

Fareeduddin Resume



Dr. Fareeduddin has served for over three decades in Geological Survey of India and for about one decade in Bangalore Metro Rail Ltd.

Professional Experience

- a) Geological Mapping (i) Geological mapping in Precambrian terrains of Dharwar Craton (Chitradurga and Bababudan schist belts), Karnataka State and Aravalli Craton (Delhi Fold Belt and Aravalli Fold Belt), Rajasthan State on 1:50,000, 1:25,000 scales for about fifteen years.
- b) Mineral Exploration: (i) Detailed Sub-surface Mineral Exploration for (a) tungsten deposits in Sewariya granite, Rajasthan (ii) copper and zinc +/-Au in Volcanogenic Massive Sulphide Deposits, South Delhi Fold Belt and (iii) epigenetic gold deposit in Aravalli Fold Belt; (ii) Regional Prognostication for metal deposits using Airborne Geophysical Data for Rajasthan (ii) Regional studies for gold mineralization in Rajasthan; (ii) Identification of regional albitite zones for albitite related mineral deposits (U. REE etc).(iii) IOCG deposits in Rajasthan.
- c) **Engineering Geology:** Served as consultant to the Bangalore Metro Rail for underground tunneling. Involved in construction of over 40 km tunnels in Bangalore City.
- d) Worked on Naghill Ophiolite Belt.

Contributions to geosciences:

Dr. Fareeduddin has made fundamental contribution to Geo-sciences that include:

- (i) Establishment of North Delhi Fold Belt as an older cratonic segment that constitutes basement for the South Delhi Fold Belt (SDFB) and (ii) identification of 30-km long tectonic slices of granulites, quantified their P-T paths and produced zircon dates to interpret their formation during Grenvillian and Pan-African global events.
- (ii) He worked on gold, basemetal and tungsten deposits of Rajasthan, quantified the resources, identified newer mineral prospects and produced well acclaimed publications on wall-rock alterations, regional lineament and contrasting hydrothermal systems, IOCG-type metal deposits, shungitic Aravalli carbon, tourmaline as metallogenic indicator and geochemistry and metallogenesis of Pb-Zn and Cu-Au deposits.
- (iii) His research on kimberlites resulted in a monograph on these rocks. He reported lamprophyres in SDFB, chondritic features in diamondiferous Majhgawan lamproite, diamondiferous Kodomali diatreme as orangeite and rare mineral phases in minette-lamproites of Raniganj coalfields in Singhbhum craton.

- (iv) His research on the Nagaland–Manipur Hill ophiolites fructified in (i) publication of international book on it and (ii) established it as a typical subduction channel mélange evolved during the fast subduction of the Neotethyan oceanic lithosphere beneath Asia – Sundaland in progressively westward migrating subduction-accretion complex.
- (v) He was part of the team that established a high quality CAMECA SX100 electron probe micro-analyzer facility at Bangalore. This lab is one among the most successful EPMA facilities in the country; generated data for high impact journal publications and Ph.D dissertations.

Organization experience:

- (i) Convener, International Workshop on “Kimberlites and Related Rocks”, (November, 2005)
- (ii) Convener, 10th International Kimberlite Conference, held at Bangalore during 6-11th February, 2012 under the auspices of Geological Society of India (GSI). About 300 foreign delegates from 36 countries attended the conference.
- (iii) Course Coordinator, International Training Courses (January, 2008) on: (i) “Petrology of diamond bearing potassic-ultramafic rocks” (Course faculty – Prof. R.H.Mitchell, Lakehead University, Canada) and (ii) “Exploration for diamond deposits” (Faculty - Howard Coopersmith, USA).
- (iv) Chairperson of the Legacy Committee of the 36th International Geological Congress

Editorial Experience includes:

- (i) Editor, Journal of the GSI.
- (ii) Editor-in-chief - Journal of International Geosciences Episodes, (Impact Factor = 3.26 during his editorship) – Flagship journal of the International Union of Geological Sciences (2012 -2016)
- (iii) Associate Editor, Indian Journal of Geosciences, since 2012.
- (iv) Guest Editor-in-chief of the 36th International Geological Congress Legacy Volume “Geodynamic Evolution of the Indian Sub-continent”, published by the IUGS journal Episodes
- (v) Member, Editorial Board, Journal of Society for Geosciences and Applied Technology

Served as

- (i) Secretary (2004 to 2007) and (ii) Council Member (2007-2013), Geological Society of India GSI,
- (ii) Member Secretary, Indian National Committee for International Geological Correlation Projects (2013-2014),
- (iii) Member, Publication Committee, International Union of Geological Sciences.
- (iv) Vice-Chair, International Commission on Geoheritage Stones (2012-2016)
- (v) Member – International Kimberlite Conference Advisory committee (2012-2016).
- (vi) Member, National Centre for Mineral Targeting, Ministry of Mines, Government of India, New Delhi

Currently Serving as

- (i) Member, National Geoheritage and National Geological Monument Committee, Government of India

- (ii) Member, National Committee for International Geological Correlation Programme, Govt. Of India.

Teaching experience:

1. Faculty at Geological Survey of India Training Institute, taught geological mapping, petrology, geochemistry and mineral exploration.
2. Guided (as External Guide) two students (one each from Indian School of Mines, Dhanbad and CEPT University, Ahmedabad) for Ph.D and M. Tech dissertation respectively.

Awards and accolades: He is the recipient of:

- (i) National Mineral Award from Government of India (December 1994), for the year 1992-93 for outstanding contribution in the field of applied geochemistry. The award was given for the work related to application of geochemical concepts for identification of gold and tungsten mineralization in Rajasthan;
- (ii) **B.P. Radhakrishna Prize** for the best paper published in the Journal of the Geological Society of India during the year 2007;
- (iii) **Prof. M.R. Srinivasa Rao Award** for outstanding contribution in the field of petrology, given by Geological Society of India, 2010 and
- (iv) Plaque from International Kimberlite Conference Advisory Committee "*In recognition of dedication and sacrifices in brining 10th International Kimberlite Conference from a Dream to Reality*".

A. Books Authored:

1. Fareeduddin 2026 (under print) Geology of Greater Bangalore
2. **Fareeduddin** and R.H. Mitchell (2012) Diamonds and their source rocks in India. Geological Society of India, 434p.
3. N.C. Ghosh, N. Chatterjee and **Fareeduddin** (2014) A Petrographic atlas of Nagahill Ophiolites. An example from the eastern India – Asia collision zone. Springer Verlaag, 234p.

B. Books Edited:

1. **Fareeduddin (Editor-in-chief)** Role of Geology for a sustainable urban growth in India. Special Publication Geological Survey of India. Final manuscripts submitted to the Geological Survey of India.
2. **Fareeduddin (2020)** (Editor-in-Chief) Geodynamic Evolution of Indian Subcontinent: Hadean to Recent. 36th IGC Special Volume. Episodes, Vol. 43, No.1., 667p.
3. **Fareeduddin** and M.S. Rao (2007) Kimberlites and Related Rocks of India. Special Issue of the Geological Society of India, Vol. 69, No. 3.
4. Harsh K. Gupta and **Fareeduddin** (2008) Recent Advances in Earth System Sciences. Memoir---, Golden Jubilee Volume, Geological Society of India, Bangalore.

Research Publications:

1. Authored/co-authored about 80 research papers, published in national and international journals.
2. 18 Unpublished Field Season Project Reports of Geological Survey of India related to Geological Mapping and Mineral Exploration.