Government of Pakistan
Cabinet Secretariat (Aviation Division)
Pakistan Meteorological Department
Sector H-8/2, Islamabad – 44000

No. Co (Isb)-2(3)/IA/3/2018/ Dated: 22nd February, 2019

CIRCULAR

SUBJECT: **Fifth Workshop on Water Resources in Developing Countries: Hydroclimate Modeling and Analysis Tools, Trieste, Italy from 27th May to 7th June, 2019**

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy has announced "Fifth Workshop on Water Resources in Developing Countries: Hydroclimate Modeling and Analysis Tools" being held in Trieste, Italy from 27th May to 7th June, 2019. The GEWEX is the lead project for the WCRP's Grand Challenge on Water Availability, which focuses on how the fresh water availability shift due to climate change in many food producing regions of the world. To this aim, the climate model community and, in particular, the regional climate community from one side is moving toward very high resolution simulation ensemble efforts down to the scale of the convection permitting resolution (1-3 km); and from the other end is working to implement fully coupled Earth System models to be able to understand the role of coupled water cycle and land atmosphere interactions in understanding local climate response. A limited number of grants are available to support the selected participants. This workshop will focus on the state of the art of:

- Precipitation measurements: what we can use to validate precipitation coming from the model output?
- Ensemble of high resolution regional climate model outputs: how can those be used as input of an hydrological model?
- Regional Earth System models: which is the role of the coupled water cycle? Uncertainty in global and regional climate projections: how can this uncertainty be taken into account for hydro-climate simulation?

Interested/eligible scientists/officers may submit their online application at ***http://indico.ictp.it/event/8685/*** under intimation to this office (pakmet_Islamabad@yahoo.com) latest by ***15th March, 2019***. PMD will consider only those personnel for nomination whose application(s) have been accepted alongwith the provision of complete financial support by the organizer.

This issues with the approval of Director Genral, PMD.

(IMRAN AKRAM)
Meteorologist (Coordination)
For Director General, PMD

Distribution:-

- Chief Meteorologist, NDMC Islamabad/FFD Lahore/R & D Division, Islamabad/Met. Complex, Karachi
- Director, F & C/CDPC/Maintenance/IMG, Karachi
- Director, RMC, Karachi/Lahore/Quetta/Peshawar/Gilgit.
- Director, NAMC/NWFC/NDMC/Seismic/Planning/Lai Nullah, Islamabad.
- Senior Meteorologist, MO, Karachi/Lahore/Islamabad/Multan

CC:-

- Section Officer (Met), Aviation Division, Islamabad.

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Fifth Workshop on Water Resources in Developing Countries: Hydroclimate Modeling and Analysis Tools

27 May - 07 June 2019
Trieste, Italy

Further information:
http://indico.ictp.it/event/8685/
smr3294@ictp.it

The Workshop is addressed to researchers from developing regions working on hydro-climate modelling with the aim to foster international research and educational projects on topics related to climate and hydrology, and will be a contribution to the G-WADI programme within the framework of UNESCO IHP VIII (2014-2021), Water Security: Responses to Local Regional and Global Challenges.

Description:

GEWEX is the lead project for WCRP's Grand Challenge on Water Availability, which focuses on how fresh water availability will shift due to climate change in many food producing regions of the world. Fresh water availability can vary over in time due to reductions or increases in precipitation, evapotranspiration, runoff, ground water recharge or discharge, and snow melt.

Climate extremes are one factor that can influence the intensity of precipitation in time, the snow melt timing and the exchange of water with land and, therefore, the storage of a region. All these make it imperative to better understand and predict precipitation variability and change.

To this aim, the climate model community and, in particular, the regional climate community from one end is moving toward very high resolution simulation ensemble efforts down to the scale of the convection permitting resolution (1-3 km); and from the other end is working to implement fully coupled Earth System models to be able to understand the role of coupled water cycle and land atmosphere interactions in understanding local climate response.

This will open new frontiers for the hydrological modeling community by bridging the spatial scale gap between regional climate models and impact models (hydrological models, ecosystem models, etc.); which will, in turn, affect the quality of the prediction of the hydrological cycle across several scales, from catchments to regional to global.

Topics:

- Precipitation measurements: what we can use to validate precipitation coming from the model output ?
- Ensemble of high resolution regional climate model outputs: how can those be used as input of a hydrological model?
- Regional Earth System models: which is the role of the coupled water cycle?
- Uncertainty in global and regional climate projections: how can this uncertainty be taken into account for hydro-climate simulation?

Directors:

S. Sorooshian, University of California, Irvine, USA
M. Verdecchia, University of L'Aquila, Italy

Local Organizers:

E. Coppola, ICTP, Italy
F. Di Sante, ICTP, Italy

Speakers:

S. Sorooshian , University of California, Irvine, USA
M. Verdecchia, University of L'Aquila, Italy
E. Coppola, ICTP, Italy
R. Ludwig, Maximilians U. Munich, Germany
P. Nguyen, University of California, Irvine, USA
F. di Sante, ICTP, Italy
L. Mariotti, OGS, Italy
A. Fantini, ICTP, Italy
R. Nogherotto, ICTP, Italy

and to be announced

How to apply:

Online application:
http://indico.ictp.it/event/8685/

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

Deadline:

15 March 2019

The Abdus Salam
International Centre
for Theoretical Physics
www.ictp.it
Trieste, Italy