# LAREEF ZUBAIR

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#### Education

**B.Sc**: University of Peradeniya, Sri Lanka, Chemical and Mechanical Engineering, 1987.

First Class Honors, Prize for the best undergraduate research project, Valedictorian.

M.Sc: Yale University, Chemical Engineering, 1990.

Ph.D: Yale University, Mechanical Engineering, 1993 - "Studies in Turbulence".

University Consortium for Atmospheric Research (UCAR), Boulder, 2000 -2001

Postdoctoral Associate, Tropical Climate and Applications

Yale University, CT, 1994 – 1995 -Post-Doctoral Associate, Mathematics.

## **Employment**

# Foundation for Environment, Climate and Technology, Sri Lanka, 2004 to date

Principal Scientist (Part-time, Jan. 2004-June 2011, Full-time, July 2011 onwards)

Columbia University, 2002 to 2012

Associate Research Scientist, International Research Institute for Climate and Society (2002 to 2012) Adjunct Researcher, Columbia University Water Center (2014 to date)

University of Peradeniya, Sri Lanka, 2010 to 2014

Lecturer, Masters in Development Practice (2010 onwards)

William C. Fulbright Scholarship Board, D.C., 2012 to 2013

Senior Scholar, University of Peradeniya, Sri Lanka

University of Peradeniya, Sri Lanka, 1995 – 1997

Senior Lecturer in Civil (Environmental) and Mechanical Engineering

Yale University, U.S.A., 1993 - 1995

Tutor in Mathematics and Science, Jonathan Edwards College

# **Publications**

40 publications in indexed journals such as Journal of Climate, Monthly Weather Review, Physics of Fluids, International Journal of Climatology, Theoretical and Applied Physics and book chapters. List available at <a href="https://www.lareef.net">www.lareef.net</a>

#### **Editorial and Review Service**

Editor: Associate Editor: ASCE Journal of Energy Engineering - 2007 to 2012

**Reviewer:** Geophysical Research Letters, Journal of Geophysical Research, Water Resources Research Environmental Science and Technology, Experimental Thermal and Fluid Science, Hydrological Processes, Climatic Research, International Journal of Climatology, Journal of Climate, Journal of Hydrology, Journal of Hydrometeorology, Pure and Applied Geophysics

### **Fellowships**

- Fulbright Visiting Scholar Fellowship 2015, pending
- Fulbright Senior Fellowship, Sri Lanka and Maldives, 2012-2013
- Botswana Meteorological Service, Gaborone, Botswana, February 2007.
- Exchange Fellow, Frontier Research System for Global Change, Yokohama, Mar 2002.
- Visiting Eminent Scientist, Ministry of Science and Technology, Sri Lanka, January, 2002.
- *Indian Institute for Tropical Meteorology, Pune, India, December 1999.*
- International Institute for Theoretical and Applied Physics, Ames, Iowa, August 1998.
- International Center for Theoretical Physics, Trieste, Italy, June 1998.
- Jawarlhalal Nehru Centre for Advanced Scientific Research and Indian Institute of Science, Bangalore, India, March 1997.

### **Professional Associations and Service**

*Member:* American Geophysical Union, Indian, American Society of Civil Engineers, American Association of Environmental Engineering Professors, American Meteorological Society, Meteorological Society, Royal Meteorological Society, Agronomy Society of America, International Association for Ecology & Health. American Institute for Sri Lankan Studies

Founder: Sri Lanka Meteorology, Oceanography and Hydrology Network.

# **Advisory and Capacity Building Programs**

- Founder, Foundation for Environment, Climate and Technology in Sri Lanka, USA, Comoros.
- Invited Expert, *Comoros Ministry of Fisheries and Hairu Fisheries Development Project (Comoros)*, To develop climate research and its applications, Comoros. February 2014.
- Invited Expert, Small Earth Nepal, and Center for Capacity Building, University of Colorado, Program for young scientists.
- Invited Adviser, *Ministry of Environment, Male Maldives*, To Develop a Program of Climate Research and Services, August 2008, with follow up programs in 2009, 2010, 2011 and 2012.
- UNDP Totken Fellowship, for Developing a Masters in Sustainable Development Practice, *University of Peradeniya, Sri Lanka* and *Maldives National University, Maldives*. 2009
- Trainer on Developing Climate Outlooks, Pretoria and Gaborone, 2008.
- Invited Expert, *Botswana Meteorological Service*, 2008 for Climate Diagnostics and Impacts on Malaria Transmission,
- Invited Expert, *Ministry of Science and Technology, Sri Lanka*, Capacity Building at the Department of Meteorology and at University of Colombo. January-February 2002.

## **Projects**

- 2012-2015, Developing monitoring tools for managing drought risk and addressing the riddle of increased drought tendency amidst the wetter climate change projections for Sri Lanka and the Maldives, *National Academy of Sciences*, Ongoing, \$150K, (PI)
- 2012-2014, Modeling the impacts of a variable and changing climate on rice and sugarcane agricultural systems in Sri Lanka, *Agricultural Model Inter-comparison Project*, \$400K, (PI)
- 2012-2015, Intra-Seasonal Climate Prediction for Sri Lanka and Maldives for Water Resources Management, *National Academy of Sciences*, Ongoing, \$150K, (PI)
- 2009-2015, Launching a Masters in Sustainable Development Practice at the University of Peradeniya with a focus on Sri Lanka and Maldives, *MacArthur Foundation*, \$200K, (co-PI)
- 2011-2012: Climate change impacts on seasonally and intermittently open tidal inlets in Sri Lanka and Thailand (CC-SIOTI), *UNESCO-IHE Institute for Water Education*. Subcontract \$20K, (I)
- 2010: The Impacts of El Niño Southern Oscillation (ENSO) Events on Cereal Production Area and Yield in South and South-East Asia *FAO-SEARO*, \$12K, (I)
- 2009-2013: Launching a Masters in Sustainable Development Practice at the University of Peradeniya with a focus on Sri Lanka and Maldives, *MacArthur Foundation*, \$200K, (co-PI)
- 2003 to 2008: Early Warning Systems for Malaria risk with the Anti-Malaria Campaign, the International Water Management Institute and several partners. *NOAA Climate Variability and Human Health Program*, Project Completed. \$390K total, (PI).
- 2002 to 2003: A case study on Sri Lanka for the Global Disaster Hotspots project, *World Bank/Earth Institute at Columbia University*, sub-contract, \$25K (PI).
- 2002 to 2005: Adaptation and Climate Change in Sri Lanka, with Sri Lanka Department of Meteorology, Coconut Research Institute, Tea Research Institute, *Adaptation to and Impact Assessment of Climate Change, START, Washington, D.C.*, \$233K total, Completed. (co-PI).
- 2001 to 2003: Climate Impacts on Wildlife was developed in collaboration with CEISIN and CERC. *IRI/Earth Institute at Columbia University*, \$50K, Work completed. (PI).