Curriculum Vitae

Runcie Paul Mathews

Scientist-B

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Educational Qualifications

Qualification	Year of Passing	Name of the Institution
PhD	2012	IIT Bombay
M.Sc. Geology	2006	Kerala University Campus, Trivandrum
B.Sc. Geology	2004	Govt. College, Kottayam, Kerala
Higher Secondary	2001	Vivekodayam B.H.S.S., Trissur, Kerala
S.S.L.C.	1999	Bethany St. Johns E.H.S., Kunnamkulam, Trissur, Kerala

Current Research Areas

- > Organic matter characterization of western Indian lignites through petrological studies.
- Organic petrographical and geochemical characterization of Tertiary lignite bearing sequences of south India
- > Organic geochemical studies of Gondwana coal from Rajmahal and Damodar Basins.

PhD

Title : Petrology, Palynology and Organic Geochemistry of Eocene Matanomadh Lignite Bearing Sequence, Kutch Basin, Western India.

Guide: Dr. Suryendu Dutta, Professor, Dept. of Earth Sciences, IIT Bombay.

Scope: Multidisciplinary study of Eocene Matanomadh lignites and associated sediments using, organic petrology, palynology and Organic geochemistry to identify the source vegetation, environment of deposition and hydrocarbon source potential of these deposits.

Areas of Academic Interests

Lignite/Coal Petrology, Organic Geochemistry, Tertiary Palynology.

Academic Achievements

- Qualified CSIR-JRF, UGC-CSIR Examination, December 2006
- ➤ Qualified NET, UGC-CSIR Examination, June 2006
- Ranked 2nd in the Kerala University (Credit and Semester), in M.Sc. (Geology), 2006.
- Ranked 13th in Geologists Examination (UPSC), 2009.
- ➤ Best poster presentation Award, National Conference & XXVII Convention of IAS, University of Jammu, 2010, Jammu.
- ➤ Best presentation Award, Third Neogene Climate Evolution in Eurasia (NECLIME) Asian meeting, February 23-27th, **2016**, Lucknow, India.

Conferences/Meetings Attended

➤ Third Neogene Climate Evolution in Eurasia (NECLIME) Asian meeting, February 23-27th, **2016**, Lucknow, India.

- ➤ 67th Annual Meeting of the International Committee for Coal and Organic Petrology. September 5-11, **2015**, Potsdam, Germany.
- National Conference on Paleogene of the Indian Subcontinent. April 23-24, **2015**, Lucknow, India.
- International Conference on Current Perspectives and Emerging Issues in Gondwana Evolution. Feb 19-20, **2015**. BSIP, Lucknow.
- ➤ 66th ICCP International Meeting and Symposium, 20-27th Sept. **2014**. Science City, Kolkata.
- ► GeoIndia 2011, the 2nd South Asian Conference and Exhibition, 12-14th Jan **2011**, Greater Noida.
- National Conference & XXVII Convention of IAS, University of Jammu, **2010**, Jammu.
- AAPG Annual Convention and Exhibition, Denver, Colorado, USA. June 7-10, 2009.
- National Conference & XXVII Convention of IAS, M.S. University, 2008, Baroda.
- ➤ GeoIndia 2008, the 1st South Asian Conference and Exhibition, Dec **2008**, Greater Noida.

Workshop/seminar Attended

- ➤ Seminar on 'Advanced Detection and Separation' organized by Agilent technologies at Sapna Clarks Inn, Lucknow, 18th May, **2018.**
- FTIR microscopy and chemical imaging' organized by Agilent technologies at Manesar facility, Haryana, 23rd June, **2017.**

Geological Field Experiences

- Kangra, Chamba, Mandi, Hamirpur, Una districts of Himachal Pradesh
- ▶ **Ph.D:** Extensive field work in the Tertiary rocks of kutch basin, Fieldworks in Panandhro, Matanomadh, Akri lignite mines (Kutch), Vastan, Tarakeshwar lignite mines (Surat), Warkalli Lignites, Southern Kerala. Deccan traps exposures in and around Mumbai.
- ➤ M.Sc.: Field work in Ayirur river basin, Kollam, Southern Kerala.
- ▶ **B.Sc.:** Fieldwork in and around Cudappah, Kurnool areas of Andhra Pradesh and Jodhpur, Jaisalmer, Udaipur areas of Rajasthan. Field Work around Holenarispur, Kanjamali, Malpe in Karnataka. Field Work around Warkalli Cliff in Southern Kerala, Muttam, Kanyakumari and Neyveli Lignite mine in Tamil Nadu.

Geophysical Field Experiences

➤ Electrical resistivity survey study in using Schlumberger array (2004), in Ayirur River Basin, Kollam, Kerala (2006).

Work Experience

- > Scientist B, Birbal Sahni Institute of Palaeosciences, Lucknow, India (2014 present).
- > Scientist B, Central Ground Water Board, Northern Himalayan Region, Dharamsala, H.P., India (2012-2014).
- **Research Scholar**, Department of Earth Sciences, IIT Bombay, India (2007-2012).
- **Photogrammatrist**, Photogrammatry Division, DSM Soft Ltd Trichy, Tamil Nadu, India (2007).

Affiliations

Associate Member of the International Committee of Coal and Organic Petrology

Publications

Literatures Published

- 1. Mathews R.P., Singh B.D., Singh V.P., 2018. Evaluation of organic matter, hydrocarbon source, and depositional environment of onshore Warkalli sedimentary sequence from Kerala-Konkan Basin, south India. Journal of Geological Society of India (accepted: JGSI-D-17-00308R1)
- 2. Mathews R.P., Singh B.D., Hukam Singh, Singh V.P. and Alpana Singh 2018. Characterization of Panandhro Lignite Deposits (Kachchh Basin), western India: Results from the Bulk

- Geochemical and Palynofloral Compositions. *Journal of Geological Society of India 91, pp. 281-289.*
- 3. Singh V.P., Singh B.D., **Mathews R.P.**, Singh A., Mendhe, V.A., Singh, P.K., Misra, S., Dutta S., Mahesh S., Singh, M.P., **2017.** Investigation on the lignite deposits of Surkha mine (Saurashtra Basin, Gujarat), western India: Their depositional history and hydrocarbon generation potential. *International Journal of Coal Geology*, **183** (2017) 78–99.
- 4. Singh A., Mahesh S., **Mathews R.P.**, Singh B.D., Singh H., Singh V.P., Dutta S., **2017**. Paleoenvironment of Eocene lignite bearing succession from Bikaner-Nagaur Basin, western India: Organic petrography, palynology, palynofacies and Geochemistry. *International Journal of Coal Geology* **181**, 87–102.
- 5. Vikram P. Singh, Bhagwan D. Singh, Alpana Singh, Mahendra P. Singh, Runcie P. Mathews, Suryendu Dutta, Vinod A. Mendhe, S. Mahesh, Subhashree Mishra, 2017. Depositional palaeoenvironment and economic potential of Khadsaliya lignite deposits (Saurashtra Basin), western India: based on petrographic, palynofacies and geochemical characteristics. *International Journal of Coal Geology 71, 223-242*.
- 6. Mahesh Shivanna, Alpana Singh, Bhagwan D. Singh, Vikram Partap Singh, Runcie Paul Mathews, Paulo A. Souza 2017. Peat biomass degradation: Evidence from fungal and faunal activity in carbonized wood from the Eocene sediments of western India. *Palaeoworld 26*, 531-542.
- 7. Runcie P. Mathews and Bhagwan D. Singh, 2016. Characterization of solid bitumen from Panandhro lignite (western India) based on FTIR and pyrolysis GC-MS investigation. *Current Science* 111, 1842-1846.
- 8. Mathews, R.P., Tripathi, S.K.M., Dutta, S., Banerjee, S., 2013. Palynology, palaeoecology and palaeodepositional environment of Eocene lignites and associated sediments from Matanomadh mine, Kutch Basin, western India. *Journal of the Geological Society of India* 82, 236-248.
- 9. Dutta. S., **Mathews, R.P.**, Singh, B.D., Tripathi, S.K.M., Singh, A., Saraswati, P.K., Banerjee, S., Mann, U., **2011**. Petrology, Palynology and Organic Geochemistry of Matanomadh lignite, Kutch Basin, Western India: Implications to Palaeodeposition and Hydrocarbon Source Potential. *International journal of coal geology 85, 91-102*.
- Dutta, S., Tripathi, S.K.M., Mallick, M., Mathews, R.P., Greenwood, P.F., Rao, M.R., Summons, R.E., 2011. Eocene-out-of-India dispersal of Asian dipterocarps, Rev. Palaeobot. Palynol. 166, 63-68.
- 11. Dutta, S., Mallick, M., **Mathews, R.P.**, Mann, U., Greenwood, P.F., Saxena, R., **2010**. Chemical composition and palaeobotanical origin of Miocene resins from Kerala–Konkan Coast, western India. *Earth Syst. Sci.* 119(5) pp. 711–716.
- 12. Dutta, S., Mallick, M., Bertram, N., Greenwood, P.F., **Mathews, R.P.**, **2009**. Terpenoid composition and class of Tertiary resins from India. *International Journal of Coal Geology 80*, 44–50.

Conference Publications

- Bhagwan D. Singh, Vikram P. Singh, Runcie P. Mathews, Alpana Singh, Suryendu Dutta, Mahendra P. Singh, Vinod A. Mendhe and Mahesh Shivanna, 2016. Petrography and Geochemistry in relation to depositional conditions and hydrocarbon potential of Surkha lignite deposits (Saurashtra Basin), western India (TSOP-AASP-ICCP joint meeting, Houston, Texas USA, 18-23th, Sept.) P. 108.
- 2. Vikram P. Singh, Bhagwan D. Singh, Mahendra P. Singh, Alpana Singh, Mahesh Shivanna, **Runcie P. Mathews**, Suryendu Dutta, Vinod A. Mandhe and Subhashree Mishra, **2016**. Investigation of lignite deposits from Saurashtra Basin, Gujarat: their depositional history and hydrocarbon potential in western India. National Geo-Research Scholars Meet. p:146.
- 3. Runcie P. Mathews, Vikram P. Singh and Bhagwan D. Singh, 2016. Characterization of Miocene-Pliocene Onshore Warkalli Sedimentary Sequence (Kerala-Konkan Basin, South

- India), based on Organic Geochemical and Visual Kerogen Data. 3rd Neogene Climate Evolution in Eurasia (NECLIME). p:34d
- 4. **Mathews, R.P.**, Singh, H., Singh, V.P., Singh, B.D., Singh, A., **2015**. Organic composition and palaeoenvironment of Valia Lignite Deposit (Cambay Basin), Gujarat, western India: inferences from palynology and petrography. 67th Annual Meeting of the International Committee for Coal and Organic Petrology. September 5-11, 2015, Potsdam, Germany p. 117
- 5. **R.P Mathews,** Alpana Singh, S. Mahesh, V.P. Singh, B.D. Singh, Suryendu Dutta, **2015**. Hydrocarbon Potential and Depositional Conditions of Gurha Lignite Deposits (Bikaner Basin), Rajasthan, Western India. National Conference on Paleogene of the Indian Subcontinent. April 23-24. P.67.
- 6. Singh, A., **Mathews, R.P.**, Singh, H., Singh, B.D., Dutta. S., **2015**. Geochemical, Palaeopalynological, and Petrographical Features of Gurha Lignite (Rajasthan), western India: An insight into the Palaeovegetation. 67th Annual Meeting of the International Committee for Coal and Organic Petrology. September 5-11, 2015, Potsdam, Germany p. 58
- 7. B.D. Singh, Alpana Singh, Anju Saxena, Neerja Jha, **R.P Mathews**, Petrographic Facies in Lower Gondwana of Peninsular India: An assessment from Singrauli Coal Field (Son Valley). International Conference on Current Perspectives and Emerging Issues in Gondwana Evolution. Feb 19-20, **2015**. BSIP, Lucknow.
- 8. Singh, A., Mahesh, S., Singh, B.D., **Mathews, R.P.** Singh, H., Singh V.P., Dutta. S., **2014**. Petrography, Palynology, Palynofacies and Organic Geochemistry of Matasukh Lignite Deposits (Rajasthan), Western India: An Insight into the Organic Composition, Depositional Environment and Hydrocarbon Potential. 66th ICCP International Meeting and Symposium, 20-27th Sept. Kolkata.
- 9. **Mathews, R.P.**, Singh, B.D., Singh, A., Dutta, S., **2014**. Bulk Organic Geochemical and Petrographical Evaluation of the Eocene Panandhro Lignite Deposits (Kachchh Basin), Western India. 66th ICCP International Meeting and Symposium, 20-27th Sept. Kolkata.
- Dutta, S., Tripathi, S.M., Mallick, M., Mathews, R.P., Greenwood, P.F., Rao, M.R., Summons., R., 2012. Origin and evolution of Asian dipterocarps. Japanese Journal of Palynology 58, 52-53 (IPC, Tokyo, 2012).
- 11. **Mathews, R.P.,** Dutta, S., Banerjee, S. Singh, B.D., Tripathi, S.K.M., Singh, A., **2011**. Hydrocarbon source potential of Tertiary lignites of Kutch basin, Petrography, palynology and organic geochemistry. GeoIndia 2011, the 2nd South Asian Conference and Exhibition, 12-14th Jan **2011**, Greater Noida.
- 12. Mallick, M., Dutta, S., **Mathews, R.P., 2011**. Macromolecular Composition of Tertiary and Cretaceous Resins from India: It's application in hydrocarbon exploration. GeoIndia 2011, the 2nd South Asian Conference and Exhibition, 12-14th Jan **2011**, Greater Noida.
- 13. Mathews, R.P., Dutta, S., Tripathi, S.K.M., Banerjee, S. Organic geochemistry and palynology of Matanomadh lignites, W. India in relation to hydrocarbon source potential. National Conference & XXVII Convention of IAS 2010. University of Jammu.
- 14. Mathews, R.P., Dutta, S., Banerjee, S. Organo-geochemical characteristics of Kutch lignites and carbonaceous shales and its application on source rock evaluation. AAPG Annual Convention and Exhibition, Denver, Colorado, USA. June 7-10, 2009.