

Speaker Brief Biographies:

Bhupesh Adhikary was born and brought up in Kathmandu, Nepal and earned a BA in Economics from the College of Wooster and B.S.E., and PhD in chemical engineering from the University of Iowa. He worked as an assistant professor at Kathmandu University until July 2011 and still continues as a visiting faculty, but now works for the EvK2CNR-Committee Italy as a resident scientific coordinator in Nepal. His area of expertise is regional scale atmospheric chemical transport modeling. He has worked in international projects such as the NASA ICARTT, INTEX-B and ARCTAS field campaigns on the modeling team responsible for chemical weather forecasts in support of airborne missions; and in the UNEP-ABC field campaigns. Currently he is studying air pollution over the Himalayas using a regional chemical transport model and observations from the National Climate Observatory – Pyramid; and coordinates in-situ measurements related to the ABC-SusKAT field campaign in Kathmandu.

Tom Bracegirdle is a research scientist at the British Antarctic Survey (BAS). After completing a PhD in Meteorology in 2006 from the University of Reading, Dr. Bracegirdle has been conducting research on polar climate and atmospheric dynamics at BAS. His main interests are polar cyclonic storms, large-scale atmospheric circulation, troposphere-stratosphere interactions, climate model evaluation, and quantifying and reducing uncertainty in climate model projections. Whilst at BAS he has published 31 peer-reviewed papers on these topics. Through his work on Antarctic climate he has been selected as theme leader on Theme 2 of the AntarcticClimate21 Research Programme of the Scientific Committee on Antarctic Research (SCAR).

Sandro Fuzzi is Research Director at the Institute of Atmospheric Sciences and Climate (ISAC) of the Italian National Research Council (CNR). His main research interests are physical and chemical processes of aerosols and clouds, and their effects on atmospheric composition change and climate. Sandro Fuzzi has coordinated several international projects and has published over 150 papers in refereed journals (h-index = 45). Has been a member of several international panels such as the European Commission Panel on Atmospheric Composition Change, the International Commission on Clouds and Precipitation, the Steering Committee of the Atmospheric Brown Cloud (ABC) project, and has been co-chair of the International Global Atmospheric Chemistry (IGAC) Steering Committee. Sandro Fuzzi has coordinated the European Network of Excellence–Atmospheric Composition Change (ACCENT), which included the major European institutions in the field of global change research, and is currently coordinating a follow-up program aimed at facilitating the transfer of research results into policy-decision making (ACCENT Plus). Has been a Contributing Author for the 4th IPCC Assessment Report and is presently involved as Review Editor in the preparation of the 5th IPCC Assessment Report. Recently has been appointed as a member of the Coordination Group on the WMO Integrated Global Observing System (ICG-WIGOS).

Mauro Guglielmin has the permanent position as Associate Professor of Physical Geography and Geomorphology at Insubria University, focusing on glacial and periglacial geomorphology in the Alps, Arctic and Antarctica. He has participated to 14 Antarctic expeditions, and is co-chairman of the SCAR Expert Group ANTPAS (Antarctic and Sub

Antarctic Permafrost, Soils and Periglacial Environments). Recently he started cooperation with EvK2-CNR both in the Alps and in Pakistan, focused on periglacial processes, permafrost thermal regime and ground ice. More recent papers focused on the relationships between permafrost, vegetation and climate change.

Hartmut H. Hellmer is a physical oceanographer in the Climate Science department of the Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI), Bremerhaven, Germany. He spent six years at the Lamont-Doherty Earth Observatory of Columbia University, New York, as Postdoctoral Fellow and Associate Research Scientist and still holds the position of Adjunct Research Scientist. Back at AWI in 1996 he led the working group on Southern Ocean model development, including the sub-ice shelf cavities, which resulted in the design of the BRIOS (Bremerhaven Regional Ice Ocean Simulations) model. He organized and participated in several expeditions to the Antarctic marginal seas on German, US, and Brazilian research vessels and was one of the chief scientists of the first and sole US/Russian ice floe drift experiment in the western Weddell Sea, ISW-1992. Hartmut Hellmer was co-chair of the SCAR affiliated project iAnZone, member of the science steering committee of the NERC project Autosub Under Ice (AUI), is leader of work package WP4 of the EU project ice2sea, and member of the CLIVAR/CliC/SCAR Southern Ocean Panel. He was recently nominated as expert within the frame of the UN Regular Process for Global Reporting and Assessments of the State of the Marine Environment.

Margareta Johansson is based at the Dept of Physical Geography and Ecosystem Science at Lund University and at the Royal Swedish Academy of Sciences in Sweden. Dr. Johansson has a broad experience in Arctic research, ranging from glaciology/climatology to Arctic ecology and for the last eight years focusing on permafrost in a changing climate in northern Sweden. Her research experience includes helping to coordinate major environmental assessments such as a chapter in the Arctic Climate Impact Assessment (ACIA) on terrestrial ecosystems, and international networks such as "A circumarctic network of Terrestrial Field Bases (SCANNET). She is currently the Executive Secretary for a FP7 EU project INTERACT networking more than 60 research stations in the north and for a Nordic top-level research initiative DEFROST, and was a co-coordinator of the Permafrost Young Researchers Network (PYRN) during 2006-2008 when it was initiated. Dr. Johansson was one of two convening lead authors for two chapters (snow and permafrost) of the AMAP SWIPA assessment (Snow Water Ice and Permafrost in the Arctic that is a follow up on the Arctic Climate Impact Assessment, published in December 2011.

Shichang Kang is a Professor and Assistant Director of the Institute of Tibetan Plateau Research, Chinese Academy of Sciences (CAS), and Director of Nam Co Observation and Research Station for Multisphere Interaction, CAS. With extensive field experience in Tibet including several 7000+ meter expeditions, he is also an associate research scientist at the University of Maine. Dr. Kang has been awarded the "Talent Project" of CAS. He has been a PI or co-PIs for more than 20 projects, and has organized more than 20 expeditions in the Tibetan Plateau. Dr. Kang mainly focuses on glacier and climate changes, environmental chemistry of snow/ice and atmosphere, and paleo-climate and environmental variability recovered by ice core records in the Tibetan

Plateau. He has published more than 180 peer-reviewed papers, with more than 80 papers published in international journals.

Georg Kaser is Professor for Climate and Cryospheric Research at the Institute of Meteorology and Geophysics (IMGI) at the University of Innsbruck, Austria, and Speaker of the Innsbruck University Research Centre of Climate and Cryosphere. He was educated at the IMGI in meteorology, geophysics, and geography. After a long affiliation with the Institute of Geography in Innsbruck, he is back at the IMGI since 2010. His primary interest is the interaction of the atmosphere with snow and ice surfaces in different temporal and spatial scales, for better understanding a glacier's reaction to climate. His expertise spans from global perspectives of glaciers' contribution to sea level rise and regional water supply to small scale studies, e.g. on processes affecting the ice cliffs on Kilimanjaro. He has investigated glaciers in the European Alps, the Peruvian Andes, the Himalaya, Greenland, Alaska, and East Africa. He was the Secretary of the International Commission of Snow and Ice (ICSI/IAHS/IUGG) from 1999 – 2005 and was elected the first President of the International Association for Cryospheric Sciences (IACS/IUGG) (2007 - 2009). In cooperation with UNESCO-IHP he has organised training courses on the monitoring of glacier mass changes in India, Nepal, and Bolivia. He was a Lead Author in the Working Group I of the 4th and the 5th IPCC Assessment Report as well as in the IPCC Technical Paper on Climate Change and Water.

Karin Kemper is Director of Climate Policy and Finance at the World Bank. As such, she contributes to the strategic direction of the Bank's climate agenda, and is responsible for her department's work on carbon finance, climate policy analysis and design, climate finance, the Climate Investment Funds, the Partnership for Market Readiness and coordination with the Global Environment Facility and Montreal Protocol. She has held the position since July 2013. Prior to her appointment, Ms. Kemper was the Environment and Water Resources Sector Manager in the Bank's Latin America and Caribbean Vice Presidency. From 2007 to 2009 Ms. Kemper served as the Sector Manager for Social Development, Environment and Water Resources in the South Asia Region. Her work on institutional economics in water resources management is widely known within and outside the Bank. Ms. Kemper, a German national, joined the Bank in 1996 through the Young Professionals Program. She holds a Ph.D. in Water and Environmental Studies from the University of Linköping in Sweden.

Zbigniew Klimont is a research scholar with the Mitigation of Air pollution and Greenhouse gases programme (MAG) at the International Institute for Applied Systems Analysis (IIASA) in Laxenburg, Austria where he works on the assessment of regional (Europe, Asia) and global emissions of various air pollutants. He leads MAG work on the development of particulate matter and carbonaceous emission and costs modules of the GAINS model (<http://gains.iiasa.ac.at>); an integrated assessment modelling framework recently supporting development of air pollution policy in Europe. Since more than a decade he has been involved in European and Asian work on emission control strategies and has co-authored European and global inventories and policy studies on black and organic carbon.

Luisa Molina is currently the president of the Molina Center for Strategic Studies in Energy and the Environment (MCE2) in La Jolla, California and principal research

scientist at the Department of Earth, Atmospheric and Planetary Sciences at the Massachusetts Institute of Technology. Dr. Molina's research interests include molecular spectroscopy, chemical kinetics, and atmospheric chemistry. She has been involved in particular with the chemistry of stratospheric ozone depletion and urban air pollution. She demonstrated experimentally a new reaction sequence, which explains how chlorofluorocarbons (CFCs) caused the Antarctic ozone hole. Recently she initiated a multi-disciplinary project involving an integrated assessment of air pollution in megacities, aimed at improving the environmental decision making process through education and the better use of scientific, technical, and socio-economic understanding; and a new initiative aimed at looking how these pollutants impact the South American cryosphere.

Dirk Notz is head of the Research Group Sea Ice in the Earth System at the Max Planck Institute of Meteorology. Research interests include:

- Sea ice in the climate system
 - Representation of sea ice in climate models
 - Air-ice-sea interaction
 - Sensitivity studies with adjoint models
- Physical processes in sea ice
 - Salinity evolution of sea ice
 - Properties of the ice-ocean interface
 - Melt-water fluxes through sea ice
- Miscellaneous
 - Phase changes in multi-phase systems

Arnico Panday joined ICIMOD in 2012 as Lead Atmospheric Scientist and Coordinator of the upcoming Atmosphere Initiative. He is also a Research Assistant Professor at the Department of Environmental Sciences at the University of Virginia and a Visiting Assistant Professor at the Department of Earth, Atmospheric, and Planetary Sciences at the Massachusetts Institute of Technology (MIT). Arnico received a Bachelor's degree with high honours in Environmental Science and Public Policy from Harvard University, US, a Master's degree in Land Resources from the University of Wisconsin-Madison, US, and a Doctor of Science in Atmospheric Science from MIT. He has conducted postdoctoral research at MIT and at Princeton University's Geophysical Fluid Dynamics Laboratory. His research has focused on atmospheric chemistry and physics in mountain areas. He has used field measurements and modelling to study the processes responsible for the accumulation and ventilation of air pollutants in the Kathmandu Valley, and prepared simulations of air pollution transport from the Ganges Basin to the high Himalayas; and set up stations in the Kali Gandaki Valley to study the transport of polluted air from South Asia towards the Tibetan Plateau. Since 2011 he has also served as advisor and supervisor of the Rwanda Climate Observatory Project.

Lars-Otto Reiersen serves as the Executive Secretary of the Arctic Monitoring and Assessment Programme of the Arctic Council in Oslo, Norway. He received the 2012 SETAC Rachel Carson Award, which noted that "...In his 20-year tenure as AMAP Executive Secretary, Reiersen has harnessed the volunteer energy of hundreds of scientists as well as the indigenous peoples of the Arctic to address scientific and policy

issues related to how the Arctic is responding to global pollution and climate change.

Claudio Smiraglia is Full Professor of Physical Geography-Geomorphology at the University of Milano, Italy; he teaches "Physical Geography" at the degree course in Natural Sciences and at the degree course in Environmental and Human Sciences (SUA) of the Milan University. Moreover he developed the courses of Climatology and Glaciology at the Milan University. His main research topic is glacial and periglacial evolution of high mountain environments. In 2011 he received the Laurea Honoris Causa in Geography from the University of Bucarest (Romania). The main purposes of his research is analysis of Alpine glaciers for quantifying their historic and recent (XX century) changes and the relations with climate; studying epiglacial morphology; studying debris covered glaciers describing their features and the occurring processes; describing and analysing periglacial morphologies like rock glaciers; analysing Antarctic local glaciers; promotion of Alpine environment by identifying geomorphosites and by detecting geomorphological hazards and risks in relation to human presence.

Elisabetta Vignati is a physicist by training and graduated at the University of Milan, with a PhD in Geophysics obtained at Copenhagen University. Through the 19 years of her carrier in atmospheric science, Elisabetta Vignati has mainly worked in evaluating the impact of human activities on air quality and climate. She is co-author of several articles published in peer reviewed journals, including related to the 2010 UNEP/WMO Integrated Assessment of Black Carbon and Ozone, where she led the modeling work at the European Commission Joint Research Centre (JRC). She is currently the Head of the Air and Climate Unit of the Institute for Environment and Sustainability of the JRC.