Ashish Paiguinkar

Scientific Assistant Grade 'A' Polar Cryosphere and Ice core studies Division National centre for Polar and Ocean Research Earth Science System Organization Goa, India



Professional Experience

- 2012 Scientific Assistant Grade 'A', National Centre for Polar and Ocean Research, Goa
- 2011 Laboratory Supervisor, Supreme Fuels F.Z.E, Afghanistan
- 2010 Laboratory Technician, Supreme Fuels F.Z.E, Afghanistan
- 2006 Technical Assistant, National Centre for Antarctic and Ocean Research, Goa

Training

- **2019** Participation and member of "Antarctic Climate Workshop" at **British Antarctic Survey, Cambridge** during 25-30 March 2019 and associated laboratory_training.
- **2016** In house training at the National Centre for Antarctic and Ocean Research, on the operation, maintenance and troubleshooting of Ion Chromatography system(Thermo Scientific Dionex ICS 5000+ Capillary HPIC).
- **2016** Field training on the operation of "Hinged tipping tower design Ice core drilling system" (Eclipse Ice core drill) at a glacier in **Whitehorse Yukon, Canada**.
- **2016** In house training at the National Centre for Antarctic and Ocean Research on Operational knowledge, maintenance and troubleshooting of ICP MS (Agilent 7700x).
- **2011** Fire Extinguisher and Fire Warden Training by ATCO Frontec Europe Fire Crash Rescue Services at Kandahar Air Field, Afghanistan.
- 2010 Training course on Jet fuel and ground fuel testing at Intertek Laboratory, Sharjah, U.A.E
- **2007** In house training at the National Centre for Antarctic and Ocean Research on the operation, maintenance and troubleshooting of Dined DX-2500 and ICS-2000 IonChromatography systems.
- **2006** In house training at the National Centre for Antarctic and Ocean Research on the operation, maintenance and troubleshooting of Total Organic carbon Analyzer (Shimadzu TOC-V_{CPH}).

Area of Specialization

- Maintenance, sub-sampling and processing of the Antarctic ice cores and snow cores at sub-zero temperature (-15 °C and -20 °C) ice core processing facility.
- Ionic analysis of ice/snow/water/aerosol samples using Ion Chromatography systems.
- Operational Knowledge of Triple isotope water analyzer (TIWA).
- Trace elemental analysis of ice/snow samples using Inductively Coupled Plasma Mass Spectrometer.
- Inorganic and organic carbon analysis of ice/snow/sediment using Total organic carbon analyzer.
- Analysis of dust particles in ice/snow samples using Coulter counter.

Scientific Expeditions

- Member of the **37**th Indian Scientific Expedition to Antarctica as a part of the joint Indo- Norwegian Project "Mass balance, dynamics, and climate of the central Dronning Maud Land coast, East Antarctica (MADICE)" for ice core drilling on ice rises (Oct 2017 to Jan 2018).
- Member of the Indian Scientific Expedition to Himalayas (September 2014) for conducting Glaciological and hydrological field studies at Sutri Dhaka, Batal, Samudra Tapu and Bara Sigri high altitude glaciers.

Certificate of Appreciation

- By Task Force Dragon, Regional Command-South and the United States Army for outstanding support in testing services of Petroleum products.
- By U.S. Department of State Airwing, Kandahar for providing outstanding support in the area of fuel laboratory testing.

Personal Profile and Experience

I have been actively supporting ice core research activities at the National Centre for Antarctic and Ocean Research, India, as an Ice core analyst for over 11 years.

My role involves the archival, maintenance, processing and analysis of ice cores and snow samples from Antarctica and Himalayas. My main role has been to carry out measurements of major ions in ice cores using ion chromatography (DX 2500, ICS 2000 and ICS 5000+) and ensure that the data is of good quality. I am highly experienced in working in a class-100 clean room, as well as, working in -20°C cold rooms for long periods of time. In addition to my knowledge in the operation, trouble shooting and maintenance of Ion chromatography system, I am proficient in operating other instruments such as Inductively Coupled Plasma Mass Spectrometry (ICP-MS), Triple isotope water analyzer (TIWA), Coulter Counter and High Sensitivity Total Organic Carbon Analyzer, for measurements of trace elements, isotopes, dust and total organic carbon, respectively, in snow/ice cores.

I have strong team work skills as I work closely with ice core scientists and research students, both in the laboratory and in the field actively supporting both individual and group research projects. I am also adept at wet chemistry laboratory techniques (preparation of standard solutions, filtration, cleaning of glassware etc.) and am experienced in safe laboratory practices and maintenance of laboratory inventories. I have undergone field training (**Canadian glacier**),

on the operation of Hinged tipping tower design Ice core drilling system for drilling of ice cores.

I am fluent in written and spoken English. I have good communication skills as I frequently interact with other scientists, college/university students, as well as, the general public in order to acquaint them with the ongoing research activities during their scientific/educational visits to the ice core laboratory.

In addition, I have helped in various capacities in organizing National and International conferences as a member of:

- Organizing committee of **PAGES** (Past Global Changes) conference held at Goa-India in February 2013.
- Organizing Committee of **MADICE** summer school and workshop held at National Centre for Antarctic and Ocean Research, Goa in May 2017
- Member of Organizing Committee of **NCPS** (National Conference on Polar Sciences) held at National Centre for Antarctic and Ocean Research, Goa in May 2017.
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