International Association of Meteorology & Atmospheric Sciences

www.IAMAS.org

Introduction

IAMAS is the specialized association of the International Union of Geodesy and Geophysics (IUGG) which deals with all aspects of the gaseous envelope around the Earth and other planets. The main research work is carried out, coordinated and communicated in IAMAS's ten International Commissions (IC), which are in alphabetical order the ICs on *Atmospheric Chemistry and Global Pollution* (ICACGP), on *Atmospheric Electricity* (ICAE), on *Climate* (ICCL), on *Clouds and Precipitation* (ICCP), on *Dynamical Meteorology* (ICDM), on the *Middle Atmosphere* (ICMA), the *International Ozone Commission* (IOC), the IC on *Planetary Atmospheres and their Evolution* (ICPAE), on *Polar Meteorology* (ICPM), and the *International Radiation Commission* (IRC). The ICs are historically grown from mostly personal initiatives and focus on topics of global extent (ICPAE, ICACGP, ICCL), on combinations of important processes within the Earth's atmosphere (ICCP, ICDM, IOC, IRC, ICAE), or on certain regions within the atmosphere (ICMA, ICPM); for details see the links collected under www.iamas.org/Commissions.html.

The tradition of IAMAS goes back until 1922 when it became the Section for Meteorology of the new IUGG. The extended names 'and Atmospheric Physics' (1957-1995) as well as 'and Atmospheric Sciences' (since 1995) reflect the explicit broadening of scope to physical and later also chemical techniques.

All ICs, and IAMAS as a whole, take a leading part within the global communication and discussion of latest research results in a wide range of scientific meetings that are open to all scientists. Personalities of many countries serve on a voluntary basis as presidents and secretaries for all these bodies. This network on an often personal basis forms an important supplement and extension to research activities and applications overseen by the national meteorological services (NMS) under the umbrella of the *World Meteorological Organization* (WMO), a specialized agency of the *United Nations*.

Administration

For IAMAS, officers and members at large were routinely elected at the IUGG Assembly in Perugia in July 2007. No changes occurred in 2008.

IAMAS-IOC elected as new officers at the *Quadrennial Ozone Symposium* in July 2008: Christos ZEREFOS (Athens, Greece) as president, Richard S. STOLARSKI (Greenbelt, USA) as vice-president, and Sophie GODIN-BEEKMANN (Paris, France).

IAMAS-IRC elected as new officers at the *International Radiation Symposium* in August 2008: Robert F. CALAHAN (Greenbelt, USA) as president, Werner SCHMUTZ (Davos, Switzerland) as vice-president, and Byung-Ju SOHN (Seoul, Korea) as secretary.

Activities in 2008

Here a brief selection of activities is reported; the full compilation of commission reports will be posted on www.iamas.org/Reports.html .

IAMAS:

President and Secretary General (SG) met at the occasion of the IUGG EC meeting in Karlsruhe in July 2008 also for personal discussions of IAMAS matters. The main inner-Bureau-matters were discussed via Email on an ad-hoc basis, as e.g. the planning of the joint IAMAS-IAPSO-IACS-Assembly (MOCA-09), scheduled for July 2009 in Montréal, Canada (cf. www.moca-09.org). In August 2008 the SG joined a planning meeting with the Local Organising Committee (LOC) of MOCA-09 and discussed extensively the set-up of the programme with Jacques

DEROME, chair of the MOCA-09 Scientific Programme Committee. The SG and his deputy joined the regular telephone-conferences between the LOC members. IAMAS newsletter, issue 7 appeared in Aug. 2008 (cf. www.iamas.org/ Newsletter/IAMAS_Newsletter_Aug2008.pdf).

Hans-Jürgen BOLLE (IAMAS president 1983-87) compiled a 150-page monograph about the development of IAMAS-IRC from 1896 to 2008. This publication appeared as IAMAS Publication Series, No.1 (ISBN 978-3-00-024661), can be ordered from Hans.Volkert@dlr.de or downloaded from www.iamas.org , and is hoped to serve as an example for additional surveys dealing with the role of IAMAS and its commission for the gradual advancement of atmospheric research through international cooperation on a voluntary basis.

IAMAS-ICACGP:

ICACGP officials were engaged in the organisation of the 10th International Global Atmospheric Chemistry International Conference entitled "Bridging the Scales in Atmospheric Chemistry: Local to Global" which took place from 7 to 12 September 2008 in Annecy, France. Details are found on the IGAC www.igacfrance2008.fr/ . The number of scientific contributions to the meeting was approximately 650.

Halifax was selected in 2008 as the next venue for the joint ICACGP and IGAC Conference for 2010 among three proposals. James Drummond of Dalhousie University is the chair of the local organising committee; the potential title for this event is 'Atmospheric Chemistry: Challenging the Future'.

For MOCA-09, the Commission is organising and co-organising the following 3 symposia:

- M15: Atmospheric Composition Change: Air Pollution in the Global Environment (convenors: Maria KANAKIDOU, David EDWARDS, John BURROWS, Kimitaka KAWAMURA, Young J. KIM [all ICACGP members]);
- M13: Aerosol-Cloud-Radiation-Precipitation Interactions (convenor: Ulrike LOHMANN [ICACGP member]; co-organized with IRC, ICCP, ICACGP)
- J13: Biogeochemistry and Climate (co-convenor: John BURROWS [ICACGP secretary])

IAMAS-ICAE:

In 2008 a further detailed issue of the ICAE-newsletter was produced and distributed. Currently there are more people (especially from developing countries) showing interest in mitigation of lightning hazard, so our ICAE mailing list has been nearly doubled from the August of 2007. From the all ICAE-newsletters, one can find information about ICAE activity, especially the new publications contributed by our commissions. For details see www.atmospheric-electricity.org or contact the ICAE secretary under Daohong WANG via www.atmospheric-electricity.org or contact the ICAE secretary under Daohong WANG via www.atmospheric-electricity.org or contact the ICAE secretary under Daohong WANG via www.atmospheric-electricity.org or <a href="https://www.atmospheric

IAMAS-ICCL:

In 2008 numerous commission activities took place in the following countries: Australia, Italy, Japan, Portugal, Romania, Spain, Tahiti (*outre-mer* part of France), United Kingdom, and United States of America. Among them are

- the Japanese *Innovative Program of Climate Change Projection for the 21st Century* (cf. www.kakushin21.jp/eng/);
- the Portugese workshop *Land Surface Analysis: Satellite Applications Facility* (cf. landsaf.meteo.pt/workshops.jsp?seltab=6&starttab=0#Proceedings);
- the symposium *Effects of Climate Change on the World's Oceans* (cf. www.pices.int/ meetings/ international_symposia/2008_symposia/Climate_change/climate_background_3.aspx);
- the ENSO summer school in Haiwaii (cf. iprc.soest.hawaii.edu/~axel/ENSOsummerschool.html);
- a number of reports compiled by the US Climate Change Science Program (cf. www.climatescience.gov).

IAMAS-ICCP:

The 15th International Conference on Clouds and Precipitation was held in Cancun, Mexico, between 7 and 11 July, 2008. The detailed program and an archive of the extended abstracts is stored under cabernet.atmosfcu.unam.mx/ICCP-2008/). About 400 scientists attended the conference and presented about 550 papers in oral talks and posters. The presentations covered a wide range of topics on the formation of clouds and precipitation, the interactions of aerosols and clouds, the effects of clouds on climate, new instrumentation for measuring various processes in clouds and many more. Special sessions were devoted to reports on results from RICO (Rain in Cumulus Over the Ocean), a field campaign that took place in the Western Caribbean, November 2004 to January 2005, and to reports from the ice nucleation comparison workshop (AIDA) that took place in Karlsruhe Germany, September 2007.

Roland LIST, year-long commission member and past SG of IAMAS was elected as honorary member. The achievements and services to ICCP of the recently deceased members Peter V. HOBBS (USA), Albert CHERNIKOV (Russia), Yoram KAUFMAN (USA), Brian RYAN (Australia), Solomon M. SHMETER (Russia), and Henri LAURENT (France) were remembered.

The 16th *International Conference on Clouds and Precipitation* will be held during the summer of 2012 in Leipzig, Germany; the 18th *International Conference on Nucleation and Atmospheric Aerosols* will be held in Prague on August 10-14, 2009 (cf. www.icnaa.cz)

IAMAS-ICDM:

The activities of the International Commission on Dynamical Meteorology (ICDM) during 2008 have been focused on preparations for the MOCA-09 assembly taking place in Montreal in 2009. ICDM is sponsoring or co-sponsoring seven IAMAS sessions on several different topics relating to dynamical meteorology. The commission is also co-sponsoring two joint (inter-association) sessions, on tropical cyclones and data assimilation.

IAMAS-ICMA:

Activities included the co-sponsorship of the 37th COSPAR Scientific Assembly, 13 to 20 July 2008 in Montreal, Canada, through symposia C22 "Multi-Scale Wave Coupling and Energetics from the Troposphere to the Ionosphere" and C23 "Variability of the Middle Atmosphere and Lower Ionosphere in Composition and Dynamics Induced by External Forcing from Space" and the co-sponsorship of 5th IAGA/ICMA/CAWSES Workshop on Long-Term Changes and Trends in the Atmosphere, 9 to 12 September 2008 in St. Petersburg, Russia.

More details about the activities can be found on the new ICMA website under $\,$ www.icma-iamas.org $\,$.

IAMAS-IOC:

Activities culminated in the organization of the *Quadriennal Ozone Symposium*, 30 June to 5 July 2008, in Tromsø, Norway. More than 350 scientists from various countries attended the meeting. At this occasion, the Dobson Award was awarded to both Veronica EYRING and Björn-Martin SINNHUBER (both from Germany) for their contribution to ozone science. Honarary member Rumen BOJKOV reviewed the historical development of IOC. Details like programme and abstracts can be found under www.qos2008.no.

IAMAS-ICPAE:

Activities included the organization and co-sponsorship of sessions at the *European Geosciences Union Assembly*, 14-18 April in Vienna, Austria, (Session PS4.0), at the *Asian-Oceanian Geophysical Society (AOGS) meeting*, 16-20 June 2008 in Busan, South Corea (Sessions PS05 & PS08), and at the COSPAR Assembly, 13-20 July 2008 in Montreal, Canada (Session B03). For

MOCA-09 two symposia are organized, for which the participation of NASA scientists was observed to have considerably diminished (probably due to financial constraints).

Commission members served as guest editors for a special issue of *Planetary and Space Sciences*, Vol. **56**, issue 12, Nov. 2008.

IAMAS-ICPM:

Members of ICPM contributed to Open Science Conference of the Scientific Committee on Artic Research (SCAR) and the International Arctic Science Committee (IASC) in conjunction with the International Polar Year (IPY), 8 to 11 July 2008 in St. Petersburg, Russia (cf. www.scar-iasc-ipy2008.org/)

IAMAS-IRC:

Activities culminated in the organization of the *International Radiation Symposium* (IRS2008), 3-8 August 2008 in Foz do Iguaçu, Brazil (cf. www.irs2008.org.br/) to which several hundreds of scientist from all continents contributed. The *16th International TOVS Study Conference*, 7-13 May 2008, in Angra dos Reis, Brazil was another highlight (cf. cimss.ssec.wisc.edu/itwg/itsc/).

Future activities

A survey was started to find an appropriate venue for the IAMAS assembly in 2013, possibly again in conjunction with other IUGG associations. During and after MOCA-09 decision will be made taking into account the experiences made during MOCA-09.

All IAMAS commissions are planning the coming events in their often long standing conference series besides dedicated workshops for special purposes and smaller groups.

Note:

This brief report was composed and somewhat homogenized from submissions of the Commission secretaries following the guideline distributed by the IUGG secretariat. The full material is to be posted on www.iamas.org/Reports.html .

Oberpfaffenhofen, Germany, 18 February 2009

Hans Volkert, IAMAS secretary general