

# 15<sup>th</sup> International Symposium for the Advancement of Boundary Layer Remote Sensing (ISARS) 28-30 June 2010

#### FIRST ANNOUNCEMENT

ISARS was founded in 1981 as the International Society of Acoustic Remote Sensing of the Atmosphere and Oceans. ISARS organizes a symposium every two years on Remote Sensing and Associated Techniques of the Atmosphere and Oceans, with a particular focus on the Boundary Layer. In June 2010, the 15<sup>th</sup> ISARS Symposium will be hosted by Institut Pierre Simon Laplace, Université de Versailles Saint-Quentin-en-Yvelines, France.

#### Scientific program of the symposium: the program is constructed around 5 main topics:

#### I. Ground-based remote sensing measurement techniques and instruments

The goal of topic I is to present the state of the art of ground-based remote sensing instrumentation and measurement techniques designed to sound the boundary layer. Contributions are encouraged on all aspects of boundary layer electromagnetic and acoustic measurements for all parameters (temperature, humidity, wind, aerosols, clouds, precipitations, etc.).

#### II. Inversion, retrieval, analysis methods and observation strategies

Topic II will be dedicated to recent developments on retrievals and monitoring of mean and turbulent properties of the atmospheric boundary layer (e.g. dynamical, radiative, microphysical properties, and boundary layer depth), with emphasis on novel data analysis techniques and innovative observation strategies based on instrument synergies and data fusion. Contributions on retrievals considered as challenges are encouraged (e.g. boundary layer depth).

#### III. Process studies in the atmospheric boundary layer

Topic III will put together all physical and chemical process studies, based on ground-based observations, numerical simulations, laboratory experiments that focus on all types of planetary boundary layer. Presentations are sought on land-atmosphere, air-sea, and air-ice interactions, water vapor transport, boundary-layer clouds, aerosols, moist convection, precipitation, and processes in the urban boundary layer.

# IV. Remote sensing data for modeling of boundary layer and surface processes

Topic IV will focus on parameterizations, model developments and assimilation techniques that help to better represent the boundary layer structure in models. Modeling studies using ground-based remote sensing data are sought in this topic.

# V. Operational applications of boundary layer research

Topic V will gather results in boundary layer research that have direct applications of high societal concerns. Presentations are sought on ground-based remote sensing applications for key societal needs such as: (1) air quality in our cities (e.g. interactions between chemistry and dynamics); (2) transport safety and regulation in relations to low visibility conditions (e.g. haze and fog) and severe dynamical conditions (e.g. low-level wind shear); (3) renewable energy research, in particular wind and solar remote sensing capabilities to characterize their potential; (4) monitoring of natural hazards such as forest fires; (5) other relevant research.









# Format of the Symposium:

The symposium will be convened in plenary oral sessions and poster sessions. For each topic invited speakers will provide introductory keynote addresses. Young scientists will be encouraged to participate through grants. The symposium will include a field excursion to the SIRTA remote sensing observatory, located at Ecole Polytechnique in Palaiseau, and a social program (ice breaker, cultural event in Paris and conference diner)

# Abstract submission and important dates:

Authors are invited to submit abstracts (250 words or less) related to one of the five highlighted topics of the ISARS 2010 program. Abstract submission information will be provided in the next announcement.

# **Important dates:**

Abstract submission deadline	15 January 2010
Notification of paper status	01 March 2010
On line registration	01 March - 15 June 2010
Young scientist fellowship application	01 March - 31 March 2010
Young scientist fellowship acceptance/refusal notification	15 April 2010
Extended abstract submission	25 May 2010

# ISARS 2010 organization:

Web site: http://www.isars2010.uvsq.fr

#### **Program Chairs:**

Martial Haeffelin, Institut Pierre Simon Laplace (IPSL) – CNRS/E. Polytechnique, France Sophie Bastin, LATMOS/IPSL - CNRS/UVSQ, France (Co-Chair)

#### **International Scientific Committee:**

Philip Anderson, British Antarctic Survey, UK
Stefania Argentini, Istituto di Fisica dell'Atmosfera - CNR, Italy
Stuart Bradley, University of Auckland, New Zealand
Stefan Emeis, Forschungszentrum Karlsruhe, Germany
Sabine von Hünerbein, University of Salford, UK
Margarita A. Kallistratova, Russian Academy of Science, Russia
Jakob Mann, Risø National Laboratory, Denmark
Torben Mikkelsen, Risø National Laboratory, Denmark
William Neff, Environmental Technology Laboratory - NOAA, USA
Alain Weill, LATMOS/IPSL - CNRS/UVSQ, France

# **Local Science and Organizing Committee:**

Olivier Bousquet, CNRM - Météo-France Eric Dupont, CEREA - EDF R&D Thomas Dubos, LMD/IPSL - CNRS/E. Polytechnique Armella Longrez, Institut Pierre Simon Laplace (IPSL) - CNRS/UVSQ Marie Lothon, Université Paul Sabatier Catherine Michaut, Institut Pierre Simon Laplace (IPSL) - CNRS Joël Van Baelen, Université Blaise Pascal



