

B. L. Redkar
Scientific Assistant Grade B
Cryosphere Science Division

PROFESSIONAL CAREER:

2012-till date : Scientific Assistant Grade B at Cryosphere Science Division, NCAOR, Goa.
2006-2012 : Laboratory Technician at Ice-Core Laboratory, NCAOR, Goa.
2004-2006 : Technical Assistant at Ice-Core Laboratory, NCAOR, Goa.
2003-2004 : Project Assistant at Physical Oceanography Division, National Institute of Oceanography, Goa
2002-2003 : QA Inspector for the Quality Assurance Department at Tata InfoTech, Goa.

ACADEMIC QUALIFICATIONS:

1997 : Secondary School certificate examination from Goa Board of secondary Education passed with Distinction.
1997-1999 : HSSCE,10+2 Science, First class at Deepvihar Higher Secondary School, Headland Sada, Goa.
1999-2002 : Diploma in Electronics Engineering (Three years), First Class at Agnel Polytechnic Verna, Goa.

AREA OF SPECIALIZATION:

- Stable Isotope Ratio Mass spectrometer
- Inductively Coupled Plasma Mass Spectrometer (ICP-MS).

MAJOR DUTIES:

- Responsible for sample preparation, standards preparation, routine operation, calibration, troubleshooting and maintenance of Stable Isotope Ratio Mass spectrometer (SIRMS) and Inductively Coupled Plasma Mass Spectrometer (ICP-MS).
- Processing of Antarctic Ice cores, Snow cores (Antarctic & Arctic) and ECM and Density measurements of the Ice cores at -15°C cold rooms.
- Maintenance and operation of the Liquid Nitrogen plant.
- Maintenance of the Millipore Ultra pure water purification system.
- Providing technical assistance to other labs at Ice core Laboratory block as and when required.

AWARDS:

Best Employee Award in Group B category by Ministry of Earth Sciences, Government of India, in 2012.

ACHIEVEMENTS:

2012 : Member, Himalayan Glacier Expedition.

- 2013 : Winter Team Member, Indian Arctic Expedition.
 2014 : Summer Team Member, Indian Antarctic Expedition.

TRAINING:

- 2007: Stable Isotope Ratio Mass spectrometer at GV Instruments(Now Isoprime Ltd.), Manchester, United Kingdom from 3rd to 14th September, 2007
 2008: Training on TOC Analyser from 29th to 31st January, 2008 at Shimadzu Asia-Pacific Pte. Ltd, Singapore.

PUBLICATIONS:

I have been co-authored and acknowledge for my efforts towards Ice core processing, Instrument operation and data generation in various research papers listed below:

- M. Thamban, A. Chaturvedi, A. Rajakumar, S. S. Naik, W. D'Souza, A. Singh, S. Rajan and R. Ravindra. Current Science Vol.No.91 No.9 10th November 2006 Aerosol perturbations related to volcanic eruptions during the past few centuries as recorded in an ice core from the Central Dronning Maud Land, Antarctica .
- Thamban, M. ,Chaturvedi,A. ,D'souza W.,Rajakumar.A.,Laluraj,C.M, Redkar,B. and Ravindra,R Measurement of delta 18O in waters by Isotope Ration Mass spectrometry: Results from an Antarctic Icecore. Naik, S.S., Presented at 12th ISMAS,symposium cum workshop on mass spectrometry held at Inetrnational centre Donapaula,Goa 403004 India,March 25- 30,2007.
- Laluraj C.M, K.P.Krishnan, M. Thamban, Rahul Mohan, A. Chaturvedi, S.S.Naik, W.Dsouza and R. Ravindra. (2009). Characterisation and origin of micro particle in the ice core from the Central Dronning Maud Land, East Antarctica. Environmental Monitoring and Assessment.144 (1-4), 377-383.
- Thamban, M., C. M. Laluraj, K. Mahalinganathan, B. L. Redkar, S. S. Naik and P. K. Shrivastava(2010). Glacio-chemistry of surface snow from the Ingrid Christensen Coast, East Antarctica,and its environmental implications. Antarctic Science, 22(4), 435-441.
- Naik, S.S., Thamban, M., Rajakumar, A., Laluraj C.M., and Chaturvedi, A. (2010). Influence of climatic teleconnections on the temporal isotopic variability as recorded in a firm core from the central Dronning Maud Land, East Antarctica. Journal of Earth System Science, 119, 41-49.
- Laluraj C.M., Thamban, M., S.S. Naik, B.L. Redkar, A. Chaturvedi and R. Ravindra (2011).Nitrate records of a shallow ice core from East Antarctica: atmospheric processes, preservation and climatic implications. The Holocene, 21 (2), 351-356.
- Naik, S. S., Thamban, M., Laluraj C.M., Redkar, B.L. and Chaturvedi, A. (2010). A century of climate variability in the central Dronning Maud Land, East Antarctica and its relation to Southern Annular Mode and El Niño Southern Oscillation. Journal of Geophysical Research.
- Thamban M., Laluraj, C. M., Naik, S. S., Chaturvedi, A. (2011). Reconstruction of Antarctic climate change using ice core proxy records from the coastal Dronning Maud Land, East Antarctica. Journal of Geological Society of India, 78 (1), 19-29.
- M.C. Manoj, M. Thamban, N. Basawaiah and R. Mohan, "Evidence for climate controls on lithogenic sediment supply to the Indian Ocean sector of Southern Ocean over the past 63 kaBP" Geo-Marine Letters, Accepted: 17th November 2011.

- Sruthi k, Thamban M., Manoj M.C., Laluraj C.M. "Association of trace elements with various geochemical phases in the Indian Sector of Southern Ocean during past 22,000 years and its pale oceanographic implications" (Published: Current Science).
- Mahalinganathan, K., Thamban, M., Laluraj, C. M. and Redkar, B. L. (2012). Relation between surface topography and sea-salt snow chemistry from Princess Elizabeth Land, East Antarctica. *The Cryosphere*. 6, 1–11.
- Thamban M, Thakur RC. "Trace metal chemistry of surface snow from Ingrid Christensen Coast, East Antarctica - Spatial variability and possible anthropogenic contributions": *Environmental Monitoring and Assessment*. 2013 Apr; 185(4):2961-75.
- Laluraj C.M., Thamban, M., Satheesan, K. (2013). Dust and associated geochemical fluxes in a firn core from coastal East Antarctica and its linkages with Southern Hemisphere climate variability over the last 50 years. *Atmospheric Environment*. (Revised manuscript submitted for minor revision).
- Suhas Shetye, Rahul Mohan,, Sunil Kumar Shukla, Sudhakar Maruthadu, Rasik Ravindra. Variability of *Nonionellina labradorica* Dawson in Surface Sediments from Kongsfjorden, West Spitsbergen. Article first published online: 14 JUN 2011
- K. P. Krishnan, Rupesh Kumar Sinha, Kiran Krishna, Shanta Nair and S. M. Singh Microbially mediated redox transformations of manganese (II) along with some other trace elements: a study from Antarctic lakes. *Polar Biology*, volume 3, Number 12/December 2009, 1765-1778.
- Runa Antony, Meloth Thamban, K P Krishnan and K Mahalinganathan Is cloud seeding in coastal Antarctica linked to bromine and nitrate variability in snow? *Environ. Res. Lett.* 5 (January-March 2010) 014009.