



Faculty Details proforma for DU Web-site

(PLEASE FILL THIS IN AND Email it to websiteDU@du.ac.in and
cc: director@ducc.du.ac.in)

Title	Dr.	First Name	PANKAJ	Last Name	SRIVASTAVA	Photograph
Designation		Professor				
Address		R. No. 209, 2 nd Floor, Department of Geology University of Delhi (North Campus) Delhi 110 007				
Phone No	Office	27667073				
Residence		27662927				
	Mobile	9868454197				
Email	pankajps@gmail.com					
Web-Page	http://people.du.ac.in/privastava/					
Educational Qualifications						
Degree	Institution				Year	
Ph.D.	University of Roorkee (IITR)				1992	
M.Sc.	University of Roorkee (IITR)				1986	
UG	University of Lucknow				1984	
Career Profile						
22-01-2009 – till date: Professor, Department of Geology, University of Delhi						
2006 –21-01-2009: Associate Professor, Department of Geology, University of Delhi						
2003-2006: Reader, University of Delhi (Date of Joining: 22-01-2003)						
1994-2003: Soil-Micromorphologist (T6-7), NBSS&LUP, ICAR, Nagpur						
Administrative Assignments						
Member: Board of Research Studies (Sciences) 2008-2010, 2018-2020						
Member: Faculty of Science: 2012-2015						
Areas of Interest / Specialization						
Quaternary Geology, Sedimentary Geology, Geomorphology, Paleopedology						
Presently studying paleopedological evolution of the Himalayan foreland and its implications for paleoclimate and tectonics						
Subjects Taught						

PG level

Sedimentary Geology, Sedimentary Environment, Stratigraphy, Earth Surface Processes

UG Level

Sedimentary Geology, Stratigraphy, Geomorphology

Research Guidance

Supervision of awarded Doctoral Thesis: 3

2014: K. Manini Aruche “Soil-geomorphic variations of Gangetic Plains in response to late Quaternary climatic changes”.

2008: Apurba Banarjee, “Sedimentological and Geochemical Studies in parts of Vindhyan Basin Satna, Maihar and Nagod areas” (Co-supervisor)

2007: Nikesh Ranjan, “Geochemistry of Himalayan Foreland sediments and soils in parts of NW Himalaya” (Co-supervisor)

Supervision of Doctoral Thesis, under progress: 4

Supervision of awarded M. Phil dissertations: 3

2017: Abdul Hameed, “Micromorphology, Particle size and clay mineralogy of Lower Siwalik Paleosols from Kangra Basin, NW Himalaya”

2006: Manoj K. Rajak, Evolution of Quaternary alluvial fan deposits of Kangra valley, NW Himalaya: Paleoclimatic and neotectonics implications”

2007: Jagannath Nanda: Holocene geomorphology and sedimentology of the Lacustrine sediments from Chilka, Odisha”

Supervision of awarded M.Sc. dissertations: 26

Publications Profile

Book Chapters:

1. **Srivastava, P., Pal., D.K., Bhattacharyya, T. 2013.** Mineral formation in soils and sediments as signatures of climate change. In: T. Bhattacharyya T., D.K., Pal, D.K., D. Sarkar, P. Wani (Eds.) **Climate Change and Agriculture.** Studium Press India Pvt. Ltd. ISBN: 978-93-80012-40-7, 328pp.
2. **Srivastava, P., Pal, D.K., Kalbande, A.R. 2009.** Soil Micromorphology and its Usefulness in Soil Surveys. In: Bhattacharyya T., Sarkar., D., Pal, D.K. (Eds.) **Soil Survey Manual.** NBSSLUP Publication No 146. pp. 149-156.
3. Velayutham, M., Pal, D. K., Bhattacharyya, T., **Srivastava, P., 2002.** Soils of the Indo-Gangetic Plains, India – the historical perspective. In: Abrol, Y. P., Sangwan, S.

and Tiwari, M. (Eds.) **Land Use – Historical Perspectives – Focus on Indo-Gangetic Plains.** Allied Publishers, New Delhi, pp. 61–70.

Research papers published in Refereed/Peer Reviewed Journals

1. Hameed, A., Raja, P., Ali, M., Upreti, N., Kumar, N., Tripathi, J.K., **Srivastava, P.** 2018. Micromorphology, Clay mineralogy, and Geochemistry of calcic-soils from Western Thar Desert: Implications for origin of palygorskite and southwestern monsoonal fluctuations over the last 30 ka. **Catena** 163, 378-398. (IF: 3.191, Elsevier, Corresponding author: Pankaj Srivastava).
2. D.N. Spinola, R.C. Portres, **P. Srivastava**, J. Torrent, V. Barón, P. Kühn, 2018. Diagenetic reddening of Early Eocene paleosols on King George Island, Antarctica. **Geoderma** 315: 149-159. (IF 4.036, Elsevier publication). (April 2018)
3. **P. Srivastava**, R. Sinha, V. Deep, A. Singh, N. Upreti, 2018. Micromorphology and sequence stratigraphy of the interfluvial paleosols from Ganga Plains: A record of alluvial cyclicity and paleoclimate during the late Quaternary. **Journal of Sedimentary Research** 88: 1-24. (IF: 2.427, SEPM publication).
4. Khan, I, Amir, M., Paul, D., **Srivastava, P.** 2018. Late Holocene aridification recorded in the stable carbon and nitrogen isotope composition of soils from Nainital, Lesser Himalaya. **Quaternary International** 467: 195-203. (IF 2.163, Elsevier) (Feb 2018).
5. Thakre, D. Samant, B., Mohabey, D.M., Sangode, S., **Srivastava, P.**, Kapgate, D.K., Mahajan, R., Upreti, N., Manchester, S.R., 2017. A new insight into age and environments of intertrappean beds of Mohgaon Kalan, Chhindwara District, Madhya Pradesh using palynology, megaflora, magnetostratigraphy and clay mineralogy. **Current Science** 112, 2193-2197.
6. **P. Srivastava**, M. Aruche, A. Arya, D.K. Pal, L.P. Singh, 2016. A micromorphological record of contemporary and relict pedogenic processes in soils of the Indo-Gangetic Plains: Implications for mineral weathering, provenance and climate changes. **Earth Surface Processes and Landforms** 41: 771-790. (doi:10.1002/esp.3862). (Impact Factor: 2.845, Wiley Publication).
7. **P. Srivastava**, D. K. Pal, K M. Aruche, S.P. Wani, K. L. Sahrawat, 2015. Soils of the Indo-Gangetic Plains: A pedogenic response to landscape stability, climatic variability and anthropogenic activity during the Holocene. **Earth Science Reviews** 140:54-71; DOI 10.1016/j.earscirev.2014.10.010). (Impact Factor: 7.135, Elsevier Publication).

8. Srivastava, P., Saur, D. **2014**. Thin-section analysis as a tool to resolve the effects of burial diagenesis of lithified paleosols for paleoenvironments: an example from the oldest fossil soils of the Himalayan Foreland. **Catena** 112: 86-98. (Impact Factor: 2.482, Elsevier Publication).
9. Pal, D.K., Wani, S.P., Sahrawat, K.L., Srivastava, P. **2014**. Red ferruginous soils of tropical Indian environments: A review of the pedogenic processes and its implications for edaphology. **Catena** 121:260-278. (Impact Factor: 2.482, Elsevier Publication).
10. Samant, B., Mohobey, D.M., Srivastava, P., Thakre, D. **2014**. Palynology and clay mineralogy of the Deccan volcanic associated sediments of Saurashtra, Gujarat: Age and Paleoenvironments. **Journal of Earth System Science** 123, 219-232 (Springer, ISSN: 0523-4126)
11. Srivastava, P. Patel, S., Singh, N., Jamir, T., Kumar, N., Aruche, M., Patel, R.C. **2013**. Early Oligocene paleosols of the Dagshai Formation: A record of the oldest tropical weathering in the Himalayan foreland. **Sedimentary Geology** 294: 142-156. (Impact Factor: 2.134, Elsevier).
12. Srivastava, P., Banerjee, B., Aruche, M., Ahmad, N. **2013**. Clay mineralogy of the oldest paleosols from the Himalayan foreland: Implications of Diagenetic overprinting and paleoenvironments. **Clay Research** 32: 17-25.
13. Pal, D.K., Bhattacharyya, T., Sinha, R., Srivastava, P., Dasgupta, A.S., Chandran, P., Ray, S.K., Nimje, A. **2012**. Clay minerals record from Late Quaternary drill cores of the Ganga Plains and their implications for provenance and climate change in the Himalayan Foreland. **Palaeogeography Palaeoclimatology Palaeoecology** 356-357: 27-37. (Impact Factor: 2.752, Elsevier).
14. Srivastava, P., Rajak, M.K., Sinha, R., Pal., D.K., Bhattacharyya, T. **2010**. A high resolution micromorphological record of the Late Quaternary paleosols from Ganga-Yamuna Interfluve: Stratigraphic and Paleoclimatic implications. **Quaternary International** 227: 127-142. (Impact Factor: 2.128, Elsevier).
15. Srivastava, P., Rajak, M., Singh, L.P., **2009**. Late Quaternary alluvial fans and paleosols of the Kangra Basin, NW Himalaya: Tectonic and paleoclimatic implications. **Catena** 76:135-154. (Impact Factor: 2.482, Elsevier Publication).
16. Pal. D.K., Bhattacharyya, T., Srivastava, P., Chandran, P., Ray. S.K. **2009**. Soils of the Indo-Gangetic Plains: their historical perspective and management. **Current Science** 96: 1193-1202.

17. Srivastava, P., Singh, A.K., Parkash, B., Singh, A.K., Rajak, M., 2007. Paleoclimate implications of micromorphic features of Quaternary Paleosols of NW Himalayas and polygenetic soils of the Gangetic Plains — A comparative study. **Catena** 70: 169–184. (Impact Factor: 2.482, Elsevier Publication).
18. Pal, D.K., Bhattacharyya, T., Ray, S.K., Chandran, P., Srivastava, P., Durge, S.L., Bhuse, S.R. 2006. Significance of soil modifiers (Ca-zeolites and gypsum) in naturally degraded Vertisols of the Peninsular India in redefining the sodic soils. **Geoderma** 136: 210–228. (Impact Factor: 2.509, Elsevier Publication).
19. Chandran, P, Ray, S.K., Bhattacharyya, T., Srivastava, P., Krishnan, P., Pal, D.K., 2005. Lateritic soils of Kerala, India: their mineralogy, genesis and taxonomy. **Australian Journal of Soil Research** 43: 839-852 CSIRO Publication.
20. Pal, D.K., Srivastava, P., Bhattacharyya, T., 2003. Clay illuviation in calcareous soils of the semiarid part of the Indo-Gangetic Plains. **Geoderma** 115:177-192. (Impact Factor: 2.509, Elsevier Publication).
21. Pal, DK, Srivastava, P., Durge, SL, Bhattacharyya, T. 2003. Role of microtopography in the formation of sodic soils in the semi-arid part of the Indo-Gangetic Plains. **Catena** 51:3-31.
22. Srivastava, P., Bhattacharyya, T., Pal, D.K. 2002. Significance of the formation of calcium carbonate minerals in the pedogenesis and management of cracking clay soils (Vertisols) of India. **Clays and Clay Minerals** 50:111-126.
23. Srivastava, P., Parkash, B., 2002. Polygenetic soils of the North-central Part of Gangetic Plains: A micromorphological approach. **Catena** 46:243-259.
24. Srivastava, P., 2001. Paleoclimatic implications of pedogenic carbonate in Holocene soils of the Gangetic Plains. **Palaeogeography Palaeoclimatology Palaeoecology** 172:207-259.
25. Pal, D.K., Balpande, S.S., Srivastava, P., 2001. Polygenetic Vertisols of the Purna Valley in Central India. **Catena** 43:231-249.
26. Pal, D.K., Srivastava, P., Durge, S.L., Bhattacharyya, T., 2001. Role of weathering of the fine-grained micas in Potassium management of Indian soils **Applied Clay Science** 20:39-52.
27. Bhattacharyya, T., Pal, D.K., Srivastava, P., Velautham, M. 2001. Natural Zeolites as saviour against soil degradation. **Gondwana Geological Magazine** 16: 27-29.

28. Zade. S.P., Srivastava, P., Pal, D.K. 2001. Do primary minerals weather during the formation of Vertisols in India? **Clay Research** 20:57-63.
29. Srivastava, P., Chandran, P., Ray, S.K., Bhattacharyya, T. 2001. Evidence of chemical degradation in tropical ferruginous soils of southern India. **Clay Research** 20:31-41.
30. Roy, A, Chatterjee, AK, Pal, DK, Srivastava, P. 2001. Geology, chemistry and mineralogy of some Bole Beds of the Eastern Deccan Province. **Geol. Sur. Ind. Spl. Publ.** 64:543-551.
31. Bhattacharyya, T., Pal, D.K., Srivastava, P., 2000. Formation of gibbsite in presence of 2:1 mineral: and example from ultisols of northeast India. **Clay Minerals** 35:827-840.
32. Bhattacharyya, T., Srivastava, P., Pal, D.K. 2000. In search of parental legacy for gibbsite in soils. **Clay Research**, 19:69-75.
33. Parkash, B., Kumar, S. Rao, M.S., Giri, M.S., Kumar, S., Gupta, S., Srivastava, P. 2000. Holocene tectonic movements and stress fields in the western Gangetic Plains. **Current Science** 79:438-449.
34. Bhattacharyya T, Pal DK, Srivastava P. 1999. Role of Zeolites in persistence of high altitude Ferruginous Alfisols of the humid tropical Western Ghats, India. **Geoderma** 90:263-276.
35. Pal DK, Srivastava P, Bhattacharyya T. 1999. Clay Minerals as Evidence of Paleoclimatic Signature in Soils. **Gond. Geol. Mag., Spl. Vol.** 4:169-176.
36. Srivastava, P., Pal D.K. 1999. Clay mineralogy of the pedogenic calcrete: complementary approach to infer the climatic change in soils of the Indo-Gangetic Plains. **Clay Research** 17:43-56.
37. Srivastava, P., Parkash, B., Pal. D.K., 1998. Clay minerals in soils as evidence of Holocene climatic change, Central Indo-Gangetic Plains, North-Central India. **Quaternary Research** 50:230:239.
38. Kumar, S. Parkash, B., Manchanda, M.L., Singhvi, A.K., Srivastava, P., 1996. Holocene landform and soil evolution of the western Gangetic Plains: Implications of neotectonics and climate. **Ztschrift fuer Geomorphologie** 103:283-312.
39. Srivastava, P., Parkash, B., Sehgal, J., Kumar, S., 1994. Role of neotectonics

and climate in development of the Holocene geomorphology and soils of the Gangetic Plains between the Ramganga and Rapti rivers. **Sedimentary Geology** 94: 129-151.

40. Srivastava, D. C., **Srivastava, P.**, 1988. The modification of parallel folds by progressive shearing parallel to the axial plane. **Tectonophysics** 156:167-173.

Research Report (Online ICRISAT)

41. Bhattacharyya T, (.....), **Srivastava, P.** (.....), 2006. Morphological properties of red and black soils of selected benchmark spots in semi-arid tropics of India. **Global Theme on Agroecosystems Report no. 21.ICRISAT and ICAR.** 100 pp.
42. Bhattacharyya T, (.....), **Srivastava P**, (.....), 2006. Estimation of carbon stocks in red and black soils of selected benchmark spots in semi-arid tropics of India. **Global Theme on Agroecosystems Report no. 28 ICRISAT and ICAR.** 86 pp.
43. Bhattacharyya T, (.....), **Srivastava P**, (.....), 2008. Characterization of benchmark spots of selected red and black soils in semi-arid tropics of India. **Global Theme on Agroecosystems Report No. 42.** Identifying systems for carbon sequestration and increased productivity in semi-arid tropical environments (RNPS-25). (NATP), (ICAR), (ICRISAT), 388 pp

Conference Organization/ Presentations (in the last three years)

List against each head (If applicable)

1. Organization of a Conference:-
2. Participation as Paper:2

Research Projects (Major Grants/Research Collaboration)

1. Loess-paleosols in alluvial fans of Kangra Basin (DST, Rs. 1.5 lakhs, completed 2007).
2. Quaternary alluvial fans of Kangra Intermontane Basin (DST, 24 lakhs, completed 2012).
3. Ganga-Yamuna Interfluve Stratigraphy Gangetic Plains (DST, 24 lakhs, completed 2012).
4. Spatial variability of soils and weathering processes across the catchment of Yamuna River from National Capital Region (DU/DST/PURSE) (Rs. 21 lakhs, completed 2013).
5. Paleopedological..... records of climate change and tectonics.... of Siwalik succession, Panjab re-entrant (MOES approved June 2014, 42 lakhs, work in progress).
6. Paleogene fossil soils..... Implications for the oldest tropical weathering and monsoonal conditions, Indian subcontinent (SERB- DST 2016-2019, 28 lakhs, work in progress).

Awards and Distinctions

2018: Elected as fellow, **The Clay Mineral Society of India**, New Delhi, 2018.

2017: DFG-INSA Fellowship (University of Tübingen, Germany)

2012: INSA-DFG Exchange Fellowship (University of Hohenheim, Stuttgart, Germany)

2007: ACU Titular Fellowship, Oxford University Centre for Environment, UK, 2007.

2006: CASF, **2002:** DAAD Fellowship, **1994:** CSIR Research Associate

1989-92: CSIR Senior Research Fellowship,

1987-89: OIDB Junior Research Fellowship

Association With Professional Bodies

1. Reviewing: Elsevier, INSA, Springer, Current Science
2. Memberships: PAGES, Paleopedology

Other Activities

Actively involved in academic affairs of the department as members of various committees

Pankaj Srivastava

Signature of Faculty Member