AGU ATMOSPHERIC SCIENCES

## Atmospheric Sciences Section of AGU Newsletter

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providers and institutional users

- b) Produced hybrid professionals that translate science-based information into usable and actionable formats
- c) Shifted the culture of relying on deterministic forecasts for decision-making to using probabilistic forecasts in a risk management framework
- d) Member States that have access to cutting edge technologies and research outputs for providing customized need-based information for guiding hazard risk reduction investments, even for emerging hazards in an anticipatory mode

Explain how CFAN-RIMES interaction could constitute a template for future collaboration between universities everywhere and international program like RIMES.

**Professor Peter Webster:** The type of relationship that exists between CFAN and Georgia Tech and RIMES provides a unique access to some of the really important problems in environmental prediction.

**Mr. Subbiah:** RIMES provides a test-bed for pilot-testing promising new and emerging technologies and products of research and making these operational through demonstration of tangible benefits.

RIMES and CFAN collaboration brings best the of science to the benefit of at risk communities through a sustained and institutional process.

The opinions expressed in this interview do not necessarily represents those of the reviewer or the AGU.

## Visiting One of India's Most Prestigious Meteorological Institutes

Dr. Michel d. S. Mesquita1,2 and Dr. R. Krishnan<sup>3,4</sup>

- <sup>1</sup> Uni Bjerknes Centre, Bergen, Norway
- <sup>2</sup> Bjerknes Centre for Climate Research, Bergen, Norway
- $^{\rm 3}$  India Institute of Tropical Meteorology, Pune, India
- <sup>4</sup> Centre for Climate Change Research, Pune, India

It does not take much time to hear the acronym "IITM" while visiting India. It has become a national symbol of cutting-edge tropical meteorology research — and it is well recognized abroad. It has become a "magnet" for students and scientists who search for more understanding on the complexity of monsoon systems. The Indian Institute of Tropical Meteorology is this place.

IITM started in 1962 based on the recommendation of the World Meteorological

Organization for a research institute dedicated to Tropical Meteorology. The campus was initially based at the India Meteorological Office in Pune. Presently, IITM has a separate campus, thanks to the visionary action of Prof. P.R. Pisharoty, the founding director of the Institute, who had recognized the importance of purchasing a large plot of land in the western part of Pune city. Early on, IITM researchers made several important scientific contributions in the area of monsoon research which include (a) creation of long-term rainfall and temperature datasets over the Indian region (b) documenting the relationship between the Indian monsoon rainfall and the El Niño Sourthern Oscillation (c) development of numerical models for simulation of monsoon weather and climate (d) observational research initiatives for studying tropical weather and climate processes.



Researchers from the Centre for Climate Change Research gathered in the modern workplace at IITM.

In addition to that, IITM is also a leading educational center, which has graduated hundreds of scientists. Many are working or studying abroad, as for example, Muralidhar Adakudlu, a previous master's student at IITM who has recently received a PhD degree from the University of Bergen (Norway). In order to build in-house capabilities in Earth System Science and Modeling and also promote research in the field of monsoon prediction, IITM has started a new initiative called the Advanced Training Program, in which young graduate trainees will be provided with jobs and they will undergo training in all aspects of Earth System Science. This is a new initiative of the present IITM Director, Prof. B. N. Goswami, a renowned scientist in the field of monsoon science. Prof. Goswami feels that the job-linked training program is essential for attracting young and bright students into the field of Earth Sciences. In the long run, this activity will provide the skilled human resources and scientific capacity required by all of the Institutions of the Ministry of Earth Sciences.

IITM has grown to become one of the leading research institutes in India. The campus is expanding with the construction of a building for High Performance Computing

system i.e., a 70 teraFLOPs super-computer; as well as a building under construction for the new Center for Climate Change Research (CCCR) and an auditorium. For more details, please visit the website: http://www.tropmet.res.in.



Outside one of the main buildings at IITM together with CCCR researchers. From left to right: Dr. Ramesh Vellore, Dr. R. Krishnan, Dr. Michel d. S. Mesquita, Dr. Milind Mujumdar and Dr. G. Pandithurai.

"CCCR" is the acronym of the new subcenter at IITM. It was created for the need to develop climate projection datasets for India. CCCR is developing its Earth System Model at the moment. A team of modelers is working intensively, in the temporary but modern research floor in the main IITM building, in the development of this model. Others are also high-resolution monsoon on downscaling activities for the IPCC AR5 assessment. CCCR is led by Dr. R. Krishnan and it employs some of the best young Indian researchers with quite a few of them holding Ph.D. degrees from well-known universities both in India and abroad. Considering these new research staff and infrastructural developments, Dr. Krishnan feels that the development of an Earth System Model in India in the coming years will allow Indian researchers to play a larger role in the scientific community worldwide.

## Announcement

IITM Golden Jubilee International Conference on "Opportunities and Challenges in Monsoon Prediction in a Changing Climate" (OCHAMP-2012)

21-25 February, 2012 Pune, INDIA Website:

http://www.tropmet.res.in/ochamp/

Submission: September 1, 2011- October 31, 2011

Deadline for Conference Registration : December 30, 2011

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