Abhijit Mazumder
Scientist C

Marine Micropaleontology Lab II
Birbal Sahni Institute of Palaeobotany
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EDUCATION

Ph. D., Marine Sciences *August, 2005*
Goa University, India
Doctoral dissertation: "*Paleoclimatic Reconstruction through the Study of Foraminifera in Marine Sediments off Central West Coast of India*"
Thesis advisors: **Dr.Rajiv Nigam**, Scientist G, National Institute of Oceanography, Dona Paula, Goa, India.

M.Sc., Geology *February 1999*
Percentage acquired: **65.1%**
University of Calcutta, India
Master's thesis: "*Sedimentation of Gondwana Rocks in and around Kudwe, North Karanpura Coal Field, District Hazaribag, Bihar*"
Thesis advisors: **Dr. Tapan K. Ghosh**, Reader, University of Calcutta, Calcutta, India.

B.Sc., Geology (Hons.); Minors - Mathematics, Chemistry *August 1996*
Percentage acquired: **64.0%**
Presidency College, University of Calcutta, India

Higher Secondary, Pure Sciences *July 1993*
Percentage acquired: **76.4%**
West Bengal Council of Higher Secondary Education, West Bengal

Secondary, General *July 1991*
Percentage acquired: **77.0%**
West Bengal Board of Secondary Education, West Bengal

OTHER QUALIFICATIONS

- GATE (Graduate Aptitude Test for Engineering) *February, 1998*
  Indian Institute of Technology
  Percentile: 95.17; All India Rank: 9 *June, 1999*
- NET (National Eligibility Test)
  Council of Science and Industrial Research

PRESENT ASSIGNMENT

- Scientist 'C' July 21, 2011 till date
  Birbal Sahni Institute of Palaeobotany
  53, University Road
  Lucknow
  Uttar Pradesh – 226 007
  INDIA

PAST ASSIGNMENTS

- Research Scientist B — April 16, 2007 to July 20, 2011
  National Centre for Antarctic and Ocean Research
  Headland, Sada
  Vasco-da-Gama
  Goa – 403 804
  INDIA
- Environmental Scientist — March 1, 2006 to March 20, 2007
  Enviro Analysts & Engineers Pvt. Ltd.
  1-A, Enviro House, Hansa Complex
  Carter Road No. 2, Datta Pada
  Borivali (E), Mumbai – 400 066
  Maharashra, INDIA
- In-Charge, Quality Assurance Department — November 14, 2005 to February 08, 2006
  Chemco Plastic Industries Pvt. Ltd.
  Survey No. 227/1/1
  Village Sayali, Silvassa – 396 320
  Dadra and Nagar Haveli (U.T.), INDIA
- Senior Research Fellow (CSIR) — August 21, 2002 to August 20, 2005
  Geological Oceanography Division
  National Institute of Oceanography
  Dona Paula – 403 004
  Goa, INDIA
- Junior Research Fellow (CSIR-NET) — August 21, 2000 to August 20, 2002
  Geological Oceanography Division
  National Institute of Oceanography
  Dona Paula – 403 004
  Goa, INDIA

FOREIGN VISIT

- Invited to Netherlands Institute of Ecology (NIOO), Yerseke, Netherlands as a scientist during June 14 to June 27, 2004 for discussing and preparing of a collaborative project Oxygen Minimum Benthic Ecological Functioning between India and The Netherlands.

PUBLICATIONS

International

1. S. Dasgupta, J. Ray, **A. Mazumder**, N.K. Sarkar, S. Das and C. Dasgupta (2000). Correlation Characteristics among Minerological Parameters in Porphyritic Granite Bodies around Raghunathpur, Purulia District, West Bengal. *Journal Geological Society of India*, vol.56, pp.263-270.
2. R. Nigam, R. Saraswat and **A. Mazumder** (2003). Life Spans of Planktonic Foraminifers: New Insight through Sediment Traps. Journal of the Paleontological Society of India, vol.48, pp.129-133.
3. **A. Mazumder**, P.J. Henriques and R. Nigam (2003). Distribution of benthic foraminifera within oxygen minima zone, off central West Coast of India. Gondwana Geological Magazine, special volume No. 6, pp.5-12.
4. R. Saraswat, **A. Mazumder**, S. Kurtarkar, R. Nigam, and A. Ganguly (2003). Role of 12S mitochondrial gene on dimorphism and coiling direction in benthic foraminiferal species Pararotalia nipponica. Gondwana Geological Magazine, special volume no. 6, pp.23-27.
5. R. Saraswat, Sujata R. Kurtarkar, **A. Mazumder** and R. Nigam (2004). Foraminifers as indicators of Marine Pollution: A Culture Experiment with *Rosalina leei*. *Marine Pollution Bulletin*, vol.48/1-2, pp.91-96.

6. R. Nigam, **A. Mazumder** and R. Saraswat (2004). *Ammolagena clavata* (Jones and Parker) 1860, An Agglutinated Benthic Foraminiferal Species – First Report from the Indian Ocean Region. *Journal of Foraminifera Research*, vol.34, no.1, pp.74-78.
7. R. Nigam, **A. Mazumder**, P.J. Henriques and R. Saraswat (2007). Benthic foraminifera as proxy for Oxygen-depleted conditions off central west coast of India. *Journal of the Geological Society of India*, vol.70, pp.1047-1054.
8. N. Khare, S.K. Chaturvedi and **A. Mazumder** (2007). An Overview of foraminiferal studies in nearshore regions off eastern coast of India, and Andaman and Nicobar Islands. *Indian Journal of Marine Sciences*, vol.36, no.4, pp.288-300.
9. N. Khare, R. Saraswat, **A. Mazumder**, P. Govil and S.K. Chaturvedi (2007). Micropaleontological investigations during pilot expedition to the southern ocean: Indian initiative. Indian Journal of Polar Science, vol.1, pp.43-52.
10. N. Khare, **A. Mazumder** and P. Govil (2007). Climate Change – Role of proxies for paleoclimatology. Proc. A. P. Akademi of Sciences, Hyderabad, vol.11, no.4, pp.291-304.
11. **A. Mazumder**, B. Ghosh and T.K. Ghosh (2008). Sedimentation of lower Gondwana rocks around Garikalan-Kudwe area, North Karanpura Coalfield, Hazaribag District, Jharkhand. Proc. A. P. Akademi of Sciences, Hyderabad, vol.12, no.3, pp.320-329.
12. N. Khare, P. Govil and **A. Mazumder** (2009). Latitudinal trends in morphological characteristics of *Neogloboquadrina pachyderma* (Ehrenberg) along a north-south transect in south western Indian Ocean. *Geo-Marine Letters*, vol.29, pp.61-69.
13. **A. Mazumder**, N. Khare and P. Govil (2009). Cosmopolitanism of the planktonic foraminiferal species *Globigerinita glutinata* – A testimony by Q-mode cluster analysis. *International Journal of Geology*, Vol.3, no.1, pp.1-7.
14. N. Khare, **A. Mazumder**, P. Govil and V.P. Singh (2009). Environmental implication on Chamber Accretion of Neogloboquadrina pachyderma (Ehrenberg) in Southern Indian Ocean. *Journal of Geological Society of India*, vol.73, pp.379-385.
15. R. Nigam, V. Prasad, **A. Mazumder**, R. Garg, R. Saraswat and P.J. Henriques (2009). Late Holocene changes in hypoxia off the west coast of India: Micropaleontological evidences. *Current Science*, vol.96, no.5, pp.708-713.
16. N. Khare, **A. Mazumder**, R. Srivastava and A. Wangneo (2009). Biological and morphological studies carried out in Antarctic lakes. International Journal of Lakes and Rivers, vol.2, no.1, pp.57-102.
17. N. Khare, **A. Mazumder** and R. Saraswat (2009). Geochemical and geophysical studies carried out in Antarctic lakes. International Journal of Lakes and Rivers, vol.2, no.1, pp.103-161.
18. N. Khare, **A. Mazumder** and P. Govil (2010). Abundance and coiling direction in planktic species Neogloboquadrina pachyderma (Ehrenberg) as indicators of hydrological conditions: evidence from N–S transect of Indian Ocean. *Current Science*, vol.98, no.8, pp.1108-1112.
19. N. Khare, P. Govil, P. Kumar, **A. Mazumder**, S. Chopra, J. K. Pattanaik, S. Balakrishnan and G. S. Roonwal (2011). ^{10}Be as paleoclimatic tracer: initial results from south western Indian Ocean sediments. *Journal of Radioanalytical and Nuclear Chemistry*, DOI 10.1007/s10967-011-1218-4.
20. P. Govil, **A. Mazumder**, A. Tiwari and S. Kumar (2011). Holocene climate variability from lake sediment core in Larsemann Hills, Antarctica. *Journal Geological Society of India*, vol.78, pp.30-35.
21. N. Khare, **A. Mazumder** and P. Govil (2012). Do Changes in coiling directions in planktonic foraminifera correspond to dimorphic reproduction? *Okeanologiya*, vol. 52, no. 3, pp. 364-371.
22. **A. Mazumder**, R. Nigam and P.J. Henriques (2012) Deterioration of Early Holocene coral reef due to sea level rise along west coast of India: Benthic foraminiferal testimony. *Geoscience Frontiers*, vol. 3, no. 5, pp. 697-705.

23. P. Govil, R. Asthana, **A. Mazumder** and R. Ravindra (2012). Grain size distribution and its influence on biological productivity during Holocene in a fresh water lake in Larsemann Hills, Antarctica. *National Academy Science Letters*, vol.35, no.2, pp.115-119.
24. **A. Mazumder**, P. Govil, A. K. Ghosh and R. Ravindra (2012). Significant research on diatom in Antarctica lake during last decade. *Journal of Algal Biomass Utilization*, vol. 3, no. 4, pp.74-79.
25. **A. Mazumder**, P. Govil, R. Ravindra and N. Khare (2013). Indication of colder condition within Holocene period in a freshwater lake in Vestfold Hills area, East Antarctica region. *Geosciences Journal*, vol. 17, no. 2, pp. 235-239.
26. **A. Mazumder** and P. Govil (2013). Signature of warmer Late Holocene around Vestfold Hills, East Antarctica. *Canadian Journal of Basic and Applied Sciences*, vol. 1, no. 1, pp. 33-43.
27. **A. Mazumder**, P. Govil, S. Sharma, R. Ravindra, N. Khare and S.K. Chaturvedi (2013). A testimony of detachment of an inland lake from marine influence during the mid-Holocene in the Vestfold Hills region, East Antarctica. *Limnological Review*, vol. 13, no. 4, pp. 209-214.
28. **A. Mazumder** and R. Nigam (2014). Bathymetric preference of four major genera of rectilinear benthic foraminifera within oxygen minimum zone in Arabian Sea off central west coast of India. *Journal of Earth System Science*, vol. 123, no. 3, pp. 633-639.
29. **A. Mazumder**, N. Khare and P. Govil (2014). The interdependency of the morphological variations of the planktonic foraminiferal species Globigerina bulloides in surface sediments on the environmental parameters of the southwestern Indian Ocean. *International Scholarly Research Notices*, DOI: dx.doi.org/10.1155/2014/621479.
30. P. Govil, **A. Mazumder**, R. Asthana, A. Tiwari and R. Mishra (2016). Holocene climate variability from the lake sediment core in Schirmacher Oasis region, East Antarctica: Multiproxy approach. *Quaternary International*, http://dx.doi.org/10.1016/j.quaint.2016.09.032.
31. **A. Mazumder**, N. Khare and P. Govil (2016). Statistical Approach to Correlate the Morphological Variations in Foraminifera Neogloboquadrina Pachyderma with the Hydrological Parameters in Surface Sediments along NS Transect in SW Indian Ocean. *International Journal of Earth Sciences and Engineering*, vol. 9, no. 3, pp. 966-972.
32. **A. Mazumder**, P. Govil, R. Kar, N.M. Gayathri and Raghuram (2017). Palaeoenvironments of a proglacial lake in Schirmacher Oasis, East Antarctica: Insights from quartz grain microtextures. *Polish Polar Research*, Vol. 38, no. 1, pp. 1-19.

STUDENT GUIDANCE

1. P.S. Vijay Kumar (2008). Sedimentary analysis of glacial samples near Maitri station, Schirmacher Oasis, Antarctica. Int. M.Sc., Indian Institute of Technology, Kharagpur. **Co-supervisor.**
2. S.V. Nagendra Bharadwaz (2008). Sedimentary analysis of Antarctic lake core sediments, Larsemann Hills. M.Sc., Indian Institute of Technology, Kharagpur. **Co-supervisor.**
3. Shalini Sharma (2009). Study of diatoms and quartz grains from fresh water lake core sediments, Larsemann Hill, Antarctica, and their paleoclimatic implications. M.Sc. (Tech.), Banaras Hindu University, Banaras. **Supervisor.**
4. Sandeep Kumar (2009). Paleoclimatic studies of two lakes sediment cores from Larsemann Hill, Antarctic based on geochemical proxies. M.Sc. (Tech.), Banaras Hindu University, Banaras. **Co-supervisor.**
5. Emmanuel Barreto (2010). Study of core sediment samples from Antarctica Lake. B.Sc., Fergusson College, Pune. **Supervisor.**
6. Shubham Singh (2012). Integrated study of calcareous algae and benthic foraminifera from Palaeogene sequence of Assam shelf (***Summer Internship Training***). B.Tech., University of Petroleum and Energy Studies, Dehradun. **Supervisor** (Jointly with Dr.A.K. Ghosh).

7. Surabhi Ramachandran Pillai (2013). Study of pollen and diatom from polar sediments: A palaeoclimatic perspective. M.Sc. Dissertation. Cochin University of Science and Technology, Cochin. **Co-supervisor.**
8. Gayathri N.M. (2014). Sedimentological and micropalaeontological studies of two lake sediment cores from Schirmacher Oasis and Larseman Hills, East Antarctic. M.Sc. Dissertation. Cochin University of Science and Technology, Cochin. **Supervisor.**

MEMBERSHIPS/FELLOWSHIPS

1. **Paleontological Society of India**, Lucknow – Life Member since 2003
2. **Indian Geophysical Union**, Hyderabad – Life Member since 2003
3. **Indian Science Congress Association**, Kolkata – Life Member since 2003
4. **Palaeobotanical Society of India**, Lucknow – Life Member since 2013
5. **Gondwana Geological Society**, Nagpur – Life Member since 2015

PROJECT

1. **Geophysical and limnological investigation of Antarctic lakes and their paleoclimatic implications** [In-house project, NCAOR from 2007 to 2011]
2. **Study of Beryllium-10 concentration in southern high latitudes sediments (lake and ocean)** approved by Inter University Accelerator Centre, New Delhi in August 2007.
3. **Deciphering the Quaternary Climatic History of the Polar Regions: Multi-proxy studies from Antarctica and Arctic** [In-house project, BSIP from 2012 to 2017]
4. **Biofacies analysis from the Cenozoic sediments of Andaman– Nicobar Basin and its implications for palaeogeography, palaeoecology and palaeobathymetry** [In-house project, BSIP from 2012 to 2017]
5. **Macro and micro-phytodiversity and behavioral pattern of pollen deposition in and around endangered wetlands of Assam: a palaeoecological and conservational perspective** approved by Department of Science and Technology, New Delhi in March 2016.

AWARD

1. **ISCA Young Scientist Award, 2004** by Indian Science Congress Association at 91st Indian Science Congress, Chandigarh, India.