

# Dr. Thamban Meloth

Scientist-F & Group Director (Polar Sciences) ESSO-National Centre for Polar & Ocean Research (Ministry of Earth Sciences), Vasco da Gama, Goa - 430804

#### **RESEARCH INTERESTS**

Palaeoclimatology • Glaciology • Snow biogeochemistry

### **PROFESSIONAL CAREER**

- 2016 Scientist-F, ESSO-National Centre for Polar and Ocean Research, Goa
- 2002 Scientist-C, ESSO-National Centre for Antarctic Ocean Research, Goa
- 2002 Scientist-B, CSIR-National Institute of Oceanography, Goa
- 2001 JSPS Post Doctoral Fellow, Geological Survey of Japan, Tsukuba, JAPAN
- 2000 Asst Professor, Government College of Kasaragod, University of Kannur, Kerala
- 1997 DAAD Fellow, University of Bremen, Bremen, Germany
- 1993 Research Fellow (CSIR-NET), National Institute of Oceanography, Goa

# **AWARDS & HONOURS**

- 2013 National Geoscience Award, Ministry of Mines, Government of India.
- 2008 NIPR Visiting Scientist Award, by the National Institute of Polar Research, Japan.
- 2006 Certificate of Merit for Outstanding Contributions by Ministry of Earth Sciences, India
- 2003 Prof. Naganna Gold Medal by the Mineralogical Society of India.
- 2001 START Young Scientist Award by International Geosphere Biosphere Programme.
- 2001 JSPS Fellowship, by the Japanese Society for Promotion of Science (JSPS), Japan.
- 2001 Young Scientist Award, by the Indian Science Congress Association (ISCA).
- 1999 PAGES / START Fellowship by PAGES (IGBP), Switzerland.
- 1997 Young Sedimentologist Award by Indian Association of Sedimentologists (IAS).
- 1997 DAAD Fellowship by German Academic Exchange Service (DAAD), Germany.

# **ROLES AT NATIONAL & INTERNATIONAL SCIENTIFIC BODIES**

- Member, Research Advisory Committee (RAC), *Wadia Institute for Himalayan Geology (WIHG)* (2019 onwards)
- Member, Programme Advisory Committee (PAC) on Earth and Atmospheric Sciences, *Science and Engineering Research Board (SERB)*, India (2018 2021).
- Member, SCAR (Scientific Committee on Antarctic Research) National Committee, Indian National Science Academy (2020-2023)
- Member, Scientific Steering Committee, International Partnerships in Ice Core Sciences (IPICS) (2015 onwards)
- Member-Secretary, Research Advisory Committee, National Centre for Polar & Ocean Research (2014 onwards)
- Member, Board of Studies in Marine Geology, Mangalore University (2018 2021)

# **PROJECTS & RESEARCH GRANTS**

- MADICE (Mass balance, dynamics, and climate of the central Dronning Maud Land coast, East Antarctica), Indo-Norwegian Project, funded by Ministry of Earth Sciences (India) and Rsearch Council Norway (2016-2020)
- *Cryosphere and Climate (CyCle)*, funded by Earth System Science Organization, Ministry of Earth Sciences, India (2013-2017 & 2017-2020)
- *Glacio-chemical studies on ice cores from the coastal and inland region of East Antarctica,* funded by Ministry of Earth Sciences (2007-2012)

- Southern Ocean palaeoceanography during the late Quaternary from the Indian sector, funded by Indian Space Research Organization (ISRO) (2007-2010)
- *Establishment of Ice Core Laboratory*, funded by Department of Ocean Development, India (2002-2007)
- *High resolution study on late Quaternary palaeoceanography of the northern Indian Ocean,* SERC Fast Track Young Scientist project, funded by Department of Science and Technology, India (2000-2002)

#### **CONTRIBUTIONS TO CAPACITY BUILDING**

#### **Post Doctoral supervision**

Shipra Nagar: NPDF (National Post Doctoral Fellow) supported by SERB (Science and Engineering Research Board), India. Project - "Structural Investigations of Extracellular Polymeric Substances from Antarctic microbes"

#### PhD Supervision (Awarded)

- 2014 *M.C. Manoj* (Goa University): Geochemical studies on late Quaternary sediments from the Indian sector of Southern Ocean (Guide)
- 2015 *Runa Antony* (Goa University): Bacteria and their role in organic carbon dynamics in Antarctic snow (Co-Guide)
- 2017 *Roseline Thakur* (Goa University): Study of size segregated chemical composition of aerosols and air-snow interaction of ionic precursors over the Polar Regions (Guide)
- 2017 *Mahalinganathan K* (Goa University): Chemical and Stable isotope records of Antarctic snow and its implications on palaeoclimate studies (Guide)
- 2018 *Abhilash Nair* (Goa University) Late Quaternary studies on climate variability in Indian sector of the Southern Ocean using diatoms (Co-guide)
- 2019 *Ankit Pramanik* (University of Oslo) *Energy balance modelling and meltwater routing in a glaciated Svalbard fjord system* (Co-guide)
- 2019 *Vikram Goel* (University of Oslo) Dynamics and past changes of ice rises in Dronning Maud Land, Antarctica (Co-guide)
- 2019 *Gautami Dev Samui* (Goa University): Biogeochemistry of selected supraglacial ecosystems in coastal Antarctica (Guide).

#### PhD Supervision (Ongoing)

- *Tariq Ejaz* (Goa University) Triple-oxygen and hydrogen isotope based ice core records of Antarctic climate variability (Guide)
- *Rahul Dey* (Goa University) Reconstruction of Antarctic Climate variability using high resolution ice core layer stratigraphy (Guide)
- *Ajit T. Singh* (Goa University) Hydrology and hydrochemistry of Chandra basin glaciers, Western Himalaya (Co-guide)
- Akansha Patel (IIT Roorkee) Impact of climate variability on glacier mass balance in regional, basinal and local scale (Co-guide)
- *Aritri Sanyal* (Goa University) Biogeochemical cycling potentials of cryoconite hole environments in coastal Antarctica (Guide)
- Sunil Oulkar (Goa University) Spatio-temporal changes in glacier mass balance using modeling and observations in the Chandra Basin, Western Himalaya (Guide)
- PUBLICATIONS Published more than 75 international/national peer-reviewed papers (see the publication list) with <u>2100 citations</u> and have <u>h-index 23</u> (as per GoogleScholar)