



# The Abdus Salam International Centre for Theoretical Physics



Workshop on

## Atmospheric Deposition: Processes and Environmental Impacts 21 - 25 May 2012

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, will organize the “**Workshop on Atmospheric Deposition: Processes and Environmental Impacts**”, from **21 - 25 May 2012**.

*The Workshop will be co-sponsored by the International Union of Geodesy and Geophysics (IUGG)*

Atmospheric deposition is the transfer of substances from the air to the surface of the Earth, either in wet form (rain, fog, snow, dew, frost, hail) or in dry form (gas, aerosol). Atmospheric deposition encompasses a number of processes (eg. interactions with cloud and hydrometeors, boundary layer transport, interactions with canopies ...). Since these processes constitute the ultimate paths by which chemical compounds and particles are removed from the atmosphere, they are very important for atmospheric chemistry and climate. Atmospheric deposition has also an impact on water and land surface and can greatly impact ecosystems and biogeochemical cycles. Acid rains, nitrogen/phosphorus deposition effects on lake and coastal eutrophication, ozone impacts on crops, heavy metal contaminations, fertilization of ocean ecosystems, are examples of such environmental impacts. As anthropogenic pressure and activity increase in many parts of the globe, these impacts are likely to undergo significant modifications notably in emerging and developing countries.

The workshop intends to promote exchange of expertise and knowledge of scientific communities dealing with atmospheric deposition, from process understanding to environmental impact studies. We seek the participation of a broad range of disciplines (e.g. atmospheric physicist and chemists, ecosystem/ agro modelers, hydro-biologists, biological oceanographers and environmental experts). Experimental and modeling aspects of atmospheric deposition will be covered from scale varying from local to global. The workshop also intends to promote north-south networking as well as specific discussion of existing projects

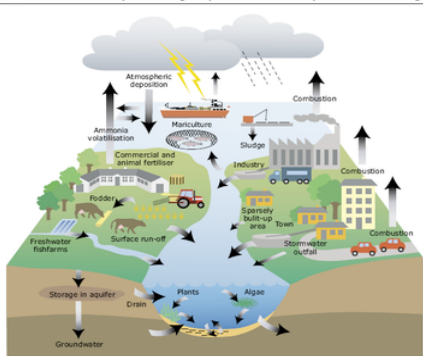
### Preliminary Programme

- **Wet and dry deposition measurements.**
- **Modeling of deposition processes, from the local to global scales.**
- **Acidic deposition impacts / eutrophication.**
- **Other types of deposition and environmental impacts.**



### PARTICIPATION

Figure 2.1 Overview of the aquatic nitrogen cycle and sources of pollution with nitrogen



Scientists and students from all countries, which are members of the United Nations, UNESCO or IAEA, may attend the Workshop subject to approval by the Workshop Directors. As the Workshop will be conducted in English, participants should have an adequate working knowledge of that language. Although the ICTP main purpose is to help researchers from developing countries, through a programme of training activities within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants should be borne by the home institution. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants, who are nationals of, and working in, a developing country, and who are not more than 45 years old. Such support is available only for those who attend the entire activity. There is no workshop registration fee.

### HOW TO APPLY FOR PARTICIPATION

The application form can be accessed at the activity website  
<http://agenda.ictp.it/smr.php?2339>

Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form. Closing date for receipt of the applications is: **5 February 2012**.

### ACTIVITY SECRETARIAT:

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Co-Sponsor IUGG



### DIRECTORS

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**C. Galy-Lacaux**  
(Laboratoire  
d'Aerologie, Toulouse,  
France)

### LOCAL ORGANIZER

**F. Solmon**  
(ICTP, Trieste, Italy)



### SPEAKERS TO BE ANNOUNCED

### DEADLINE

For requesting participation:

**5 February 2012**