

The International Science Council (ISC) expert book for COP30 introduces featured experts from the ISC network who are ready to share their knowledge and insights to help make COP30 both science-based and action-driven.

Featuring a diverse range of researchers – from leading experts to emerging scholars from a range of disciplines – this document highlights climate scientists available to provide expert opinions and engage with the media, policy-makers and others.

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A rich network of global science collaboration for a sustainable planet

The International Science Council (ISC), building on the legacy of its predecessor organizations, has a long-standing history of advancing international scientific collaboration on global environmental change. For more than seventy years, the ISC has played a pivotal role in catalysing and supporting international science collaborations that guide and complement research conducted at the national level.

These joint science initiatives and programmes are co-sponsored by the ISC and other international and intergovernmental organizations and focus on specific areas of research. They are important means of bringing together a range of global partners to address a particular issue or area.

Through the co-sponsorship of major scientific initiatives and programmes, the ISC helps ensure that research on issues of global concern are approached from the broadest possible perspective, promoting coordination and reducing duplication of effort.

Beyond the individual experts featured in this book, we invite policy-makers, media representatives, and other stakeholders to engage with these flagship research initiatives and draw on their extensive experience and knowledge – at COP30 and beyond.

Thematic organizations

These initiatives convene scientists from all disciplines to organize international scientific initiatives and offer policy advice on specific themes.

- World Climate Research Programme (WCRP)
- Committee on Space Research (COSPAR)
- Global Research Programme on Inequality (GRIP)
- Future Earth
- International Network for Government Science Advice (INGSA)
- Integrated Research on Disaster Risk (IRDR)
- Scientific Committee on Antarctic Research (SCAR)
- Scientific Committee on Oceanic Research (SCOR)
- Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)
- <u>Urban Health & Well-being (UHWB)</u>

Data and Information

Virtually all international science depends on the production, use and integration of data and information. The ISC is interested in all aspects of this issue, including new challenges related to the collection, analysis and dissemination of data, as well as intellectual property rights and data access. Some of the ISC's initiatives related to Data and Information are specific to a particular scientific domain, while others deal with issues affecting the entire scientific community.

- Committee on Data (CODATA)
- Frequencies for Radio Astronomy & Space Science (IUCAF)
- World Data System (WDS)

Monitoring and observations

These programmes facilitate data collection and foster the development of international standards and methodologies that support universal equitable access. Global observing initiatives are critically important to policy-relevant science at national, regional and international scales, and respond to an increasingly evident need to integrate data from ocean, terrestrial and climate systems.

- Global Climate Observing System (GCOS)
- Global Ocean Observing System (GOOS)



DR. RAJENDRAN SHOBHA AJIN

PhD Researcher University of Florence, Italy, Italy

Spoken languages: English COP30 presence: Online

Expertise: Hydrology, Natural hazards and disaster

management, Geomorphology

Dr. Rajendran Shobha Ajin is a PhD Researcher in the Department of Earth Sciences at the University of Florence, Italy, supported by the EU-funded "PE3 – RETURN" project under the NextGenerationEU-NRRP programme. He was a visiting PhD student at Transilvania University of Braşov, Romania. He holds an M.Sc. in Applied Geology (First Rank) from the University of Madras and a B.Sc. in Geology from the University of Kerala, India. With over 12 years of research experience, 58 publications, nine patents, and 1,300+ citations (h-index 21), his expertise spans disaster risk management, nature-based solutions, remote sensing, GIS, and AI/ML applications in earth sciences. His research focuses on floods, landslides, and soil erosion across mountainous regions including the Western Ghats (India), the Carpathians (Romania & Ukraine), and the Alps and Apennines (Italy). He actively contributes to global scientific and professional organizations.



TASSO AZEVEDO

General Coordinator MapBiomas, Brazil

Spoken languages: Portuguese, English, Spanish

COP30 presence: On-site

Expertise: Land Cover & Land Use, Forest, Farming, GHG

inventory, Nature Based Solutions

Tasso Azevedo is a forester and social entrepreneur on forests, climate and sustainability. Tasso is the general coordinator of MapBiomas Network (land cover and land use change monitoring initiative) and Chair of the Board Connection Forest People initiative. Founder and General Coordinator of SEEG - System to Estimate GHG Emissions in Brazil and technical Coordinator for Climate Observatory (2012-2022). Tasso was founder and general director of IMAFLORA and General Director of the Brazilian Forest Service. He was the lead designer of the Amazon Fund and proponent of the concept of TFFF. He is a visiting scholar of Brazil Lab at Princeton University, an Ashoka Senior Fellow (2021), Stanford University Bright Awardee (2014), Skoll Award Fellow (2022), Audacious Project Awardee (2024) and board member of various organizations including Rainforest Alliance, Schwab Foundation, The Prince Albert II of Monaco Foundation and Santander Brazil.



DR. LINDSAY BARBIERI

Science-Policy Lead Global Land Programme, United States of America

Spoken languages: English COP30 presence: Online

Expertise: Land-system science, land-climate interactions,

climate change adaptation and mitigation, just energy transitions, resilience building, urban climate resilience, agricultural systems climate resilience, synergies co-benefits and trade-offs

Dr. Barbieri is a land-climate expert whose work bridges science and policy to advance sustainable and resilient land systems. She has published on climate adaptation and resilience in agricultural and urban contexts, as well as on just energy transitions examining the community impacts of renewable energy projects. Her research includes systematic reviews exploring synergies and trade-offs between climate adaptation and mitigation strategies. Formerly a Senior Geospatial Analyst leading the climate and environmental portfolio for the U.S. Agency for International Development's GeoCenter, Dr. Barbieri supported geospatial data analysis to inform global development programs. She now serves as the Science-Policy Lead for the Global Land Programme, synthesizing insights from land system science and connecting researchers and decision-makers worldwide to drive transformative, evidence-based action. In this role, she can provide additional connections to other land-climate experts within the Global Land Programme network.



PROF. DR. B. BURÇAK BASBUG ERKAN

Professor

Department of Statistics, Middle East Technical University (METU), Turkiye

Spoken languages: Turkish, English

COP30 presence: Online

Expertise: Disasters, Statistics, Earthquakes

Burçak is a Professor of Statistics and Disaster Science at the Middle East Technical University (METU). She was the Course Director of MSc in Disaster Management and Resilience at Coventry University in the United Kingdom between August 2019 and August 2020. She was the Director of the METU Disaster Management Centre, Ankara, Türkiye between 2008 and 2018. She is a co-chair of the CODATA International Data Policy Committee since 2022. She is the Academic Director of the Institute of Civil Protection and Emergency Management (ICPEM). She has 25 years of experience in disaster risk reduction, disaster risk management, policy development, resilience, disaster risk finance, and disaster risk management education at the international level. She has been in the field for Syrian Refugee Camps 2015, 2011 Van Earthquakes, May 2014 Soma Mine Fire, 2020 Giresun Flood, 2020 Izmir Earthquake, and the 2023 Kahramanmaras Earthquake.



DR. AVIT BHOWMIK

Assistant Professor Karlstad University, Sweden

Spoken languages: English, German, Swedish, Bangla

COP30 presence: On-site

Expertise: Climate Action, Social Tipping Points,

Sustainability Transformation

Dr. Avit Bhowmik is an internationally recognized environmental scientist and climate solutionist. For the last 8 years, Avit has advanced research on rapid climate action and positive social tipping points. He contributed to the conceptual development of positive social tipping points as well as to identifying the scales to maximize the benefit of those tipping interventions. Avit has published several scientific articles in highly ranked international peer-reviewed journals including in the Proceedings of the National Academy of Sciences (PNAS). He played a key role in several reports and policy documents released in the Conference of the Parties (COP), Global Climate Action Summits and United Nations High Level Political Forums outlining pathways to exponentially reduce greenhouse gas emissions and abruptly transform societies to achieve Sustainable Development Goals. Avit advises municipalities, bioregions and national and international scale industries and NGOs about strategizing climate action and sustainability transformation plan.



PROF. SCOTT BREMER

Research Professor University of Bergen, Norway

Spoken languages: English, French, Norwegian

COP30 presence: Online

Expertise: Climate adaptation governance, Science-policy

interface, Alternative knowledge systems, Transdisciplinary co-production, Anticipatory

action, Climate services

Prof. Scott Bremer is an interdisciplinary environmental social scientist whose research focuses on how groups in society adapt to climate and other social and environmental changes, as part of wider adaptation governance. He particularly focuses on which ways of knowing are important for supporting adaptation decisions, and as developed concepts and tools for facilitate bringing together knowledge systems to co-create adaptation knowledge and action, in a transdisciplinary way. This extends to co-developing climate services for anticipatory action for example. Prof. Bremer has experience working in the Pacific, the Nordics, Southern Asia and Africa. His most recent focus is on how groups can ensure adaptation action is timed appropriately.



DR WENDY BROADGATE

Global Hub Director Future Earth, Stockholm, Sweden

Spoken languages: English, Swedish, (French)

COP30 presence: On-site

Expertise: Earth system science, Climate Science,

Resilience, Global Change

Wendy has two decades of experience coordinating and synthesizing international research for sustainability. She established and led the Swedish Global Hub of Future Earth which coordinates a global network of sustainability researchers. Her broad interests cover global change, climate science, Earth system science, resilience science and the science-policy interface. She is the founding Executive Director of the Earth Commission, an expert assessment to define safe and just boundaries for people and the planet and is on the Editorial board of two synthesis reports for policy-makers: "10 New Insights in Climate Science" and "Resilience Science Must Knows".



DR. KUNAL CHAKRABORTY

Scientist

MoES-Indian National Centre for Ocean Information Services (INCOIS), India

Spoken languages: Bengali/Hindi/English

COP30 presence: Online

Expertise: Ocean Modeling, Ocean Biogeochemistry,

Ocean Climate, Carbon Cycling, Machine

Learning

Dr. Kunal Chakraborty is a leading oceanographer at MoES-Indian National Centre for Ocean Information Services, with over a decade of experience. He specializes in modeling biogeochemical and ecological variability in marine environments and has advanced ocean forecasting through high-resolution models. His pioneering work in coupled ocean-ecosystem modeling has enhanced understanding of the Indian Ocean's biogeochemical evolution and the links between ocean physics and ecosystem functioning. Dr. Chakraborty is an active contributor to major international collaborations such as the Global Ocean Acidification Observing Network (GOA-ON), OceanPredict's Marine Ecosystem Analysis and Prediction Task Team, the RECCAPv2 initiative of the Global Carbon Project (GCP), and the World Climate Research Programme's WGORC, contributing meaningfully to global climate governance under the UN Decade of Ocean Science. He serves as a faculty member at the UNESCO Category 2 training centre, ITCOocean at INCOIS, advancing equitable access to marine science education in underrepresented and developing regions.



DR. CHING-CHENG CHANG

Research fellow Institute of Economics, Academia Sinica, Taipei, China

Spoken languages: English COP30 presence: Online

Food security, climate-related adaptation, just Expertise:

transition

Ching-Cheng Chang holds a PhD degree in Agricultural Economics from Pennsylvania State University of the US. Her main research interests include assessing the economic impact of climate change, public policies and free trade agreements on sustainable usage of natural resources and production decisions involved in the agriculture and food sectors. Her current research focuses on food loss and waste reduction, low-carbon just transition pathways and climate change adaptation policies in agricultural sector using integrated partial equilibrium and general equilibrium models.



MR. FRANCIS P. CRAWLEY

International Data Policy Committee (IDPC) CODATA, Belgium

Spoken languages: English COP30 presence: On-site

Expertise: Climate-related crises, Data & Al policy and

governance, Science-policy transition, UN

Digital SDGs Programme (DSP), International law

As Chair of CODATA's International Data Policy Committee, Francis P. Crawley is a leading voice in shaping the global data and Al governance critical for effective climate action. His expertise lies at the crucial science-policy interface, ensuring that robust, ethical data systems underpin international climate negotiations and the implementation of Nationally Determined Contributions. He is a key architect of foundational policy tools, such as the UNESCO Open Science Toolkit for crisis data policies, directly applicable to climate-related crises. His recent work on data & Al governance, data visitation, DSPs, genomics, and open science provides essential guidance for navigating the role of advanced technologies in climate science and governance. Francis is uniquely positioned to advise on how transparent, equitable data policies and Al governance, aligned with initiatives like the UN Digital SDGs Programme, are fundamental for building resilience and achieving the goals of the Paris Agreement.



PROFESSOR ANNA DAVIES

Chair of Geography, Environment & Society Trinity College Dublin, Ireland

Spoken languages: English COP30 presence: Online

Expertise: Environmental Governance, Public participation

in climate action, Participatory futuring, Sustainable consumption and production, Circular economy, Climate change adaptation planning, Urban food system transitions,

Environmental values

Anna Davies works across sectors including climate change, food, and nature-based solutions. She leads Horizon Europe Innovation Action - CULTIVATE and is a member of the Naturescapes project. A Fellow of the Royal Irish Academy and the International Science Council, she has been a member of Ireland's Climate Change Advisory Committee and National Economic and Social Council. She co-authored a report for the European Union Science Advice Mechanism on social science research for a sustainable food system (2020) and was a chapter lead of the United Nations Global Independent Expert Group report on Transforming higher education for global sustainability (2020). In 2021 she led the development of the Science & Technology Major group position paper for the UN HLPF on sustainability post COVID-19. A former Chair of The Rediscovery Centre, Ireland's national centre for the circular economy, Anna established and Chaired Future Earth Ireland, hosted by the Royal Irish Academy.



DR. RAJIB DEB

Senior Scientist Indian Council of Agricultural Research, India

Spoken languages: English COP30 presence: Online

Expertise: Animal Science, Climate-related stress on dairy

cattle, Livestock health

Dr. Rajib Deb, PhD, is a Senior Scientist at the Indian Council of Agricultural Research (ICAR). Specializing in Animal Biotechnology, he focuses on the molecular mechanisms underlying livestock adaptation to climatic stress and disease resilience. His acclaimed research on heat-shock proteins, thermotolerance genes, and biomolecular responses to environmental fluctuations has significantly contributed to the development of climate-resilient livestock. Dr. Deb has pioneered several patented diagnostic technologies for rapid disease detection and genetic screening, enhancing sustainable animal production systems. A recipient of multiple national and international fellowships including ICMR-DHR, TWAS, and INSA, he also serves on editorial boards of leading journals such as Scientific Reports and PLOS ONE. Through his work at ICAR, Dr. Deb continues to advance innovations in veterinary biotechnology that strengthen India's livestock productivity and climate adaptation strategies.



PROF. SUSANNE DITLEVSEN

Professor University of Copenhagen, Denmark

Spoken languages: Danish, Spanish, English

COP30 presence: Online

Expertise: Climate changes and tipping points,

Biostatistics, Statistical ecology, Mathematical

modeling of physiological systems

Susanne Ditlevsen is a statistician with a strong interdisciplinary profile spanning stochastic processes, nonlinear dynamics, and mathematical modelling in biology and climate science. Her research focuses on statistical methods for detecting critical transitions in complex systems, such as climate tipping points. In 2023, she co-authored a widely publicized article in Nature Communications on the potential collapse of the Atlantic Meridional Overturning Circulation (AMOC), which received global media attention. She is currently engaged in statistical ecology, with a particular focus on marine mammals in the Arctic.



PROF. ADEBAYO ELUDOYIN

Lecturer, Research Lead Department of Geography, Obafemi Awolowo University, Ile-Ife, Nigeria, Nigeria

Spoken languages: Yoruba, English

COP30 presence: Online

Expertise: Hydrology and Water Resources, Remote

Sensing and GIS Applications, Climate

Change and Variability, Urban Climatology and Environmental Sustainability, Water Quality Assessment, Land Use and Land Cover Change,

Flood and Drought Risk Management, Soil Science and Agroecosystems, Geospatial

Analysis and Modelling, Environmental Pollution

and Public Health, Artificial Intelligence in

Environmental Science.

Prof. A.O. Eludoyin is a leading scholar in physical geography, specializing in hydrology, climate change, and geospatial analysis. With over two decades of academic and research experience, his work integrates remote sensing, GIS, and environmental modelling to address land use dynamics, water resource management, and climate resilience in West Africa and globally. He has contributed extensively to flood and drought risk assessment, urban climatology, and water quality studies, with over 1,600 citations and numerous publications in peer-reviewed journals and edited volumes. Prof. Eludoyin has held key academic positions, supervised doctoral and postgraduate research, and participated in international collaborations on climate adaptation and sustainable development. His expertise supports nature-based solutions, ecosystem services, and policy frameworks for environmental sustainability.



DR HERMANCIA EUGENE-ZAMORE

Dean, Academic Affairs

Dominica State College, Dominica

Spoken languages: English, French

COP30 presence: Online

Expertise: Microbiology

Dr. Eugene-Zamore earned her PhD in Molecular Virology and Microbiology from the University of Pittsburgh School of Medicine (completed in 2012) and holds a B.Sc. in Biology from Cameron University (2005). During her doctoral studies, she worked on developing broadly reactive antibody vaccines against HIV-1 and contributed to scientific literature in that field. Notably, she co-authored a chapter on virus-like particle vaccines in the 2011 reference book "Development of Vaccines: From Discovery to Clinical Testing"



KARA-KICHWA AMB. WARĪN FLORES

Funder/Consultant

Kinray Hub: Indigenous R&D Think-Do Tank, Ecuador

Spoken languages: English COP30 presence: On-site

Expertise: Indigenous data sovereignty (IDS) and

governance (IDG), artificial intelligence governance systems, Indigenous systems

thinking & systems design, futures & anticipatory

thinking, digital sequence information on genetic resources (DSI), biocultural (nature-

culture) solutions, Indigenous nature

finance & technology, Indigenous relational science & technology, biocultural heritage agroecosystems, relational biotechnology &

synthetic biology

WarīN Flores is a first-generation Andean Kara and Andean-Amazonian Kichwa PhD student at the University of Arizona & Ancestral Territory Trustee. He develops innovative frameworks that connect Indigenous institutionality, data sovereignty, and relational science with financial mechanisms for environmental markets, with a focus on planetary regeneration. WarīN, as Technical Co-Lead for the BCA-IAPB-WEF Marine Biodiversity Credits Collaboration and a member of the Pooled Fund Steering Committee with Rights and Resources Initiative, supports how climate finance flows to frontline communities. As Translational Leader with the UN Biodiversity Credits Alliance - International Environmental Guardianship (IEG), he supports equitable environmental market innovation and strategy. As IPBES Fellow for Biocultural Intellectual Property & Data Governance (2025-2028) and Co-Chair of the Eco-Augmentation Initiative with the Geneva Science & Diplomacy Anticipator (GESDA), WarīN influences global biodiversity policy, ensuring Indigenous perspectives remain central to international environmental governance frameworks.



DR CLAUDIA GIARDINO

Research Director CNR-IREA, Italia

Spoken languages: Italian, English

COP30 presence: Online

Expertise: Remote sensing, lakes, aquatic ecosystems

mapping

After completing her PhD in Geomatics from the Politecnico di Milano, she joined the Istituto per il Rilevamento Elettromagnetico dell'Ambiente (IREA) of the Italian National Research Council (CNR), where she is currently a Research Director. She was a Visiting Scientist at CSIRO Land and Water in Canberra, Australia, in 2004 and 2006. Her research focuses on the remote sensing of inland and coastal waters, including the study of harmful algal blooms, aquatic vegetation and shallow-water mapping. She develops and applies remote sensing techniques for water quality monitoring and assessment across local to global scales, with particular attention to lakes, water resource management, and the impacts of climate change on water resources. She has contributed to the development of satellite missions and is an active member of the International Ocean Colour Coordinating Group (IOCCG) and the Terrestrial Observation Panel for Climate (TOPC) of the Global Climate Observing System (GCOS).



PROF. MARCOS GIBSON

Director of Climate Change Flacso, Spain

Spoken languages: Spanish, English, Portuguese

COP30 presence: On-site

Expertise: Climate governance, climate policy, public policy, sustainable innovation, super pollutants, methane, short-lived climate pollutants, Climatech, just transition, data for climate action, Latin America and the Caribbean, China-LAC relations, energy transition, climate diplomacy, environmental governance, Paris Agreement implementation

Marcos C. Gibson is a lawyer, professor, and researcher specializing in climate policy, public governance, and sustainable innovation. He currently serves as Director of Climate Change at FLACSO Chile, where he leads regional programs on climate governance and coordinates the Postgraduate Diploma in Climate Change: Ethical Challenges for Public Policy, which has trained participants from over 20 Ibero-American countries. He is the author of the book "Rutas Climáticas del Siglo XXI: China y América Latina y el Caribe en Transformación" and directs the pioneering university program "Climate Change: Super Pollutants and Perspectives for Public Policies in Latin America," sponsored by the Andean Parliament, which has trained over 120 parliamentarians and public officials from 18 countries in reducing short-lived climate pollutants. With more than a decade as a permanent observer at UNFCCC COPs, he holds a Master's in Politics, Law and Environmental Management (Universidad Austral).



PROF. DR. BARBAROS GÖNENÇGIL

Head of Geography Department İstanbul University, Türkiye

Spoken languages: Turkish, English

COP30 presence: Online

Expertise: Climatology, Urban Heat Islands

He graduated from İstanbul University (İ.U.) Department of Geography. He received his master's degree and doctorate on Climatology at the University of İstanbul. He is currently the head of Geography Department, the head of Physical Geography Division in Geography Department and Open and Distance Education Faculty Geography Programme of İstanbul University. He is also a member of the Istanbul University Senate. Prof. Gönençgil is also the founder and the head of the Climate Change Division in İstanbul University Social Sciences Institute. Prof. Dr. Gönençgil is the President of Turkish Geographical Society. At the same time, he is the editor of the Journal of Turkish Geography and Journal of Geography. He was head of the Local Organizing Committee of the IGU/IGC 2021 İstanbul. He is also the LOC Chair of the 2026 IGU Istanbul Regional Conference. He served as IGU VP between 2016-2021, from 2021 he is IGU Secretary General.



SARGAM GOUNDAR

Doctoral Researcher University of Otago, Fiji

Spoken languages: English; Fijian; Fiji-Hindi; Hindi

COP30 presence: Online

Expertise: Climate-related migration, (im)mobilities, intra-

regional migration, Pacific Islands, climate change, adaptation, planned relocation, displacements, minorities, marginalized

communities, Oceania

Sargam Goundar is a Fijian geographer and PhD researcher in Geography at the University of Otago, New Zealand. Her research focuses on climate-related (im)mobilities in Oceania, examining how environmental change shapes movement, adaptation, and resilience in Pacific communities. She has contributed to the scholarship on foreign aid and climate change-related mobilities, highlighting the need for climate aid to consider 'inter-Pacific Islands migration' and Fiji's role as a receiving country in the region. Sargam holds a Postgraduate Diploma in Geography from Otago and a BA in Geography and Political Science from the University of the South Pacific (USP). She has taught at both Otago and USP and was a Visiting Fellow at the nccr - on the move at the University of Neuchâtel. With professional experience at IOM, PDD, UNICEF, and the Fiji Ministry of Economy, her work bridges research and policy to strengthen climate resilience and sustainable development in Oceania.



PROF. DOUGLAS HAMILTON

Assistant Professor North Carolina State University, USA

Spoken languages: English COP30 presence: Online

Expertise: Earth System modelling, biogeochemical cycles,

climate change, wildfires

Douglas Hamilton is Assistant Professor of Earth System Science at North Carolina State University. His research explores how the land, atmosphere, and ocean are interconnected through the movement of nutrients like iron, nitrogen, and phosphorus. He examines how climate change and human activity are transforming the atmospheric nutrient supply to the ocean that helps sustain marine ecosystems. Combining field observations, satellite data, and advanced Earth System modeling reveals how changing atmospheric processes influence ocean productivity and carbon cycling over space and time. He has developed Earth System models, published over 60 peer-reviewed articles, is a member of the SOLAS (Surface Ocean Lower Atmosphere Study) Early-Career Scientist Committee and leads the SOLAS fire initiative, is a co-chair of the SCOR working group RUSTED (Reducing Uncertainty in Soluble aerosol Trace Element Deposition), and an Editorial Board member for the Journal of Pyrogeography. He teaches climate communication, instrumentation, and wildfire science.



PROF. MICHIO KAWAMIYA

Director-general of a research center JAMSTEC, Japan

Spoken languages: Japanese, English

COP30 presence: Online

Expertise: Climate change projection, carbon cycle

modeling, earth system modeling, ocean

ecosystem modeling

Michio Kawamiya received his PhD in 1997 for his study on marine ecosystem modeling research aimed at elucidating the dynamics of lower trophic ecosystems in the North Pacific Ocean. Later, at the Institute of Oceanography, Kiel University, where he worked from 1997 to 2002, he conducted numerical modeling studies on the mechanisms of phytoplankton growth and formation in the Arabian Sea. He returned to Japan in 2002 and joined a program where he led the development of the ESM. Since then, he has been leading national projects for climate change projection. He now leads the group at JAMSTEC developing the world-class, cutting-edge Earth system model that has contributed to IPCC reports. He is also keen on contributing to research communities as, e.g., a vice-president of Japan Geoscience Union, a member of TG-data for IPCC AR6, SSC member of WCRP ESMO activity, and a Review Editor for IPCC WG1 AR7.



PROF. DANIELA KLEINSCHMIT

Head of the Chair of Forest and Environmental Policy University of Freiburg, Germany

Spoken languages: English, German

COP30 presence: On-site

Expertise: Forests policy and governance, Resilience,

Bioeconomy

For more than 25 years she has analyzed, taught and advised on the area of natural resource policy and governance. Her research interests include amongst others the areas international forest governance and bioeconomy with a focus on legitimacy, discourses, communication and integration. She has initiated and coordinated various research projects and published several scientific papers, chapters and edited volumes. Being the head of the Chair of Forest and Environmental Policy, she has the pleasure to supervise diverse research studies of PhD students bringing in different research perspectives. Her active involvement in the International Union of Forest Research (IUFRO) has provided her with an international disciplinary and interdisciplinary network fostering collaboration with colleagues around the globe.



PROFESSOR TAIBAT LAWANSON

Professor of Planning and Heritage University of Liverpool, United Kingdom

Spoken languages: English, Yoruba

COP30 presence: Online

Expertise: Climate induced displacements, Urban planning

and Governance, Urban Resilience, Community

Development,

Taibat Lawanson is Leverhulme Professor of Planning and Heritage in the School of Architecture at the University of Liverpool, United Kingdom. She holds a PhD in Urban and Regional Planning from the Federal University of Technology, Akure, Nigeria. Her research focuses on the interface of social complexities, urban realities and the quest for spatial justice in Africa. At the University of Liverpool, she leads the Urbanism and Coastal Heritage Lab, investigating how globalization and climate change impact the built environment, sustainable livelihoods and cultural heritage of West African cities. Currently, she leads the technical teams for the development of the Lagos Resilience Strategy and Lagos Urban Development Policy. She serves as member of the International Advisory Committee for UN-Habitat's flagship World Cities Report, member of the World Economic Forum's Global Future Council on Experience and Lifestyle economy, and member of the steering Committee of Future Earth's Urban Knowledge Action Network.



DR JOSE ANTONIO MARENGO

R&D Director CEMADEN/MCTI, BR

Spoken languages: English, Spanish, Portuguese

COP30 presence: On-site

Expertise: Climate modeling, disaster risk reduction,

climate disasters, disaster risk perception

José A. Marengo holds a PhD in Meteorology from the University of Wisconsin-Madison (1991) in the United States, postdoctoral studies at NASA-GISS and Columbia University in New York, and at Florida State University. He is currently a senior researcher and General Coordinator of Research and Development at CEMADEN (National Center for Monitoring and Early Warning of Natural Disasters), where he works on extreme events, natural disasters, and disaster risk reduction. He is a professor in the graduate programs of INPE and UNESP. He is the author of over 300 articles, book chapters, books, technical reports, and conference papers. He is a Full Member of the Brazilian Academy of Sciences, the São Paulo State Academy of Sciences, and the World Academy of Sciences (TWAS). He was selected by Clarivate as one of the most influential and highly cited researchers in the field of geosciences in the world in 2019, 2020, 2022,2023 and 2024.

DR. NAUSHEEN MAZHAR

Chairperson & Associate Professor Geography Lahore College for Women University, Pakistan

Spoken languages: English COP30 presence: Online

Expertise: Climate change, Climate modelling, SSPs, Land

degradation, sedimentation, Smog, Extreme

weather events, GLOFs, food security

Nausheen Mazhar is Chairperson and Associate Professor in the Department of Geography, and Head of the International Resource Center (IRC), DFDI at Lahore College for Women University, Lahore. With a University of Leeds fellowship, her research focuses on desert ecosystems, dryland ecology, livelihoods, sedimentology, and climate change. Mazhar contributed to the Punjab Climate Change Policy, the Climate Resilient Punjab Vision 2024, and the Lahore Climate Action Plan (Urban Unit). She is also part of HESSA-USAID, the Pakistan Climate Resilience Network (PAK-CRN), and UNU-EHS collaborations. As a Contributing Author in IPCC's 6th Assessment Report, Mazhar actively promote climate awareness through national and international forums, including the Oxford Desert Conference, FBAS 2024 Beijing, and TEDx Countdown. Currently, Mazhar leads a PERIDOT-funded project with the University of Paris on Tarbela Reservoir sedimentation, with 40 publications and 30 impact factor, advocating science-based climate resilience in Pakistan.



PROFESSOR PHIL MCMANUS

Professor in Urban and Environmental Geography University of Sydney, Australia

Spoken languages: English COP30 presence: Online

Expertise: Human geography, relationship between media

coverage of climate and weather and extreme

weather events

Phil McManus's background is in geography, environmental studies and urban planning. Recent research has focused on media coverage of extreme weather events (Global Environmental Change, 2025) and different approaches to understanding hope and pessimism in relation to climate change and sustainability (Geographical Research, 2023). These ideas are currently being brought together and developed in a new book.

DR. TIMON McPHEARSON

Director and Professor New York, New York, United States

Spoken languages: English COP30 presence: On-site

Expertise: Nature-based solutions, urban resilience,

social-ecological systems, urban climate risk

and vulnerability.

Dr. Timon McPhearson is the founding director of the Urban Systems Lab, professor at NYU Environmental Studies, and author of Nature-based Solutions for Cities. Drawing on his mixed Native American (Cherokee Nation) and European descent his work takes an interdisciplinary systems approach to advancing urban resilience, equity, and sustainability earning the Ecological Society of America's Sustainability Science Award twice as well as the Innovation in Sustainability Science Award. Dr. McPhearson was named an NYC Climate Hero and was awarded the Gulbenkian Prize for Humanity as a lead author for the Intergovernmental Panel on Climate Change (IPCC). He is a Senior Research Fellow at the Cary Institute of Ecosystem Studies, Stockholm Resilience Centre, and the Beijer Institute of Ecological Economics at The Swedish Royal Academy of Sciences. He currently serves as co-chair of the NYC Panel on Climate Change and is a Lead Author for IPCC and IPBES.



PROF. DR. VIRGINIA MURRAY

International Data Policy Committee (IDPC) CODATA, United Kingdom

Spoken languages: English COP30 presence: On-site

Expertise: Disaster risk management; public health

emergencies; Sendai Framework; Hazard

Information Profiles (HIPs)

Professor Virginia Murray is a public health doctor committed to improving health emergency and disaster risk management. She was appointed as Head of Global Disaster Risk Reduction for UK Health Security Agency (formerly Public Health England) in April 2014. She chaired the UNDRR/ISC Hazard Information Profile Steering Group for the 2025 update, having been the Chair of the UNDRR/ISC Hazard Classification and Review Technical Working Group from 2019 with the report published in 2020 and the UNDRR-ISC Hazard Information Profiles: Supplement in 2021. She was a member and then vice-chair of the UN International Strategy for Disaster Reduction (UNISDR) Scientific and Technical Advisory Group (STAG), 2008-2017, supporting as required negotiations for the Sendia Framework for Disaster Risk Reduction 2015-2030 by the UN member states. She is a co-chair of the WHO Thematic Platform Health and Disaster Risk Management Research Network.



PROF ATTILA NAGY

Full professor University of Debrecen, Hungary

Spoken languages: English, Hungarian

COP30 presence: Online

Expertise: Water management, food security, drought

management environmental management

Dr Attila Nagy (male) is a full-time professor and the Head of the Institute of Water and Environmental Management. He has a PhD since 2009 in the field of crop and horticultural sciences. He undertook his habilitation in 2016 on the topic of remote sensing and geographic information system (GIS) based monitoring and identification of agrohydrological parameters such as drought-related yield loss or fruit ripening. He has 20 years of professional experience in monitoring of crops and orchards in response to drought and water stress, irrigation scheduling and GIS-based analysis of erosion and surplus water risk.



ZEENAT NIAZI

Chief Advisor, Climate Resilience and Circular EConomy Development Alternatives, India

Spoken languages: English COP30 presence: Online

Expertise: Human Settlements, Sustainable Consumption

and Production Systems, Circular Economy, Urban Resilience, urban resource flows, climate change and disaster resilience of rural and urban settlements, Green and just economic

transitions

Zeenat Niazi mentors the policy studies and development action initiatives across the Circular Economy and Climate Resilience Programmes at Development Alternatives in India. She has over 35 years of professional experience working with multi-disciplinary teams engaged in grassroots action, transdisciplinary research, training and teaching, and support to policy development. Her areas of expertise include rural and urban affordable housing, sustainable consumption and production in the built environment, green and inclusive circular economy models, and climate resilience in the rapidly transforming contexts of the global south. She is currently researching reciprocal relationships between social and institutional learning systems and nature-based solutions for urban resilience.



DR. ERIC ROSAS

Professor Universidad Autónoma del Estado de México, Mexico

Spoken languages: Spanish, English, French

COP30 presence: Online

Expertise: Photonics, Photonic detectors, High-Accuracy

Radiometry, Lasers

E. Rosas has conducted extensive research in developing high accuracy measurement methods and standards applied to increasing the detection responsibility for some of the most hazardous green-house gasses and other environment higher polluting substances as well as human-risky electromagnetic radiations, like CO, CO2, ozone, UVC rays (254 nm), among others. This research is a key one in trying to geolocalize these substances and radiation spots around the world and over long periods of time, which is also fundamental in order to detect the climate change patterns all over the globe. E. Rosas has also been active in advocating for the environmental protection and recovering in Mexico, one of the five most biodiverse ecosystems in the world and has participated in and led several initiatives. He is the current President of the International Commission for Optics, Founder and President of the Mexican Photonics Cluster, former scientific leader at the National Measurement Institute of Mexico and Member of the Global Environmental Measurement and Monitoring (GEMM) initiative.



PROF. NOEL SALAZAR

Head of Department KU Leuven, Belgium

Spoken languages: English, Spanish, French, Dutch

COP30 presence: Online

Expertise: Polycrisis, restorying climate change, narrative

and climate, more-than-human approaches,

(im)mobility, climate futures

Prof. Salazar's expertise offers indispensable conceptual tools and practical methodologies for tackling the most complex social and ethical dimensions of climate change. His core theoretical contribution—the critical analysis of imaginaries—is essential for establishing shared, just, and actionable visions of climate futures that are culturally resonant and politically robust. Furthermore, his work on contested mobilities is non-negotiable for designing an equitable and rights-based Loss and Damage Fund that recognizes the diverse and often marginalized experiences of climate-induced displacement and immobility.



PROF. PHILIPPE SCHOENEICH

Professor Université Grenoble Alpes, France

Spoken languages: French, English, German

COP30 presence: Online

Expertise: Mountain permafrost, Mountain geomorphology,

Natural hazards

Geographer, specialized on mountain geomorphology. Focus on periglacial geomorphology in the European Alps, and on monitoring of mountain permafrost, as well as on natural hazards in mountains. He created the French permafrost observing network PermaFRANCE. He is a member of the Steering Committee of the GTN-P (Global Terrestrial Network for Permafrost), the global network coordinating permafrost monitoring for the ECV Permafrost. He is a permafrost expert in the terrestrial panel (TOPC) of GCOS.



PROF. JEFFERSON SIMÕES

Director, Centro Polar e Climatico Universidade Federal do Rio Grande do Sul, Brazil

Spoken languages: English, Portuguese, French

COP30 presence: Online

Expertise: Melting of the polar ice masses, Ice core

environmental record (greenhouse gases pollutants), Andean glaciers, Biomassa burning

and Andean ice core record

Jefferson Simões is one of the main Latin American glaciologists, the scientific leader of the Brazilian Antarctic Programme. His research area encompasses the record of polar and Andean ice core climatic and air chemistry, as well as remote sensing of ice masses.



DR. GILES B. SIOEN

Project Lecturer
Sustainable Society Design Center, Graduate School of Frontier
Sciences, The University of Tokyo, Japan

Spoken languages: English, Dutch

COP30 presence: Online

Expertise: Planetary Health, Urban and Landscape

Systems, Sustainability Science, Climate

Change Adaptation

As a trained sustainability scientist, Giles B. Sioen cross scientific boundaries focusing on Planetary Health, Urban and Landscape Systems, Sustainability Science, Climate Change Adaptation using innovative, transdisciplinary systems science approaches to tackle the world's most pressing challenges. His current project focuses on scenarios of our global environment, particularly through the lenses of food, water, and environmental sustainability. Gathering existing scenarios and comparing them may indicate directions for further research.



ASSOC. PROF. SUNHEE SUK

Associate Professor Nagasaki University, Japan

Spoken languages: Japanese, Korean, English

COP30 presence: Online

Expertise: Market-based mechanisms, climate change

policy, carbon pricing and markets, carbon offset credits, corporate decarbonization

management

Sunhee Suk is an Associate Professor at Nagasaki University, specializing in environmental and resource economics. Her research focuses on market-based mechanisms for climate change mitigation, including carbon pricing, emissions trading, and corporate decarbonization strategies. She leads multiple interdisciplinary projects on blue carbon and nature-based solutions, examining how carbon credit systems and climate policies influence business behavior and regional sustainability. Through her work with Future Earth's Finance and Economics KAN, she contributes to international dialogues linking science, policy, and finance for a low-carbon transition.



PROF JÁNOS TAMÁS

Full professor University of Debrecen, Hungary

Spoken languages: English, Hungarian

COP30 presence: Online

Expertise: Water management, food security, drought

management environmental management

Prof. Dr János Tamás (male) is a full-time professor and the Vice-Head of the Institute of Water and Environmental Management (IWEM). He has a PhD since 1992 and a DSc since 2007. His professional area is agricultural and water management applications based on GIS modelling and remote sensing techniques, precision agriculture, environmental informatics and water management. He has more than 40 years of experience in research and education.



PROF. EINSTEIN TEJADA

Head, Technology Education Commission Bolivian National Academy of Sciences, Bolivia

Spoken languages: Spanish, English

COP30 presence: Online

Expertise: Livestock production, Integrated Risk Reduction

Management and Agroclimatic Emergency

Response

Professor, Masters in Agroecological Livestock Management at Universidad Mayor de San Simon (UMSS), Cochabamba, Bolivia. Doctoral candidate in Higher Education and Scientific Research Management at the Bolivian Graduate School. Specializing in Digestible Metabolic Physiology, Methane Emissions, and Animal Energy Expenditure through doctoral studies at the Royal KVL University in Denmark. Scientific researcher in the Department of Animal Physiology and Biochemistry. Master of Science in Animal Science and Range Management, New Mexico State University, USA, Academic English studies at Georgetown University, Washington DC. International Postgraduate Diploma in Agricultural Services for International Rural Development Programs from the Ministry of Agriculture and Land Reclamation, Egypt. Agricultural Engineer at UMSS. Professor and advisor of 76 theses and research projects in six universities in Bolivia, Peru, Germany, Chile, and Italy. Author and editor of 120 scientific publications focusing on Digestive Physiology and Environmental Interaction (particularly in camelids), Rural Development, Agrostology, Climate change.



DR. ELISA VILHUNEN

Postdoctoral researcher University of Helsinki, Finland

Spoken languages: English, Finnish

COP30 presence: Online

Expertise: Climate education

With a background in science education, Elisa Vilhunen brings practical insight into how students emotionally and cognitively engage with climate issues. Her research focuses on fostering meaningful learning experiences through activities that promote interest, challenge, and skill development in climate education. Using methods like ecological momentary assessment, her studies show how real-time engagement can be enhanced through problem formulation, ideation, and solution design. Her work emphasizes the importance of supporting students' sense of competence and motivation in climate learning environments. Her interdisciplinary approach contributes to more effective, empathetic, and evidence-based climate education, helping educators better support learners in navigating complex environmental challenges.



DR. KARINA VON SCHUCKMANN

Senior Advisor, Ocean Science for Policy Mercator Ocean international, France

Spoken languages: English, French, German

COP30 presence: On-site

Expertise: Ocean & Climate, Climate change, Earth energy

imbalance, Climate Impact Drivers

Karina von Schuckmann (Dr., HDR) is Senior Advisor, Ocean Science for Policy, at Mercator Ocean International in France. Passionate about the ocean, she is interested in understanding the role of the ocean - and its interactions - in the Earth's climate system, its changes and the underlying processes involved. She is, amongst others, the director of the Copernicus Ocean State Report and was the lead author of the IPCC SROCC and AR6 reports (Working Group I), and a lead author for the upcoming IPCC AR7; she is an author for the WMO State of the Climate and the IOC-UNESCO Ocean Report. She is a member of several international expert groups on climate science. She is a member of the European Academy of Sciences and was awarded the French Academy of Sciences Climate Prize in 2023.



DR. NOBORU ZAMA

Manager / Industrial Development Expert UNIDO, Austria

Spoken languages: English, Japanese, Portuguese

COP30 presence: Online

Expertise: Energy Social Science, Climate Change

Mitigation, Renewable Energy, International Environmental Cooperation, Environment and

Development

Dr. Noboru Zama serves as a Project Manager and Industrial Development Expert at the United Nations Industrial Development Organization (UNIDO) in Vienna, Austria. He is an expert on environment, climate change and sustainable development, and leading the climate technology innovation and adaptation portfolio at UNIDO. Prior to joining UNIDO, Dr. Zama held positions at the United Nations Human Settlements Programme (UN-Habitat), the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS), the Japan International Cooperation Agency (JICA) and institutes affiliated with the Ministry of the Environment of Japan. His international expertise encompasses assignments in Kathmandu, Nepal, with UN-Habitat, and in Malé, Maldives, with JICA. Throughout his professional career, he has assumed a variety of leadership positions, which have been instrumental in the advancement of environmental and climate resilience initiatives. Dr. Zama holds a PhD in Environmental Studies and has a wealth of experience, notably in developing countries.



SAID SHARIPOV

Head

Institute of Water Problems, Hydropower and Ecology of the National Academy of Sciences of Tajikistan, Tajikistan

Spoken languages: English COP30 presence: Online

Expertise: Water Resources Management, Environmental

Protection, Ecological Design, monitoring and control, Environmental Impact Assessment (EIA),

Environmental Education and Training

Sharipov is an environmental and water resources specialist with expertise in engineering surveys, ecological design, and water protection. He applies GIS and modeling tools for environmental monitoring, control, and impact assessment, while supporting environmental education, training, and compliance with legislation and regulations.

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