Dr. Srikanta Murthy, Scientist "E"

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Gondwana palaeobotany Division
Birbal Sahni Institute of Palaeosciences (BSIP)
53 - University Road, Lucknow – 226 007,
Uttar Pradesh, **INDIA**.
E-mail: srikanta_murthy@bsip.res.in; srikanta_murthy22@redifmail.com
Telephone: +91- 522 - 2742997 (*Office*); +91 9935793412 (*Mobile*)
Telefax : +91- 522 - 22740485 (*Office*)

EDUCATION

- **M.Sc Geology, Ph.D**

PROFESSIONAL EXPERIANCE

- **01/01/2121 to present** : **Scientist-E,** in BSIP, Lucknow, India
- **01/01/2017 to 31/12/2020** : **Scientist-D,** in BSIP, Lucknow, India
- **01/01/2013 to 31/12/2016** : **Scientist-C,** in BSIP, Lucknow, India
- **01/02/2006 to 31/12/2012** : **Scientist-B,** in BSIP, Lucknow, India

FIELD OF SPECILIZATION

- Gondwana Palynology

CURRENT RESEARCH INTEREST

- Biostratigraphy, Palaeoclimate, Palaeodepositional environment of Gondwana sequences.
- Palaeowildfires.

SPONSORED PROJECTS

2016-2018: **Principal Investigator**

- Project: Palyno-biozonation and palaeoclimatic reconstruction of Permo-Mesozoic sediments, West Bokaro Coalfield, Damodar Basin

2019- 2022: Principal Investigator

- Project: Biozonation and Palaeoclimatic reconstruction of Permo-Triassic sediments from Talchir Coalfield, Mahanadi Basin, Odisha, India

PUBLICATION

1. **Murthy, S.,** Jasper, A., Uhl, D. 2023. Macro-charcoal as evidence for wildfire events during the ValanginianeHauterivian and Barremian? (Rajmahal Formation, Lower Cretaceous) in the Raniganj Coalfield, West Bengal. Cretaceous Research 151 (2023) 105625

2. **Murthy, S.,** Saxena, A., Pillai, S.S.K. and Gupta S. (2023). Reappraisal of Permian and Early Triassic palynoflora and palynostratigraphy of Son-Mahanadi Basin and their climatic implications. In Samant, B. (Ed.) Application of Palynology in stratigraphy and climate studies. Springer Nature Publishing (Accepted).

3. Sahoo, M., **Murthy, S**., Saxena, A., Pillai, S.S.K. and Kumar, S. (2023). Significance of palynology in understanding age, palaeoclimate and correlation of Indian Gondwana sediments. In Samant, B. (Ed.) Application of Palynology in stratigraphy and climate studies. Springer Nature Publishing (Accepted).

4. Pillai, S.S.K., Manoj, M.C., Mathew, R.P., **Murthy, S.,** Sharma, A., Sahoo, M., Saxena, A., Pradhan, S., and Kumar, S. (2023). Lower Permian Gondwana sequence of Rajhara (Daltonganj Coalfield), Damodar Basin, India: Floristic and geochemical records and their implications on marine ingressions and depositional environment. *Environmental Geochemistry and Health* (Accepted)

5. Saxena A, Suyash Gupta S, S. Pillai SSK, **Murthy S,** Agnihotri D, Khnagar R, Savita C and Merajjuddin Khan M, 2022. Late Permian macrofloral remains from the Bijori Formation, Satpura Gondwana Basin and their biostratigraphic Implications. Geophytology 51(1&2): 41–58

6. Deveshwar Prakash Mishra, Vikram Partap Singh , Anju Saxena, Dieter Uhl, **Srikanta Murthy,** Bindhyachal Pandey , Raj Kumar. 2022. Palaeoecology and depositional setting of an Early Permian (Artinskian) mire based on a multi-proxy study at the Jagannath coal mine (Talcher Coalfield), Mahanadi Basin, India. Palaeogeography, Palaeoclimatology, Palaeoecology, https://doi.org/10.1016/j.palaeo.2022.111124

7. **Murthy S**., Uhl D., Jasper A., Sarate OSS and Mishra D.P. (2022). New Evidence for Palaeo-wildfire in the Early Permian (Artinskian) of Gondwana from Wardha Valley Coalfield, India. **Geological Society of India. Journal of Geological Society of India,** 98:395-401.

8. Gupta, S., Saxena, A*., Shabbar, H., **Murthy, S**., Singh, K.J. and Bali, R. (2022). First record of late Carboniferous palynoassemblage from Ganmachidam Formation, Spiti Valley: Implications for age assessment and extent of Glossopterid elements in the Tethyan realm. ***Geological Journal*** (DOI: https://doi.org/10.1002/gj.4400).

9. Gautam S, Mendhe VA, **Murthy S,** Mishra DP, and Mishra VK. 2022. Palynoassemblages and depositional environment of the subsurface Permian sediments in

Raniganj CoalBeld, Damodar Basin, West Bengal, India. Journal Earth System Science. https://doi.org/10.1007/s12040-022-01937-7

10. Deveshwar Prakash Mishra, **Srikanta Murthy,** Bindhyachal Pandey & Ashish Kumar Singh. 2021. Palaeobotanical evidence for Artinskian wildfire in the Talcher Coalfield, Mahanadi Basin, India. Journal of the Palaeontological Society of India, 66(2): 303-314.

11. **Murthy S,** Mendhe VA, Dieter Uhl D, Mathews RP, Mishra VK. and Gautam S. 2021.Palaeobotanical and biomarker evidence for Early Permian (Artinskian) wildfire in the Rajmahal Basin, India. Journal of Palaeogeography, https://doi.org/10.1186/s42501-021-00084-2.

12. Saxena, A., Gupta, S., Singh, K.J., **Murthy, S**., Anand Prakash, Singh, P.K. 2021. Diversity of the genus Gangamopteris McCoy in the Early Permian sequences of Singrauli Coalfield, Son-Mahanadi Basin, India. J. Palaeontological Society of India, 66 (1): 23-34.

13. Bhattacharya, S., Yadav A., **Murthy, S**. and Kushwaha, V. 2021. Biotic response to environmental shift during the Permian-Triassic transition: Assessment from organic geochemical proxies and palynomorphs in terrestrial sediments from Raniganj Sub-basin, India. Palaeogeography, Palaeoclimatology, Palaeoecology 576: 110483.

14. Mishra DP, **Murthy S**, Pandey B. and Singh AK. 2021. Palaeobotanical evidence for Artinskian wildfire in the Talcher Coalfield, Mahanadi Basin, India. Journal of the Palaeontological Society of India Volume 66(2),: 303-314.

15. **Murthy S**, Mendhe VA , Kavali PS , Singh VP. 2020. Evidence of recurrent wildfire from the Permian coal deposits of India: Petrographic, scanning electron microscopic and palynological analyses of fossil charcoal. ***Palaeoworld*** DOI:10.1016/j.Palwor/.2020.03.004

16. **Murthy S**, Mendhe VA, Dieter Uhl D, Runcie Paul Mathews RP, Mishra VK and Gautam S. (2020). Palaeobotanical and biomarker evidence for wildfire in the Early Permian (Artinskian) of the Rajmahal Basin, India. ***Journal of Palaeogeography (***status preliminarily **accepted**

17. **Srikanta Murthy**, Paulin Sabina Kavali, Mercedes di Pasquo and Bhaskar Chakraborti 2020. Late Pennsylvanian and Early Cisuralian palynofloras from the Rajmahal Basin, Eastern India, and their chronological significance. ***Historical Biology***, 32(2): 143–159. https://doi.org/10.1080/08912963.2018.1529763.

18. **Murthy S**, Mendhe VA , Kavali PS , Singh VP. 2020. Evidence of recurrent wildfire from the Permian coal deposits of India: Petrographic, scanning electron microscopic and palynological analyses of fossil charcoal. ***Palaeoworld*** DOI:10.1016/j.Palwor/.2020.03.004**.**

19. **Murthy S**, Aggarwal N and Saxena A. 2020. Early Permian floral diversity and palaeoenvironment of the West Bokaro Coalfield, Damodar Basin, India. ***Journal of Palaeontological Society of India***, 65(1): 1-14.

20. **Murthy S**, Saxena A and Chakraborti B. 2020. Palynostratigraphy of Permian and Mesozoic subsurface sediments of Brahmani coalfield, Rajmahal Basin, India. ***Journal Palaeontological Society of India,*** **65**(2): 149-161**.**

21. Pillai SS K, Mathews, RP, **Murthy, S**, Shreerup Goswami S, Agrawal S, Sahoo, M and Singh, R.K.2020 Palaeofloral Investigation Based on Morphotaxonomy, Palynomorphs, Biomarkers and Stable Isotope from Lalmatia Coal Mine of Rajmahal Lower Gondwana Basin, Godda District, Jharkhand: An Inclusive Empirical Study. ***Journal Geological Society of India***, 96:43-57 **(IF- 1.01)**.

22. Saxena A, **Murthy S** & Singh, K.J. 2019. Floral diversity and environment during the early Permian: a case study from Jarangdih Colliery, East Bokaro Coalfield, Damodar Basin, India. ***Palaeobiodiversity and Palaeoenvironment*** (https://doi.org/10.1007/s12549-019-00375-6).

23. Saxena A, Guptha S, **Murthy S**, Singh KJ, Prakash A and Singh PK. 2020. Diversity of the genus *Gangamopteris* McCoy in the Early Permian sequences of Singrauli Cofleild, Son-Mahanadi Basin, India. ***Journal Palaeontological Society of India*** (accepted).

24. Pillai SS K, Mathews, RP, **Murthy, S**, Shreerup Goswami S, Agrawal S, Sahoo, M and Singh, R.K. 2020. Palaeofloral Investigation Based on Morphotaxonomy, Palynomorphs, Biomarkers and Stable Isotope from Lalmatia Coal Mine of Rajmahal Lower Gondwana Basin, Godda District, Jharkhand: An Inclusive Empirical Study. ***Journal Geological Society of India***, 96:43-57

25. Farooqui A, Tripathi S, Garg A , Shukla A N, **Murthy S** , Prasad V , Sinha G.P. **2019**. Paleotropical lineage of Indian Water Primrose (Ludwigia L., Onagraceae) using pollen morphometric analysis. ***Review Palaeobotany and Palynology,*** 269: 64–77.

26. **Murthy S**, Sarate OS & Aggarwal N. 2019. Palynofloral and Palynofacies Evidences and its Implication on the Depositional Environment from Wardha Valley Coalfield, Maharashtra. ***Journal Geological Society of India,*** 93: 85-94.

27. Aggarwal N, **Murthy S,** S. S. K. Pillai S.S.K and Sarate O.S. 2019. Artinskian Palynoflora and Palaeoclimate of Nand–Besur Block, Bandar Coalfield Wardha Basin, India. ***Journal Palaeontological Society of India,*** **64**(2): 241-255.

28. Saxena A, Singh K.J, **Murthy S,** Prakash A and Singh P.K. 2019. Early Permian Macro and Miofloral Diversity from Singrauli Coalfield, Son-Mahanadi Basin, India. ***Journal Palaeontological Society of India,*** 64(2): 169-183

29. Tripathi S, **Murthy S** and Saxena A. 2018. The 10th European Palaeobotany and Palynology Conference-2018, Dublin, Ireland. ***Journal Geological Society of India***, 92: 769.

30. Prasad, V., Farooqui A., **Murthy**, S., Sarate O.S. and Sunil Bajpai, S., **2018**. Palynological assemblage from the Deccan Volcanic Province, central India: Insights into early history of angiosperms and the terminal Cretaceous paleogeography of peninsular India. ***Cretaceous Research*** 86: 186 -198

31. Mahesh Shivanna, **Srikanta Murthy**, Saurabh Gautam, Paulo A. Souza, Pauline Sabina Kavali, Mary Elizabeth Cerruti Bernardes-de-Oliveira, Ram Awatar, Cristina Moreira Félix. 2017. Macroscopic charcoal remains as evidence of wildfire from late Permian Gondwana sediments of India: Further contribution to global fossil charcoal database. ***Palaeoworld***, 26:638-649**.**

32. **Murthy S** & Rajanikanth A. 2017. Palynology and Palaeoenvironment of Late Permian Sawang OCM, East Bokaro Coalfield, Damodar Basin, India. ***Palaeobotanist*** 66(1): 61-70.

33. **Murthy S**. 2017.Late Permian palynomorphs from the West Bokaro Coalfield, Damodar Basin, Jharkhand, India. ***Palaeobotanist*** 66(2): 201-209.

34. Singh KJ, **Murthy S,** Saxena A and Shabbar H. 2017. Permian macro- and miofloral diversity, palynodating and palaeoclimate implications deduced from the coal-bearing sequences of Singrauli coalfield, Son–Mahanadi Basin, central India. ***Journal of Earth System Sciences***, 126:25 DOI 10.1007/s12040-017-0809-z.

35. Murthy S, Sarate OS, Pillai SKP A and Tewari R. 2017. Early Permian micro and megaspores from the Nand–Besur Block, Bandar Coalfield, Wardha Basin, Maharashtra, India. ***Palaeobotanist*** 66(2): 177-189.

36. Sarate OS and **Murthy S**. 2017. Talchir Palynoflora fromWardha Valley Coalfield, Central India:Climatic Implications. ***Journal of Geosciences Research****, 2(2): 139 – 148*

37. Mahesh S, **Murthy S**, Pauline Sabina K, Saran S & Singh VP 2016. Organic Matter Characterization of Carbonaceous Shales from Raniganj Coalfields and its Implications on Depositional Condition: A Palynofacies and Petrographic Overview. *J. Geol. Soc. India* 87: 132-144.

38. Singh YR, Singh BP, **Murthy S** , Kom KB, Singh KA & Guruaribam V 2016. Reworked Early Permian Palynomorphs and Tertiary Palynomorphs from the Upper Bhuban Formation (Miocene), Nagaland, India. *Himalayan Geology* Vol. 37 (1): 35-41.

39. **Murthy S** & Sarate OS 2016. Late Permian palynoassemblage from Chalburdi area, Chandrapur District, Maharashtra. *The Palaeobotanist* 65: 85–95.

40. Sarate OS, **Murthy S** & Kalkar SA 2016. Late Permian palynoassemblage from Borehole No. WG–22 near Sekapur, Wardha District, Maharashtra, India. *The Palaeobotanist* 65: 177-187.

41. **Srikanta Murthy**, Mahesh.S, Jyoti Shankar Roy 2016. Palyno-petrographical Facet and Depositional Account of Gondwana Sediments from East Bokaro Coalfield, Jharkhand, India. JGSI, Bangalore (accepted). Journal Geological Society of India, 88:549-558.

42. Mahesh S, **Murthy S**, Chakraborty B and Roy MD 2015. Fossil Charcoal as Palaeofire Indicators: Taphonomy and Morphology of Charcoal Remains in Sub-surface Gondwana Sediments of South Karanpura Coalfield. *J. Geol. Soc. India* 85:567-576.

43. Mahesh S, **Murthy S**, Singh VP & Roy JS 2015. Thermally Altered Coals from Bore Core EBM-1, East Bokaro Coal Field, Damodar Valley, India: A Petrographic Inference. *J. Geol. Soc. India* 86: 535-546.

44. Saxena A, Singh KJ, **Murthy S**, Chandra S & Goswami S 2015. Spore tetrads, possible indicators of intense climatic regimes: case study from an early Permian stratum of Singrauli Coalfield, Son-Mahanadi Basin, India. *Geol. Mag.* doi:10.1017/ S0016756815000382.

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47. **Srikanta Murthy**, Archana Tripathi, Chakraborti B & Singh UP 2014. Palynostratigraphy of Permian Succession from Binja Block, South Karanpura Coalfield, Jharkhand, India. *J. Earth Syst. Sci.* **123**: 1895-1906.

48. **Srikanta Murthy**, Ram-Awatar & Saurabh Gautam 2014. Palynostratigraphy of Permian succession in the Mand-Raigarh Coalfield, Chhattisgarh, India. *J. Earth Syst. Sci.***123**: 1879-1893.

49. **Srikanta Murthy**, Vijaya & Vethanayagam 2013. Palynostratigraphy of Permian Succession in the Pench valley Coalfield, Satpura Basin, Madhya Pradesh India, *Jour. Palaeontological Society of India,* **58(2):** 241- 250.

50. K. L. Meena, S. S. K. Pillai, **S. K. Murthy** and S. M. Vethanayagam (2013). Early Talchir Palynozone Recorded from Sediments of Baikunthpur Area, Chirimiri Coalfield, Chhattishgarh, India.*Gond. Geol. Mag.,* **28**(1)

51. Vijaya & **Srikanta Murthy 2013**. Spores from the Permian Succession in India. *Palaeobotanist* **62**: 71–121.

52. Archana Tripathi, Vijaya, **Srikanta Murthy**, B Chakarborty & D K Das 2012. Stratigraphic status of coal horizon in Tatapani-Ramkola Coalfield, Chhatisgarh, India. Journal of Earth System Science **121(2)**: 537-557.

53. Vijaya and **Srikanta Murthy (2012)** Palynomorphs and Oribatid and Mesostigmatid Mites- from the Denwa Formation, Satpura Basin, Madhya Pradesh, India. *International Journal of the Geosciences,* **3**: 195- 205.

54. Vijaya, **Srikanta Murthy**, B.Chakraborty and Joyti Shankar Roy. (2012). Palynological Dating of subsurface coal bearing horizon in East Bokaro Coalfield, Damodar Basin, Jharkhand – Palaeontographica, **288(**1-4): 41- 63.

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56. **Srikanta Murthy** and M.S. Chauhan. (2011) Fungal remains from the Denwa Formation, Satpura Basin, Madhya Pradesh and their palaeoenvironment implications. *Jour. Indian Association of Sedimentologists, 31(1&2): 95-103.*

57. Srikanta Murthy, Chakraborthi B & Roy MD 2010. Palynodating of subsurface sediments, Raniganj Coalfield, Damodar Basin, West Bengal. *J. Earth Syst. Sci.* **119** (5): 701-710.

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59. Tripathi A, Srikanta Murthy & Singh RK 2010. Palynodating of coal-bearing strata near Kunda Pahari, Pachwara Coalfield, Rajmahal Basin, Jharkhand, India. *J. Palaeontol. Soc. India* **55(**1): 29- 35.

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