University Faculty Details Page on DU Web-site

Title	Professor	First Name	Jaya Prakash	Last Name	Shrivastava	Photograph

Designation	Professor
Department	Department of Geology
Address	Geology Department, Delhi UniversityDelhi-7
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Education

Subject	Institution	Year	Details
M. Tech (Three years)	Department of Applied Geology, Dr. H. S. Gour Central University, Sagar	1978	First Division (third position in the University merit list)
Ph.D.	Department of Applied Geology, Dr. H. S. Gour Central University, Sagar	1981	Thesis entitled "Experimental studies on base metal exploration at Malanjkhand and Zawar: Pedogeochemical and geomicrobiological approach"

Career Profile

Organisation / Institution	Designation	Duration	Role
U.N. Mineral Expl. Prog., Director Geol. and Min., M.P.	Geologist	1980-1981	Exploration of base metal deposits
NML, Jamshedpur -7	Scientist	1981	Ore dressing Division
Deptt. of App. Geol., Dr. H. S. Gour Central Uni., Sagar	Senior Lecturer	1981-1988	Teaching and Research
Deptt. of App. Geol., Dr. H. S. Gour Central Uni., Sagar	Senior Lecturer	1988-1994	Teaching and Research
Deptt. of App. Geol., Dr. H. S. Gour Central Uni., Sagar	Reader	1994 - 2002	Teaching and Research
Deptt. of App. Geol., Dr. H. S. Gour Central Uni., Sagar	Professor	2002-cont. till to date	Teaching and Research

Research Interests / Specialization

Geochemistry, Petrology and Economic Geology

Teaching Experience (Subjects/Courses Taught) 34 years

Geochemistry, Igneous Petrology and Economic Geology taught at Post-Graduate and

Under-Graduate levels in University of Delhi and University of Saugar.

Honors & Awards

1. President 106, Indian Science Congress (Earth and Planetary Sciences section).
2. National Mineral Award, 2003, Ministry of Steel and Mines, Government of India, New Delhi.
3. West Memorial Award, 2017, Indian Science Congress Association, Kolkata.
4. Best paper award in National seminar on "Geology and Climate of Himalaya, held at University of Jammu, Jammu (2018).
5. INSA Best paper award: Rani, N., Shrivastava, J. P., Bajpai, R. K. for Modelling of alteration behaviour of nuclear waste glass for long-term performance assessment in the geological repository: In National Mathematical Modelling of Natural Phenomena, held at Kolkata in 2010

Publications

Books: 4

Year	**Title**	**Publisher**	**Co-Author**
2012	Introduction to Ore Microscopy	Prentice Hall of India, Delhi	Nishi Rani
2009	Rock and Ore Forming Minerals (National Science Digital Library, CSIR, New Delhi) http://hdl.handle.net/123456789/1086	CSIR, New Delhi	Nil
2009	Igneous Rocks National Science Digital Library (National Science Digital Library, CSIR, New Delhi) http://hdl.handle.net/123456789/1034	CSIR, New Delhi	Nil
2007	Geochemical modeling and related topics (special volume of the Journal edited)	Indian Journal of Geochemistry, B.H.U., Varanasi	Nil

In Indexed/ Peer Reviewed Journals (for the last 5 years)

In Press	Thermodynamic modelling and experimental validation of CO_2 mineral sequestration in Mandla basalt of the eastern Deccan volcanic province, India.	*J. Geol. Soc. of India. (Impact Factor: 0.63)*	Amit Kumar

In Press	CO_2 capture induced cell parametric and interatomic andesine-calcite transformational changes in basalt from the eastern Deccan volcanic province.	*European Journal of Mineralogist (Impact Factor: 1.2)*	Amit Kumar
In Press	Clay associated trace elemental signatures of alteration halos from the unconformity (sensu lato) type U mineralization in the Bijawars of the Sonrai basin, Central India	*J. Geol. Soc. of India. (Impact Factor: 0.63)*	Surendra Kumar Jha, Rashmi Sharma
Revised MS submitted	Environmental effects of Deccan volcanism on biotic transformations and attendant K/PB mass extinction in the Indian sub-continent: organo-molecular evidences.	*Geological Society of America.(GSA Publication; Impact Factor: 4.2)*	Sucharita Pal, Surabhi Srivastava
Revised MS submitted	Volcanism induced regional fire effects on paleoenvironment through K/PB transition: organo-chemical evidence from Um Sohryngkew River section, Meghalaya, India.	*Proceedings of the Geologists' Association.(Elsevier; Impact Factor:1.85)*	Sucharita Pal, Sanjay K Mukhopadhyay, Sandeep Hamilton

2018	High resolution ^{14}C AMS ages (~50 ka) of organic matter associated with the loess-palaeosol Holocene-Late Pleistocene (8–130 ka) sediments of Dilpur Formation, Karewa Group, Kashmir, India.	*Quaternary Geochronology*. *https://doi.org/10.1016/j.quageo.2018.06.004*. *(Elsevier; Impact Factor: 3.3)*	Meenakshi, Pankaj Kumar, Rakesh Chandra, Sundeep Chopra, G. S. Roonwal, Rajveer Sharma
2018	Ultrasonic P- and S-Wave Attenuation and Petrophysical Properties of Deccan Flood Basalts, India, as Revealed by Borehole Studies.	*Pure and Applied Geophysics, doi.org/10.1007/s00024-018-1817-x (Impact Factor: 1.65)*	Nimisha Vedanti, Ajay Malkoti, O. P. Pandey
2018	Foraminiferal Effects of Regional Fire and Attendant Paleoenvironment during K/Pg Transition: Organo- Chemical Evidence from the Um Sohryngkew River Section, Meghalaya, India. In:	*The Indian Paleogene Chapter: 4, ISBN 978-3-319-77442-8.*	Sucharita Pal, and Sanjay K. Mukhopadhyay
2017	Mineral carbonation reactions under water - saturated, hydrothermal-like conditions and numerical simulations of CO_2 sequestration in tholeiitic basalt of the Eastern Deccan Volcanic Province, India.	*Applied Geochemistry (Elsevier; Impact Factor: 3.1), v. 84, pp. 87-104.*	Amit Kumar and Vamdev Pathak

2017	Comments on the paper published by Sial et al (2016), Mercury enrichments and Hg isotopes in Cretaceous-Paleogene boundary successions: Links to volcanism and palaeoenvironmental impact.	*Cretaceous Research, v. 66, pp60-61.(Elsevier; Impact Factor:2.06)*	Sanjay K. Mukhopadhyay and Sucharita Pal
2017	Tectono-magmatic setting of lava packages in the Mandla lobe of the eastern Deccan volcanic province, India: Paleomagnetism and Magnetostratigraphic evidences.	*Geological Society of London. http://doi.org/10.1144/SP445.3. 1-25 pp (Impact Factor: 2.68)*	Vamdev Pathak and Shiva Patil
2016	Weathering characteristics of interflow volcanic boles from Mandla lobe, Eastern Deccan volcanic province	*Catena 140, pp. 169 - 181(Elsevier; Impact Factor: 3.36)*	Priyeshu Srivastava, S.J. Sangode and Surabhi Srivastava.
2016	Long-term performance assessment of nuclear waste and natural glasses in the geological repository: a geochemical modelling	*Current Science, v. 110, No. 214 2, pp 214-219. (Impact Factor: 0.88)*	Nishi Rani and R. K. Bajpai
2016	Feeder and post Deccan Trap dyke activities in the northern slope of the Satpura Mountain: Evidence from new 40Ar-39Ar ages.	*Geoscience Frontiers, pp. 1-10, DOI: http://dx.doi.org/10.1016/j.gsf.2016.04.001*	R. Kumar and N. Rani
2016	Geochemical Modeling and Experimental Studies on Mineral Carbonation of Primary Silicates for Long-term Immobilization of CO2 in Basalt from the Eastern Deccan Volcanic Province.	*Indian Geophysical Union (Special Volume), V. 1, pp 42-58. Impact Factor: 0.4)*	Nishi Rani and Vamdev Pathak

2015	Mineral Chemistry of Clays Associated with the Late Cretaceous-Early Palaeogene Succession of the Um-Sohryngkew River Section of Meghalaya, India: Palaeoenvironmental Inferences and K/Pg Transition.	*Journal Geological Society of India, v. 86, No. 6, pp.631-647(Impact Factor: 0.63)*	Sucharita Pal and S. K. Mukhopadhyay
2015	Physils and organic matter-base palaeoenvironmental records of the K/Pg boundary transition from the late Cretaceous-early Palaeogenesuccession of the Um-Sohryngkew River section of Meghalaya, India	*Chemie der Erde, v. 75, pp.445-463. (Elsevier; Impact Factor: 2.38)*	Sucharita Pal and S. K. Mukhopadhyay
2015	Natural glass from Deccan volcanic province: an analogue for radioactive waste form	*International Journal of Earth Science (Geol Rundsch) DOI 10.1007/s00531-015-1244-5 (Impact Factor: 2.27)*	Nishi Rani and R. K. Bajpai
2015	PAH excursions and K/Pg transition in the late Cretaceous-early Paleogene succession of the Um-Sohryngkew river section, Meghalaya.	*Current Science, v. 109, No. 6, 1140-1150.(Impact Factor: 0.88)*	Sucharita Pal and S. K. Mukhopadhyaya
2015	Post-K/PB younger 40Ar–39Ar ages of the Mandla lavas: Implications for the duration of the Deccan volcanism.	*Lithos, v. 224–225, pp. 214–224. (Elsevier; Impact Factor: 4.97)*	Robert A. Duncan and Mamta Kashyap
2014	Trace elemental and Nd-Sr-Pb isotopic compositional variation in 37 lava flows of	*Mineralogy Petrology v. 108:801–817 DOI 10.1007/s00710-014-*	J. J. Mahoney and Mamta Kashyap

	Mandla lobe and their chemical relation to the western Deccan stratigraphic succession, India	*0337-3.* *(Impact Factor: 1.70)*	
2014	Compositional variation in magma through Early Neogene in the Northeast Indian Ocean: a testimony from glass shards	*Journal Geological Society of India. v. 84, pp.181-186.*	V. Sharma
2014	Airborne Suspended Particulate Matter and its Impact on Humen Respiratory System-Mineralogical Study from Shahdara and Shahzada Bagh areas in Delhi.	*Georesources (EDs. K. L. Shrivastava and Arun Kumar) Scientific Publishers, India. ISBN 978-81-7233-895-4.*	Jitendra Nagar and Raj Kumar
2013	Alteration Study of Sodium Borosilicate Glass under Hydrothermal-like Conditions.	*Transactions of the American Nuclear Society, v. 108, 151-153.*	Nishi Rani and R. K. Bajpai
2013	Deccan Traps associated obsidian glass: a nuclear waste containment	*Current Science, v.105, No. 3.pp371-379. (Impact Factor: 0.88)*	Nishi Rani and R. K. Bajpai
2013	Sodium Borosilicate Glass: Alteration Study under Hydrothermal-like Conditions for its Long-Term Assessment in Geological Repository	*Transaction, American Nuclear Society, v. 108, 151-153.*	Nishi Rani and R. K. Bajpai
2013	Chemico-mineralogical attributes of clays from the Late Cretaceous- Early Palaeogene succession of the Um Sohryngkew River section of Meghalaya, India: palaeoenvironmental inferences and the K/Pg boundary	*Cretaceous Research., v. 45, 247-257. (Elsevier; Impact Factor:2.06)*	Sanjay K. Mukhopadhaya Sucharita Pal
2013	Mineral Chemistry of Clays Associated with the Jhilmili Intertrappean bed in the	*J. Geol. Soc. India, v.82, pp. 38-52.*	Sucharita Pal and Surabhi Srivastava

	Eastern Deccan Volcanic Province: Palaeoenvironmental inferences and KTB Transition		
2013	Studies on Nuclear Waste Glass and Natural Analogue (Obsidian) for Performance Assessment in Geological Repository	*Sustainable Future of the Earth's Natural Resources Springer-Verlag Berlin Heidelberg, 285-306*	Nishi Rani and R.K. Bajpai
2013	CO2 mineral trapping: an experimental study on the carbonation of basalts from the eastern Deccan Volcanic Province, India.	*Procedia Earth and Planetary Science, v. 7, pp 806-809.*	Nishi Rani and Vamdev Pathak
2013	Obsidian: alteration study under hydrothermal-like conditions for its assessment as a nuclear waste glass	*Procedia Earth and Planetary Science, v. 7, pp 725-728.*	Nishi Rani and R. K. Bajpai
2013	Trace elements geochemistry and petrogenesis of basalt from the southern part of the East Pacific Rise	*J. Geol. Soc. India. v. 81, pp 91-100*	Sucharita Pal, Sanjay Pandey and G.S. Roonwal

Publication Profile: (87 papers published) * = corresponding author in a lead role

1. Amit Kumar and **J. P. Shrivastava1*** (In Press) Thermodynamic modelling and experimental validation of CO2 mineral sequestration in Mandla basalt of the eastern Deccan volcanic province, India. *J. Geol. Soc. of India.*

2. Amit Kumar and **J. P. Shrivastava1*** (In Press) CO2 capture induced cell parametric and interatomic andesine-calcite transformational changes in basalt from the eastern Deccan volcanic province. *European Journal of Mineralogy.*

3. Surendra Kumar Jha1, Rashmi Sharma1, **J. P. Shrivastava1***, C. L. Bhairam (Under revision) Clay associated trace elemental signatures of alteration halos from the unconformity *(sensu lato)* type U mineralization in the Bijawars of the Sonrai basin, Central India. *J. Geol. Soc. of India.*

4. Sucharita Pal, Surabhi Srivastava and **J. P. Shrivastava*** (revised MS submitted) Environmental effects of Deccan volcanism on biotic transformations and attendant K/PB mass extinction in the Indian sub-continent: organo-molecular evidences. *Geological Society of America.*

5. Sucharita Pal, **J. P. Shrivastava*,** Sanjay K Mukhopadhyay, Sandeep Hamilton (Revised MS submitted) Volcanism induced regional fire effects on paleoenvironment through K/PB transition: organo-chemical evidence from Um Sohryngkew River section, Meghalaya, India. *Proceedings of the Geologists' Association*.

6. Meenakshi, Pankaj Kumar, **J. P. Shrivastava*,** Rakesh Chandra, Sundeep Chopra, G. S. Roonwal and Rajveer Sharma (2018) High resolution ^{14}C AMS ages (~50 ka) of organic matter associated with the loess-palaeosol Holocene-Late Pleistocene (8–130 ka) sediments of Dilpur Formation, Karewa Group, Kashmir, India. Quaternary Geochronology *(Elsevier),* v. 47, pp 170-179 (*Impact Factor: 3.3*; Citations: 2)

7. Nimisha Vedanti, Ajay Malkoti, O. P. Pandey, and **J. P. Shrivastava** (2018) Ultrasonic P- and S-Wave Attenuation and Petrophysical Properties of Deccan Flood Basalts, India, as Revealed by Borehole Studies. Pure and Applied Geophysics, doi.org/10.1007/s00024-018-1817-x. *(Impact Factor: 1.65)*

8. Sucharita Pal, **J. P. Shrivastava*** and Sanjay K. Mukhopadhyay (2018) Foraminiferal Effects of Regional Fire and Attendant Paleoenvironment during K/Pg Transition: Organo- Chemical Evidence from the Um Sohryngkew River Section, Meghalaya, India. In: The Indian Paleogene (Eds. Sunil Bajpai, Satish C. Tripathi and Vandana Prasad), Chapter: 4, ISBN 978-3-319-77442-8.

9. Amit Kumar**, J.P. Shrivastava***, Vamdev Pathak (2017) Mineral carbonation reactions under water-saturated, hydrothermal-like conditions and numerical simulations of CO_2 sequestration in tholeiitic basalt of the Eastern Deccan Volcanic Province, India. Applied Geochemistry *(Elsevier),* v. 84, pp. 87-104. *(Impact Factor: 3.1; **Citations: 2**).*

10. Sanjay K. Mukhopadhyay, Sucharita Pal and **J. P. Shrivastava** (2017) Comments on the paper published by Sial et al (2016), Mercury enrichments and Hg isotopes in

Cretaceous-Paleogene boundary successions: Links to volcanism and palaeoenvironmental impacts. Cretaceous Research *(Elsevier),* v. 66, pp 60-61. *(Impact Factor: 2.06)*

11. Vamdev Pathak, Shiva Patil, and **J.P. Shrivastava*** (2017) Tectono-magmatic setting of lava packages in the Mandla lobe of the eastern Deccan volcanic province, India: Paleomagnetism and Magnetostratigraphic evidences. Geological Society of London, https://doi.org/10.1144/SP445.3. *(Impact Factor: 2.68; **Citation =2**).*

12. Nishi Rani, J. P. Shrivastava and R. K. Bajpai (2016) Long-term performance assessment of nuclear waste and natural glasses in the geological repository: a geochemical modelling. *Current Science*, v. 110, No. pp. 214-219. *(Impact Factor: 0.88; Citation: 1)*

13. Sucharita Pal, **J. P. Shrivastava** and Sanjay K. Mukhopadhyay *(In Press)* Mineral chemistry of clays associated with the late Cretaceous-early Palaeogene succession of the Um Sohryngkew river section of Meghalaya, India: Palaeoenvironmental inferences and K/Pg transition. *Geological Society of India.* V. 86 (6), pp 631-647

14. Sucharita Pal, **J.P. Shrivastava** and Sanjay K. Mukhopadhyay (2015) Physils and organic matter-base palaeoenvironmental records of theK/Pg boundary transition from the late Cretaceous-early Palaeogenesuccession of the Um-Sohryngkew River section of Meghalaya, India. *Chemie der Erde-Geochemistry (Elsevier)* v. 75 (4), pp 445-463 (*Impact Factor: 2.38; Citations: 6).*

15. J. P. Shrivastava, Nishi Rani and Vamdev Pathak (2015) Geochemical Modeling and Experimental Studies on Mineral Carbonation of Primary Silicates for Long-term Immobilization of CO_2 in Basalt from the Eastern Deccan Volcanic Province. *The Journal of Indian Geophysical Union 1, 42-58.* pp. 10-25. *(Impact Factor: 0.4; Citations: 5)*

16. Nishi Rani, J. P. Shrivastava and R. K. Bajpai (2015) Natural glass from Deccan volcanic province: an analogue for radioactive waste form. *International Journal of Earth Sciences* v. 104 (8), pp. 2163-2177 *(Impact Factor: 2.27: Citations: 2)*

17. Sucharita Pal, **J. P. Shrivastava** and Sanjay K. Mukhopadhyay (2015) PAH excursions and K/Pg transition in the late Cretaceous-early Paleogene succession of the Um-Sohryngkew river section, Meghalaya. *Current Science*, v. 109, No. 6, 1140-1050. *(Impact Factor: 0.88; Citations: 7).*

18. **J.P. Shrivastava,** Robert A. Duncan, Mamta Kashyap (2015) Post-K/PB younger 40Ar–39Ar ages of the Mandla lavas: Implications for the duration of the Deccan volcanism. *Lithos (Elsevier)* 224–225 (2015) 214–224. *(Impact Factor: 4.97; Citations: 14).*

19. **J. P. Shrivastava,** J. J. Mahoney and M. R. Kashyap (2014) Trace elemental and Nd-Sr-Pb isotopic compositional variation in 37 lava flows of the Mandla lobe and their chemical relation to the western Deccan stratigraphic succession, India, *Mineralogy and Petrology,* v. 108 (6), pp. 801-817. *(Impact Factor: 1.70; Citations:8).*

20. **J. P. Shrivastava** and V. Sharma (2014) Compositional Variation in Magma through Early Neogene in the Northeast Indian Ocean: A Testimony from Glass Shards. *Journal Geological Society of India.* v. 84, pp.181-186. *(Impact Factor: 0.44; Citation: 1).*

21. Jitendra Nagar, **J. P. Shrivastava** and Raj Kumar (2014) Airborne Suspended Particulate Matter and its Impact on Humen Respiratory System-Mineralogical Study from Shahdara and Shahzada Bagh areas in Delhi, *Georesources* (EDs; K. L. Shrivastava and Arun Kumar) Scientific Publishers, India. ISBN 978-81-7233-895-4.

22. **J.P. Shrivastava,** Sanjay K. Mukhopadhyay and Sucharita Pal (2013) Chemico-mineralogical attributes of clays from the late Cretaceous - early Palaeogene succession of the Um Sohryngkew river section of Meghalaya, India: Palaeoenvironmental inferences and the K/Pg boundary. *Cretaceous Research (Elsevier)* v. 45 (2013) 247-257 *(Impact Factor: 2.06; Citations: 8).*

23. Nishi Rani **J. P. Shrivastava** and R. K. Bajpai (2013) Deccan Traps associated obsidian glass: a nuclear waste containment. *Current Science. v. 105, No.3, pp 371-379. (Impact Factor: 0.88; Citations: 3).*

24. Nishi Rani **J. P. Shrivastava** and R. K. Bajpai (2013) Alteration of sodium borosilicate

glass under hydrothermal-like conditions. *Transactions of the American Nuclear Society, pp. 151-153.*

25. Sucharita Pal, Surabhi Srivastava and **J. P. Shrivastava** (2012) Mineral Chemistry of Clays Associated with the Jhilmili Intertrappean bed in the Eastern Deccan Volcanic Province: Palaeoenvironmental inferences and KTB Transition, *J. Geological Society of India,* v. 82, pp 38-52. *Impact Factor: 0.44; Citations: 6).*

26. Nishi Rani, **J.P. Shrivastava,** and R.K. Bajpai (2013) Induced Near-Hydrothermal Alteration Studies on Nuclear Waste Glass and Natural Analogue (Obsidian) for Performance Assessment in Geological Repository *IN:* Sustainable Future of the Earth's Natural Resources (ED.) Mu. Ramkumar, *Springer Earth System Sciences, Springer-Verlag Berlin Heidelberg, pp 285-316.*

27. Nishi Rani and Vamdev Pathak and J**. P. Shrivastava** (2013) CO_2 mineral trapping: an experimental study on the carbonation of basalts from the eastern Deccan VolcanicProvince, India. *Procedia Earth and Planetray Science (Elsevier),* v. 7, pp 8065-809.*(Impact Factor: 1.8; Citations:3)*

28. Nishi Rani and R. K. Bajpai and **J. P. Shrivastava** (2013) Obsidian: alteration study under hydrothermal-like conditions for its assessment as a nuclear waste glass. *Procedia Earth and Planetray Science (Elsevier),* v. 7, pp 725-728. *(Impact Factor: 1.8; Citations:1).*

29. Sanjay Kumar Pandey, **J. P. Shrivastava,** Sucharita Paul and G. S. Roonwal (2013) Trace elements geochemistry and petrogenesis of basalt from the southern part of the East Pacific Rise, *J. Geol. Soc. of India,* v. 81, pp 91-100. *(Impact Factor: 0.44)*

30. Mansoor Ahmad, **J. P. Shrivastava** and Surabhi Shrivastava (2012) Microstructures and compositional variation in the intra-volcanic bole clays from the eastern Deccan volcanic Province: palaeoenvironmental implications and duration of volcanism. *J. Geol. Soc. India,* v. 80, pp 177-188. *(Impact Factor: 0. 44; Citations: 12).*

31. Rajesh Prakash and **Shrivastava, J. P.** (2012) A Review of the Seismicity and

Seismotectonics of Delhi and adjoining areas J. Geol. Soc. India. *J. Geol. Soc. India*, v. 79, pp376-382. *(Impact Factor: 0. 44; Citations: 6).*

32. Rani, N, **Shrivastava, J. P**. Bajpai R. K (2012) Near Hydrothermal alteration of Obsidian Glass: Implications for Long Term Performance Assessments. *J. Geol. Soc. India.* v. 79, pp 376-382. *(Impact Factor: 0. 44; Citations: 3).*

33. Mansoor Ahmad, **J. P. Shrivastava** and Surabhi Shrivastava (2012) REE abundance in the clays associated with the intra- volcanic bole horizons of the eastern Deccan Traps: palaeoenvironmental implications. *Proc. Indian Nat. Sci. Acad*., v. 78, pp 59-69. *(Impact Factor: 0. 44; Citations:12).*

34. Jha, S.K., **Shrivastava, J.P**. and Bhairam, C.L. (2012) Clay mineralogical studies on Bijawars of the Sonrai Basin: Palaeoenvironmental implications and inferences on the uranium mineralization. J. Geol. Soc. India. *Geol. Soc. of India,* v. 44: pp196-212. *(Citation =6, I.F. = 0.567).*

35. **Shrivastava, J. P.,** Mukhopadhyay, S. K. and Sucharita Paul (2012) REE signatures of the bole clays associated with the Early Cretaceous Sylhet Traps of Meghalaya: palaeoenvironmental inferences. Current Science, v. *Current Science v. 102, No. 2, pp. 322-328. (I.F. = 0.905).*

36. Nishi Rani, **J. P. Shrivastava** and R. K. Bajpai (2011) Alteration mechanism and Obsidian: a kinetic study. Mem. Geol. Soc. India, v. 77, pp 591-600. *(I.F. = 0.567).*

37. Nishi Rani, **J.P.Shrivastava** and Rakesh Bajpai (2011) Chemico mineralogical and dissolution studies on obsidian under near hydrothermal conditions for long-term performance assessments in geological repository. In: Radioactive Waste edited by: Dr. R. O. Abdel Rahman Hot Laboratory Center, Atomic Energy Authority of Egypt, Cairo, Egypt Intech Open Access Publisher.

38. Jha, S. K., **Shrivastava, J. P**. and Bhairam, C. L. 2010. Clay mineralogy of Bijawar rocks, Sonrai basin, Lalitpur district, U.P. Miner. Geol. Soc India. v. 44: pp196-212. *(Citation =4, I.F. = 0.229).*

39. Rani, N, **Shrivastava, J. P**. Bajpai R. K 2010 Alteration studies on obsidian under Induced Hydrothermal like conditions for long-term performance assessment geological repository Miner. Soc. India v. 44: pp188-193. *(I.F. = 0.229).*

40. Nishi Rani, **J. P. Shrivastava** and R. K. Bajpai (2010) Obsidian: a potential analogue for nuclear waste glass. *Current Science*, v. 98, No. 7, pp. 950-954. *(Citation =7, I.F. = 0.897).*

41. Nishi Rani, **J. P. Shrivastava** and R. K. Bajpai (2010) Corrosion mechanism in the obsidian and its comparision with the nuclear waste glass for long-term performance assessment in the geological repository. *The Open Corrosion Journal* v. 3. Pp 16-27. *(I.F. = 1.071).*

42. **J. P. Shrivastava** (2010) *Discussion*: Petrography and mineral chemistry of neovolcanics occurring between Pacific and Nazca Plate boundaries. *J. Geological Society of India*, v. 75, pp 441-442. *(Citation =3).*

43. Mamta Kashyap, **J. P. Shrivastava** and Raju Kumar (2010) Occurrence of small scale inflated pahoehoe lava flows in the Mandla lobe of the eastern Deccan volcanic province. *Current Science* v. 98, No. 1, pp 72-76. *(Citation =7, I.F. = 0.897).*

44. Nishi Rani, Mansum P. Kashyap and **J. P. Shrivastava** (2009) Impact glass from Lonar Crater: A potential analogue for nuclear waste glass. Some glimpses on the origin and Evolution of the Deep Continental Crust, India (Eds: N. R. Karmalkar, R. A. Duraiswami, N. J. Pawar and Ch. Sivaji. Norosa Publishing House Pvt. Ltd., New Delhi, pp 203-216.

45. Sanjay Kumar Pandey, **J. P. Shrivastava** and G. S. Roonwal (2009) Petrography and mineral chemistry of neovolcanics occurring between pacific and Nazca plate boundaries. *J. Geological Society of India*, v. 74, pp 559-572. *(Citation =3).*

46. **J. P. Shrivastava** (2009) Book review on "A handbook of Minerals, Crystals, Rocks and Ores, by P. O. Alexander, *J. Geological Society of India*, v. 74, pp646-647. *(I.F. = 0.424).*

47. Raju Kumar and **Shrivastava, J. P.** (2009) Geochemistry of basic dykes from Betul-Jabalpur area in the Deccan volcanic province. *J. Geological Society of India,* v. 74, pp 95-107. (Citation =5, I.F. = 0.424).

48. Mohanty, William K., Rajesh Prakash, Suresh, G., Shukla, A. K., Walling Yanger, M. and **Shrivastava, J. P.** (2009) Estimation of coda wave attenuation for National Capital Region, Delhi, India using local earthquake**s.** *Pure and applied Geophysics*, v. 166, pp 1-21. (Citation =22, I.F. = 0.938).

49. Pandey, S. K. **Shrivastava, J. P.** and Roonwal, G. S. (2008) Occurrence of ferroan trevorite within olivine megacrysts of the MORB from Southern East Pacific Rise. *Current Science,* v. 95, pp 1468-1473. *(Citation =5, I.F. = 0.774).*

50. Mansoor, Ahmad and **Shrivastava,** J. P. (2008) Compositional studies on clays associated with the intra-volcanic bole horizons from the Eastern Deccan Volcanic Province: palaeoenvironmental implications. *Mem. Geol. Soc. of India*, No. 74, pp 299-321. *(Citation =6, I.F. = 0.424).*

51. **Shrivastava, J. P.** Bajpai, R. K. and Nishi Rani (2008) A review on corrosion mechanism in the borosilicate nuclear waste glass for long term performances assessments in geological repository. *J. Geol. Society of India*, v.72 No. 8, pp.238-244. *(Citation = 7, I.F. = 0.355).*

52. **Shrivastava, J. P.** Ahmad M. and Raju Kumar (2008) Petrography, composition and petrotrogenesis of the basalts of the Chakhla – Delakhari intrusive Complex from the eastern Deccan volcanic province. India. *Indian Dykes: Geochemistry, Geophysics and Geochronology*, Norosa Pub. House Pvt., Ltd., pp 83-109. *(Citation =6).*

53. Ahmad, M. and Shrivastava, J. P. (2008) Trace element compositions of iridium enriched illite-smectite assemblages from Anjar intertrappean sediments: Inferences on Palaeoenvironment. *Cretaceous Research* v. 29 592-602. (Citation =14, I.F. = 0.938).

54. Raj Kumar, Jitendra Kumar Nagar, Pawan Kumar, Alka Singh, Mahesh Meena, Harsh Kumar, Dheeraj Kumar, Neelima Raj, S. N. Gaur, **J. P. Shrivastava (**2007) Indoor Air

Pollutants and Rhinitis in Children in Delhi: an exposure response study. *Indian J. Allergy Asthma and Immunol*, v 20 No. 2: p 56.

55. Jitendra K. Nagar, **J. P. Shrivastava**, Raj Kumar Umesh Chandra Brijesh Rathi S. V. S. Rana Kafeel Ahmad (2007) Urban air pollution: a global environmental health problem - a review. *Bulletin of Environmental Sciences*, v. xxv, No. 3, pp 201-223.

56. **J. P. Shrivastava** and Pujari, G. N. (2007) Co-Mo anomalies in the deciduous taxa associated with the Malanjkhand granitoid, Madhya Pradesh. J. *Geological Society of India*, v. 70, No. 4, pp 641-657. *(Citation =2).*

57. Pujari, G. N. and **Shrivastava, J. P.** (2006) Vegitation zonation and metal contents in higher trees of Malanjkhand copper province, Central India, *Indian Journal of Geochemistry*, 21 (2): 313-330.

58. **Shrivastava, J. P.,** Ahmad M., 2005. Compositional studies on illite – smectite from iridium enriched and other infra (Lametas) / inter- trappean sediments from Deccan Traps. *Indian Journal of Geochemistry* v. 20, pp 121-142. *(Citation =7).*

59. **Shrivastava, J. P.** and Ahmad, M. (2005). Chemical Composition and Stratigraphic Correlation of Volcano-Sedimentary Sequences from Mandla Lobe of Eastern Deccan Volcanic Province. *Gond. Geol. Magz., Spl.* v. 8, pp. 61-82. *(Citation =2).*

60. **Shrivastava, J. P.** and M. Ahmad (2005). Compositional studies on organic matter from iridium enriched Anjar intertrappean sediments: Deccan volcanism and palaeoenvironmental implications during the Cretaceous - Tertiary boundary. *J of Iberian Geology*, v. 31(1), pp. 167-177. *(Citation =12).*

61. **Shrivastava, J. P.** and M. Ahmad (2005). A review of research on Late Cretaceous volcanic-sedimentary sequences of the Mandla Lobe: implications for Deccan volcanism and the Cretaceous/Palaeogene boundary. *Cretaceous Research*, v. 26, pp. 145-156. *(Citation =20).*

62. **Shrivastava, J. P.** and M. Ahmad (2005). Compositional studies on illite-smectite from iridium enriched and other infra (lametas)/ inter-trappean sediments from Deccan Traps.

Indian Journal of Geochemistry, V. 20, pp. 121-142. *(Citation =7).*

63. Ahmad, Mansoor and **Shrivastava, J. P.** (2004). Iron - Titanium Oxide Geothermometry and petrogenesis of lava flows and dykes from Mandla Lobe of the Eastern Deccan Volcanic Province, India. *Gondwana Research,* v. 7 No. 2, pp. 563-577. *(Citation =16).*

64. Pujari, G.N. and **Shrivastava, J. P.** (2003). Biogeochemical Studies on some Copper rich Areas from Malanjkhand Granitoid, Madhya Pradesh. *J. Geol. Society of India,* V. 61, No. 3, pp 295-318. *(Citation =4).*

65. Pujari, G.N. and **Shrivastava, J. P.** (2003). Threshold Estimation using Probability Plot for Biogeochemical Anomaly Interpretation in the Malanjkhand Copper Province, Madhya Pradesh. In: *Computer Application in Mineral Development and Water Resource management, SAAEG volume* (Ed: K.L. Rai and others) pp 45-70. *(Citation =3).*

66. **Shrivastava, J.P.** and Pattanayak, S.K. (2002). Basalts of the Eastern Deccan Volcanic Province, India. *Gondwana Research* v. 5, No. 3, pp 649-665. *(Citation =24).*

67. Pujari, G.N. and **Shrivastava, J. P.** (2001). High bioassay values in *Terminalia Alata* leaves: An indiaction of Cu mineralisation in Malanjkhand Granitoid, Central India. *Chemical Speciation and Bioavailability* v. 13, No. 4, pp 97-111. *(Citation =5).*

68. Pattanayak, S.K. and **Shrivastava, J. P.** (2001). Major Elemental Modelling of basalts from Deccan Volcanic Province: Petrogenetic Implications. *J. of Geochemistry,* v. 16, pp 43-60. *(Citation =2).*

69. **Shrivastava, J. P.,** Pattanayak, S.K. and Singh, Chatar (2001). Gold Grains in Fe-rich Tholeiitic Lava Flows from Amarkantak in the Eastern Deccan Volcanic Province, India. *J. Geol Soc. India*, v. 57, pp. 455-458. *(Citation =2).*

70. **Shrivastava, J. P.,** Salil, M.S. and Pattanayak, S.K. (2000). Clay Mineralogy of Ir-bearing Anjar Intertrappeans, Kutch, Gujarat, India: Inferences on Palaeoenvironment, *J. Geol. Soc. Ind.,* v. 55, pp. 197-206. *(Citation =15).*

71. **Shrivastava, J. P.,** Pattanayak, S.K., Giridhar, Mukta, Chauhan, P.K.S. and Mohanty,

W.K. (1999). Petrochemical studies on the epicentral region of the recent Jabalpur earthquake. *Curr. Sci.,* v. 77, No. 8, pp. 1100-1104. *(Citation =9).*

72. Pattanayak, S.K. and **Shrivastava, J. P.** (1999). Petrography and Major-oxide geochemistry of basalts from Eastern Deccan Volcanic Province, India. *J. Geol. Soc. Ind., Mem. 43,* pp. 233-270. *(Citation =36).*

73. Salil, M.S., **Shrivastava, J. P.** and Pattanayak, S.K. (1997). Similarities in the mineralogical and geochemical attributes of detrital clays of Maastrichtian Lameta Beds and weathered Deccan basalt, Central India. *Chemical Geology,* v. 136, pp. 25-32. *(Citation =38).*

74. Salil, M.S., Pattanayak, S.K. and **Shrivastava, J. P.** (1996). Composition of smectites in the Lameta sediments of Central India: Implications for the commencement of Deccan Volcanism. *J. Geol. Soc. of India.* v. 47, No. 5, pp. 555-560. *(Citation =11).*

75. Salil, M.S. and **Shrivastava, J. P.** (1996). Trace and REE signatures in the Maastrichtian Lameta Beds for the initiation of Deccan volcanism before KTB. *Current Science,* v. 70, No. 5, pp. 399-401. *(Citation =13).*

76. **Shrivastava, J. P.** and Pattanayak, S.K. (1995). Nb-Zy-Y discrimanation diagram: a testimony to MORB nature of Deccan Trap basalt. In: R.K. Shrivastava and R. Chandra (eds.) Magmatism in relation to diverse tectonic settings. *Oxford and IBH Pub. Co. Ltd., New Delhi*, pp. 429-438.

77. Salil, M.S., Pattanayak, S.K., **Shrivastava, J. P.** and Tandon, S.K. (1994). X-ray diffraction study on the clay mineralogy of infra (Lametas)-/inter-trappean sediments and weathered Deccan Basalt from Jabalpur, M. P. Implications for the age of Deccan volcanism. *J. Geol. Soc. of India.* v. 44, pp. 335-337. *(Citation =8).*

78. **Shrivastava J.P.** (1989). Particulate characterization as an aid to copper prospecting in Malanjkhand. Indian *J. of Geochemistry,* v. 4(2) pp.47-50. *(Citation =2).*

79. **Shrivastava J.P.** and Alexander, P.O. (1988). Geomicrobiology as an aid to prospecting: A critical study from Malanjkhand and Zawar base metal deposits, India. J. Geol. Soc.

Ind., v. 31, No. 3, pp. 328-336. *(Citation =2).*

80. Vandna Pathak, **Shrivastava J. P.** and Banerjee, A.K. (1988). Mine water pollution studies: Patherkhera coal mine of Satpura region, M. P. Indian *J. of Environmental Protection,* v. 8, No. 2, pp. 93-95.

81. Vandna Pathak, **Shrivastava J. P.** and Banerjee, A.K. (1988). Microbiological screening of Patherkhera coal mine waters from Satpura region of Madhya Pradesh, India: Thiobacillus ferrooxidans an indicator of pollution. *Proc. International Conference on Environmental Impact Assessment, New Delhi.*

82. Shrivastava C.K. and **Shrivastava J. P.** (1986). Modification in the analysis of arsenic in soils and sediments. *J. Geol. Soc. of India*, v. 27, pp.227-228. *(Citation =2).*

83. Shrivastava, C.K. and **Shrivastava. J. P.** (1984). Field determination of arsenic in soils and sediments. *Proc. Nat. Acad. Sci. India*, 54 (A), III, pp.264-265.

84. **Shrivastava J. P.** and Alexander, P.O. (1983). Nature of Copper mineralization at Malanjkhand and its relevance for future prospecting programme. *Current Trends in Geology, Today and Tomarrow's Publications, New Delhi,* v. 7pp. 301-307.

85. **Shrivastava, J. P.** (1981) Note on beneficiation of fluorspar ore of Karara deposit of Rajasthan. Madhya Bharti, v. 29-32, Part II, Sec. B, pp. 227-229.

86. **Shrivastava, J. P.** and Alexander, P. O. (1981) Estimation of Ni in soils – Comparison of colorimetric and paper chromatographic methods. Madhya Bharti, v. 29-32, Part II, Sec. B, pp. 189-193.

87. **Shrivastava, J. P.** (1980) Microbial studies in geochemical exploration. Madhya Bharti, v. 26-28, Part II, Sec. B, pp. 77-79.

Articles contributed to Books: 10

1. Sucharita Pal, J. P. Shrivastava and Sanjay K. Mukhopadhyay (2018) Foraminiferal Effects of Regional Fire and Attendant Paleoenvironment during K/Pg Transition:

Organo-Chemical Evidence from the Um Sohryngkew River Section, Meghalaya, India. (Eds. Sunil Bajpai, Satish C. Tripathi, Vandana Prasad). ISSN 2194-9204, Society of Earth Scientists Series, Springer, pp. 135-150

2. Nishi Rani, **J.P. Shrivastava,** and R.K. Bajpai (2013) Induced Near-Hydrothermal Alteration Studies on Nuclear Waste Glass and Natural Analogue (Obsidian) for Performance Assessment in Geological Repository *IN:* Sustainable Future of the Earth's Natural Resources (ED.) Mu. Ramkumar, Springer Earth System Sciences, Springer-Verlag Berlin Heidelberg, pp 285-316.

3. Nishi Rani, **J.P.Shrivastava** and Rakesh Bajpai (2011) Chemico mineralogical and dissolution studies on obsidian under near hydrothermal conditions for long-term performance assessments in geological repository. In: Radioactive Waste edited by: Dr. R. O. Abdel Rahman Hot Laboratory Center, Atomic Energy Authority of Egypt, Cairo, Egypt Intech Open Access Publisher.

4. Nishi Rani, Mansum P. Kashyap and **J. P. Shrivastava** (2009) Impact glass from Lonar Crater: A potential analogue for nuclear waste glass. Some glimpses on the origin and Evolution of the Deep Continental Crust, India (Eds: N. R. Karmalkar, R. A. Duraiswami, N. J. Pawar and Ch. Sivaji. Norosa Publishing House Pvt. Ltd., New Delhi, pp 203-216.

5. **J. P. Shrivastava** (2009) Book review on "A handbook of Minerals, Crystals, Rocks and Ores, by P. O. Alexander, *J. Geological Society of India*, v. 74, pp646-647.

6. **Shrivastava, J. P.** Ahmad M. and Raju Kumar (2008) Petrography, composition and petrotrogenesis of the basalts of the Chakhla - Delakhari intrusive Complex from the eastern Deccan volcanic province. India. *Indian Dykes: Geochemistry, Geophysics and Geochronology*, Norosa Pub. House Pvt., Ltd., pp 83-109.

7. **Shrivastava, J. P.** and Ahmad, M. (2005). Chemical Composition and Stratigraphic Correlation of Volcano-Sedimentary Sequences from Mandla Lobe of Eastern Deccan Volcanic Province. *Gond. Geol. Magz., Spl.* v. 8, pp. 61-82.

8. Pujari, G.N. and **Shrivastava, J. P.** (2003). Threshold Estimation using Probability Plot for Biogeochemical Anomaly Interpretation in the Malanjkhand Copper Province, Madhya Pradesh. In: *Computer Application in Mineral Development and Water Resource*

management, SAAEG volume (Ed: K.L. Rai and others) pp 45-70.

9. **Shrivastava, J. P.** and Pattanayak, S.K. (1995). Nb-Zy-Y discrimanation diagram: a testimony to MORB nature of Deccan Trap basalt. In: R.K. Shrivastava and R. Chandra (eds.) Magmatism in relation to diverse tectonic settings. *Oxford and IBH Pub. Co. Ltd., New Delhi*, pp. 429-438.
10. **Shrivastava J. P.** and Alexander, P.O. (1983). Nature of Copper mineralization at Malanjkhand and its relevance for future prospecting programme. *Current Trends in Geology, Today and Tomarrow's Publications, New Delhi,* v. 7pp. 301-307.

Conference Presentations

More than 140 presentations and chairing sessions in the national and international conferences.

Public Service / University Service / Consulting Activity

1. Expert, UPSC, New Delhi
2. Expert member, Science Board, IGNOU, New Delhi
3. Member, Selection committee, PSC, Jharkhand
4. Expert, Banaras Hindu University, Varanasi
5. Expert, AMD selection committees
6. Expert, DRDO, New Delhi
7. Expert, Selection committee, Staff Selection Board, New Delhi
8. Expert, Selection Committee, University of Pune.
9. Expert, Selection Committee, Banaras Hindu University, Varanasi
10. Expert, Selection Committee, Aligarh Muslim University, Aligarh
11. Expert, Selection Committee, Mizoram University, Aizawal.
12. Expert, Staff Selection commission, Northern Region, New Delhi
13. Chairman, BOG nominee for Selection Committee, NSIT, Delhi
14. Member, Governing body of NSIT from 2005 - 2011
15. Warden, D.S. Kothari Hostel, Delhi University from 2000 - 2002
16. Member, Governing body, P. G. Men's Hostel from 2005 – 2011
17. Member, CSIR selection committee for RA and SRF-2015

Professional Societies Memberships

1. International Association of Geochemistry
2. Member, International Association for the Study of Clays.
3. Life Member, Geological Society of India, Bangalore
4. Life Member, Mineralogical Society of India, Mysore
5. President, SAAEG
6. Life Member, Electron Microscopy Society of India.
7. Life member, Indian Association of Analytical Scientists.

Projects (Major Grants / Collaborations)

(A) Ongoing Research Projects: 3

1. Geochemical flow stratigraphy, age and duration of Deccan volcano sedimentary sucession from Koyna Drill-core site. **(Grant Rs. 53,43,60).**
2. Clay organo-molecular studies on late Cretaceous-early Palaeocene sucession of the Mahadeo-Cherapunji section and its lateral correlation with the K/Pg layer of the Um-Sohryngkew river section Mehalaya: Palaeoenvironmental implications and K/Pg transition. **(Rs. 18,00,000).**
3. Isotopic compositions, 10Be and 14C dating of loess-palaeosol from Dilpur formation of Kashmir: Palaeoclimatic reconstruction. **(5,79,000).**

(B) R & D Projects: Concluded 24

1. Geochemical Flow Stratigraphy and Age of Basalts from Eastern Deccan Volcanic Province, India (ESS/CA/A6-07/91). Sponsored by Department of Science and Technology, New Delhi. **(Grant Rs. 4,07,000)**
2. Compositional and Structural Studies on the Smectites and Geopolymers of Ir enriched and other Infra-? Inter-trappean sediments: implications on Deccan Volcanism and KTB. (ESS/CA/A6-11/95) Sponsored by Department of Science and Technology, New Delhi. (**Grant Rs. 7, 82,000)**
3. Mineralogical and geochemical studies on the clay minerals of the intra-volcanic bole horizons from the Deccan Traps: Palaeoenvironmental implications and KTB. Sponsored by University Grants Commission, New Delhi. **(Grant Rs. 9, 89,000)**
4. Magmatism and hydrothermal activity on the fast spreading East Pacific Rise. (DOD/12 – MMDP/1/02) Sponsored by Department of Ocean Development, New Delhi. **(Grant Rs.**

6,32,400)

5. Study of corrosion mechanism in the basaltic Glasses (analogue for nuclear waste glass) for long-term assessments in geological repository. Funded by Delhi University. Funded by Delhi University (**Grant Rs. 2, 50000).**

6. Age and duration of Deccan volcanic activity in the eastern Deccan volcanic province, India. Funded by Delhi University **(Grant Rs. 2, 50000).**

7. Study of hydrothermal and chemical behavior of impact glass from Lonar area in the Buldana district of Maharashtra, India. Funded by Delhi University **(Grant Rs. 2, 50000).**

8. Paleomagnetic, Compositional and Tectono-magmatic Setting of Basaltic Lava Sequence from Mandla Lobe of the Eastern Deccan Volcanic Province. (ESS/16/286/2006). Sponsored by Department of Science and Technology, New Delhi. **(Grant Rs. 13, 00000).**

9. Petrochemistry and Petrogenesis of Mafic Dykes from the Eastern Deccan Volcanic Province between Narmada-Son and Tapti Lineaments (ESS/16/291/2006). Sponsored by Department of Science and Technology, New Delhi. **(Grant Rs. 24, 00000).**

10. Compositional studies on soluble organic matter entrapped within clay sediments, associated with intra-volcanic bole horizons from Deccan Traps: Palaeoenvironmental implications and KTB (F. No. 34-49\2008 (SR). Sponsored by University Grants Commission, New Delhi. **(Grant: Rs. 7.36800).**

11. Studies on hydrothermal sulphides (MoES/Hydro-Sulphides/04/08-PC-II, Government of India. Sponsored by Ministry of Earth Sciences, New Delhi **(Grant Rs. 47.973 Crores: Delhi University component under Prof. J. P. Shrivastava, Rs. 55, 00000 approx.)**.

12. Study of alteration mechanism under accelerated P-T conditions in the barium borosilicate nuclear waste glass for its long-term performance assessment in geological repository. Funded by Delhi University **(Grant Rs. 2, 50000).**

13. CO_2 sequestration studies on volcano-sedimentary succession of the eastern Deccan volcanic province (Funded by Department of Science and Technology, New Delhi, Vide Letter No. DST Reference No: IS- STAC/CO2-SR-79/10(G) **Grant: 59 lacs approx.**

14. Compositional studies on soluble organic matter entrapped within clay sediments from the Late Cretaceous-Early Paleocene succession of the Um-Sohryngkev river section of Meghalaya, India: palaeoenvironmental implications and KTB (Funded by CSIR, New Delhi Vide Letter No. 24(0315)/11/EMR-II, dated 20/04/2011) **14 lacs approx.**

15. Sr-Cs ion implantation and long term performance assessment of nuclear waste (impact) glass from Lonar Crater, Buldana Maharashtra. Funded by Delhi University **(Grant Rs.**

2, 50000).

16. Cosmogenic ^{10}Be dating of the clay sediments associated with the intra-volcanic bole horizons of the Deccan Traps: palaeoenvironmental implications and duration of volcanism at KTB. Funded by Inter University Accelerator Centre IUAC Letter No. IUAC/ III.01/1567 dated 11/04/2013. **(Grant: 12 Lacs approx.**

17. Compositional studies on clays and organic matter associated with the intra-cratonic Proterozoic Bijawar basin in Central India: alteration haloes and palaeoenvironmental control in the unconformity related U mineralization. Funded by BRNS-BARC Letter No. 36(5)/14/57/2014-BRNS/10272 dated 28/May 2015) **49 lacs approx.**

18. Geochemical Flow Stratigraphy, Age and Duration of Deccan Volcano-Sedimentary Succession from Koyna Drill-Core Site. Likely to be funded by the Ministry of Earth Science, Govt. of India. **34 lacs approx.**

19. CO_2 sequestration studies on volcano-sedimentary succession of the eastern Deccan volcanic province. Sponsored by DST **(Grant Rs. 57, 00000).**

20. Compositional studies on soluble organic matter entrapped within clay sediments from the Late Cretaceous – Early Palaeogene succession of the Um-Sohryngkev river section of Meghalaya India: Palaeoenvironmental implications and KTB: Sponsored by CSIR, New Delhi **(Grant Rs. 27, 00000).**

21. Cosmogenic Be dating of the bole sediments of the Deccan Traps: palaeoenvironmental implications and duration of volcanism at KTB. Sponsored by Inter University Accelerator Center, New Delhi **(Grant: Rs. 10, 50, 000)**

22. Study of Corrosion Mechanism in Borosilicate Nuclear Waste Glass for long Term Performances Assessments in Geological Repository. Sponsored by Bhabha Atomic Research Center. **(Grant Rs. 27, 00000)**.

23. Sr/Ce Ion Implantation and Long Term Performance Assessment of Nuclear Waste (Impact) Glass from Lonar Crater, Buldana Maharashtra **(Grant: Rs. 2,44,000).**

(C) Consultancy Projects Completed: 5

24. Analysis of water samples with special reference to the grain size, mineral composition, physical and chemical characteristics. Sponsored by Indo-Canadian Consultancy Services Ltd. **(Cost Rs. 1,66,000)**

25. Grain size, mineral composition and chemical analysis of water samples. **(Cost Rs. 2,98,000)**

26. Grain size, mineral composition and chemical analysis of water samples. **(Cost Rs. 3,04,980)**

27. Analysis of water samples with special reference to the grain size, mineral composition, physical and chemical characteristics. Sponsored by Indo-Canadian Consultancy Services Ltd. **(Cost Rs. 20,700).**

28. Consultancy and training programme on silt analysis for two Scientific Officers from the Druk Green Power Corporation, CHP-Chhukha, Bhutan. **(Cost Rs. 0.6 lacks).**

Other Details

Scientist and Research Associate worked/working under my supervision: 6

1. **Dr. Shilpi Saxena (2010 - 2013).** Hydro Chemical Characterization and Pollutant Transport Study in the regime of groundwater at Najafgarh Basin in the South-Western part of Delhi sponsored by DST (WOS A), New Delhi (**Cost Rs. 23,00,000**)
2. **Dr. Nishi Rani (2011-2012).** Alteration Studies of Induced Radioactivity in Obsidian Glass for High Level Nuclear Waste Immobilization sponsored by CSIR, New Delhi **(Cost Rs. 10,89,000).**
3. **Dr. Samba Cissokho (2014)** Geodynamic Context and Fluids Mineralizing of Massawa Gold Deposit Kedougou-Kenieba Inlier, Senegal **(JPS-**Academic Supervisor under Sir C. V. Raman International Fellowship by Department of Science and Technology, Government of India.
4. **Dr. Nishi Rani (2013-2014)** Immobilization of radionuclide and its diffusion in obsidian (natural analogue) for its suitability as nuclear waste glass. D. S. Kothari Post-Doctoral Fellow, UGC. Pune.
5. **Dr. Sucharita Pal (2016 – continued till today)** Clay organo-molecular studies on late Cretaceous-early Palaeocene sucession of the Mahadeo-Cherapunji section and its lateral correlation with the K/Pg layer of the Um-Sohryngkew river section Mehalaya: Palaeoenvironmental implications and K/Pg transition. CSIR.

Ph. D. Degree awarded under my supervision: 15

1. **Pattanayak, S.K. (1999).** Geochemical Flow Stratigraphy of Basalts from Eastern Deccan Volcanic Province, India.
2. **Girdhar, Mukta (2001).** Geochemistry and Petrogenesis of the Basalt from the Chakhla-Delakhari Intrusive Complex and their Chemical Correlations with the Lava Flows of the Eastern Deccan Volcanic province, India.
3. **Pujari, Gobinda Nanda (2002).** Biogeochemical Studies around Malanjkhand Copper Deposit, India.
4. **Ahmad, Mansoor (2006).** Mineralogical and Geochemical Studies on Intra-volcanic Bole Clays from Eastern Deccan Volcanic Province: Palaeoenvironmental Implications and K-T Boundary.

5. **Sanjay, Kumar Pandey (2008).** Magmatism and Hydrothermal activity on the fast spreading East Pacific Rise.
6. **Jitendra Kumar Nagar (2010)** Airborne suspended particulate matter in the industrial area of Delhi and its effects on respiratory allergy in children.
7. **Rajesh Prakash (2010)** Seismicity and attenuation studies of Delhi and adjoining areas.
8. **Nishi Rani (2011)** Alteration studies on Nuclear Waste and natural Glasses for Long Term Performance Assessment in Geological Repository.
9. **Raju Kumar (2012)** Petrochemistry and petrogenesis of mafic dykes from eastern part of the Deccan volcanic province between Narmada-Son and Tapti lineaments.
10. **Mamta Ramesh Kashyap (2012)** Geochemical flow stratigraphy, age and petrogenesis of basalts from Mandla lobe of the eastern Deccan volcanic province, India.
11. **Surendra Kumar Jha (2014)** Compositional studies on clays and organic matter and their relevance to depositional mechanism and palaeoenvironmental control over uranium mineralization in Bijawars of the Sonrai basin.
12. **Sucharita Pal (2014)** Compositional Studies on Clays and Extractable Organic Matter Associated with the Late Cretaceous-Early Palaeogene Succession of the Um-Sohryngkew River Section of Meghalaya, India: Palaeoenvironmental implications and KTB boundary.
13. **Surabhi Srivastava (2015)** Compositional Studies on Organic Matter Associated with Clays of the Jhilmilli and Other Intertrappean Intra-volcanic Bole Beds from the Eastern Deccan Volcanic Province: Palaeoenvironmental Implications and K/Pg transition.
14. **Vamdev Pathak (2015)** Palaeomagnetic, AMS and Rock Magnetic Studies on Lavas of the Mandla Lobe of the Eastern Deccan Volcanic Province, India.
15. **Amit Kumar (2018)** Experimental studies on mineral carbonation under water saturated hydrothermal-like conditions and thermodynamic modelling for CO_2 sequestration in tholeiitic basalt of the eastern Deccan volcanic province, India.

M. Phil degrees awarded under my supervision: 7

1. **Salil, M.S. (1993).** Comparative Mineralogy and Geochemistry of Infra- (Lametas)/ Inter-trappean Sediments and Weathered Deccan Volcanics.
2. **Raza, S.A. (1994).** Petrography and Geochemical Flow Stratigraphy of Tholeiitic Basalt from Eastern Deccan Volcanic Province (Seoni-Jabalpur Traverse).
3. **Ahmad, Mansoor (2002).** Mineral Chemistry and Petrogenesis of Basalts from Eastern Deccan Volcanic Province, India.
4. **Kumar, Raju (2006).** Petrochemistry and Petrogenesis of Deccan Basalt Dykes, between Betul-Jabalpur areas of M. P (to be awarded).

5. **Surendra Kumar Jha (2010)** Compositional studies on clays and their palaeoenvironmental implications on uranium mineralization in Bijawars of the Sonrai basin.
6. **Virinder Pal Singh (2018)** Mineral chemistry of giant plagioclase basalt: petrogenetic implications.
7. **Aman Kumar (2018)** Thermodynamic modelling at high pressure and temperature conditions for CO_2 sequestration in tholeiitic basalt of the eastern Deccan volcanic province, India.

Ph. D. Thesis Reviewed: 31

1. Geochemistry of crystalline rocks around Rayachoti, Cuddapah District and Kasturigattu, Nellore district, Andhra Pradesh India, and its bearing on uranium mineralization, *submitted by* **C. Sudhakar** for the award of Ph. D. of Bangalore University, Bangalore.
2. Geological investigations on search of mineralization in carbonatite-nephelinite, alkaline suite of Sanpa-Dandali Area, District Barmer, Rajasthan, *submitted by* **Yasmin Sayeed** for the award of Ph. D. Degree of Jodhpur University, Jodhpur.
3. Seismotectonics of deep crustal earthquakes in parts of Central Indian Sheer Zone with special reference to Jabalpur and its surrounding environs, *submitted by* **Sadanand Pimprikar** for the award of Ph. D. degree of Jabalpur University.
4. Comparative study of low cost and high cost DPW: Software focused on orthophoto production and its utility in GIS application for geo-environmental studies, *submitted by* **Manoj Kumar Gaur**, Department of Geology, Maharaja Ganga Singh University, Bikaner.
5. Petrological and geochemical investigation of the Behradih kimberlite from the Bastar Craton, Central India, with special reference to its diamond potential *submitted by* **Datta Mainkar**, Department of Applied Geology, National Institute of Technology, Pt. Ravishankar Shukla University, Raipur.
6. Hydrogeological and hydrogeochemical studies in and around Sehore town with special reference to Fluorine pollution (M. P.) India", *submitted by* **Surndra Kumar Khatarkar**, Department Geology, Government Motilal Vigyan Mahavidyalaya, Barkatullah University, Bhopal, Bhopal (M. P.).
7. Petrology and geochemistry of syenite pluton and associated rocks of Elagiri, Tamil Nadu,

Southern India, *submitted by* **Sharmistha Mukhopadhyay**, Department of Geology, University of Calcutta, Calcutta.

8. Environmental geo-scientific study of westernpart of Nokha Tehsil, District Bikaner, Rajasthan, *submitted by* **Priti Parihar**, Department of Geology, Maharaja Ganga Singh University, Bikaner.

9. Magnetostratigraphic study of the Nhuban Formation (Surma Group) around Aizwal, Mizoram, *submitted by* **J. Malsawma,** Department of Geology, Mizoram University, Aizwal Submitted by J. Malsawma, Department of Geology, Mizoram University, Aizwal.

10. Geoenvironmental Assessment and Management Strategies of Groungwater around Kishengarh Disttrict, Ajmer, Rajasthan, *submitted by* **Mr. Manoj Panwar**, Department of Geology, Faculty of Science, Dunger College, Maharaja Ganga Singh University, Bikaner.

11. Seismic Risk Assessment and Development of Seismic Disaster Management Plan for Hoshangabad City, District Hoshangabad (M. P.) using Remote Sensing Techniques, *submitted by* **Dilip Kumar Singh,** Department Geology, Government Motilal Vigyan Mahavidyalaya, Barkatullah University, Bhopal Bhopal (M. P.).

12. An evaluation of geo-exploratory developments and environmental management around Khetri, District Jhunjhunu, Rajasthan, India, s*ubmitted by* **Manmohan Shukla,** Department of Geology, Government Dunger College, Faculty of Science, Maharaja Ganga Singh University, Bikaner.

13. Geohydrological Studies of Balaghat Block, District Balaghat, Madhya Pradesh, s*ubmitted by* **Mr. Mado Prasad Bisen**, Research Center, Department of Geology, Government Model Science College, Rani Durgavati Vishwavidyalaya, Jabalpur (M. P.).

14. Magnetostratigraphic study of the Surma and Tipam Groups in parts of the Kolasib District, Mizoram, *submitted by* **Paul Lalnuntluanga,** Department of Geology, Mizoram University, Aizawl.

15. Geology and prospects of clay deposits around Kolayat, Bikaner, Rajasthan Submitted by **Mr. Bahagirath**, P. G. Department of Geology, Government Dunger College, Faculty of

Science, Maharaja Ganga Singh University, Bikaner.

16. Petrology and geochemistry of Deccan Trap lava flows around Linga, Chindwara District, Madhya Pradesh, Central India, *Submitted by* **Sohini Ganguly**, Department of Geology, University of Calcutta, Calcutta.

17. Geological and geochemical studies on granitoids located on either side of Peddavoora schist belt and its bearing on uranium mineralization in Nalgoda district, Andhra Pradesh, India, *Submitted by* **Cinthala Ravi,** Geology Department, Osmania University, Hyderabad.

18. Sedimentological study of rocks around bidasar (Churu district) and their geological and tectonic setting *Submitted by* **Mr. Sukesh Jhakhar**, P. G. Department of Geology, Government Dunger College, Faculty of Science, Maharaja Ganga Singh University, Bikaner

19. Hydrogeomorphological study of watersheds for prioriyization and water resources development in Bharveli area, Tehsil and District - Balaghat (M. P.)" *Submitted by* **Mr. Trilok Singh Patle**, Department of Geology, Government Model Science College, Rani Durgavati Vishwavidyalaya, Jabalpur (M. P.)

20. Petrography, Geochemistry and Palaeontology of Carbonate Rocks of Shella Formation Occurring in and Around Shella-Ismati Area, East Khasi Hills District of Meghalaya (India)". *submitted by* **Moloi Bora,** Department of Geological Sciences, Guwahati University, Guwahati

21. Nature and composition of crystalline basement below Deccan volcanic covered 1993 Latur - Killari earthquake region, Maharastra, (India)" *submitted by* **Priyanka Tripathi**, CSIR-National Geophysical Research Institute, Hyderabad

22. Sedimentation model and hydrocarbon potential of the Barail Group of rocks from parts of the oilfield areas in Dibrugarhand and Tinsukia Districts and adjoining fold-belt areas of Assam-Arakan basin, *submitted by* **Manas Kumar Sharma**, Dibrugarh University, Assam.

23. Study of geology and industrial characteristics of Tertiary clays of Bikaner and Nagaur regions s*ubmitted by* **Sandeep Kumar,** Department of Geology, Government Dunger

College, Faculty of Science, Maharaja Ganga Singh University, Bikaner.

24. Report on the Ph. D. thesis titled Petrological and Geochemical Studies of Distinct Palaeoproterozoic Mafic Dyke Swarms from the Northern Part of the Eastern Dharwar Craton, Southern India, s*ubmitted by* **Amiya Kumar Samal**, Department of Geology, BHU, Varanasi.

25. Geochemistry and Petrogenesis of Proterozoic Felsic and Mafic Magmatic Rocks in and around Bomdila Area, Arunachal Pradesh, NE Lesser Himalaya, s*ubmitted by* **Naqeebul Islam**, Department of Geology, Aligarh Muslim University, Aligarh

26. Studies of Cosmogenic Radionuclides using Accelerator Mass Spectroscopy s*ubmitted by* **Pankaj Kumar**, Jawaharlal Nehru University, New Delhi.

27. Geohydrological Studies of Lalburra Tehsil of Balaghat-District, Using Remote sensing and Geographical Information System, *submitted by* **Roopam Khare**, Department Geology, Government Motilal Vigyan Mahavidyalaya, Barkatullah University, Bhopal.

28. Petrology and geochemistry of mafic rocks and porpyritic granitoids around Laitlyngkot, east Khasi Hills district, Meghalaya, North - Eastern, India, *submitted by* **Sampa Hazara**, Department of Geology, University of Calcutta, Calcutta.

29. Study of geology and industrial characteristics of Tertiary clays of Bikaner and Nagaur regions, *submitted by* **Sandeep Kumar**, Department of Geology, Government Dunger College, Bikaner.

30. Hydrogeological and hydrogeochemical studies in and around Sehore town with special reference to Fluorine pollution (M. P.) India, s*ubmitted by* **Mr. Surndra Kumar Khatarkar,** Department Geology, Government Motilal Vigyan Mahavidyalaya, Barkatullah University, Bhopal.

31. Geological, Petrological, Geochemical and Geophysical Studies on Deccan Basalts of Mandla Region, Eastern Deccan Volcanic province, *submitted by* **K. N. S. S. S. Srinivas**, CSIR-NGRI, Uppal Road, Hyderabad.

Research Papers Reviewed:

1. Geological Society of India, Bangalore (20 papers)
2. Current Science (10 papers)
3. Earth System Science (7 paper)
4. Indian Journal of Geochemistry (6 papers)
5. Journal of Asian Earth Sciences (5 papers)
6. Geological Journal (10 papers)

Students' Summer Training Programme:

1. Ashutosh Kumar (2011) from IIT, Kharagpur: Clay mineral separation and analysis of Deccan Traps associated bole horizons.
2. Raj Kumar (2011) from IIT Kharagpur: Clay mineral separation and analysis of Deccan Traps associated bole horizons.
3. Narayan Shandilya (2011) Separation and analysis of extractable organic carbon from bole horizons associated with the Deccan Traps.
4. Abhimanyu (2011) Clay mineral separation and analysis from from Late Cretaceous-Early Palaeogene succession of the Um Sohryngkew River section of Meghalaya.
5. Shilpa (2011) Clay mineral separation and analysis from from Late Cretaceous-Early Palaeogene succession of the Um Sohryngkew River section of Meghalaya.

International and National collaboration :

1. On Pb-Sr-Nd isotopic composition of Deccan basalt: Professor J. J. Mahoney, University of Howaii, SOESET, U. S.
2. On duration of Deccan volcanism: Professor Robert Duncan, Oregon University, U. S.
3. International Geological Correlation Programme: Geological Survery of India, Kolkata (Project Coordinator: Dr. S. K. Mukhopadhay).
4. On hydrothermalism in the Indian Ocean and Andaman Nicobar Islands: NGRI, Hyderabad, NIO, Goa and Inter IUAC, New Delhi.

5. On duration of Deccan volcanism: IUAC, New Delhi (with Dr. Sandeep Chopra and Pankaj Kumar).
6. On uranium mineralization in the Bijawars of the Sonrai basin: AMD, Hyderabad.
7. On organic matter associated with the infra/intertrappean sediments in the Deccan Traps: NIO, Goa.
8. On organic matter associated with the Late Cretaceous- Early Palaeogene succession of the Um Sohryngkew River section of Meghalaya: NIO, Goa.

Signature of Faculty Member

Signature & stamp
of Head of the Department