2022) conferred by the American Psychological Association Division 52 (International Psychology).

Rana DAJANI

The Hashemite University
Zarqa, Jordan



Membership Section 02. Biological Sciences

Born in Dahrán, Saudi Arabia, on 26 April 1969.

Dajani is currently a Yidan Global Fellow at Harvard Graduate School of Education, and a professor of molecular biology at the Hashemite University, in Jordan. Her area of expertise is epigenetics and biomarkers of trauma among refugees. Through her leadership, she has introduced national and regional stem cell laws and presided over numerous scientific boards and United Nations councils, most recently as the president of the Society for the Advancement of Science and Technology in the Arab World. She has held visiting professor positions at Harvard, Yale, Massachusetts Institute of Technology, Jepson School of Leadership (United States of America) and Cambridge (United Kingdom of Great Britain and Northern Ireland). She is an advocate for building indigenous research capabilities in the developing world, and for creating a mentoring programme to support women scholars in STEM that was recognized by the National Academy of Sciences. Rana is a social entrepreneur and a global thought leader. She is the founder of We Love Reading, a grassroots initiative to create changemakers in underserved communities by fostering a lifelong love of reading. A recipient of the International Literacy Prize by the United Nations Educational, Scientific and Cultural Organization (UNESCO), We Love Reading has established more than 8,000 locally run libraries in over 70 countries.

Odir Antonio DELLAGOSTIN

Universidade Federal de Pelotas
Pelotas, RS, Brazil

Membership Section 01. Agriculture, Nutrition & Food Systems Sciences

Born in Aratiba, Brazil, on 27 October 1967.

Dellagostin obtained his PhD in 1995, from the University of Surrey, United Kingdom of Great Britain and Northern Ireland, and is now full professor of biotechnology at the Federal University of Pelotas, Brazil. His research focuses on the development of recombinant vaccines and biotechnological innovations for the prevention of infectious diseases in animals. He has trained numerous Master of Science and PhD students and led high-impact research projects. He is currently president of the Research Foundation of the State of Rio Grande do Sul and chair of the board of directors of the Centre for Strategic Studies and Management. He served two terms as president of the Brazilian National Council of State Research Funding Agencies, where he played a leading role in shaping public policy for science, technology and innovation in Brazil. He has represented Brazil in international scientific partnerships and serves on advisory boards and evaluation committees nationally and abroad. In 2018, he was elected to the Brazilian Academy of Science for his contributions to science and policy in Latin America.



Donald Bruce DINGWELL

Ludwig-Maximilians-Universität München
München, Germany

Membership Section 07. Earth, Climate & Environmental Sciences

Born in Corner Brook, Canada, on 29 June 1958.

Dingwell is a professor and founding director at Ludwig Maximilian University Munich, in the Department of Earth and Environment, and a distinguished professor with GEOLAB, Hangzhou, China. He has published approximately 600 papers on geomaterials, primarily focused on experimental research and material properties, high temperature earth materials and volcanology. He is the recipient of 12 scientific awards, seven academy memberships, six honorary degrees and three national orders. He was the president of the European Geoscience Union and the International Association of Volcanology and Chemistry of the Earth's Interior. He was secretary-general of the European Research Council, and is currently the vice-president of the Academia Europaea.



Lalla Btissam DRISSI

LPHE-Modeling and simulation, Faculty of Sciences
Mohammed V University in Rabat
Rabat, Morocco



Membership Section 09. Physics, Astronomy & Space Sciences

Born in Rabat, Morocco, on 7 September 1978.

Drissi is a Moroccan scientist who has made significant achievements in quantum science, exploring critical phases of matter and quantum fields with a focus on nanostructures for advanced energy, environment, health, and spintronics applications. A resident member of the prestigious Hassan II Academy of Science and Technology, she leads African efforts in advanced materials and physics education reform, chairing an African nanotech network and representing Morocco in the African Strategy for Fundamental and Applied Physics. Drissi is deeply engaged in mentoring, teaching, and coordinating degree programmes, and in the organization of high-impact scientific events. As lead coordinator of Morocco's Falling Walls Lab, she empowers young Moroccan innovators. Her research work has earned national honors, besides international awards, including membership at the Abdus Salam International Centre of Theoretical Physics in Italy, membership in the Arab-German Young Academy of Sciences and Humanities in Germany, the Georg Forster Research Fellowship by the Alexander von Humboldt Foundation, and the Guardians of Science: A Research Security Study Tour with Harvard University.

Hichem ELEUCH

University of Sharjah
Sharjah, United Arab Emirates



Membership Section 06. Information and Data Sciences & Technologies

Born in Sfax, Tunisia, on 10 July 1969.

Eleuch is a professor of physics and a leader of the quantum information, quantum simulation, and quantum processing research group at the University of Sharjah, United Arab Emirates. He received his PhD in quantum physics in 1998, from Kastler Brossel Laboratory at the École Normale Supérieure and the University Pierre and Marie Curie (Paris), France. He has visited and worked at several prestigious institutions such as Texas A&M University, Max Planck Institute, Princeton University, McGill University, the University of Auckland, and the University of Montreal. Eleuch has authored more than 300 papers and holds 19 patents in the United States of America (US). He has received fellowships from the Fulbright Foundation, the Max Planck Society, and the Abdus Salam International Center for Theoretical Physics. He is a Fellow of the African Academy of Sciences, a member of Sigma Xi, the Scientific Research Honor Society (US), and the Mohammed Bin Rashid Academy of Scientists. He has been ranked among the top 2% of scientists, according to Stanford University's rankings, both in career-long and annual categorises, since 2019. In 2024, he received the Abdul Hameed Shoman Prize for Arab Researchers in Science.

Khalil EZZINBI

Department of Mathematics, Faculty of Sciences Semlalia
Cadi Ayyad University
Marrakesh, Morocco



Membership Section 08. Mathematical Sciences

Born in El Kalaa des Sarghna, Morocco, on 29 July 1965.

Ezzinbi is a Moroccan scholar whose research focuses on differential equations and dynamical systems. He works in the laboratory of mathematics and population dynamics of the Faculty of Sciences Semlalia, Cadi Ayyad University, Marrakech, Morocco. He earned his PhD in partial functional differential equations in 1997, at Cadi Ayyad University. His current areas of interest cover differential equations, dynamical systems, evolution equations, partial functional differential equations, operator theory, and control theory. His works have inspired many researchers and influenced many publications worldwide. Ezzinbi wrote more than 250 papers that were published in well-established journals, two books and several chapters. He has been a visiting professor at numerous universities in Africa, Asia, Europe and North America. He is leading several groups at many universities in Africa. He has supervised more than 40 PhD students, many of them in countries including Algeria, Benin, Burkina Faso, Cameroon, China, Morocco, Nigeria, Senegal, Chad, and Tunisia. He has been elected a member of the African Academy of Sciences in 2009.

FAN Chunhai

School of Chemistry and Chemical Engineering,
and
National Center for Translational Medicine
Shanghai Jiao Tong University
Shanghai, China



Membership Section 04. Chemical Sciences

Born in Zhangjiagang, China, on 11 March 1974.

Fan is a K.C. Wong Chair professor, new cornerstone investigator and dean in the School of Chemistry and Chemical Engineering, at Shanghai Jiao Tong University, and the executive dean of the National Center for Translational Medicine. He is a member of the Chinese Academy of Sciences, Chinese Academy of Medical Sciences, a Fellow of the American Association for the Advancement of Science, the Royal Society of Chemistry, American Institute of Medical and Biological Engineering, and International Society of Electrochemistry. He is an associate editor of *JACS Au*, and serves as a co-chair in the editorial board of ChemPlusChem and as an editorial board member of more than 10 journals including *Angewandte Chemie*, *Accounts of Chemical Research* and *American Chemical Society Nano*.

FAN Maohong

School of Energy Resources
University of Wyoming
Laramie, United States of America



Membership Section 06. Information and Data Sciences & Technologies

Born in Huixian, China, on 11 March 1964.

Fan holds the Carrell Endowed Chair and is a School of Energy Resources professor in chemical and petroleum engineering at the University of Wyoming. He is also an adjunct professor at the Georgia Institute of Technology. Fan has led and contributed to many projects in resource recovery, chemical production, clean energy generation, and environmental protection, receiving support from funding agencies such as the National Science Foundation, Department of Energy, Environmental Protection Agency, Geological Survey and Department of Agriculture in the United States of America. His work has been supported by international bodies including the New Energy and Industrial Technology Development Organization of Japan, the United Nations Development Programme, and industrial companies such as Siemens and Caterpillar. Fan has helped chemical, environmental, and energy companies overcome technical challenges. He has authored refereed books, book chapters, and papers in his areas of expertise. As an associate editor, editorial board member, or advisory board member, he has been serving many international chemical energy and environmental journals.

Mounir GHOGHO

College of Computing,
University Mohammed VI Polytechnic
Rocade Rabat-Salé, Morocco



Membership Section 06. Information and Data Sciences & Technologies

Born in Sidi Slimane, Morocco, on 29 July 1968.

Ghogho received his PhD in signal processing from the National Polytechnic Institute of Toulouse (1997). He was a research fellow at the University of Strathclyde (1997–2001) before joining the University of Leeds where he was promoted to full professor and head of the Signal Processing and Communications Group, in 2008. In 2010, still affiliated with the University of Leeds, he joined the International University of Rabat where he served as Information and Communication Technology research director and dean of the College of Doctoral Studies. In March 2025, he joined the College of Computing at Mohammed VI Polytechnic University. He is a recipient of prestigious awards, including the Royal Academy of Engineering Fellowship (2000), IBM Faculty Award (2013), and was elected a Fellow of the Institute of Electrical and Electronics Engineers (2018), and of the American Institute of Aeronautics and Astronautics (2021). His work focuses on machine learning and statistical signal processing, with applications in wireless communications, robotics, cybersecurity, and healthcare. He has published over 450 papers, supervised over 50 PhD students, and led over 20 research projects, serving as editor for many journals.

Steven Michael GOODMAN

Association Vahatra
Antananarivo, Madagascar

Membership Section 02. Biological Sciences

Born in Detroit, United States of America, on 3 August 1957.

Goodman has been studying different aspects of the Malagasy fauna for more than three decades, focusing in particular on mammals and birds, publishing more than 700 scientific articles and books on different subjects, most of them centered on the island's fauna. He holds the post of MacArthur Field Biologist at the Field Museum of Natural History in Chicago and is the vice-president of the Association Vahatra in Antananarivo, of which he is one of the founding members. Goodman earned his bachelor's degree from the University of Michigan, his PhD from the University of Hamburg, and his habilitation from the University of Paris. He has worked on Madagascar's fauna for close to 40 years, living on the island during most of the past 35 years. Goodman has received numerous international awards for his research and conservation related work. In recognition of his work, the University of Antananarivo awarded him an honorary doctorate (Doctor Honoris Causa).



Mazen HASNA

Qatar University
Doha, Qatar

Membership Section 06. Information and Data Sciences & Technologies

Born in Damascus, Syria, on 1 January 1972.

Hasna earned a PhD in electrical engineering from the University of Minnesota Twin Cities (2003) and has over than 25 years of academic experience. At Qatar University, he served as head of Electrical Engineering Department, dean of College of Engineering, and vice-president and chief academic officer. Hasna was a founding member of the Society of Qatari Engineers, Institute of Electrical and Electronics Engineers Qatar section, and co-established the Qatar Mobility Innovation Center at Qatar Science and Technology Park. As a prolific researcher, he has published more than 250 publications with a total of over 10,000 citations. He was the first from Qatar to be included in Thomson Reuters' highly-cited list of researchers, in 2015. His research focuses on wireless communication, including a project with the Ministry of Foreign Affairs to establish an affordable network connecting the Comoros Islands. Hasna serves on senior committees: the National Education Excellence Award's Board of Trustees and the Energy and Industry Qatarization Awards Advisory Committee. He represents Qatar in the Arabian Gulf University's Board of Trustees since 2014.



HE Zuhua

Center for Excellence in Molecular Plant Sciences
Shanghai, China

Membership Section 01. Agriculture, Nutrition & Food Systems Sciences

Born in Zhuji, Zhejiang, China, on 24 November 1962.

He is a professor at the Center for Excellence in Molecular Plant Sciences, Institute of Plant Physiology and Ecology, Chinese Academy of Sciences (CAS). He earned his Master of Science degree in plant genetics and breeding and completed his PhD in plant pathology at Zhejiang University (formerly Zhejiang Agriculture University). Following his graduate studies, he pursued postdoctoral research with the Plant Molecular and Cellular Biology laboratory at the Salk Institute for Biological Studies, and the Department of Plant Pathology, at the University of California, Davis. In December 2000, he was appointed as a full professor and principal investigator at the Institute of Plant Physiology and Ecology, Shanghai Institutes for Biological Sciences, CAS. His research focuses on understanding the mechanisms of disease resistance to ensure better crop production, while reducing the use of fungicides and promoting environmentally friendly agriculture. His research interests include functional genomics, mechanisms and application of plant disease resistance, in particular broad-spectrum disease resistance genes, and the cross-talk between plant defense and growth/yield.



M. Anwar HOSSAIN

Department of Microbiology
University of Dhaka
Dhaka, Bangladesh

Membership Section 02. Biological Sciences

Born in Munshigonj, Bangladesh, on 1 January 1958.

Hossain is the former vice-chancellor of Jashore University of Science and Technology, in Bangladesh. He received the Bangladesh Academy of Sciences Gold Medal (2017), the University Grants Commission (UGC) Best Researcher Award (2011), and the UGC Gold Medal (2018). He received the Ekushey Padak Award (2022) from the Government of People's Republic of Bangladesh. He earned his PhD in 1991, from University of Tokyo and his Bachelor of Science and Master of Science in biochemistry and molecular biology, in 1981 and 1983 respectively, from Dhaka University. He did his postdoctoral research work in industry, with Suntory Group, Osaka, and in academia at the University of Medicine and Dentistry of New Jersey and the Robert Wood Johnson Medical School, United States of America. He was a visiting professor at Kochi University, Japan and Rhein-Waal University, Germany. He published over 158 referred publications, 4 book chapters, over 100 conference presentations, proceedings and abstracts. His research areas are: antibiotics resistance and pollutants, foot-and-mouth disease viruses, White Spot Syndrome Virus, As-microbiome, COVID-19 and Long COVID, mastitis and mastitis microbiome, genomics and bioinformatics.



Rahinah IBRAHIM

Universiti Putra Malaysia
Serdang, Selangor, Malaysia

Membership Section 10. Economic & Social Sciences, Humanities & Arts

Born in Bentong, Malaysia, on 1 September 1965.

Ibrahim is a senior professor and former dean of the Faculty of Design and Architecture, at Universiti Putra Malaysia. A Stanford University alumna, she is a design scientist and a Fellow of the Academy of Sciences Malaysia. She leads the Built Environment and Life (BE-Life) informatics research group, which focuses on innovating products and processes that preserve and enhance the human cultural behavior. Her research expands her doctoral work on discontinuity in organizations beyond property development, applying it to broader societal and environmental challenges. A strong advocate for integrating local traditional knowledge into modern technology and product development, she emphasizes the value of cultural context in innovation. Her transdisciplinary and translational research approaches have led to numerous award-winning inventions that serve vulnerable communities. Notably, the United Nations recognized her work on an independent sewage treatment plant for wastewater treatment as a Sustainable Development Goals Good Practice project. Ibrahim is currently a distinguished professor at the Purple Pottery College (formerly the Faculty of Arts), Honghe University, Yunnan Province, China.



Raymond Compton JAGESSAR

Faculty of Natural Sciences, University of Guyana
Berbice, Guyana

Membership Section 04. Chemical Sciences

Born in Skeldon, Corriverton, Berbice, Guyana, on 2 November 1967.

Jagessar obtained his Bachelor of Science with distinction in chemistry-biology from the University of Guyana (1992) and his PhD from Oxford University, United Kingdom of Great Britain and Northern Ireland (UK), in 1995. He served as an assistant lecturer at the University of Guyana, from 1991 to 1992. From 1996 to 1999, he held three postdoctoral research fellowships: at the University of South Carolina, Columbia, and Wichita State University, Kansas (both in the United States of America), and at the University of the West Indies. In 2022, he also earned a Diploma in Education (DiPEd) with distinction in higher education from the University of Guyana. Jagessar has received several international honours: he was designated a chartered chemist, and elected Fellow of the Royal Society of Chemistry (UK). He is also a recipient of the Guyana Innovation Prize and a Fellow of the Caribbean Academy of Sciences. His research interests span pure and applied chemistry, chemical biology, and pharmaceutical chemistry. He has published over 100 research articles, five book chapters, one book, three e-books, and has presented at over 100 conferences locally, regionally, and internationally.



JIA Jinfeng

School of Physics and Astronomy
Shanghai Jiao Tong University
Shanghai, China



Membership Section 09. Physics, Astronomy & Space Sciences

Born in Jiangsu, China, on 27 March 1966.

Jia is a chair professor and vice-dean of the School of Physics and Astronomy at Shanghai Jiao Tong University, and acting vice-president of the Southern University of Science and Technology. He graduated in 1987 and received his PhD in condensed matter physics in 1992, both from Peking University. In 2021, he was elected as an academician of the Chinese Academy of Sciences. Jia is an experimental physicist specializing in condensed matter physics. His main research interests include topological superconductors, quantum materials, and quantum phenomena in nanostructures. He has authored more than 340 scientific papers, including 6 in *Science*, 3 in *Nature*, 4 in *Nature Physics*, 3 in *Nature Materials*, and 30 in *Physical Review Letters*, with over 24,000 citations. He has received numerous honors, including the National Prize for Advancement in Natural Science (second class, 2004), the National Prize for Advancement in Natural Science (second class, 2011), the Group Award for Outstanding Science and Technology Achievement from the Qiu Shi Science and Technologies Foundation of Hong Kong (2011), and the National Prize for Advancement in Natural Science (second class, 2019).

JIN Kuijuan

Institute of Physics, Chinese Academy of Sciences
Beijing, China



Membership Section 09. Physics, Astronomy & Space Sciences

Born in Shenyang, China, on 10 February 1965.

Jin is a distinguished scientist in the field of optics and condensed matter physics whose significant contributions have advanced scientific research, promoted women's involvement in science, and facilitated international scientific collaboration. She served as director of the Optical Physics Key Laboratory of the Chinese Academy of Sciences and chair of the Commission of Optical Physics of the Chinese Physical Society, from 2009 to 2017. Since 2015, she has also chaired the Working Group of Women in Physics of the Chinese Physical Society. She served as chair of the Commission of Physics for Development of the International Union of Pure and Applied Physics (IUPAP) from 2021 to 2024, and has been elected the vice-president of IUPAP in 2021. Jin was elected a Fellow of the Institute of Physics in 2011, and a Fellow of the American Physical Society in 2012. For her scientific excellence, she has been honoured with the first-class Rao Yu Tai Basic Optics Prize, and the Xie Xide Physics Prize. In 2023, she was elected as a member of Chinese Academy of Science.

Bal Krishna JOSHI

National Genebank, Nepal Agricultural Research Council (NARC)
Kathmandu, Nepal

Membership Section 01. Agriculture, Nutrition & Food Systems Sciences

Born in Samibhanjyang, Lamjung, Nepal, on 26 June 1967.

Joshi is an agricultural scientist with a PhD in agricultural science earned in Japan, and over 25 years of experience in the field. He has been at the forefront of agrobiodiversity conservation, developing and promoting more than 100 innovative methods and best practices for managing agrobiodiversity. His interventions comprise crops, livestock, forages, agro-insects, agro-microbes, and aquatic agricultural genetic resources. His pioneering efforts include genetic enhancement of landraces, biotechnology applications, geographical information system, climate analog tools, participatory and evolutionary plant breeding, and agricultural policy development. Joshi has published more than 600 articles, edited 25 books, and served as editor-in-chief for two scientific journals. He has taught plant breeding, genetics, biotechnology, and statistics at various universities and was a resource person in international training. He received 12 awards and serves as president of the Plant Breeding and Genetic Society of Nepal. A life member of many scientific organizations, his motto is to make agricultural genetic resources competent and dynamic, emphasizing ecological yield, food health index, and ecological agriculture.



Vahid KARIMIPOUR

Sharif University of Technology
Tehran, Islamic Republic of Iran

Membership Section 06. Information and Data Sciences & Technologies

Born in Khorramabad, Islamic Republic of Iran, on 31 January 1961.

Karimipour began his studies in electrical engineering before switching to physics and earning his PhD from Sharif University of Technology, where he has been a faculty member since 1993, and is now a physics professor. His early research focused on quantum groups and integrable models, later expanding to exactly solvable models in statistical mechanics, particularly reaction-diffusion systems. As a contribution to this field, he developed an algebraic model for particles overtaking each other in a line and related it to traffic flow. Since 2001, he works in quantum computation and quantum information, mentoring many students who now work in Iran and abroad. His work covers various areas of quantum information theory, and is restricted to formal and mathematical aspects, like entanglement theory, and capacity of quantum channels. He was a regular associate of the Abdus Salam International Centre for Theoretical Physics (ICTP) (1998–2013) and a Simons Associate (2015–2023). He served on the editorial board of the *European Physical Journal D* (2019–2024) and was named an outstanding referee by the American Physical Society, in 2013. Since 2007, he co-founded and co-organized the biennial conference series International Iran Conference on Quantum Information and contributed to ICTP schools.



Devang KHAKHAR

Indian Institute of Technology Bombay
Department of Chemical Engineering
Powai, Mumbai, India



Membership Section 05. Engineering

Born in Mumbai, India, on 7 April 1959.

Khakhar is currently an emeritus Fellow in chemical engineering at the Indian Institute of Technology (IIT) Bombay. His research interests include the mechanics of granular materials and polymer processing, all fields where he has currently published more than 150 papers. For his research achievements, he has received several national awards, including the Shanti Swarup Bhatnagar Prize (1997), the Swarnajayanti Fellowship (1998) and the J. C. Bose Fellowship (2010). Khakhar is also a recipient of IIT Bombay's Excellence in Teaching Award, and the Mathur Award for Research Excellence. He is a Fellow of all three science academies of India and the Indian National Academy of Engineering, and currently the Indian National Academy of Engineering chair professor. From January 2009 to April 2019, Khakhar served as the director of IIT Bombay. He has been a member of the Atomic Energy Regulatory Board since 2011, and currently serves on the Governing Body of the Council of Scientific and Industrial Research. He is also the chairman of the governing board of the Technology Information Forecasting and Assessment Council, the Department of Science and Technology and the Bose Institute, Kolkata.

Sardar KHAN

Department of Environment Sciences
University of Peshawar
Khyber Pakhtunkhwa, Pakistan



Membership Section 07. Earth, Climate & Environmental Sciences

Born in Charsadda, Pakistan, on 9 November 1973.

Khan serves as vice-chancellor, University of Shangla, Khyber Pakhtunkhwa, Pakistan. He remained as chairman, Department of Environmental Sciences at the University of Peshawar (UOP), Pakistan, as vice-chancellor of Kohat University of Science and Technology, and director, Directorate of Advanced Studies at UOP. He also holds adjunct positions at Hunan Agricultural University, China and the Chinese Academy of Sciences. He was elected a Fellow of the Pakistan Academy of Sciences (2021). He has authored over 200 peer-reviewed research papers, with an impact factor exceeding 960, and a total citation count of 25,325. His current h-index is 71. He has published one book and six international book chapters, and supervised 35 PhD and 28 Master of Philosophy students. Khan has developed and patented a biochar-based organic fertilizer, and successfully recovered high-purity food-grade calcium carbonate from marble waste, for which he received a patent from the Intellectual Property Organization of Pakistan. He earned many awards, including the Tamgha-e-Imtiaz, the Gold Medal from Pakistan Academy of Sciences, the Young International Scientist Award, and the Best University Teacher Award.

Marcelo KNOBEL

The World Academy of Sciences (TWAS)
 Trieste, Italy

Membership Section 09. Physics, Astronomy & Space Sciences

Born in Buenos Aires, Argentina, on 18 July 1968.



Knobel serves as executive director of TWAS, a position he assumed in December 2024. A distinguished physicist and science advocate, Knobel brings more than three decades of experience in higher education leadership, scientific research, and science communication. He previously served as rector of the University of Campinas (Unicamp) in Brazil from 2017 to 2021, where he has been a faculty member for 30 years. With more than 300 scientific publications and numerous prestigious awards—including Brazil's most distinguished science and technology honour—Knobel is internationally recognized for his contributions to physics research, educational innovation, and science popularization. For his contributions he has received prestigious awards, including the 2022 CBMM Prize on Science and Technology (Brazil's most prestigious science and technology award), the 2019 José Reis Science Popularization Prize, and the 2013 Peter Murányi Prize in Education. He is a Commander of the Order of Scientific Merit (Brazil) and holds a Doctor Honoris Causa from Universidad Mayor de San Andrés, Plurinational State of Bolivia.

Giridhar KULKARNI

Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)
 Jakkur, Bengaluru, Karnataka, India

Membership Section 09. Physics, Astronomy & Space Sciences

Born in Dharwad, Karnataka, India, on 22 July 1963.



Kulkarni earned his PhD from the Indian Institute of Science, Bangalore in 1992, where he also conducted postdoctoral research. He moved to Cardiff University to work on a project funded by Unilever. In 1995, he joined the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) as a faculty fellow, serving there as a professor since 2008. Until 2011, he chaired the Materials Science Unit at JNCASR and held key administrative roles including dean of academic affairs and dean of faculty affairs. He later joined the Centre for Nano and Soft Matter Sciences (CeNS) as its director. In 2020, he returned to JNCASR as president, while continuing to serve as an adjunct professor at CeNS. Kulkarni has been a visiting scientist and professor at several prestigious institutions, including Cardiff University, the University of Tokyo, TASC National Laboratory of the Italian Institute for the Physics of Matter in Trieste, Scuola Normale Superiore in Pisa, Purdue University, and the Institute of Molecular Sciences of Orsay at Université Paris-Sud. He also served as an adjunct professor at the Birck Nanotechnology Center, Purdue University (2009–2011), and held an international senior fellowship from the University of Bayreuth (2016–2018).

Alison Emslie LEWIS

University of Cape Town
Rondebosch, South Africa



Membership Section 05. Engineering

Born in London, United Kingdom of Great Britain and Northern Ireland, on 19 April 1969.

Lewis is the dean of the Faculty of Engineering and the Built Environment at the University of Cape Town (UCT), where she previously served as head of the Department of Chemical Engineering. She is the first woman to hold the position of dean in the faculty's history. She holds a Bachelor of Science, Master of Science, and a PhD in chemical engineering, all from the University of Cape Town. During her academic career, she has supervised more than 200 master's, PhD, and honours students. In addition, she is the co-author of more 160 peer-reviewed scientific articles. Lewis is a registered professional engineer (PrEng), an international member of the National Academy of Engineering (United States of America)—one of only five African members—and a Fellow of both the Institution of Chemical Engineers (IChemE) and the UCT College of Fellows. Her many accolades include the Distinguished Woman Scientist award from South Africa's Ministry of Science and Technology (received in 2012 and 2015), the Rockefeller Fellowship (2018), and the Water Research Commission Legends Award (2021).

Li Hui

Harbin Institute of Technology
School of Civil Engineering
Nangang District, Harbin, China



Membership Section 05. Engineering

Born in Jinan, China, on 21 November 1966.

Li is a distinguished professor at the Harbin Institute of Technology, where she earned her PhD in engineering mechanics, in 1994. She is an academician of the Chinese Academy of Sciences and a globally recognized leader in the fields of structural health monitoring, intelligent wind engineering, and aerogel materials for bridges. Li previously served as president of the International Association for Structural Control and Monitoring, and is currently the president of the Asian-Pacific Network of Centers for Research in Smart Structures Technology. Her pioneering research and impactful innovations have earned her numerous prestigious awards, including the American Society of Civil Engineers (ASCE) Robert H. Scanlan Medal in 2023, the ASCE George W. Housner Medal in 2021, the 2015 Structural Health Monitoring Person of the Year awarded by the international journal *Structural Health Monitoring*, and the National Prize for Scientific and Technological Progress (China) in 2018, 2013, 2007, and 2006. Li is also the founder of the International Competition for Structural Health Monitoring and is widely regarded as a leading figure in the global advancement of intelligent bridge engineering.

Tapas Kumar MAJI

Chemistry and Physics of Materials Unit
Jawaharlal Nehru Centre for Advanced Scientific Research
Jakkur, Bangalore, India



Membership Section 04. Chemical Sciences

Born in Mejia, West Bengal, India, on 1 August 1974.

Maji is a professor at the Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India. He earned his PhD from the Indian Association for the Cultivation of Science, in Kolkata (2002). His research focuses on the design and functionalization of metal-organic frameworks (MOFs) and porous organic polymers (POPs), of which he explores the applications in energy storage and conversion, and cost-effective adsorptive separation and purification of feedstocks. He developed MOFs and POPs for CO₂ capture, and photo and electrocatalytic conversion of CO₂ to fuels and green H₂ production by water splitting. His research also extends to metal-organic "soft" materials for catalysis and optoelectronics, and his achievements are well reflected in the more than 285 publications to his credit. Maji is a recipient of the Shanti Swarup Bhatnagar Award in chemical sciences (2019), the Scopus Young Scientist Award, and the Senior Alexander von Humboldt Fellowship (Germany). His accolades include the Bronze Medal from the Chemical Research Society of India and the Materials Research Society of India. He is a Fellow of the Indian Academy of Sciences and the Royal Society of Chemistry.

Marcos Rodolfo MICHEL LOPEZ

Academia Nacional de Ciencias
La Paz, Plurinational State of Bolivia



Membership Section 10. Economic & Social Sciences, Humanities & Arts

Born in La Paz, Plurinational State of Bolivia, on 14 January 1967.

Michel López's distinguished career reflects a profound commitment to academic research, teaching and cultural heritage preservation. He founded Bolivia's first salvage archaeology company, Empresa Consultora de Arqueología ECOAR and possesses extensive knowledge of Bolivia's protected areas. From 2005 to 2011, as the director of the Institute of Anthropological and Archaeological Research at San Andrés University in La Paz, he spearheaded groundbreaking research and mentored future generations of scholars. His dedication to education has enriched academic discourse, ensuring the transmission of knowledge. From 2011 to 2015, as director-general of the Cultural Heritage at Bolivia's Ministry of Cultures and Tourism, he led initiatives that secured World Heritage Site status by the United Nations Educational, Scientific and Cultural Organization for the Ichapekene Piesta of San Ignacio de Moxos (2012), the Qhapaq Ñan (Andean Road System) and the intangible heritage of the Pujllay Ayarichi (2014). He also championed Bolivia's Cultural Heritage Law (530), enacted in 2014. His academic contributions span diverse topics, including the pre-Columbian settlement of Tarija, ancient hydraulic systems in Beni, and the Inca conquest of Bolivia.

Muhammad Golam MORSHED

University of British Columbia
 Vancouver, Canada



Membership Section 03. Medical & Health Sciences

Born in Kushtia, Bangladesh, on 1 February 1957.

Morshed is a leading authority in microbiology, specializing in zoonotic and vector-borne diseases, diagnostic microbiology and public health. With over 150 scientific publications and \$20 million in research funding, he has addressed a broad range of topics, including SARS-CoV-2, and syphilis. His career began at the Teknaf Dysentery Project, where he established a microbiology laboratory in a remote, power-deprived area using innovative methods. He helped establish microbiology labs in Dhaka Children Hospital and Jahangirnagar University, which later was turned into a full department. Before moving to Canada, he pursued a PhD in Japan. He has been a key scientist at the British Columbia Centre for Disease Control and University of British Columbia (UBC), mentoring students and managing outbreaks like SARS-CoV-2 and West Nile Virus. He has delivered over 50 international lectures. His accolades include UBC's Excellence in Education (2023), the Distinguished Microbiologist Award (2018), Top 25 Canadian Immigrants People's Choice Award (2017) and Excellence in Clinical Services Award from UBC (2016). Morshed's contributions highlight resilience and dedication in public health.

Yacob MULUGETTA

University College London (UCL)
 Department of Science, Technology, Engineering & Public Policy (STePP)
 London, United Kingdom of Great Britain and Northern Ireland



Membership Section 10. Economic & Social Sciences, Humanities & Arts

Born in Addis Ababa, Ethiopia, on 5 November 1964.

Mulugetta is a professor of energy and development policy at University College London (UCL), and a member of the management team of the Climate Compatible Growth programme. Prior to joining UCL, he held an academic position at the Centre for Environmental Strategy at the University of Surrey, United Kingdom of Great Britain and Northern Ireland. He is also a founding member of the African Climate Policy Centre at the Ethiopia-based UN Economic Commission for Africa, where he served as senior climate and energy specialist (2010–2013). He has over 25 years of research, teaching and advisory experience specialising on the links between energy infrastructure provision and human welfare. His research focuses on three interconnected areas: energy systems and development; energy systems and climate change; and political economy of low carbon development. He served as a coordinating lead author of the energy systems chapter of the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report (Working Group III on mitigation), lead author in the IPCC Special Report on global warming, and lead author in the IPCC 6th Assessment Report. He is a Fellow of the African Academy of Sciences.

Aliya NAHEED

icddr,b
Mohakhali, Dhaka, Bangladesh

Membership Section 03. Medical & Health Sciences

Born in Dhaka, Bangladesh, on 9 June 1966.

A medical doctor with 30 years of health research experience in Bangladesh, including a research track record in disease epidemiology, population studies and health systems research, Naheed joined the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) in 1994 after earning a degree in medicine from the University of Dhaka (1992). She began a research career in infectious disease epidemiology after obtained a Master of Public Health degree from the Johns Hopkins University (US), in 2002. After obtaining a PhD from Tulane University (US) in 2012, she focused on noncommunicable diseases and, after postdoctoral training from the University of Melbourne, Australia (2015), focused on health systems research. She served as the head of the Initiative for Noncommunicable Diseases at the Health Systems and Population Studies Division at icddr,b for eight years (2015–2022) where she is currently a senior scientist with the Nutrition Research Division. She received the Bangladesh Academy of Science Sultan Ahamed Choudhury Science and Technology Gold Medal Award in 2021, and in 2022 was elected to the fellowship of the Bangladesh Academy of Sciences.



Sheila NATHAN

Universiti Kebangsaan Malaysia
Selangor, Malaysia

Membership Section 02. Biological Sciences

Born in Kuala Lumpur, Malaysia, on 1 March 1963.

Nathan earned a PhD in DNA Repair (1989–1993), and a Master of Science with distinction in molecular biology and genetic manipulation (1988–1989) both from University of Sussex, United Kingdom of Great Britain and Northern Ireland (UK), and a Bachelor of Science with first class honours in biochemistry (1984–1988) from Universiti Kebangsaan Malaysia, Malaysia. Her research focuses on dissecting the pathogenesis of the bacterium *Burkholderia pseudomallei* and the host defence against its infection. She has major research collaborations with Stanford University (United States of America), University of Sheffield (UK) and King Abdullah University of Science and Technology (Saudi Arabia), which have contributed to advance understanding of the bacterium's virulence and pathogenic mechanisms, as well as the failure of the host immune response. Her findings have resulted in the publication of over 150 research papers, review articles, and book chapters, earning her invitations to speak at national and international conferences and review grant applications for funders from Malaysia, UK, Switzerland, Austria, and Italy. She successfully trained over 50 graduate students, and is a regular peer reviewer for international journals in the field.



The Hoang NGUYEN

Military Central Hospital 108
Hoan Kiem District, Hanoi, Viet Nam

Membership Section 03. Medical & Health Sciences

Born in Ha Tinh, Viet Nam, on 1 August 1965.

Nguyen received a German Academic Exchange Service scholarship (1994–1997) and an Alexander von Humboldt Foundation scholarship (2006–2009), both in Germany. He earned his PhD in 1997, and his Doctor of Sciences in 2008. In 2006, he became an assistant professor, and in 2018, a full professor. He was a member of the surgical team who performed the world's first two arm transplants in Munich, in 2008, and led the world's first hand-transplant from a living donor in Viet Nam (2020). He was appointed the deputy director of the Central Military Hospital 108 in 2014, served as the leader of orthopaedics and trauma in Viet Nam, and is a leading authority in regenerative medicine, microsurgery, and organ transplantation. Nguyen is a member of the German Association of Surgery, vice-president of the Vietnam Orthopedics Association, and vice-president of the Vietnam Society of Organ Transplantation. His awards include the Nepomuc von Nussbaum Award (1997), APKO (2008), Karl Max von Bauerfeind (2008), VIFOTEC (2010), Alexander von Humboldt Research Award (2012), Government Awards (five times), and the Award for Contribution to Public Health from the Royal Government of Cambodia (2018).



Thi Thanh Mai NGUYEN

Vietnam National University-Ho Chi Minh City
Thu Duc City, Ho Chi Minh City, Viet Nam

Membership Section 04. Chemical Sciences

Born in Binh Phuoc, Viet Nam, on 1 December 1974.

Nguyen is a professor in medicinal chemistry at Vietnam National University, Ho Chi Minh City (VNUH-CM), Viet Nam, where she joined in 1996. She received her PhD in pharmaceutical science from the University of Toyama, Japan in 2005. From 2013 to 2021 she served as the dean of the faculty of chemistry. From 2021 to June 2024 she was the vice-president of the University of Science. Since June 2024 she is VNUHCM vice-chancellor. Her research interests focus on natural products and medicinal chemistry, fields in which she aims to elucidate the structure and biological activities of single compounds extracted from Vietnamese medicinal plants. Nguyen has nearly 100 peer-reviewed research papers and developed some dietary supplementary products to support human health.



Ntobeko Ayanda Bubele NTUSI

South African Medical Research Council
Parow Valley, Cape Town, Western Cape, South Africa

Membership Section 03. Medical & Health Sciences

Born in Umtata, South Africa, on 24 January 1977.

Ntusi, president and CEO of the South African Medical Research Council, is a distinguished leader in medical research. Prior to this role, he served as chair and head of the Department of Medicine at the University of Cape Town (UCT) and Groote Schuur Hospital. His groundbreaking research has significantly advanced the understanding of heart failure and cardiomyopathy, the cardiovascular phenotype and pathophysiology of autoimmune inflammatory heart disease, as well as HIV-associated cardiovascular disease across diverse global clinical settings. More recently, he led pioneering studies on the biology and immunology of COVID-19, with impact extending beyond South Africa's borders. A member of the South African Academy of Sciences and a Fellow of the Royal College of Physicians, the Royal Society of South Africa, and the UCT College of Fellows, Ntusi's accolades include the prestigious South African Medical Research Council Gold Medal, the Walter Siegenthaler Medal and Memorial Lecture from the University of Zurich, and the University of Oxford's Oppenheimer Fund Academic Exchange Award.



Salah OBAYYA

Zewail City for Science and Technology
Giza, Egypt

Membership Section 05. Engineering

Born in Mansoura, Egypt, on 27 May 1969.

Obayya is an internationally recognized scientist who holds fellowships from several leading scientific societies, including the Institute of Electrical and Electronics Engineers, Optical Society of America, Society of Photo-Optical Instrumentation Engineers, American Physical Society, African Academy of Sciences, Applied Computational Electromagnetics Society, Higher Education Academy, Institution of Engineering and Technology, and the Institute of Physics. He joined Zewail City of Science and Technology (ZC) in 2012, where he served as vice-chairman and currently holds the position of director-general of research institutes. Prior to joining ZC, Obayya spent 15 years at leading universities in the United Kingdom of Great Britain and Northern Ireland, including serving as chair professor of photonics at the University of South Wales. His outstanding contributions have been recognized with several prestigious awards, including the African Union Kwame Nkrumah Continental Award for Scientific Excellence; Africa's highest scientific honor (2021), the OPTICA Diversity and Inclusion Advocacy Recognition Award (2023), and the distinguished title of UNESCO Chair-Holder for Sustainable Development in Africa (2019).



Mayowa Ojo OWOLABI

University of Ibadan
Department of Medicine
University College Hospital
Ibadan, Oyo State, Nigeria



Membership Section 03. Medical & Health Sciences

Born in Aisegba Ekiti, Nigeria, on 17 November 1973.

Owolabi is the director of the Center for Genomic and Precision Medicine at the University of Ibadan, Nigeria, and a Fellow of the Royal College of Physicians, the American Neurological Association, the American Heart Association, the American Academy of Neurology, the Nigerian Academy of Science, the African Academy of Sciences and the Academy of Medical Sciences. He is a global leader in brain and global health, with over 460 scientific publications, more than 204,000 citations, and a Google Scholar h-index of 109. Widely recognized for his contributions to neuroscience and clinical research, he introduced the conceptual innovations of “stroke quadrangle” and “brain quadrangle”, which have helped shape novel approaches for stroke care and brain health. Ranked among the top 2% of scientists globally (2024), he was the recipient of the 2021 World Stroke Organization Global Award for Outstanding Contributions to Clinical Stroke Research. He is a leading voice in the promotion of brain health. He chairs the Lancet Commission on neurorehabilitation, developing pragmatic solutions to improve the quality of life of over 3.4 billion people with neurological conditions globally.

Suzana PEREIRA NUNES

King Abdullah University of Science and Technology (KAUST)
Thuwal, Saudi Arabia



Membership Section 04. Chemical Sciences

Born in Casa Branca, Brazil, on 28 February 1959.

Pereira Nunes is a professor of chemical and environmental science and engineering at King Abdullah University of Science and Technology (KAUST) in Saudi Arabia, where she also served as vice provost for faculty and academic affairs. Prior to joining KAUST, she led the Department of Membranes for Renewable Energy at the Helmholtz Association, in Germany and was previously an assistant and associate professor of physical chemistry at the State University of Campinas in Brazil, following a postdoctoral Humboldt Fellowship in Mainz, Germany. In recognition of her contributions to physical sciences (chemistry), Nunes was named the international 2023 L'Oréal-UNESCO For Women in Science Laureate for Africa and the Arab States. She is a Fellow of the São Paulo Academy of Sciences, the Royal Society of Chemistry (United Kingdom of Great Britain and Northern Ireland), the North American Membrane Society, and an honorary member of the European Membrane Society.

QIN Chuan

Institute of Laboratory Animal Science, Chinese Academy of Medical Sciences (CAMS) Peking Union Medical College (PUMC)
Chaoyang District, Beijing, China



Membership Section 03. Medical & Health Sciences

Born in Qiqihar, Heilongjiang, China, on 23 October 1959.

Qin has dedicated more than 40 years to research in laboratory animal science and comparative medicine. She established China's first international repository with multiple species and strains—the National Repository of Animal Models of Human Diseases. Her work includes the development of animal models for major disease outbreaks such as SARS and COVID-19, which played a key role in the early evaluation of emergency therapeutics and vaccines. Qin is a strong advocate for advancement of laboratory animal science, but also a committed supporter of animal welfare and ethics. She led the design of national standards for laboratory animals in China, contributing to improved animal welfare and the standardized training of laboratory personnel. She has authored 183 scientific papers as first or corresponding author, including eight papers on *Cell*, *Nature*, and *Science*. She is the editor in chief of six national unified textbooks for laboratory animal science and medical laboratory animal science, and has published 31 monographs. She was selected as a highly-cited scientist by Clarivate (2022–2023), and won several national-level awards of China.

Raja Noor Zaliha RAHMAN

Department of Microbiology/Enzyme and Microbial Technology Research Centre
Faculty of Biotechnology and Biomolecular Sciences
Universiti Putra Malaysia
Serdang, Selangor, Malaysia



Membership Section 02. Biological Sciences

Born in Arau, Perlis, Malaysia, on 18 June 1956.

Rahman, a professor and researcher at Universiti Putra Malaysia, is recognized internationally for her expertise and pioneering work in microbiology, which led to the naming of a new bacterium, *Geobacillus zalihae*, in her honour. She has made notable contributions to space research, playing a key role in projects under the Malaysian Space Programme. In collaboration with the Japan Aerospace Exploration Agency, she has facilitated the successful delivery of 24 protein samples to KIBO, the Japanese Experiment Module aboard the International Space Station (ISS). Rahman also contributes to higher education quality assurance as a member of the Malaysian Qualifications Agency's programme evaluation panel, and serves on the council of the Asia Pacific Protein Association. Her work has been recognized with numerous academic honours, including: Top Research Scientist Malaysia, Fellow of the Academy of Sciences Malaysia, and Knight Degree Conferment from the International Federation of Inventors' Associations.

Antonio José ROQUE DA SILVA

Physics Institute of the University of São Paulo (IFUSP) and Brazilian Center for Research in Energy and Materials (CNPEM)
Campinas/SP, Brazil



Membership Section 09. Physics, Astronomy & Space Sciences

Born in São Paulo, Brazil, on 23 March 1964.

Roque da Silva is a full professor in the field of electronic structure simulations of condensed matter systems, Institute of Physics, University of São Paulo, where he has been working since 1997. His research focuses on nanostructured materials and the exploration of both static and dynamic processes, in particular on charge transport calculations—a field in which he has pioneered methods for large, disordered systems. In 2009 he joined the Brazilian Centre for Research in Energy and Materials (CNPEM), serving first as the director of the Brazilian Synchrotron Light Laboratory and, since 2018, as director-general of CNPEM. His leadership has been instrumental in the development of Sirius, the state-of-the-art synchrotron light source in Brazil. He holds a bachelor's and master's degree in physics from University of Campinas, a PhD and postdoctorate from University of California, Berkeley, and a postdoctorate from University of California, Los Angeles. He is a full member of the Brazilian Academy of Sciences and the Academy of Sciences of the State of São Paulo. In 2018, he received the National Medal of the Order of Scientific Merit, Commander Class, by the Presidency of the Republic, and in 2025 the Almirante Álvaro Alberto prize.

Maria Aparecida Soares RUAS

Universidade de São Paulo
Instituto de Ciências Matemáticas e de Computação
São Carlos, S.P., Brazil



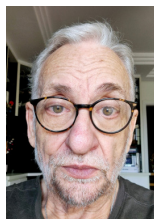
Membership Section 08. Mathematical Sciences

Born in Lins, São Paulo, Brazil, on 5 January 1948. Passed away on 30 June 2025.

Ruas was a professor emeritus at the Institute of Mathematical and Computer Sciences, University of São Paulo, where she served as a professor (1981–2012). During her tenure, she served as head of the Department of Mathematics and deputy director of the institute, was a member of the University Council, and vice-chair of the University's permanent evaluation committee. She also served in the advisory committees of CAPES (Coordination for the Improvement of Higher Education Personnel) and CNPq (National Council for Scientific and Technological Development). A founding member of the Brazilian Mathematical Society, she sits on its board of directors. A leading expert in singularity theory, Ruas coordinated international research exchange projects including Brazil's most prominent research groups in the field. Since 1990, her group has organized the internationally reputed workshop on real and complex singularities. Her scientific contributions to singularity theory include advances in the classification of singularities and their applications to geometry. A member of the Brazilian Academy of Sciences, she received the Order of Scientific Merit by the Brazilian government.

Paulo SALDIVA

Faculty of Medicine
 University of São Paulo
 São Paulo, Brazil



Membership Section 07. Earth, Climate & Environmental Sciences

Born in São Paulo, Brazil, on 12 July 1954.

Saldiva graduated from the Faculty of Medicine of the University of São Paulo (USP) in 1977, earned his PhD in 1983, and became full professor in the Pathology Department, Faculty of Medicine (USP) in 1996. He was the director of the Institute of Advanced Studies at USP (2016–2020) and was elected a member of the World Health Organization (WHO) Air Quality Committee (in 2005 and 2021). He is also a member of the International Agency for Research on Cancer panel that evaluated the carcinogenicity of ambient air pollution in 2013, and of the WHO panel for the development of the verbal autopsy instrument to improve global vital statistics. In the past six years he has developed an autopsy platform for public health studies, which was used during the COVID-19 pandemic. Since 2023, he serves on the TWAS committee on Urban Health and on the committee of the Public Policies Research Program of São Paulo's State Scientific Agency. He is a member of the Brazilian National Academy of Sciences and National Academy of Medicine, the recipient of the Anchieta Medal (São Paulo Municipality), the Order of Scientific Merit awarded by the Brazilian Academy of Sciences, and was included in Brazilian Forbes as one of the 50 most influential personalities (2024).

Ravigadevi SAMBANTHAMURTHI

Academy of Sciences Malaysia
 Kuala Lumpur, Malaysia



Membership Section 01. Agriculture, Nutrition & Food Systems Sciences

Born in Johore Bharu, Malaysia, on 13 July 1955.

Sambanthamurthi was the founding director of the Advanced Biotechnology and Breeding Centre at the Malaysian Palm Oil Board. Inducted a Fellow of the Royal Society in 2025, she is also a Fellow of the Academy of Sciences Malaysia, and currently chairs its biological, agricultural, and environmental sciences discipline group. She led the groundbreaking Oil Palm Genome Project, producing the crop's first publicly available reference genome, published in *Nature*. This milestone enabled scientific advances, including discovering the SHELL gene, the most important genetic determinant of oil yield. She also uncovered phenolic bioactive compounds in palm oil mill effluent and developed an innovative process for their extraction that led to the establishment of the first production facility in Mexico. She has published three papers in *Nature* and one in *Nature Communications*, and is the holder of over 40 patents. Her accolades include: the Malaysian Invention and Design Society Luminary Award, Lifetime Achievement Award from the Oils and Fats Congress 2022, and the Knight of the International Order of Merit of Inventors, from the International Federation of Inventors' Associations.

Muhammad Raza SHAH

H.E.J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi
Karachi, Pakistan



Membership Section 04. Chemical Sciences

Born in Charsadda, Pakistan, on 18 February 1976.

Shah is a professor and director of the International Centre for Chemical and Biological Sciences, and UNESCO chair on bio-organic medicinal and natural product chemistry at the University of Karachi, Pakistan. His research explores the intersection of supramolecular chemistry and nanotechnology. He has authored six books and edited four books (all with Elsevier), nine book chapters and more than 550 research articles with a cumulative impact factor exceeding 1,900. National and international agencies, including Organisation for the Prohibition of Chemical Weapons, International Foundation for Science, ISECO-COMSTEC (Standing Committee on Scientific and Technological Cooperation), TWAS-COMSTEC, Defense Threat Reduction Agency (United States of America), Higher Education Commission (Pakistan), and Pakistan Science Foundation have provided financial support to his research, and 50 scholars have completed their PhD studies under his supervision or co-supervision. He is a Fellow of the Pakistan Academy of Sciences, and the Islamic World Academy of Sciences. He received the Atta-ur-Rahman gold medal in 2006, and the Dr. Raziuddin gold medal in 2015, both from the Pakistan Academy of Sciences, as well as the civil award Tamgha-i-Imtiaz, conferred by the President of Pakistan (2015). He is a recipient of the Abdus Salam cash prize in chemistry, and serves as an editor of the *Journal of the Chemical Society of Pakistan*.

Milena B. P. SOARES

Instituto Gonçalo Moniz (FIOCRUZ)
Candeal, Salvador, Bahia, Brazil



Membership Section 03. Medical & Health Sciences

Born in Rio de Janeiro, Brazil, on 4 December 1968.

Soares is a senior researcher at the Gonçalo Moniz Institute, Oswaldo Cruz Foundation, and a full professor at Senai Cimatec in Salvador, Bahia, Brazil. She earned her Bachelor of Science in genetics and her PhD in immunology from the Federal University of Rio de Janeiro, completing a visiting fellowship at Harvard University. She is a senior research Fellow of the Brazilian National Council for Scientific and Technological Development, a member of the Academy of Sciences of Bahia, and the Brazilian Academy of Sciences. Her research focuses on translational medicine, with the goal of developing new diagnostic tools, therapeutic drugs, and advanced therapeutic products. Her work primarily targets neglected and unmet medical needs, including Chagas disease, leishmaniasis, and spinal cord injury. A pioneer in the field of advanced therapy medicinal products in Brazil, Soares was an expert advisor with the Brazilian Health Regulatory Agency and the Ministry of Health. In her career, she has led collaborative research with national and international institutions, mentoring a new generation of researchers and health professionals, making a significant contribution to scientific capacity-building in Brazil.

SUN Hang

Kunming Institute of Botany, Chinese Academy of Sciences
Kunming, Yunnan, China

Membership Section 02. Biological Sciences

Born in Kunming, China, on 7 December 1963.

Sun graduated with a bachelor's degree in biology from Yunnan University (1983), and earned his master's degree (1988) and his PhD (1994) from the Kunming Institute of Botany (KIB), Chinese Academy of Sciences (CAS), under the University of CAS. He began his scientific career at KIB in July 1983, and was promoted to assistant researcher in December 1990, associate researcher in June 1995, and senior research Fellow in November 1997. In November 2023, he was elected a CAS Academician. He has participated in international academic exchanges, serving as a visiting scholar at Harvard University (April–July 1999) and conducting advanced studies at the Jodrell Laboratory of the Royal Botanic Gardens, Kew (January–July 2001). He held several leadership positions at CAS, including vice-president of the Kunming Branch (2002–2005 and 2012–2014), and served as director of the Kunming Institute of Botany (July 2014 to November 2023). His research focuses on phytotaxonomy, phylogeny, and biogeography. He has published 430 scientific papers, including 280 as first author or corresponding author, and contributed to 13 monographs as chief editor or co-chief editor.



Raymond R. TAN

De La Salle University
Manila, Philippines

Membership Section 05. Engineering

Born in Manila, Philippines, on 17 January 1973.

Tan is a distinguished full professor in the Department of Chemical Engineering, and a university fellow at De La Salle University. He is an academician of the Philippine National Academy of Science and Technology. His research focuses on the development and use of models to enhance the sustainability of industrial systems. Tan is internationally recognized as the co-developer of the carbon emissions pinch analysis algorithm. He serves as an editor-in-chief of *Process Integration and Optimization for Sustainability*, associate editor of *Sustainable Production and Consumption*, and is a member of the editorial boards of *Clean Technologies and Environmental Policy*, *Chemical Engineering Transactions*, and *Cleaner Engineering and Technology*. He has received numerous scientific awards from various Philippine organizations, has been listed in the Scopus database of the world's top 2% of scientists since 2019, and is included in Reuters' Hot List of the world's 1,000 most influential climate researchers.



Francisco de Assis TENÓRIO DE CARVALHO

Universidade Federal de Pernambuco, Centro de Informatica
Recife-PE, Brazil

Membership Section 06. Information and Data Sciences & Technologies

Born in Garanhuns, Brazil, on 1 November 1958.

Tenório de Carvalho (PhD, Paris Dauphine University, 1992) is a full professor at the Federal University of Pernambuco, Recife, Brazil. He received the Scientific Merit Award from the Brazilian Computer Society in 2021, and is classified as a level 1A researcher—the highest category—by the Brazilian National Research Council (CNPq). He is a Fellow of: Science Academy of the State of Pernambuco-APC, Brazil (2020), Brazilian Academy of Sciences (2023), Core Academy (2024), Asia-Pacific Artificial Intelligence Association (2024). He was a visiting professor at many European universities and research centres. He supervised 25 master's and 14 doctoral theses, and authored more than 240 articles in high-impact journals and conferences. Now his h-index scores at 35 (Google Scholar), 27 (Scopus), and 24 (Web of Science). He is in the range of 2% of the most influential scientists in the world in the area of Artificial Intelligence. He is also a member of the Computer Science Advisory Committee of CNPq (2017–2020 and 2023–2026), and a member of the council of the International Association for Statistical Computing (2009–2013).



Ricardo Ivan Ferreira TRINDADE

Universidade de São Paulo
São Paulo- SP, Brazil

Membership Section 07. Earth, Climate & Environmental Sciences

Born in Natal, Brazil, on 21 June 1971.

Trindade is a full professor at the University of São Paulo (USP), where he served as vice-director and director of the Institute of Astronomy, Geophysics and Atmospheric Sciences. He coordinates the USP-China Center, fostering institutional collaboration with Chinese partners. He holds a Bachelor of Science in geology from the Federal University of Rio Grande do Norte (1995) and a PhD in geophysics from USP (1999). His research focuses on rock magnetism, paleomagnetism, and archeomagnetism, with emphasis on paleoenvironmental changes throughout Earth's history, including the Neoproterozoic-Cambrian transition, Phanerozoic biotic crises, and recent geomagnetic field behaviour across the South Atlantic Magnetic Anomaly. He authored more than 200 peer-reviewed articles, and is among Brazil's most cited geophysicists (h-index 50 on Google Scholar). He leads major national and international projects and has supervised more than 40 graduate and postdoctoral researchers. He is a member of the Brazilian Academy of Sciences, Secretary of the International Association of Geomagnetism and Aeronomy, and a voting member of the International Commission on Stratigraphy.



Yuri TSCHINKEL

Mathematics and the Physical Sciences
Simons Foundation
New York, United States of America



Membership Section 08. Mathematical Sciences

Born in Moscow, Russia, on 31 May 1964.

Tschinkel received his PhD from the Massachusetts Institute of Technology in 1992. From 1992–95 he was a junior Fellow of the Harvard Society of Fellows, and from 1995–96 a Leibniz Fellow at the École Normale Supérieure in Paris. Prior to joining the Simons Foundation in 2012, Tschinkel was a faculty member at the University of Illinois at Chicago, a visiting associate professor at Princeton University, the Gauss chair of mathematics at the University of Goettingen, and professor and chair of the mathematics department at the Courant Institute, New York University. Tschinkel's research lies at the interface of algebraic geometry and number theory. He is the author of 165 papers and editor of 20 books. He is a Fellow of the American Mathematical Society and of the American Association for the Advancement of Science. He is a member of Leopoldina, the German National Academy of Sciences, a foreign member of Academia Europaea, and a foreign member of the Bulgarian Academy of Sciences.

Shahlo TURDIKULOVA

Academy of Sciences of Republic of Uzbekistan
Tashkent, Uzbekistan



Membership Section 02. Biological Sciences

Born in Tashkent, Uzbekistan, on 28 April 1973.

Turdikulova is a leading scientist in biotechnology, biochemistry, and human genetics. She holds a PhD in biotechnology (2001) and a Doctor of Sciences degree in biochemistry and cell biology (2008). She conducted postdoctoral research at University of California, Los Angeles (2002–2005) and earned a postgraduate diploma in organizational leadership from the University of Oxford, in 2025. A pioneer of human genetics research in Uzbekistan, she identified 1,450 genetic markers linked to 670 disease-susceptibility genes, and established a national DNA bank with 24,000 samples. She led the development of Uzbekistan's first polymerase chain reaction test and co-led clinical trials of the ZF-UZVAC-2001 COVID-19 vaccine. She served as deputy minister of innovation and higher education (2021–2024) and currently directs the Center for Advanced Technologies. Since 2024, she has been vice-president of the Uzbekistan Academy of Sciences, leading national biotech and innovation programmes. She is a recipient of the Order Dustlik for her service to science and society.

Chandra VENKATARAMAN

Indian Institute of Technology Bombay
Powai, Mumbai, India

Membership Section 07. Earth, Climate & Environmental Sciences

Born in Mumbai, India, on 3 June 1963.

Venkataraman is a leading researcher in aerosol science, working at the intersection of technology and emissions, climate science, air quality, and engineering nanoparticles for drug delivery. Her group aims to use aerosol science to serve society, through a diversity of environmental and biomedical applications, with emphasis on locally relevant solutions. She has authored over 150 cited publications, a book and four patents, and has built academic and research programmes to advance climate and air quality studies in South Asia. She was the founding head of the Centre for Climate Studies, and led the multi-institutional COALESCE research network. She participates in global policy networks, as a member of the Science Advisory Panel of the Climate and Clean Air Coalition of the United Nations Environment Programme and the Global Burden of Disease working group. She has extensively mentored research students and supported the advancement of women in STEM. She is a Fellow of the National Academies of Science and Engineering in India, and has received a Indian Institute of Technology Delhi Distinguished Alumni Award (2024), a Fulbright-Nehru Fellowship (2012), the Vikram Sarabhai Award (2006), and teaching excellence awards.



Anna WIENHARD

Max Planck Institute for Mathematics in the Sciences
Leipzig, Germany

Membership Section 08. Mathematical Sciences

Born in Gießen, Germany, on 7 October 1977.

Wienhard is the director at the Max Planck Institute for Mathematics in the Sciences in Leipzig, an honorary professor at the University of Leipzig, and scientific chair of the Heidelberg Laureate Forum Foundation. Her mathematical scientific interests focus on geometry, group theory, and dynamics, and on the application of geometric methods in other sciences. Her career led her to Switzerland (ETH Zurich, Basel University) and the United States of America (Institute for Advanced Study, Princeton; University of Chicago; Princeton University; Caltech; Simons Laufer Mathematical Sciences Institute, formerly the Mathematical Sciences Research Institute). As a professor at Heidelberg University and a group leader at the Heidelberg Institute for Theoretical Studies she was co-spokesperson of the Excellence Cluster STRUCTURES, and founding director of the Research Station Geometry and Dynamics. Among her honours are two European Research Council grants and the Hector Science Award 2022. She gave invited addresses at the International Congress of Mathematicians in 2018, and the European Congress of Mathematics (ECM) in 2016, and a plenary address at the ECM in 2024. She is a Fellow of the American Mathematical Society, member of the Heidelberg and the Berlin-Brandenburg Academies of Science (Leopoldina), and the European Academy of Sciences.



Harald WINKLER

University of Cape Town
Rondebosch, South Africa

Membership Section 10. Economic & Social Sciences, Humanities & Arts

Born in Johannesburg, South Africa, on 1 March 1964.

Winkler is a professor in Policy Research in International Services and Manufacturing, a research unit in the School of Economics at the University of Cape Town, South Africa. His research explores the intersection of development, climate, social justice, and economics, with future work focusing on equity and inequality between and within countries; just (energy) transitions and just adaptation; implications of the global stocktake; and low emission development strategies and nationally determined contributions. His over 100 academic publications can be accessed on Scopus. He has led transdisciplinary research on mitigation action plans and scenarios in several developing countries. Winkler is a member of both the South African Academy of Sciences and African Academy of Sciences, and serves on the South African delegation to the negotiations under the United Nations Framework Convention on Climate Change. He has recently served as joint editor-in-chief of the international journal *Climate Policy*, a coordinating lead author for the Intergovernmental Panel on Climate Change, and as a co-facilitator of the technical dialogue of the global stocktake under the Paris Agreement.



Seikh Mohammad YUSUF

Physics Group
Bhabha Atomic Research Centre
Mumbai, India

Membership Section 09. Physics, Astronomy & Space Sciences

Born in Singhee, West Bengal, India, on 3 March 1965.

Yusuf, a J.C. Bose National Fellow, is a senior professor at the Homi Bhabha National Institute, serving as director of the physics group at the Bhabha Atomic Research Centre, Mumbai. He was the director of the Institute of Physics, Bhubaneswar, held a postdoctoral fellowship at Argonne National Laboratory (United States of America), and was a visiting scientist at the Institute of Materials Science in Spain. His research expertise lies in condensed matter physics. He has published nearly 400 original research articles, and obtained several patents. He serves as president of Asia-Oceania Neutron Scattering Association, and vice-president of the Materials Research Society of India. In the past, he was appointed as president of the Indian Physics Association, vice-chair of the Division of Condensed Matter Physics of the Association of Asia Pacific Physical Societies, president of the Neutron Scattering Society of India, and council member of the National Academy of Sciences, India. His honours include Materials Research Society of India (MRSI) Distinguished Lectureship Award, the P.K. Iyengar Memorial Award, the Raja Ramanna Prize Lecture in Physics (Jawaharlal Nehru Centre for Advanced Scientific Research), the MRSI Medal, and the Department of Atomic Energy Homi Bhabha Science and Technology Award.



ZHU Tong

College of Environmental Sciences and Engineering
Peking University
Beijing, China



Membership Section 07. Earth, Climate & Environmental Sciences

Born in Chengdu, China, on 6 September 1962.

Zhu is a Boya Chair professor, former dean of College of Environmental Sciences and Engineering, and founding director of the Institute of Tibetan Plateau, Peking University. He has made exceptional contributions to fundamental research in atmospheric chemistry and science-based air pollution control in developing countries, by identifying sources, revealing physical and chemical mechanisms, and assessing health impacts of atmospheric pollution. His findings have greatly supported China's Air Pollution Prevention and Control Action Plan, which drastically improved the air quality over the past decade in China. His research on the health effects of air pollution and climate change has greatly promoted the interdisciplinary research and education on environmental health. A member of the Chinese Academy of Sciences and Chinese Academy of Medical Sciences, he is a Fellow of the American Geophysical Union for his "exceptional contributions to advancing fundamental atmospheric chemistry and assessing impacts of megacity air pollution on human health and climate".

Liesl Johanna ZÜHLKE

South African Medical Research Council
University of Cape Town
Institute of Child Health, Red Cross War Memorial Children's Hospital
Rondebosch, Cape Town, South Africa



Membership Section 03. Medical & Health Sciences

Born in Cape Town, South Africa, on 10 April 1968.

Zühlke is vice-president of the South African Medical Research Council, responsible for extramural research and internal portfolio, and directs the Children's Heart Disease Research Unit focusing on relevant pediatric heart diseases in Africa. She has authored more than 250 publications, including conference proceedings and book chapters, with an h-index of 58. She has more than 74,000 citations and was a finalist for South Africa in the Women in Science Award. In 2018, she received the MRC/DFID (Medical Research Council/Department for International Development) African Research Leader Award, the winner of the National Research Foundation (NRF) of South Africa award for Social Impact in Research, the International Metrodora Award for Public Health and Research and the University of Cape Town vice-chancellor's Alan Pfifer Award for research. She was recently inducted into the prestigious University of Cape Town College of Fellows, the university's highest academic honour, and is a member of the South African Academy of Sciences. She is a fellow of the American College of Cardiology, European Society of Cardiology and American Heart Association. She is a B-1 rated NRF researcher, past president of the Paediatric Cardiac Society of South Africa and the South African Heart Association.

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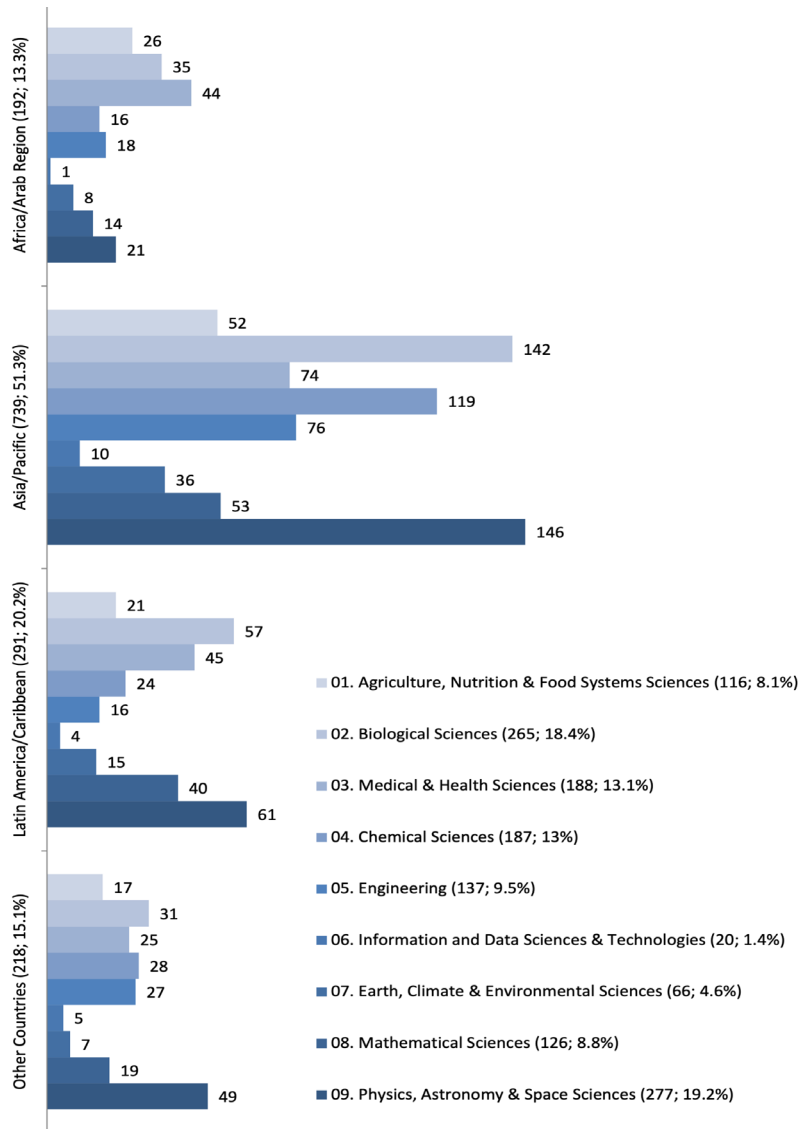
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- The Jawaharlal Nehru Centre for Advanced Scientific Research in Bangalore, India
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- The Brazilian Academy of Sciences in Rio de Janeiro, Brazil.



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