## *No.5*

## INFORMATION E-MAIL FROM THE IAMAS BUREAU



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# IAPSO-IAMAS-IAGA Assembly 2017 in Cape Town, South Africa

The IAPSO-IAMAS-IAGA Assembly will take place in Cape Town, South Africa over 27 August - 1 September 2017. The on-line registration opened on 15 September, 2017. Early Bird Registration Deadline is 5 May, 2017. Call for abstracts begins 14 November, 2016. Other important information will be announced accordingly. Please check the website <a href="http://www.iapso-iamas-iaga2017.com/">http://www.iapso-iamas-iaga2017.com/</a>.

IAMAS Bureau decided on the Joint sessions after discussions with IAPSO and IAGA. IAMAS leads 4 sessions, JM1/OBSERVING OUR PLANET FROM SPACE (IAMAS, IAGA, IAPSO) Convenor - BJ Sohn; JM2/CLIMATE VARIABILITY AND CHANGE ON ALL SCALES (IAMAS, IAPSO) Convenor - Fei Fei Jin; JM3/THUNDERSTORM COUPLING TO THE UPPER ATMOSPHERE (IAMAS, IAGA) Convenor - Colin Price; JM4/FUTURE CLIMATE FOR THE AFRICAN CONTINENT (IAMAS, IAPSO) Convenor - Charles Williams. We are planning to hold the IAMAS EC meetings on 27 and 31 August.

### **Joint Session Program**

## IAPSO Lead

JP 1

TURBULENCE, INTERNAL WAVES, AND MIXING ON ALL SCALES (IAPSO, IAGA, IAMAS)

Convenor - Trevor McDougall

JP 2

POLAR OCEANOGRAPHY AND METEOROLOGY (IAPSO, IAMAS)

Convenor - Thomas Haine and

Thomas Lachlan-Cope

JP 3

THE SECOND INTERNATIONAL INDIAN OCEAN EXPEDITION (IIOE-2) AND RELATED OCEANIC AND COUPLED ATMOSPHERIC RESEARCH IN THE INDIAN OCEAN (IAPSO, IAMAS).

Convenor – Nick D'Adamo



### **IAMAS Lead**

JM 1

OBSERVING OUR PLANET FROM SPACE (IAMAS, IAGA, IAPSO)

Convenor - BJ Sohn

JM<sub>2</sub>

CLIMATE VARIABILITY AND CHANGE ON ALL SCALES (IAMAS, IAPSO)

Convenor – Fei Fei Jin

JM 3

THUNDERSTORM COUPLING TO THE UPPER ATMOSPHERE (IAMAS, IAGA)

Convenor - Colin Price

JM 4

FUTURE CLIMATE FOR THE AFRICAN CONTINENT (IAMAS, IAPSO)

> Convenor – Charles Williams

#### IAGA Lead

JA:

SPACE WEATHER FROM SUN TO EARTH: BRINGING DATA AND MODELS TOGETHER (IAGA, IAMAS)

Convenor – Sarah Gibson

JA 2

THE REFERENCING OF GEOPHYSICAL DATA PRODUCTS: THE ROLE OF DOIS (IAGA, IAMAS, IAPSO) Convenor – Masahito Nose

JA 3

FRONTIER CHALLENGES IN DATA ASSIMILATION AND ENSEMBLE FORECASTING FOR THE ATMOSPHERE, OCEAN AND SOLID EARTH. (IAGA, IAMAS, IAPSO)

Convenor - Weijia Kuang, Craig Bishop

JA 4

SOLAR RELATED VARIABILITY OF THE ATMOSPHERE (IAGA, IAMAS)

Convenor – Christoph Jacobi

# Report on The 17th International Conference on Clouds and Precipitation in Manchester, UK



The 17th International Conference on Clouds and Precipitation took place from 25-29 July 2016 in Manchester, UK.

The conference was co-sponsored by IUGG, IAMAS and WMO (World Meteorological Organization), and thus helping early career scientists and scientists from emerging countries to participate in the conference. Prof. Dr. Robert Rauber, vice-president of ICCP, headed the sub-commission handling the support requests. From all requests that were received, the sub-commission selected 27 applications for support. The entire ICCP commission acted as scientific program committee, and the School of Earth, Atmospheric and Environmental Sciences at the University of Manchester managed the local organisation.

Over 450 scientists, among those 104 early career scientists, from 26 countries attended the conference. More than 560 abstract submissions were received and after a rigorous review process 230 abstracts were selected for oral presentations during two parallel sessions. In order to allow attendees to view the oral presentations in the other simultaneous parallel session that they missed, all presentations were recorded and (after consent) are being made available after the conference to the participants who attended as well as the public at large.

Contributions that were not selected as oral

From Left:
Prof. Andrea I.
Flossmann
President of ICCP,
Consort of
Manchester,
Dr. Keith Bower
President of the
local organising
committee,
Lord Mayer of
Manchester



presentations were presented as posters, and were discussed during dedicated poster sessions. The awards for the best early career poster contributions went to Steffen Freitag (1st prize), Linda Schlemmer (2nd prize) and Pierre Coutris ("instrumentation award" sponsored by DMT) and were announced and presented during the official banquet at the prestigious "Old Trafford" stadium, the home of the "Manchester United" Premier League football club. Prof. Dr. Zev Levin was awarded the honorary membership of ICCP in recognition of a career of outstanding scientific contributions to cloud and precipitation physics, and for his dedication to the ICCP community.

The scientific contributions to this conference covered a wide range of topics on the basic processes in clouds and precipitation, their formation and evolution in different geographical and temperature regimes, the interactions of aerosol particles and clouds, the effects of clouds on climate, new instrumentation for measuring various cloud properties and many more. These were organised into 18 scientific sessions. Particular interest was received by a session on secondary ice production, a fundamental microphysical process in cloud development, which is actually still relatively poorly understood. Another large session was devoted to the interaction of clouds with climate, including the observation of clouds through satellite measurements, a technique that has recently allowed a broadening of the understanding of clouds and their effects on a larger scale.

During the ICCP business meetings, the venue for the next ICCP conference in four year's time was selected. This, the 18th ICCP conference will be held in Asia, in a region which has not yet hosted an ICCP conference, but is the home of a quite active part of the cloud physics community: the 2020 ICCP conference will be held in Pune (India).

Prof. Dr. Andrea I. Flossmann President of ICCP

## 9th IAGA - ICMA/IAMAS - ROSMIC/VarSITI/ SCOSTEP Workshop

The well-established biannual workshop on 'Long-Term Changes and Trends in the Atmosphere' took place from 19-23 September 2016 at the Leibniz Institute of Atmospheric Physics (IAP) in Kuehlungsborn. The most important topics covered during the workshop were:

- Observed trends and long term variations in the middle atmosphere
- 2. Modeled and predicted trends and long term variations in the middle atmosphere
- 3. Trends and long-term changes in the ionosphere and thermosphere
- 4. Dynamic, physical, chemical and radiative mechanisms of trends and long term variations
- 5. Role of the middle atmosphere for climate
- 6. Trends in the entire atmosphere being relevant for the German research project ROMIC (Role Of the Middle Atmosphere In Climate)

A total of 104 scientists and students from 16 countries participated in this workshop. This is the largest attendance in this series starting in 1999. The workshop was also organized as a ROMIC symposium to present and discuss results from this German program within an international community. A total of 74 oral talks and 17 posters highlighted the actual status and recent



progress in our understanding of trends and long term variations, e. g. by solar variability, from the Earth's surface to the upper thermosphere. Anthropogenic effects as well as variations due to the eleven year solar cycle and other sources of natural variability were discussed. Both measurements of various atmospheric parameters and results from different models were presented. There was a majority decision to publish the results from this workshop in a special issue of an international peer reviewed journal, namely *Journal of Atmospheric and Solar-Terrestrial Physics*.

The workshop was co-sponsored by IAGA, ICMA/IAMAS, the ROSMIC program of VarSITI (SCOSTEP), the German Space Agency (DLR), the IAP institute, and the German ROMIC research initiative of BMBF.

Franz-Josef Luebken Chairman of the local & science organizing committees

## 6th International HEPPA-SOLARIS Workshop

The 6th International HEPPA-SOLARIS Workshop was held on 13-17 June, 2016, at the Finnish Meteorological Institute in Helsinki, Finland. The 2016 workshop focused on observational and modeling studies of the influences of solar radiation (SR) and energetic particle precipitation (EPP) on the atmosphere and climate, continuing the series of meetings organized since 2008. The workshop covered a broad range of topics: a) the causes and phenomenology of SR and EPP variability, b) mechanisms by which SR and EPP forcing affect atmospheric chemistry and dynamics, c) contributions of SR and EPP forcing to variations in space, atmosphere, and climate, and d) the current state of the art and outlook for relevant observations and models.

HEPPA-SOLARIS 2016 was attended by 57 scientists from 14 different countries. A total of 65 scientific



presentations were given: 7 invited oral, 35 oral, and 23 posters. Most of the invited talks were given by addressing the current early-career scientists, difficulties and the future of SR and measurements, and stratospheric ozone and climate connections. Two invited talks were given on the solar forcing recommendation for Coupled Intercomparison Project Phase 6 (CMIP6) which is based on a joined analysis work by the SPARC/SOLARIS-HEPPA community and for the first time includes both SR and EPP. The oral program ran throughout the week with sessions before and after lunch time. To provide a plenty of the time for posters and informal discussion, a one-and-half hour poster session followed the lunch break on four days. On Tuesday, a late-afternoon splinter meeting focused the on SPARC/SOLARISHEPPA working group activities to systematically analyze the Chemistry-Climate Model Initiative (CCMI) experiments with respect to SR and EPP forcing. Among the other scientific highlights was the advancement in understanding and modeling of the long-term variability of the so-called medium-energy electron precipitation which now allows for studies of its atmospheric and climate effects on decadal time scales.

The next HEPPA-SOLARIS workshop will be held at the Virginia Tech, in Blacksburg, Virginia, USA, in 2018.

P. T. Verronen, Finnish Meteorological Institute

## Annual Meeting Report from iCACGP

The Scientific Steering Committee International Commission on Atmospheric Chemistry and Global Pollution (iCACGP) held its annual meeting in Boulder, CO, USA on 22 and 23 September at the Foothills Laboratory of the National Center for Atmospheric Research (NCAR). The meeting was held just in advance of the International Global Atmospheric Chemistry (IGAC) Project 2016 Science Conference to minimise travel for the participants. 19 members of the commission were present from all over the world and others joined electronically for a full agenda of science and other commission business.

A highlight of the meeting was a presentation by David Edwards (Director) on the work of the Atmospheric Chemistry Observations and Modeling (ACOM) Laboratory of NCAR. Josh Tewksbury also updated the commission on the work of Future Earth.

Commission business included discussions about future

membership of the commission with a view to engaging a younger and more diverse group of scientists. Also discussed were scientific meetings in the next few years, especially participation in the joint IAPSO-IAMAS-IAGA assembly in Cape Town in 2017 and the joint iCACGP/IGAC meeting to be held in Japan in 2018. Activity reports were received for 10 regions of the globe and the commission is pleased to report that there is much enthusiasm for scientific activity in the area of atmospheric chemistry from both the scientists and their governments.

The presentations from the meeting and the minutes of the meeting will be published on the www.icacgp.org. **iCACGP** website commission annual meeting will be in Cape Town in conjunction with the joint IAPSO-IAMAS-IAGA assembly.



International Commission on Atmospheric Chemistry and Global Pollution (iCACGP) - Annual Meeting 2016 National Center for Atmospheric Research, Boulder, Co Foothills Laboratory, 3450 Mitchell Lane, Boulder, CO, 80301, USA (40.03719N, 105.241736W) - 22-23 September 2016





Back row left to right: Dr. Geoffrey S. Tyndall (NCAR, USA); Professor James R. Drummond (Dalhousie University, Canada); Professor Nobuyuki Takegawa (Tokyo Metropolitan University, Japan); Dr. Mary Barth (NCAR USA); Dr. David Edwards (NCAR USA); Professor Mark G. Lawrence (IASS-Potsdam, Germany); Professor Renyi Zhang, (Texas A&M University, USA); Middle row left to right: Dr. Michael Gauss (MET Norway); Professor Olga Mayol (University of Puerto Rico, PR-USA); Professor Russell R. Dickerson (University of Maryland, USA) Professor Maria Kanakidou (University of Crete, Grecce); Dr. Eric Williams (NOAA CMD, USA); Front row left to right: Dr. Hiroshi Tanimoto, (NIES, Japan); Professor Sachiko Hayashida (Nara Women's University, Japan); Professor Laura Gallardo Klenner University of Chile, Chile; Professor John P. Burrows (University of Bremen, Germany); Dr. Melita Keywood (CSIRO Australia); Professor Clare Murphy (Wollongong University, Australia)

## Proposal to host IAMAS Science Assembly 2021

The proposal for hosting the 2021 IAMAS Scientific Country and 3) Encouraging an inter-association Assembly is still open! The location of this assembly assembly. Financial responsibility the

will be decided at the time of the Cape Town meeting. We are sure that the 2021 assembly will also be of in 2017. Candidates who satisfy all conditions will be great value to the atmospheric sciences community. able to make a presentation on their country in Cape Could you therefore let us know any interest in your Town in 2017. The conditions for hosting an Assembly country to host the 2021 assembly? Further details on are: 1) Proposal from the national delegate, 2) hosting an assembly can be found in our statutes at National Member www.iamas.org/IAMAS\_StatutesByLaws-2011.pdf.

# Call for papers for a special issue of Advances in Atmospheric Sciences with ICPM's participation

Advances in Atmospheric Sciences is currently calling for papers for a special issue: Impact of a Rapidly Changing Arctic on Eurasian Climate and Weather.

Dr. Andrew Orr, an ICPM scientist, is invited to be one of the guest editors. Details of the special issue are as follows:

#### Lead Editor:

Xiangdong Zhang, International Arctic Research Center, University of Alaska Fairbanks, Fairbanks, AK, USA

#### **Guest Editors:**

Thomas Jung, Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany.

Muyin Wang, Joint Institute for the Study of the Atmosphere and Ocean, University of Washington, Seattle, WA, USA.

Yong Luo, Center for Earth System Science, Tsinghua University, Beijing, China.

Tido Semmler, Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany.

Andrew Orr, British Antarctic Survey, Cambridge, UK.

#### Scope

This special issue will showcase recent progress in our understanding of the coupling between Arctic climate change and Eurasian mid-latitude climate and weather, including extremes. The compilation of research papers in this special issue is expected to fill

key scientific gaps and hence contribute to a more thorough understanding of the problem. Submissions in, but not limited to, the following research areas, are invited:

- Observational and statistical evidence of changes in Eurasian weather and climate, as well as the occurrence of extremes, in conjunction with changes in Arctic climate;
- Detection and attribution of linkages between Arctic climate change and Eurasian mid-latitude climate and weather, based on observations and numerical model experiments;
- Evaluation of uncertainties and their potential impacts on Arctic-Eurasia linkages arising from the use of relatively short observational records and caused by model deficiencies.

#### Important dates:

Manuscript submission deadline: 30 November, 2016. Estimated publication: late summer or early fall 2017.

#### **Submission URL:**

https://mc03.manuscriptcentral.com/aasiap

Please select: "Special issue: Arctic" when you come to "Submission Type".

For more information of the special issue, please visit <a href="http://www.springer.com/earth+sciences+and+geography/atmospheric+sciences/journal/376?detailsPage=press">http://www.springer.com/earth+sciences+and+geography/atmospheric+sciences/journal/376?detailsPage=press</a> .

## Upcoming IAMAS-related meetings

20th International Conference on Nucleation and Atmospheric Aerosols (ICNAA) (ICCP)

Helsinki, Finland

Web: http://www.icnaa2017.net/

4 18-22 September, 2017

3rd Symposium of the Committee on Space Research (COSPAR): Small Satellites for Space Research "COSPAR 2017"

Jeju Island, South Korea

Web: http://cospar2017.org/

### The IAMAS INFORMATION E-MAIL

We welcome short reports from the Commissions at any time.

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