



a scientific call for COP30

PROFILE OF THE PARTICIPANTS

A SCIENTIFIC CALL FOR COP30

Science Academies United for Climate Action

Manaus, Brazil – October 20-22, 2025

DELEGATES OF THE ACADEMIES

ARGENTINA

National Academy of Sciences



Gabriel Bernardello is Professor Emeritus of the National University of Córdoba (UNC), Vice President of the National Academy of Sciences and Corresponding Member of the Botanical Society of America. He was professor at the Faculty of Exact, Physical, and Natural Sciences (FCEFN) at the UNC and Senior researcher at CONICET. Bernardello has dedicated himself to botanical research and biology teaching. He published more than 170 papers in scientific journals on aspects of biosystematics (with special reference to the Solanaceae family), reproductive biology, and cytogenetics of angiosperm plants. His pioneering studies in the region on floral nectar and studies on endemic plants of the Juan Fernández Islands and the Canary Islands are noteworthy. He was Secretary of Research and Graduate Studies, Director of the Master's Program in Education in Experimental Sciences and Technology and Vice Dean at the FCEFN, Academic Secretary at the UNC, and Director of the Bulletin of the Argentine Botanical Society. He also was Director of the Botanical Museum of Córdoba, Director of the Multidisciplinary Institute of Plant Biology, and President of the Argentine Botanical Society. He got the Bernardo Houssay Award from CONICET and the Lorenzo Parodi Award from the Argentine Botanical Society.

AUSTRALIA

Australian Academy of Science



Stuart Bunn is Professor Emeritus at the Australian Rivers Institute at Griffith University in Brisbane, Australia and, until July 2022, was the founding Director. His major research interests are in the ecology of river and wetland systems with a particular focus on the science to underpin river management. This work has resulted in over 300 technical publications, most of which are in peer-reviewed journals. Stuart has extensive experience working with international and Australian government agencies and industry on water resource management issues. He has led the development and implementation of several major collaborative research programs in partnership with State government agencies, industry and universities. He has also been an active member and chair of several state and national science advisory committees. Stuart is currently a member of the Murray-Darling Basin Authority and has previously served as a National Water Commissioner and as a Director of Land and Water Australia. He was appointed to the Earth Commission, hosted by Future Earth, in 2019 and in 2022 was elected as a Fellow of the Australian Academy of Science.

BOLIVIA

National Academy of Sciences



Marcos R. Michel López is an archaeologist whose career reflects a profound commitment to academic research, teaching, and heritage preservation. He currently holds the position of General Secretary of the National Academy of Sciences of Bolivia and was recently inducted as a Fellow of TWAS. As the former Director of the Institute of Anthropological and Archaeological Research (2005–2011), he was instrumental in spearheading groundbreaking research at San Andrés University and provided comprehensive mentorship, ensuring the transmission of knowledge and enriching academic experience for future generations of scholars. A pioneer in applied archaeology, founded Bolivia's first salvage archaeology company, ECOAR. His extensive knowledge of the nation's protected areas underpins his diverse academic contributions, which include seminal work focusing on the pre-Columbian settlement of Tarija, the intricacies of ancient hydraulic systems in Beni, and detailed studies on the Inca conquest

of Bolivia. Applying his scientific expertise served as Director-General of Cultural Heritage (2011–2015) and successfully championed Bolivia's Cultural Heritage Law (530), enacted in 2014. Crucially, he led initiatives that secured UNESCO World Heritage status for major assets, including the Qhapaq Ñan (Andean Road System).

BRAZIL

Brazilian Academy of Sciences



Helena B. Nader is Professor Emeritus at the Escola Paulista de Medicina of the Federal University of São Paulo (Unifesp). She obtained her PhD at Unifesp and post-doctoral training as a Fogarty (NIH) fellow at the University of Southern California. Since 1985, she is a 1A (highest level) research fellow of the National Research Council for the Scientific and Technological Development (CNPq). Helena B. Nader serves as president of the Brazilian Academy of Sciences (ABC), vice-president for the Latin America and the Caribbean of The World Academy of Sciences (TWAS), vice-president of the Alliance of National and International Science Organizations for the Belt and Road Regions (ANSO), Advisory Committee member of the InterAcademy Partnership (IAP), and Strategic Committee member of the Science Panel for the Amazon (SPA). She is member of the ABC, TWAS, and the Latin America Academy of Sciences (ACAL). Former president of the Brazilian Society of Biochemistry and Molecular Biology (SBBq, 2007-2008), former co-chair of the Inter-American Network of Academies of Sciences (IANAS, 2019-2025), former Governing Board member of the International Science Council (ISC, 2021-2025), she is also honorary president, former vice-president (2007-2011) and former president (2011-2017) of the Brazilian Society for the Advancement of Science (SBPC).

CHILE

Chilean Academy of Sciences



Alejandro H. Buschmann is a Full Professor at i-mar Research Centre at the Universidad de Los Lagos and a Number Member of the Chilean Academy of Sciences. At present, he is also a Senior Researcher at the Centre for Biotechnology and Bioengineering and Senior Research Advisor of the Marine Agronomy Seaweed Holobiont program. With over 200 peer-reviewed papers and book chapters on aspects of coastal ecology and sustainable aquaculture development. Due to his scientific achievements, he received the “Silver Jubilee Award” from The International Foundation for Science (IFS), the “Honor in Scientia Marina” by the Chilean Marine Science Association. Currently, he is an Associate Editor of the Journal of Phycology and Journal of Applied Phycology, and the Chief Editor of Algal Research. He was the Director of Research and Graduate School at the Universidad de Los Lagos and head of the i-mar Research Centre. He has been appointed to various scientific panels of the Chilean Science Agency and to the national commissions for graduate program quality certification (CNA). As a scientific consultant, he has supported seaweed culture developments within the industry and promoted sustainable environmental technologies for aquaculture with different world stakeholders.

CHINA

Chinese Academy of Sciences



Baoyin Liu, Associate Professor at the Institutes of Science and Development, Chinese Academy of Sciences, holds a Ph.D. from the University of Leeds, UK. My main research direction is disaster risk assessment and management under regional sustainable development. Specifically, my research focuses on three aspects: comprehensive disaster risk scenario simulation in complex systems, design of coordination mechanisms among multiple stakeholders for risk regulation under compound disasters, and policy research on regional sustainable development from the perspective of resilient society.

COLOMBIA

Colombian Academy of Exact, Physical and Natural Sciences



Carlos Alberto Vargas is a Colombian geophysicist and academic leader, currently serving as President of the Colombian Academy of Exact, Physical, and Natural Sciences (ACCEFYN) for the 2025-2028 term. He is a full professor at the Department of Geosciences, Universidad Nacional de Colombia, where he directs the National Research and Laboratories and leads the Geophysics Research Group. Vargas earned his degree in Geology from Universidad de Caldas (1993), followed by a Master's in Physics from Universidad Tecnológica de Pereira (2006). He completed a Master's (1999) and Ph.D. (2003) in Earthquake Engineering at the Universidad Politécnica de Catalunya, Spain, and pursued postdoctoral research at the University of Texas at Austin (2009-2010). His research focuses on seismic tomography, lithospheric thermal structure, and geodynamic processes in northwestern South America, with applications in volcanic monitoring and hydrocarbon basin analysis. Vargas has contributed to the development of Colombia's seismic networks and the creation of the Doctorate in Geosciences at UNAL.

COSTA RICA

National Academy of Sciences



Julio Cesar Calvo Alvarado served as the President of the Technological Institute of Costa Rica from 2011 to 2019, where he worked as a professor and researcher specializing in forest ecology, forest hydrology, and tropical soils. Additionally, he was the Chairman of the School of Forestry Engineering at TEC for three terms and the Executive Director of the Center for Tropical Sciences from 1997 to 2002. Calvo Alvarado has been a member of several councils and working committees for national and international organizations focused on higher education and natural resource conservation. His research primarily aims to generate knowledge and develop pilot projects and tools that support technical and political decision-making for the effective planning and management of natural resources. He has utilized hydrologic models to simulate climate change and assess the impacts of land-use changes on the water cycle, erosion, and sedimentation in watersheds. Furthermore, Julio Cesar Calvo Alvarado has employed remote sensing and GIS technologies to study land-use change dynamics and forest cover in Costa Rica. Lastly, he has conducted long-term research on forest and wetland ecology, forest hydrology, forest restoration, and the effect of climate change across a diverse range of tropical ecosystems.

CUBA

Cuban Academy of Sciences



Olga Fernández Ríos holds a Bachelor Degree in History and a PhD in Philosophical Sciences from the Universidad de La Habana. Vice-President of the Cuban Academy of Sciences. Senior Researcher at the Instituto de Filosofía de Cuba in the Sociopolitical Studies area, and member of the Scientific Council in this institution. Full Professor at Universidad de La Habana. Fernández Ríos has specialized in Social and Political Theory and has participated in research projects in the field of social sciences and humanities on civil society, democracy, public policies, political relations, popular participation, social justice, ethics and scientific diplomacy. She has also developed research and studies on contemporary Cuban society. She has coordinated several post-graduated and doctoral programs and conference cycles in Cuban and foreign academic institutions and has participated as a speaker in scientific events held in Cuba and in 18 other countries. She is member of the Editorial Board of the Cuban Journal of Social Sciences and is author of three books and of chapters in 28 books and more than 120 articles in Cuban and foreign journals. Olga Fernández Ríos has held diplomatic responsibilities at the Cuban Mission to the United Nations in New York, the Cuban Interests Section in Washington DC, and the Cuban Embassy in Chile, in charge of academic and scientific exchanges.

DOMINICAN REPUBLIC

Academy of Sciences of the Dominican Republic



Osiris de León graduated from the first class of geological and mining engineers at the Pontificia Universidad Católica Madre y Maestra (1979). He has dedicated to geological, geophysical, geotechnical, mining, seismic, and environmental studies in the Dominican Republic and other countries. He was scientific advisor to the National Commission for the Environment (1986-1997) and, between 1988 and 1990, he was the coordinator of state mining companies, administrator of National Marble Plant, and administrator of Dominican Portland Cement Factory. From 1993 to 1994, he was the administrative deputy manager of the Central Bank of the Dominican Republic, and he was in charge of directing the reopening program of the Rosario Dominicana gold and silver big mine, today one of the five largest gold-producing mines in the world. He was Ambassador for General Affairs at the Ministry of Foreign Affairs (1993-1994) and, since 1997, he has been a full member of the Academy of Sciences of the Dominican Republic and has repeatedly served on its board of directors and as coordinator of the Commission on Natural Sciences and Environment. Scientific Advisor to the Executive Branch on Geosciences, Seismicity, and Disaster Prevention (2017-2020), he has chaired the Public Infrastructure Oversight Commission on Climate Change since November 2023. President of the Mining and Petroleum Chamber of the Dominican Republic, he has published several books and dozens of articles on geosciences, mining, environment, and seismicity. He won the Loyola Scientific Community award (1995), and, in 2020, the Dominican College of Engineers selected him as the most outstanding engineer of the Year 2019. He is a frequent guest on major radio and television programs for scientific analysis of geological, engineering, environmental, seismic, climatic, and meteorological topics.

ECUADOR

Academy of Sciences of Ecuador



Boris F. Ochoa-Tocachi holds a PhD in Hydrology and an MSc in Hydrology and Water Resources Management by Imperial College London, UK, and a Civil Engineer by the University of Cuenca, Ecuador. He is the CEO of ATUK Consultoría Estratégica, founder of the Institute for Applied Sustainability Research (iiasur) in Ecuador, and associate member of the National Academy of Sciences of Ecuador (ACE). Boris has developed his professional and academic expertise around mountain hydrology, hydrological monitoring and ecosystem service management. He has published over 50 scientific articles and policy briefs, delivered more than 150 talks and conference presentations, seminars, and webinars, and received 10 prizes and awards. Currently, his investigation revolves around nature-based solutions, ecosystem-based adaptation and water security, translating science into action and mainstreaming natural capital approaches to produce actionable policy and investment recommendations for governmental entities and multilateral organizations, including the World Bank, the Inter-American Development Bank, and the Bank of Development of Ecuador.

FRANCE

Académie des Sciences



Jérôme Chave is an ecologist and modeler, recognized for his work on tropical forest dynamics and biodiversity theory. He is Director of Research at Centre National de la Recherche Scientifique (CNRS) and Deputy Director of the Laboratoire Évolution et Diversité Biologique (EDB) at Université Toulouse III – Paul Sabatier. Chave also serves as Scientific Director of the LabEx CEBA and the Nouragues Research Station in French Guiana. His research explores how tropical forests respond to global environmental change, focusing on carbon sequestration, biodiversity resilience, and ecosystem health. He combines field ecology with advanced modeling, remote sensing technologies (LiDAR, radar), and genetic approaches to understand species persistence and biogeochemical cycles. Chave has published extensively in leading journals such as *Nature* and *Science*, contributing to improved biomass estimation models and advancing neutral theory in ecology. He earned his Ph.D. in Physics from Université Paris XI and completed postdoctoral work at Princeton University. His achievements have been recognized with the CNRS Silver Medal (2016) and the International Recognition of Professional Excellence Award (2011). In 2023, Jérôme Chave was elected member of the Académie des Sciences.

FRENCH GUIANA (FRANCE)

Académie des Sciences



Géraldine Derroire is a researcher in forest ecology with CIRAD, studying tropical forest dynamics in a context of global change, with a particular focus on anthropized forests. She uses field observation data, correlative and simulation approaches to understand and model tree performance and forest trajectories, and their response to human disturbance and climate change. Trained in ecology (PhD) and forest sciences (MSc), her work finds application in forest management and restoration. She worked in French Guiana for 7 years (UMR EcoFoG), as a researcher and the scientific director of Paracou research station and coordinator of the network Guyafor. She is now a visiting researcher at the University of Brasilia (UnB, Brazil) and member of CIRAD UR Forests and Societies. She is involved in the coordination of TmFO (the Tropical Managed Forest Observatory), served in the steering committee of 2ndFor network and in the scientific committee of Labex Ceba, and is a member of the Scientific Panel for the Amazon.

GUATEMALA

Academy of Medical, Physical and Natural Sciences of Guatemala



Natalia Escobedo Kenefic is a biologist graduated from Universidade de San Carlos de Guatemala (USAC), where she is currently based, and obtained her doctoral degree at the Universidad Nacional Autónoma de México (UNAM). She has dedicated her academic career to teaching biology-related subjects and to scientific research on ecology and conservation. She was recently elected as a member of the board of the Academy of Medical, Physical and Natural Sciences of Guatemala. Her research efforts have been focused on studying the ecological dynamics of insect pollinators in agricultural landscapes of tropical highlands. Escobedo Kenefic has worked on understanding how these highly heterogeneous and complex landscapes, which are also heavily influenced by local traditional agriculture, can interact with natural spaces and maintain functional agroecosystems. She aims to understand how ecological dynamics in tropical agriculture can be maintained sustainably, while contributing to the conservation of species and their natural ecosystems. She has also worked on assessing the conservation status of native bees, and on evaluating potential threats related to climate change on bee species and bee diversity. Her main motivation is to contribute to pollinator conservation by generating scientific evidence, in context with the high natural and cultural diversity of her native region.

GUYANA

Caribbean Academy of Sciences



Raymond Jagessar obtained his BSc (distinction) in Chemistry/Biology from the University of Guyana (1992) and his PhD from the UK (1995) and Post Graduate DipEd (distinction) in higher education at the University of Guyana. He held three Post Doctoral Research Fellowships (PDF) in the USA and the University of the West Indies during the period, 1996-1999. He has several international awards, amongst them are Chartered Chemist, CChem and Fellow of the Royal Society of Chemistry, FRSC, UK, Research Grants, etc. In addition, he was one of the awardees of the Guyana Innovation Prize, 2021. He was admitted as a Fellow of The World Academy of Sciences (TWAS) in 2024. His research interests are broad, covering the spectrum of Pure and Applied Chemistry, Chemical Biology and Pharmaceutical Chemistry. He has published over one hundred (100) research articles, five book chapters, one book and presented at several international conferences, locally and internationally. He has given keynote presentations at several conferences and is currently Professor in Chemistry at the University of Guyana (South America), past President of the Caribbean Academy of Sciences, CAS and now Foreign Secretary.

HONDURAS

National Academy of Sciences of Honduras



Carolina Alduvín Sainz is a biologist and science advocate with a distinguished career in genetics, biotechnology, and environmental policy. She earned a Bachiller in Chemical-Biological Sciences from Universidad Nacional Autónoma de México (UNAM - 1972), a Biology degree from Universidad Nacional Autónoma de Honduras (UNAH - 1979), and a Magister Scientiae in Genetics and Developmental Biology from West Virginia University (1982). From 1985 to 2014, Alduvín served as a Full Professor in the Department of Biology at UNAH, teaching courses in Biology, Genetics, and Biochemistry. She has represented Honduras in the Latin American Network of Biological Sciences and the Latin American Human Genome Program since 1990. A member of the National Academy of Sciences of Honduras since 1992, Alduvín is also a founding member of the National Committee on Biotechnology and Biosecurity. She has been a columnist for *Diario La Tribuna* since 1992 and worked as an Environmental Analyst at SERNA (1997-2002). Internationally, she serves as the focal point for the Women for Science program of IANAS and has participated in United Nations Biodiversity Conferences (2014, 2016, 2018, 2022). Alduvín has also mentored teams in global competitions like iGEM and led research initiatives promoting biotechnology and biodiversity conservation in Honduras.

JAPAN

Science Council of Japan



Kaoru Kitajima has held faculty positions at Kyoto University, Japan (2013-current) and the University of Florida (1997-2013). She received a Ph.D from the University of Illinois. She specializes in plant physiological ecology and studied the functions and sustainability of tropical forest ecosystems in Latin America, Southeast Asia, and Africa. She has contributed to international efforts for forest conservation and sustainable management, for example, as a lead author for the IPCC Special Report on Climate Change and Land (2019) and as a member of the UN Food Systems Summit Science Group (2021). She served on the executive office of the Association for Tropical Biology and Conservation (as a Council member from 2006 to 2017 and as President in 2016) and the Board of Trustees of CIFOR-ICRAF (2016-2022). She is currently a member of the Science Council of Japan (Section II, Biological Sciences; Chair of the Integrative Biology Committee), and President of the Ecological Society of Japan (- March 2026). Her current research effort focuses on biodiversity and ecosystem functions of the seasonally dry tropical forest in Northwest Madagascar.

MEXICO

Mexican Academy of Sciences



Juan Pedro Laclette is a biologist and parasitologist, internationally recognized for his research on human and porcine cysticercosis. He earned a Master's in Biochemistry from Centro de Investigacion y de Estudios Avanzados (CINVESTAV) del Instituto Politecnico Nacional (IPN) and a Doctorate in Biomedical Research from Universidad Nacional Autónoma de México (UNAM), followed by a two-year postdoctoral fellowship as a Visiting Scientist at Harvard University's School of Public Health. Laclette began his academic career at UNAM's Faculty of Medicine in 1974 and joined the Institute of Biomedical Research in 1981, where he later served as Head of Immunology (1991-1995) and Director (1999-2007). He currently holds the rank of Senior Researcher (Level C) and PRIDE Level D, and has been a National Researcher Level III since 2003. His scientific contributions include pioneering studies on the biology of *Taenia solium*, development of diagnostic and treatment tools, and leadership of the IMPULSA project, which sequenced the parasite's genome (Nature, 2013). He has published over 100 papers and co-edited several books. Laclette has held key leadership roles: President of the Mexican Academy of Sciences (2006-2008), Coordinator General of the Foro Consultivo Científico y Tecnológico

(2008-2012), and Co-chair of IANAS (2007-2012). His work has shaped parasitology and science policy in Latin America.

PANAMA

Panamanian Association for the Advancement of Science



Mairim Alexandra Solis is the current vice president of the Panamanian Association for the Advancement of Science. She is the head of the stem cell research group at the Gorgas Memorial Institute for Health Studies in Panama and an adjunct professor at the University of Panama. She received her Ph.D. in biotechnology from National Cheng Kung University in Taiwan and conducted postdoctoral research in stem cell biology and developmental biology at KU Leuven in Belgium. Her research contributions in Panama led her to receive the L'Oréal National Prize for Women in Science, the Enid Cook Scientific Medal, and the Keys to the City of Panama, among other recognitions. She is a member of the Panamanian National Research Bioethics Committee and the Gorgas Institutional Bioethics Board.

PARAGUAY

Scientific Society of Paraguay



Herib Caballero Campos is a distinguished historian and academic, specializing in the social, economic, and legal history of Paraguay during the late colonial period and the nation-building process. He holds a Bachelor's degree and a Doctorate in History from the Universidad Nacional de Asunción (UNA) and a Master's in History of the Hispanic World from the Consejo Superior de Investigaciones Científicas, Spain, earned through prestigious scholarships from Fundación Carolina and Fundación Mapfre Tavera. He also completed advanced studies at the Universidad San Pablo-CEU and training in project design and management at UNED (Spain). Caballero has served as Professor and Researcher at UNA, visiting scholar at the University of Barcelona (AECID Hispanistas Program), and research fellow at the John Carter Brown Library (Brown University, USA). He is currently a full-time researcher at Universidad Nacional de Canindeyú, tutor at Universidad Nacional del Este, and President of the Centro Paraguayo de Ciencias Históricas. He is also a level II researchers at CONACYT and President of the Scientific Society of Paraguay. Author of numerous books and articles, Caballero received the Silvio Zavala Prize for Colonial History of America for his contributions to understanding Paraguay's colonial past and independence processes.

PORTUGAL

Lisbon Academy of Sciences



Cristina Branquinho is a Full Professor of Ecology at Faculty of Sciences of the University of Lisbon (FCUL), and a researcher at the Centre for Ecology, Evolution and Environmental Changes where she leads the Thematic Line, "Towards Sustainable and Resilient Ecosystems" and leads the "Systems Ecology" research group, which aims to understand complex ecological systems and promote resilience and sustainability in the face of Anthropocene challenges. Cristina Branquinho is the Vice-President of the Biology Department at FCUL and a representative of the UL in the Network for Environmental Studies of Portuguese-speaking Countries. She is a corresponding member of the Lisbon Academy of Sciences (since 2023) and a Foreign Academic Correspondent of the Royal National Academy of Pharmacy of Spain (Academy of Sciences) since 2016. Her research focused on understanding ecological patterns at the ecosystem level in response to environmental changes such as air pollution, climate change and eutrophication. Cristina Branquinho curated the 1200 m² exhibition "Variações Naturais-Uma viagem pelas paisagens de Portugal", at the National Natural History and Science Museum boasting a €1.5 million budget and engaging over 48,000 visitors in the first year. The "Variações Naturais" exhibition is designed to showcase Portugal's ecosystem diversity.

SENEGAL

Senegal National Academy of Sciences and Technologies



Mohamadou Guelaye Sall is a Professor of Pediatrics and Child Nutrition, Laureate of the Schools of Medicine of Dakar (Senegal, 1979), La Sapienza di Roma (Italy, 1984) and University of California San Diego (USA, 1994) and Expert of African Union on Nutrition in all questions regarding Codex Alimentarius. Author of more than 150 publications in medical journals from USA, France, Europe, Africa and Senegal in the area of child health and nutrition. His last publication was book on the history of nutrition in Senegal (L'Harmattan, 2025). Past President of the Country Coordinating Mechanism (CCM) Senegal for the Global Fund (2018-2021), Expert of National Superior Authority of Quality Assurance of Universities and High Schools of Health (since 2012) and Member of SENEVAL (Senegalese Evaluation Association, since 2014). Full Member of the Senegal National Academy of Sciences and Technologies (ANSTS). In 1989, he won the Prize of the Child Health Foundation, World Health Organization (WHO) for his work "A1 Apolipoprotein: Early tracer of children's nutritional status". Decorated as High Officer of the National Order of the Lion (2022), he received the First Prize of the President of the Republic of

Senegal for Sciences (Incentive Award - 2010). He also served as a member of the Technical Steering Committee Mother, Newborn, and Child Health of WHO (2009-2016).

SURINAME

National Zoological Collection of Suriname



Cindyrella Kartoredjo-Kasanpawiro is the Curator of the Vertebrates Department at the National Zoological Collection of Suriname (NZCS), where she oversees the management and development of the vertebrate collection. Her work focuses on the study and conservation of Suriname's rich fauna biodiversity, integrating ecological research, biodiversity monitoring, and spatial analysis. With expertise in Geographic Information Systems (GIS) and species distribution modeling, she applies geospatial tools to analyze species-habitat relationships. She is actively engaged in projects that combine biodiversity monitoring with community engagement, fostering local participation in conservation efforts. Through her teaching and research, she strives to connect scientific knowledge with practical conservation, inspiring a new generation of professionals dedicated to the sustainable management of tropical biodiversity within Suriname and the wider Guiana Shield region.

VENEZUELA

Academy of Physical, Mathematical and Natural Sciences of Venezuela



Liliana López holds a Bachelor's degree in Chemistry (1982) and a Ph.D. in Sciences with a specialization in Geochemistry (1992) from the Universidad Central de Venezuela (UCV). President of the Academy of Physical, Mathematical and Natural Sciences of Venezuela (ACFIMAN), she is a Full Professor at the Institute of Earth Sciences, Faculty of Sciences, UCV and a researcher in Organic Geochemistry, heading the Petroleum Geochemistry Research Group. She served as President of the Latin American Association of Organic Geochemistry (2006-2008) and has been Director for Venezuela in the same association since 2008. She has been a visiting researcher at Intevp (1997) and the French Petroleum Institute (1992), and a visiting professor at the Federal University of Rio Grande do Sul (Brazil, 2008-2009), the Federal University of Rio Grande (Brazil, 2011), and the University of Los Andes, Venezuela (2011). She has also worked as a petroleum geochemistry consultant for Exxon Services of Venezuela (1995, 1996-1998) and teaches specialized courses in petroleum geochemistry. Her research has advanced understanding of the origin of crude oils in Venezuelan basins and molecular changes caused by biodegradation. She has directed undergraduate and graduate theses and authored numerous national and international publications, two books, and three book chapters. Her awards include the Orinoquia Prize (1993), Academic Career Award (2006), Polar Foundation Prize (2015), and the José María Vargas Order (2003, 2011).

LATIN AMERICA

Latin American Academy of Sciences

**Liliana
López**

Please refer to the Delegates of the Academies (Venezuela).

SPEAKERS

THEMATIC SESSION

Rethinking Tomorrow: can we truly build a sustainable climate future?



Marianne Schmink is Professor Emerita and Distinguished Teaching Scholar at the University of Florida, where she served in the Center for Latin American Studies and the Department of Anthropology. She holds a B.A. in Anthropology from the University of Michigan (1971) and earned her Ph.D. in Anthropology from the University of Texas at Austin (1979). Schmink is internationally recognized for her pioneering work on tropical conservation and development, with a strong focus on the Brazilian Amazon. From 1980 onward, she helped build interdisciplinary research and training programs integrating social and natural sciences to address conservation, sustainable development, and gender issues. She directed the Amazon Research and Training Program (1980-1993) and later the Tropical Conservation and Development Program (1988-2010), securing major grants and endowments to support fellowships, research, and internships. Her research in Brazil emphasized community-based resource management, gender and development, and agroforestry systems, including a 13-year USAID-funded program in Acre. She co-authored "Contested Frontiers in Amazonia" (1992) and "Rio Branco: A Cidade da Florestania" (2008), along with three edited volumes and over fifty articles and chapters. Since retiring in 2018, Schmink has remained active in sustainability initiatives and local environmental justice projects in Florida. She received the UF Champions of Change Award (2018) for her contributions to sustainability and community engagement.



Paulo Artaxo graduated in Physics (1977), received a Master's degree in Nuclear Physics (1980), and a PhD in Atmospheric Physics (1985) from the University of São Paulo (USP). He has worked at NASA, the Max Planck Institute, and the Universities of Antwerp, Lund, and Harvard. He is a Full Professor at the Institute of Physics at USP. He works with physics applied to environmental problems, focusing primarily on global climate change, the Amazon environment, atmospheric aerosol physics, urban air pollution, and other topics. He is a full member of the Brazilian Academy of Sciences, The World Academy of Sciences (TWAS), and the São Paulo State Academy of Sciences (ACIESP). He has published over 520 scientific papers, including 35 in *Science* and *Nature*. He was included in the Clarivate Analytics list as one of the top 1 of most cited researchers worldwide in 2014, 2015, 2018, 2019, and 2020. In 2022 and 2023, he was the most cited Brazilian scientist in the environmental field, according to Research.com. He is a member of the Intergovernmental Panel on Climate Change (IPCC) and is part of the IPCC team that was awarded the 2007 Nobel Peace Prize. In 2007, he also received the TWAS Earth Sciences Prize and the Dorothy Stang Prize in Sciences and Humanities. He also received the National Order of Scientific Merit as a Commander (2010) and as a Grand Cross (2018). In 2016, he received the Admiral Álvaro Alberto Award.



Robin Fears, based in the UK, has a background in biochemistry, nutrition and medical research with 29 years previous experience in pharmaceutical industry R&D in the cardiovascular and neuroscience therapeutic areas and in R&D Policy. Subsequently, during the past two decades, he has provided advice on biosciences policy issues to a range of public sector organisations, particularly academies of science and medicine and their international networks, parliamentary groups, the European Commission and industry. Much of this activity has been in the EU but he also has experience in advising on policy to UN bodies and others (such as G20) worldwide. He advised the European Academies Science Advisory Council (EASAC) 2002-2023, directing the work of the Biosciences Programme and helping to ensure that EASAC outputs also catalyse and inform global science-policy activities through the InterAcademy Partnership (IAP). A significant part of this later work has focused on climate change impacts on health and equity, including clarifying threats worldwide and exploring options for mitigation and adaptation solutions. Currently, he is a consultant to WHO European Region on climate and health strategy.

THEMATIC SESSION

Biodiversity: a living treasure and a global solution



Adalberto Luis Val is a biologist with a postdoctoral degree from the University of British Columbia (Canada). He studies biological adaptations to environmental changes, both natural and human-induced, in natural and aquaculture environments. At the National Institute for Research of the Amazon (INPA) since 1981, he has been involved in understanding the educational, scientific, and technological needs of the Amazon region. He served as General Director of INPA from 2006 to 2014. Adalberto L. Val received the National Order of Scientific Merit (Commander) in 2002 and the Award of Excellence from the American Fisheries Society in 2004. In 2005, Adalberto L. Val was elected to the Brazilian Academy of Sciences (ABC) and served as its Vice-President for the Northern Region from 2007 to 2012 and again since 2019. In 2013, he was awarded the Grand Cross of the National Order of Scientific Merit. In 2016, he received the Anísio Teixeira Award from Foundation for the Coordination for the Improvement of Higher Education Personnel (CAPES). In 2017, was accredited as an adjunct professor at the Graduate School of Laval University (Canada). In 2021, he was elected a full member of The World Academy of Sciences (TWAS).

Kaoru Kitajima

Please refer to the Delegates of the Academies (Japan).



Ricardo Abramovay is a senior professor at the Institute of Advanced Studies and the Institute of Energy and Environment at the University of São Paulo (USP). He heads the National Institute of Science and Technology "Overcoming the Triple Monotony of the Agrifood System". He is a researcher at the Josué de Castro Chair at the School of Public Health of USP. He developed his academic career at the Department of Economics of FEA/USP, where he became a full professor in 2001. He is the author of sixteen books, including *Far Beyond the Green Economy* (Routledge), *Infrastructure for the Sustainable Development of the Amazon*, and *Amazon: For a Nature-Based Knowledge Economy*. He is the co-organizer of the recently launched Pathways of Transition for Sustainable Development (SENAC). He led the teams that presented policy briefs at the G20 meetings in India, Brazil, and now South Africa on the impacts of the agrifood system on climate and biodiversity. He is a lead co-author of the chapter on bioeconomy of the Amazon Science Panel. He serves on the board of the Ibirapitanga Institute and is chair of the board of IMAFLORA.

**Cristina
Branquinho**

Please refer to the Delegates of the Academies (Portugal).

**Helena
B. Nader**

Please refer to the Delegates of the Academies (Brazil).

**Jérôme
Chave**

Please refer to the Delegates of the Academies (France).



Karen B. Strier is Vilas Research Professor and Irven DeVore Professor of Anthropology at the University of Wisconsin–Madison. After graduating from Swarthmore College in 1980, she received her MA in 1981 and her PhD in 1986 in Anthropology from Harvard University. She is an international authority on the endangered northern muriqui monkey, which she has been studying in the Brazilian Atlantic Forest since 1982. She is Co-Chair of the Inter-American Network of Academies of Sciences (IANAS) and served as President of the International Primatological Society from 2016 to 2022. Strier is an elected fellow of the U.S. National Academy of Sciences (NAS), the Brazilian Academy of Sciences (ABC), the American Academy of Arts and Sciences, and the American Association for the Advancement of Science (AAAS). She has chaired committees and held leadership positions in these and other professional societies. A renowned primatologist and conservationist, she has received numerous awards, including the Muriqui Prize from the Atlantic Forest Biosphere Reserve. Her pioneering, long-term field research has been essential to conservation efforts on behalf of the muriqui and has shaped comparative perspectives on primate behavioral ecology and biodiversity more broadly.

**Mohamadou
Guelaye Sall**

Please refer to the Delegates of the Academies (Senegal).

**Stuart
Bunn**

Please refer to the Delegates of the Academies (Australia).

THEMATIC SESSION

The Climate Crisis: science, evidence, and the tipping point of the planet

**Baoyin
Liu**

Please refer to the Delegates of the Academies (China).



Mónica Moraes R., PhD., Bolivian, studied biology at the Universidad Mayor de San Andrés (UMSA) in La Paz and obtained her MSc and PhD at the University of Aarhus (Denmark). She has been a full-time professor at UMSA since 1990 and, as a botanist, she specializes in palm species native to Bolivia at the National Herbarium of Bolivia since 1984. Mónica Moraes R. was director of the Instituto de Ecología at UMSA during three terms. She has been part of the Science Panel of the Amazon (SPA) that prepared the report for the COP 2021 on the “Amazon we want”. Mónica Moraes R. was appointed full member of the National Academy of Sciences of Bolivia in 2008 and she is the first woman to assume the Presidency of this Academy (term 2021-2024). She is a member of The World Academy of Sciences (TWAS) since 2019. Starting in 2023, she serves on the Multidisciplinary Expert Scientific Advisory Group to the UN Environment Program’s (UNEP) Global Environment Outlook (GEO)-7 Assessment until 2026.



Regina R. Rodrigues is an Associate Professor of Physical Oceanography and Climate at the Federal University of Santa Catarina, with a PhD in Physical Oceanography from the University of Rhode Island (USA). Internationally, she is the co-chair of the WCRP Lighthouse Activity “My Climate Risk”, CLIVAR Atlantic Region Panel and Marine Heatwaves Research Focus. She served as a review editor of IPCC-SRCCL and is currently an author of IPCC-AR7 (Chapter on extreme events). She is also a member of the editorial board of Nature’s Communication Earth & Environment. In Brazil, she is a permanent member of the Brazilian Interministerial Committee for Climate Change and chair of the subsection on Climate Disasters of Rede CLIMA. Her research interests include understanding how tropical ocean basins interact and affect the extra-tropics, leading to extreme events. Recently, she has focused on understanding compound extreme events over land and in the ocean.



Tasso Azevedo is a forester and social entrepreneur on forests, climate and sustainability. He is the General Coordinator of MapBiomas Network (land cover and land use change monitoring initiative) and Chair of the Board Connection Forest People initiative. Tasso Azevedo was founder and general director of IMAFLORA, General Director of the Brazilian Forest Service, designer of Amazon Fund and the first concept of Tropical Forest Forever Facility (TFFF). He was also the creator and coordinator of SEEG – the system to estimate greenhouse gas (GHG) emissions in Brazil. He is an Affiliate Scholar at Princeton University.

THEMATIC SESSION

From Insight to Action: justice and sustainability in the climate crisis



Dzoodzo Baniwa is an indigenous educator, researcher, and leader of the Baniwa people in the Alto Rio Negro Indigenous Territory, Amazonas, Brazil. Born in the remote village of Santa Isabel do Rio Aiari, near the Brazil-Colombia border, Dzoodzo has dedicated his career to strengthening indigenous education and integrating ancestral knowledge with scientific approaches to address environmental and social challenges. He began his education at the Pamáali Indigenous School, the first for Baniwa and Koripako peoples, later returning as a teacher and coordinator. Today, he serves as an advisor for indigenous school education in São Gabriel da Cachoeira and advocates for intercultural curricula. Dzoodzo holds a degree in Intercultural Physics from the Federal Institute of Amazonas (IFAM) and a Master's in Environmental Science Education from the Federal University of Amazonas (UFAM). A prominent voice in climate action, Dzoodzo promotes systemic solutions that combine traditional knowledge and science. His work earned him the 2025 Fundação Bunge Award (Vida e Obra) for contributions to biodiversity conservation and indigenous knowledge systems. He has authored scientific and educational materials, including a book finalist for the Prêmio Jabuti, and continues to champion indigenous rights, sustainability, and education in the Amazon.



Gabriela Marques Di Giulio is Associate Professor in the Department of Environmental Health at the School of Public Health, University of São Paulo (USP). Her research investigates how environmental crises affect socio-cultural contexts, social practices, and decision-making processes, particularly in urban settings. She explores the intersections of environment, society, and science-policy dynamics, with a particular focus on climate change, adaptation, and sustainability transitions in cities. She holds a PhD in Environment and Society, has held research positions in the United Kingdom and Germany and actively participates in global research networks on climate adaptation. At USP, Gabriela Marques Di Giulio co-leads the Environment and Society Research Group, serves as vice-leader of CIRIS (Governance, Risk, and Communication), and as Deputy Coordinator of the Center for Sustainable Amazon Studies (CEAS). She also coordinates the Graduate Program in Global Health and Sustainability, serves on the Scientific Coordination Committee of the Biota/FAPESP Program, and, in the last 14 years, has been involved in inter- and transdisciplinary projects on climate governance, the science-policy-society interface, and risk communication. In 2023, she was elected a member of the São Paulo State Academy of Sciences (ACIESP). Since 2024, she has been a Steering Group member of the Urban Prediction Project of the WMO's World Weather Research Programme (WWRP).



Maurício Lima Barreto is a Brazilian physician, epidemiologist, and public health researcher, internationally recognized for his contributions to collective health and epidemiology. He earned his Medical degree (1977) and Master's in Collective Health (1982) from the Federal University of Bahia (UFBA) and a Ph.D. in Epidemiology (1987) from the London School of Hygiene & Tropical Medicine (LSHTM). Barreto served as Professor of Epidemiology at UFBA (1980-2013), where he helped establish the Institute of Collective Health (ISC-UFBA) and became a leading voice in Brazil's Sanitary Reform movement. In 2014, he joined Fiocruz-Bahia as a senior researcher and founded the Center for Data and Knowledge Integration for Health (CIDACS) in 2016, pioneering large-scale data analysis to inform public health policies. His research focuses on social and environmental determinants of health, health inequalities, and the impact of social protection and climate change on population health, notably through the 100 Million Brazilians Cohort. Author of over 650 scientific papers, Barreto has influenced global health policy through roles at WHO, Brazil's Ministry of Health, and major scientific committees. He is a member of the Brazilian Academy of Sciences, TWAS, and an Honorary Professor at LSHTM, honored with Brazil's National Order of Scientific Merit and other distinctions.

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Please refer to the Delegates of the Academies (Brazil).



Jailson Bittencourt de Andrade is Vice-President of the Brazilian Academy of Sciences. He earned his Licentiate (1975) and Bachelor's degree in Chemistry (1979) from the Federal University of Bahia (UFBA), a Master's in Sciences (1978), and a Ph.D. in Analytical and Inorganic Chemistry (1986) from PUC-Rio, followed by postdoctoral studies at Brookhaven National Laboratory (USA) in 1988. Jailson Bittencourt de Andrade is Full Professor and Pro-Rector for Graduate Studies and Research at SENAI-CIMATEC and a CNPq Researcher (Level 1A) since 1989. He previously served as Secretary for Research and Development Policies at the Brazilian Ministry of Science, Technology and Innovation (2015-2017), where he coordinated the National Science, Technology and Innovation Strategy (2016-2022). His research spans analytical, inorganic, and environmental chemistry, energy, and fuels. He has led major initiatives such as the INCT for Energy and Environment and the Kirimurê Project on Todos os Santos Bay. Fellow of the Royal Society of Chemistry (UK) and former editor of the Journal of the Brazilian Chemical Society, his honors include the National Order of Scientific Merit (Commander, 1998; Grand Cross, 2009), the Fritz Feigl Medal, and the Almirante Álvaro Alberto Prize (2022).

**Adalberto
Luis Val**

Please refer to the Speakers (Thematic Session - Biodiversity: a living treasure and a global solution).



Glaucius Oliva is Vice-President of the Brazilian Academy of Sciences for the São Paulo Region and Full Professor of the University of São Paulo (USP). He studied Physics and Electronics Engineering as an undergraduate of USP and subsequently obtained his PhD in Protein Crystallography and Structural Biology at the University of London in 1988. His main research interests are structural biology and medicinal chemistry and its application in drug design and discovery, with a particular focus on parasitic infectious tropical diseases that affect the population of Brazil and other developing countries. He was the key leader in the establishment of Protein Crystallography research in Brazil and has led the first graduate program on Biomolecular Physics in the country and more recently created the first undergraduate course on Biomolecular Physical Sciences in Brazil. He was Vice-President of the Brazilian Society of Biochemistry and Molecular Biology-SBBq (2005-2007). Amongst other prizes, he is member of the National Order of Scientific Merit of Brazil, International Scholar of the Howard Hughes Medical Institute (1997-2001), Member of TWAS (The World Academy of Sciences) and Fellow of the Birkbeck College - University of London. He was Director (2010) and President (2011-2015) of the Brazilian National Council for Scientific and Technological Development (CNPq); founder and member of the Governing Board of the Global Research Council (GRC).



Patricia Torres Bozza is Vice-President of the Brazilian Academy of Sciences for the Rio de Janeiro Region and Senior Researcher at the Oswaldo Cruz Institute. She earned her medical degree in 1990 from the Faculty of Medical Sciences at the State University of Rio de Janeiro. She obtained her Ph.D. in Sciences (with a concentration in Pharmacology) in 1993 through the Cellular and Molecular Biology Program at the Oswaldo Cruz Institute. In 1994, she was named a Pew Latin American Fellow and completed her postdoctoral training at Beth Israel Hospital, Harvard Medical School. Patricia Torres Bozza is a Level 1A researcher at CNPq, a member of the Brazilian Academy of Sciences (ABC), and a member of The World Academy of Sciences (TWAS). She was an International Scholar of the Howard Hughes Medical Institute from 2002 to 2006 and coordinated the Brazilian committee of the Pew Program in Biomedical Sciences. Her research group focuses on the cellular and molecular mechanisms involved in inflammatory and metabolic responses to infections, as well as the role of inflammation and lipid metabolism alterations in obesity and cancer.



Alvaro Toubes Prata holds degrees in Mechanical Engineering and Electrical Engineering from the University of Brasília (1977), a Master's in Mechanical Engineering from the Federal University of Santa Catarina (UFSC, 1980), and a Ph.D. in Mechanical Engineering from the University of Minnesota (USA, 1985). At UFSC, he was a professor of Mechanical Engineering for 44 years and served as Pro-Rector for Research and Graduate Studies (2000-2004), and Rector (2008-2012). He was a 1A research fellow at CNPq from 1992 to 2022 and received the Grand Cross of the National Order of Scientific Merit, as well as the Anísio Teixeira Award in recognition of his contributions to the development of educational, scientific, and technological institutions in Brazil. From 2012 to 2018, he was part of the Ministry of Science, Technology, and Innovation, where he held the positions of National Secretary for Technological Development

and Innovation, Secretary for Research and Development Policies and Programs, and Executive Secretary. He is a Full Member of the Brazilian Academy of Sciences and of the National Academy of Engineering. He co-founded POLO, the Laboratory for Research in Refrigeration and Thermophysics, recognized worldwide in its field. His academic specialties are heat transfer and fluid mechanics, in which he has published over 250 papers and supervised more than 60 master's and doctoral students. He currently serves as Director-President of the Brazilian Company for Industrial Research and Innovation (Embrapii).

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