

Welcome to the second iLEAPS newsletter. In this edition we are looking at the changes that have occurred over the last few months to the Scientific Steering Committee (SSC), the Early Career Scientist Network (ECS) and the International Project Office (IPO).

The role of the SSC is to provide science leadership, to grow the iLEAPS community and to nurture the next generation of iLEAPS researchers. SSC members are expected to use their science area and expertise to help deliver the iLEAPS vision and mission. In particular, SSC members take ownership of a specific iLEAPS science area or activity and contribute to papers, newsletters, stories and other communications.

SSC members are elected initially for a term of 3 years, which can be extended for a second term of 3 years. Over the Summer, the SSC sought new members through an open application process. The successful candidates are introduced to you in the following pages.

### **NEW CO-CHAIR FOR SSC—DR VINAYAK SINHA**



Dr. Vinayak Sinha is an Associate Professor & Head of the Department of Earth & Environmental Sciences at the Indian Institute of Science Education and Research Mohali, where he also leads a research group on Atmospheric Chemistry and Emissions. He has set

up a state of the art atmospheric chemistry measurement facility in north western India (Mohali) to investigate biosphere-atmosphere-climate interactions.

Dr. Sinha is known internationally for his contributions as an analytical and atmospheric chemist for ambient field studies on hydroxyl radical reactivity and volatile organic compounds within varied ecosystems (forest, urban, suburban) and research on agricultural crop fire emissions. His current research is focused on ambient chemical composition and climate interactions in South Asia, for improved understanding of emissions and atmospheric chemistry over the Indian subcontinent. He serves as Editor (subject area: atmospheric chemistry and physics) for the journal Earth System Science Data and is co-Lead of Working Group 1 of Atmospheric Composition in the Asian Monsoon, an emerging SPARC/IGAC activity. In iLEAPS, Dr Sinha helps create links within the land-atmosphere-society community in South Asia and collaborations with the atmospheric chemistry community.

SSC MEMBERS		
Co-Chair—Dr Eleanor Blyth		
Co-Chair— Dr Vinayak Sinha		
Prof. Dr Aijun Ding		
Prof. Dr Tetsuya Hiyama		
Prof. Dr Meehye Lee		
Dr Sally Archibald		
Dr Silvano Fares — New		
Dr Sirkku Juhola		
Dr Sebastian Leuzinger		
Dr Allison Steiner		
Dr Miguel Mahecha — New		
Dr David Odee — New		
Dr Ben Poulter — New		
Prof. Dr Xuemei Wang		
Ex Officio—Dr Garry Hayman		



## **NEW SSC MEMBERS**

### **DR DAVID ODEE**

Dr. Odee is a Chief Research Scientist at the Kenya Forestry Research Institute (KEFRI), Nairobi, Kenya, where he leads the Forest Biotechnology and Ecosystems Group. He is also a Visiting Research Fellow at the Centre



for Ecology and Hydrology (CEH), Edinburgh, UK. He began his research career studying nitrogen-fixing systems in African dryland acacia woodlands. He has since broadened his work to tropical forestry and agroforestry systems ranging from genes to ecosystems scale, focussing on the functions and processes underpinning the ecosystem good and services for sustainable development. He is currently an Associate Editor of the Ecosystems Services Journal. Dr. Odee contributes to the iLEAPS Early Career Scientist Workshop programme. He is leading a national initiative to establish

Long-Term Socio-Ecological Research (LTSER) platforms in range of ecosystems, which should also enhance regional coverage for long-term observation points for land-atmosphere interaction studies.

### **DR SILVANO FARES**



Silvano Fares is a senior scientist at the Council for Agricultural Research and Economics, Research Centre for Forestry and Wood, Italy, where he is the Head of the laboratory of biometeorology. He obtained his PhD in Forest Ecology at the University of Tuscia, Italy, in 2008, and has worked as a Postdoc at the University of California - Environmental Science and Policy Department, USA in 2008-2010.

His expertise includes exchange processes involving ozone, biogenic volatile organics, methane and carbon between plant ecosystems and the atmosphere. He has experience using leaf level instrumentation and eddy-covariance techniques to understand fluxes

of greenhouse gases in forest ecosystems. He is the designated Italian coordinator of terrestrial ecosystems in the frame of the EU programme ICOS (Integrated Carbon Observation System). In iLEAPS SSC, Dr Fares will bring in ecological expertise and his research interests including greenhouse gases and VOCs exchange in Mediterranean forest ecosystems, application of multi-layer models to explain plant-atmosphere interactions under abiotic stress, and quantification of ecosystem services provided by urban vegetation in terms of carbon and pollutant sequestration.

### DR MIGUEL MAHECHA



Dr. Miguel Mahecha is a scientist at the Max Planck Institute for Biogeochemistry, Germany, and Leader of the research group "Empirical Inference of the Earth System". Currently, his research focuses on the role of extreme climate events on ecosystem-atmosphere interactions, the generic derivation of indicators of change, and he is also interested in the question how biogeographical patterns influence land-atmosphere Interactions.

His expertise is on data analytic methods. He is coordinating the EU H2020 project "BACI: Detecting changes in essential ecosystem and biodiversity properties –

towards a Biosphere Atmosphere Change Index: BACI" and the ESA initiative towards an "Earth System Data Cube". He is a member of the "German Integrative Center for Biodiversity Research, iDiv" and strongly involved in the development of "PEACE: Platform for Ecological Analyses on Colombia Ecosystems".



### DR BEN POULTER

Dr. Poulter is a Research Scientist in the Biospheric Sciences Laboratory in the Earth Science Division the NASA Goddard Space Flight Center in Maryland, USA, and an Adjunct Associate Research Professor in the



Department of Geographical Sciences at the University of Maryland. He received his PhD in 2005 from Duke University in North Carolina, USA, studying ecosystem dynamics of wetland systems. As a Marie Curie Fellow, he worked at the Potsdam Institute for Climate Impact Research (PIK, 2006-2009) and the Swiss Federal Research Institute WSL (2009-2011), and then worked as a Post-Doctoral Scientist at Le Laboratoire des sciences du climat et 'environnement (LSCE, 2011-2013). His research team applies remote sensing and dynamic global vegetation modeling to understand i) the role of secondary forests in the carbon cycle, ii) wetlands as the

driver for renewed growth in atmospheric methane concentrations, and iii) climate mitigation and trade-offs from Bioenergy with Carbon Capture and Storage (BECCS). He was a contributing a author to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, the US Carbon Cycle Science Program 2nd State of the Carbon Cycle Report (SOCCR-2), and to the Global Carbon Project carbon and methane budgets, and currently serves on the Editorial Boards for PLOS ONE and Global Ecology and Biogeography.

The iLEAPS IPO are very grateful for all the hard work and support SSC members have shown to iLEAPS over the last 3 years.

Many thanks to our departing Co-Chair Prof. Dr Hans Christen Hansson, and to the retiring SSC members, Dr Alex Geunther, Dr Dan Yakir and Dr Kathleen Galvin.

# **EARLY CAREER SCIENTISTS COMMITTEE**

In early December, the ECS Network met to hand over the reins to the new Global Committee.

Role/Region	Current Committee	Outgoing Committee
Chair	tba	Kirsti Ashworth
Europe & Mediterranean	Gemma Purser	Ditte Taipale
Latin America	Stefan Wolff	Ana Maria Yañez-Serrano
SE Asia & Pacific	Ka Ming Fung	Amos Tai
S.Asia & Middle East	Pallavi Saxena	Vinod Kumar
North America	Will Porter	
Sub Saharan Africa	Kerneels Jars	

Kerneels Jar and Will Porter will continue in office. A new chair for North America has been identified and will take over in June 2018.



In future, elections will be held on a 2-year cycle with re-election possible provided that the ECR is within 5 years of their PhD award at the time of election.

We would also like to thanks all members of the ECS Committee for their support of iLEAPS whilst in office and their encouragement and leadership of the ECS Network.

ECS at the 5th iLEAPS Conference, Oxford, UK





# AN INTRODUCTION TO THE NEW ECS REGIONAL CHAIRS

### **GEMMA PURSER**

Gemma is a PhD student based at the University of Edinburgh and works with the Centre for



Ecology & Hydrology and Forest Research. Gemma's research focuses on the impacts of growing bioenergy feedstock on the biosphere-atmosphere exchange of trace gases (biogenic volatile organic compounds) within the UK. She is quantifying trace gas emissions from deciduous and conifer trees that are both native and non-native to the UK. She aims to better understand what impact land use change through the growth of Short Rotation Forests may have on air quality in the UK.

When not out in the field taking measurements, Gemma enjoys exploring the hills of Scotland on her mountain bike or rock climbing with her friends.





### **STEFAN WOLFF**

"Since finishing my meteorology studies in Hannover, Germany, in 2007, I have worked for a

Governmental Scientific Project Management Agency, and I started my scientific work and life in the Brazilian Amazon in 2011.

It is a pleasure to be looking at the interactions between atmosphere and biosphere in this very unique and beautiful ecosystem.

I work for the Max Planck Institute for Chemistry in Mainz as a representative in Manaus/Brazil at the Nacional Institute for Amazonian

Research (INPA). The Amazon Tall Tower Observatory (ATTO) project comprises the highest tower in South America, which extends to 325-meter height. I undertake trace gas profile measurements from the forest ground to the top of the tower, to understand better the transport of air above and within the rainforest, and those processes which affect the purity and pollution of the atmosphere in the Amazon. This includes the analysis of the effects of deforestation and biomass burning on air composition and on the rainforest, together with several groups and colleagues."



### **KA MING FUNG**



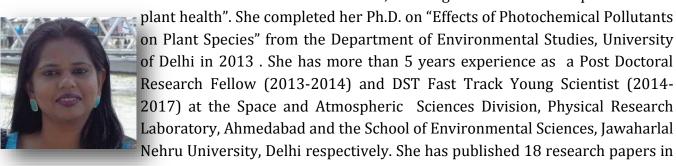
Ka Ming is a Ph.D. student in the Graduate Division of Earth and Atmospheric Sciences, The Chinese University of Hong Kong. His research focuses on simulating sustainable farming practices, e.g. intercropping, in models, including DeNitrification-DeComposition (DNDC) biogeochemical model and Community Land Model (CLM), to Investigative their beneficial effects on air quality and the environment, in particular, the global nitrogen cycle. He wishes someday his work can be transformed into real policies that could make a better world.

Though Ka Ming is an adventurous geek who is very active on social network platforms, he is also a gym goer. He would like to devote his spare time to communicate with young scientists and, if needed, provide them with support and guidance. Ka Ming has been awarded a pre-doctoral visiting scholarship from Emory University, the USA, during Oct 2017 to March 2018.



### PALLAVI SAXENA

Pallavi Saxena is an environmental scientist from India, working in the area of "air pollution and



peer-reviewed and impact factor journals.

Pallavi has been awarded various national and international awards and honours from agencies like BARC, Mumbai for best presenter in 2016, Young Scientist Award in 2013 from ICAR, Junagadh, Gujarat, OSPA Judge in AGU Meeting in 2015 and early career scientist travel and bursaries grants from WMO, IGAC, Juleich University, Cambridge University, Newton Fund Scholarships and NERC grants. She has also published an edited book in Springer in 2016 on "Plant Responses to Air Pollution" and two books are in progress and one of them is an international collaboration with NOAA of international publishers. She is also a member of the Tropospheric Ozone Assessment Report (TOAR) committee and authored chapters in collaboration with international scientists all over the world. She has also organized invited lectures during her tenure in Hindu College, by eminent speakers on burning issues of environmental pollution.

## NEW IPO PROJECT OFFICER—VICTORIA BARLOW

Victoria joined the iLEAPS IPO at CEH at the end of October 2017. Previous to working at CEH, she worked in recruitment management, marketing & public relations and education, as well as undertaking voluntary roles within local education and community initiatives.

Within her role as IPO Officer of iLEAPS Victoria will be responsible for the organisation and updating of the website, production of newsletters and bulletins, and general communications across the programme. She will also support the organisation of workshops, SSC meetings, ECS requirements and conferences.

We intend to publish some themed e-newsletters in the next year and we welcome contributions to the following editions:

- Asia due Jan/Feb 2018
- Soil Water Stress—due April/May 2018
- IPCC special report on 1.5°C warming— due Sept/Oct 2018

Also, if you have any news, events or job vacancies that you would like publicised please contact Victoria at ipo@ileaps.org