

Biodata

Name: Prem Raj Uddandam

Current position: Scientist-B
Address: Birbal Sahni Institute of Palaeosciences,
53 University Road, Lucknow, Uttar Pradesh
India- 226007.

E-mail: Premraj@bsip.res.in
premrajuddandam@gmail.com



Educational Qualifications:

- Postdoctoral (23-10-2018 onwards-present)

Title: “Centennial to millennial scale oceanographic and monsoon variability in the eastern Arabian Sea based on dinoflagellate cyst record, during the last glacial cycle”.

Mentor: Prof. Arun Deo Singh,
Department of Geology,
Institute of Science,
Banaras Hindu University

- Ph. D: (Awarded from Kumauan University in December, 2017)

Title: “Study of Organic walled dinoflagellate cysts and paleoenvironmental fluctuations from the sediments of Bay of Bengal”.

Supervisor: Dr. Vandana Prasad, Birbal Sahni institute of Palaeosciences

<u>Degree</u>	<u>University/college</u>	<u>Marks/Grades</u>
Msc (Botany)	Osmania University, India; 2011	8.47 CGPA
BSC	Osmania University, India; 2009	69%
Intermediate	NVJC, Andhra Pradesh	88.47 %
SSC	SVVN high school, AP, India, 2004	90%

Research Interest:

- Reconstruction of primary productivity variation in relation to seasonal monsoon dynamics in the Northern Indian Ocean using dinoflagellate cysts and palynofacies proxies
- Reconstruction of past changes in the OMZ in the Arabian Sea using biological and isotopic proxies
- Cretaceous-Paleogene biostratigraphy of Indian sedimentary deposits using dinoflagellate cysts
- Paleoclimate reconstruction of late Mesozoic-Cenozoic using dinoflagellate cysts and palynofacies analysis.

Ongoing research activity

- Reconstruction of Cenozoic climates and biostratigraphy utilizing organic walled dinoflagellate cysts from Meghalaya and Rajasthan basin, India.
- Reconstruction of centennial to millennial scale changes in the primary productivity in the eastern Arabian Sea based on dinoflagellate cyst record, during the last glacial cycle
- Reconstruction of spatial and temporal variation in the Oxygen minima zones from the northern Indian Ocean utilizing dinoflagellate cysts and palynofacies proxies.

Publications

- Verma, K., Singh, A D., Singh, P., Singh, H., Satpathy, R K., Uddandam, P R., & Naidu, P D. 2022. Monsoon-related changes in surface hydrography and productivity in the Bay of Bengal over the last 45 kyr BP. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 589, 110844.
- Manoj, M C., Thakur, B., & Uddandam, P R. 2021. Controls on rare earth elements distribution from Kerala coast, southwest India over the past 2000 years. *Environmental Forensics*, 1-16.
- Manoj, M C., Srivastava, J., Uddandam, P R., & Thakur, B. 2020. A 2000 Year Multi-Proxy Evidence of Natural/Anthropogenic Influence on Climate from the Southwest Coast of India. *Journal of Earth Science*, 31(5), 1029-1044.
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- Uddandam, P R., Prasad, V., & Manoj, M. C. 2020. New dinoflagellate cysts from the recent sediments of northern Indian Ocean. *Journal of the Palaeontological Society of India*, 65(1), 15-26.
- Prasad, V., Uddandam, P R., Agrawal, S., Bajpai, S., Mishra, A. K., Sharma, A., & Verma, P. 2020. Biostratigraphy, palaeoenvironment and sea level changes during pre-collisional (Palaeocene) phase of the Indian plate: palynological evidence from Akli Formation in Giral Lignite Mine, Barmer Basin, Rajasthan, Western India. *Episodes Journal of International Geoscience*, 43(1), 476-488.
- Uddandam, P R., Prasad, Thakur, B., Mc Manoj. 2018. *Crisatdinium straiospinousa* sp. nov. a new low latitude dinoflagellate cyst. *Paleontological society of India*. V 63 (1), 73-80.
- Manoj, M C., Thakur, B., Uddandam, P R., Prasad, V. 2018. Assessment of metal contamination in the sediments of Vembanad wetland system, from the urban city of southwest India. *Environmental Nanotechnology, Monitoring & Management*. V 10- 238-252.
- Prasad, V., Utescher, V., Sharma, A., Singh, I. B., Srivastava, J., Gogoi, B., Garg, R., Uddandam, P R and Joachimski, M. M. 2018. Reconstruction of the equatorial climate during Paleocene Eocene Thermal Maximum based on palynological records from northeast India. *Paleogeography, Paleoclimatology, Paleoecology*. V 497. 139-156.
- Uddandam, P R., Prasad, V and Rai., J. 2017. Dinoflagellate cysts distribution in the sediments of western Bay of Bengal: Role of sea surface conditions and preservation. *Paleogeography, Paleoclimatology, Paleoecology*, V 483C, 31-48.
- Uddandam, P R., Prasad, V., Rai, J and Joshi, H. 2015. Distribution pattern of organic-walled dinoflagellate cysts from the Bay of Bengal. *Paleontological society of India*, V 60(2), 11-19.
- Thakur, B., Srivastava, J., Uddandam, P R., M C, M., and Prasad, V. 2015. Role of sedimentary processes and environmental factors in determining the distribution pattern of marine and terrestrial palynomorphs and diatoms in a tropical coastal wetland. *Paleontological society of India*. V 60(2). 71-84.
- Uddandam, P R., Rai, J., Prasad, V., Joshi, H and Nigam, R. 2015. Holocene calcareous nannoplanktons from the western continental shelf of Bay of Bengal. *Geophytology* 45(2), 195-200.

Abstracts

- Manoj, M C., Srivastava, J., Uddandam, P R., Thakur, B., Seth, P. 2018. A 2000 year record of palaeoclimatic variability from Kerala coast, southwest India. American Geophysical Union (accepted).
- Uddandam, P R., Prasad, V and Thakur., B. 2013. Distribution of organic walled dinoflagellate cyst from the west coast of India. ICMS, XXIV, Dehradun, India, P 99.
- Uddandam, P R., Prasad, V., Rai, J and Nigam, R. 2014. Morphological variability in the protoperidinioid cysts from the Bay of Bengal. Quaternary international symposium, Birbal Sahni Institute of Paleobotany, Lucknow, India, P 75.
- Uddandam, P., Prasad. 2016. Effect of freshwater discharge on morphological variation within the Peridinioid dinoflagellate cyst. Neclime Asian meeting, Birbal Sahni Institute of Paleobotany, Lucknow, India, P 69.
- Participated in Quaternary environments and climates: Focus on Holocene and Anthropocene 21-23 February, 2017 organized by Birbal Sahni Institute of Paleosciences, Lucknow.

Poster presentation

- Uddandam, P R., Prasad, V and Thakur., B. 2013. Distribution of organic walled dinoflagellate cyst from the west coast of India. ICMS, XXIV, Dehradun, India.
- Uddandam, P R., Prasad, V., Rai, J and Nigam, R. 2014. Morphological variability in the protoperidinioid cysts from the Bay of Bengal. Quaternary international symposium, Birbal Sahni Institute of Paleobotany, Lucknow, India.
- Uddandam, P., Prasad. 2016. Effect of freshwater discharge on morphological variation within the Peridinioid dinoflagellate cyst. Neclime Asian meeting, Birbal Sahni Institute of Paleobotany, Lucknow, India.

Field experience

- Participated in oceanographic cruise on board ORV Sagar Kanya as part of the project 'Paleoclimatic studies from the Bay of Bengal' during December 2013-January 2014 in the western Bay of Bengal between 8-19°N.

Workshops and conclaves attended:

- Participated in the Indian Geophysical Union Golden Jubilee workshop “Marine Geosciences Research in India: Current Status and Future Directions” held at the CSIR-National institute of Oceanography, Goa. 21-22 February 2013.
- Conclave on ‘Understanding the Life of Bygone Eras: Emerging Trends’ conducted by Birbal Sahni Institute of Palaeobotany, Lucknow, 14-15 of November 2013
- Coursework on ‘Palaeosols’ by Prof. Greg Retallack organized by Birbal Sahni Institute of Palaeobotany, Lucknow, 6-12 November 2013.

Awards and fellowships

- DR. DS Kothari **Higher** Postdoctoral fellowship in Earth and Space sciences for the duration 2018-2010.
- Junior research fellowship in the MoES funded project entitled “High resolution Paleoclimatic studies from the Bay of Bengal” no. MoES/SIBER/RN(NIO)/11.
- Best poster award at the Quaternary international symposium held at Birbal Sahni Institute of Paleobotany, India in 2016.