

Name **Dr. Anil D. Shukla**

Present Address Professor (Associate)
Dept. of Geology,
School of Earth Science
Hemwati Nandan Bahuguna University (HNBGU)
Srinagar Garhwal-246174, Uttarakhand, India

Mobile:- 9377924637/7016324637

Email anildshukla@gmail.com
(h-index: 26; i-index-62)
<https://scholar.google.com/citations?user=Y8SLE9sAAAAJ>



Academic Qualification:

Ph.D. (Geology) entitled “Geochemical and isotopic investigation of some sedimentary sequences of the Vindhyan Super group, Rajasthan, India” from the M S University of Baroda, Vadodara, India (2012).

M. Tech. (Civil Engineering) specialization in ‘Engineering Geology’, from Indian Institute of Technology, Kanpur, India (1993).

Professional Fellowship/Memberships and Recognitions:

- Fellow of “**Indian Geophysical Union (IGU)**”
- Fellow of “**The Society of Earth Scientists India**”
- Editorial Board of the international Journal “*Geomatics, Natural Hazards & Risk*”
- Life Member of “**Indian Association of Nuclear Chemists and Allied Scientists**”

Research Interests:

- Precambrian Earth’s history through sedimentary archives
- Provenance studies of sedimentary basins
- Major catastrophic/ geological events on the Earth’s history
- Fluvial aggradations and paleofloods during the late Quaternary in Central and Western Himalaya
- Evolution of landforms through sedimentary geochemistry and chronology
- Paleoglaciations records in Himalayas
- Planetary analogs of Moon & Mars
- Impact craters
- Indian meteorites: for characterization and chemical classifications and cosmic ray interactions

Technical Expertise

- Mass Spectrometry (MCICPMS and TIMS)
- Q-Inductively coupled Plasma -mass spectrometry (ICPMS)
- Femtosecond Laser Ablation-MCICPMS
- X-ray Fluorescence Spectrometry
- Gamma rays spectrometry
- Electron Probe Microanalysis
- Scanning Electron microscopy
- Micro-Raman Spectroscopy
- Optically stimulated luminescence (OSL) Chronology

Academic Activities:

- Recognized Ph.D. Guide of Gujarat University, Ahmedabad and IIT Gandhinagar
- Teaching and guiding regularly of Ph.D. Scholars at PRL

- Courses taken: Physics Chemistry of Solar System, Analytical Geochemistry, Earth Surface Processes and Geochemical Methods and Applications
- Doctoral Research Advisory Committee of Ph.D. students at PRL working in the field of Earth & Planetary Sciences.

Seminars/Invited talks:

- Given talks at various international and national conferences and meetings.
- Lectures to Graduate and Post Graduate students in MS University Baroda./Kachchh University Bhuj, India

Mentorships/Supervisions:

- **Post-Doctoral Scholars:**
 - 1) Dr. Amrita Dutt: working on the ophiolite sequences in eastern Arunachal Pradesh
 - 2) Dr. Abhinay Sharma: working on mafic/ultramafic rocks from the Central Indian Suture zone, now Assistant Professor, Ravenshaw University, Cuttack.
 - 3) Dr. Amitav Patra, now at BHU, completed project on PETM events from Jaisalmer Basin, Rajasthan India, Now working in a Private Geological Survey Company.
 - 4) Dr. Shubhra Sharma now Assist. Professor at BHU, worked on Paleoglaciations of Western Zaskar and Paleofloods records in Central Himalaya, still working on the Paleofloods records. Now Assistant Professor at PRL Ahmedabad

- **Doctoral Students:**

Awarded. Ms. Anuradha Patel from JNU: submitted the thesis in November 2022 on Deccan basalt weathering in various climate regimes.

Submitted: Ms. Neha Chauhan, working on Alluvial fans and its role in evolution of landforms in Central Himalaya, Garhwal

Under Progress

1. MS. Ayushi Bhatnagar (DST-INSPIRE Fellow), working on Evolution of Great Rann of Kachchh
 2. Ms. Mudita Tater (DST-INSPIRE) working on Anorthosite rocks from Sighbhum craton
 3. Mr. Avisek Chaudhury: Scientist at Tripura Space Application Center. Working on the sedimentary sequence of Mizoram.
- **Undergraduate students:** About 12 students worked with me as summer/winter Internship as well as for their Post Graduate Dissertations

Reviewer's services:

- Members Editorial Board "Geomatics, Natural Hazards & Risk"
- Geology, Frontier in Earth Sciences, Journal of Mountain Science, Geomatics, Natural Hazards & Risk, Current Science and Journal of Earth System Science
- DST-SERB Research Proposals

Outreach/Other Activities/services to the Scientific Communities:

- *Institutional Representatives* in the *High-Power Committee (HPC)*, constituted by *Honorable Supreme Court of India* for evaluation of environmental impacts of the big infrastructure project of mountain highway widening in Himalayas identified as "**Chardham Pariyojana**" (All weather roads)" in Uttrakhand state of India.

- Convener of the 15th PLANEX National Workshop organized at PRL from January 4 to 10, 2015 entitled Moon and Mars analogues through remote sensing and field studies.
- Guiding Summer Internships from the Indian Science Academies'

Complete List of Publications

1. A. Dutt, **A. D. Shukla**, A. K. Singh, A. Narayanan (2024) A hydrous sub-arc mantle domain within the northeastern Neo-Tethyan ophiolites: Insights from cumulate hornblendites *Geochemistry*, 126122, <https://doi.org/10.1016/j.chemer.2024.126122>."
2. A Bhatnagar, **AD Shukla**, M Ngangom, MG Thakkar, J. Dubey, R. Bhushan (2024) Analysis of sediment provenance using geochemical and isotopic data for a post-LGM sediment core from the western Great Rann of Kachchh, India: Implications for climate control on source regions, *Palaeogeography, Palaeoclimatology, Palaeoecology*, # 112185
3. SK Khare, **AD Shukla**, AS Venkatesh (2024) Vanadium rich Fe-Ti oxide and Cu-sulphide mineralization in Paleoproterozoic Mangikhuta volcanics, Central Indian Craton: metallogenic and petrogenetic implications, *Ore and Energy Resource Geology*, # 100041
4. S Sharma and **AD Shukla** (2024) Mid-Holocene climate-glacier relationship inferred from landforms and relict lake sequence, Southern Zaskar ranges, NW Himalaya, *Geomorphology*, 444, # 108953
5. P Prasad, VJ Loveson, V Kumar, **AD Shukla**, P. Chandra, S. Verma, R. Yadav, R. Magotra, GM Tirodkar (2023) Reconstruction of Holocene relative sea-level from beach ridges of the central west coast of India using GPR and OSL dating *Geomorphology*, 442#108914
6. S Sharma and **AD Shukla** (2023) Need to declare the Higher Himalaya an eco-sensitive zone. *Current Science*, #8, 822-23
7. N. Chauhan, Y. Sundriyal, S. Kaushik, P. Chahal, DK Panda, D Banerjee, A Narayanan, **AD Shukla** (2023) Chronology and paleoclimatic implications of the upper Ganga catchment floods since Marine Isotopic Stage-2, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 620, #111566
8. D Ray, **AD Shukla** and A Bhardwaj (2023) Meteorite Fall in Bhojade Village, Kopergaon Taluk, Ahmednagar District, Maharashtra, India, *Current Science*, 1138-39
9. A. R. Pratihari, V. S. Hegde, N. R. McKenzie, H. E. Frimmel, **Anil D. Shukla** and S. Hulaji (2023) Provenance of the conglomerate and siliciclastic rocks from the Gadag Greenstone Belt, Western Dharwar Craton, India: Implications for understanding Neoproterozoic basin margin sedimentation, *Geological Journal*, 2023, 134; DOI: 10.1002/gj.4699
10. Y. Srivastava, A. Kumar, A. B. Sarbadhikari, D. Ray, V. M. Nair, A. Das, **A. D. Shukla**, S. Sathiyaseelan, R. Ramachandran, B. Sivaraman, S. Vijayan, N. Panwar, A. J. Verma, N. Srivastava, A. Rani, G. Arora, R. R. Mahajan and A. Bhardwaj (2023) The Diyodar meteorite: A new fall in India, *Current Science* V 124#2, 152-154
11. S Sarkar, H Moitra, S Bhattacharya, A Dagar, D Ray, S Gupta, A Chavan, **AD Shukla**, S Bhandari (2022) Spectroscopic studies on the Puga Hot Spring Deposits, Ladakh, an astrobiological Martian analog site in India, *JGR Planets* #127; e2022JE007299.
12. Shubhra Sharma, SP Sati, N Basaviaha, Shilpa Pandey, YP Sundriyal, Naresh Rana, Priyanka Singh, Subhendu Pradhan, **AD Shukla**, R Bhushan, Rakesh Bhatt, Navin Juyal (2022) Mid to late Holocene climate variability, forest fires and floods entwined with human occupation in the upper Ganga catchment, India, *Quaternary Science Reviews*, 293, # 107725
13. Partha Sarathi Jena, Ravi Bhushan, Harsh Raj, Ankur J Dabhi, Shubhra Sharma, Anil D Shukla, Navin Juyal (2022) Relict proglacial lake of Spituk (Leh), northwest (NW) Himalaya: A repository of hydrological changes during Marine Isotopic Stage (MIS)-2, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 2022, 602, #111164

14. Rayees Ahmad Shah, Imran Khan, Abdur Rahman, Sanjeev Kumar, Hema Achyuthan, **Anil D Shukla**, Pankaj Kumar, Chinmay Dash (2022) Holocene climate events and associated land use changes in the eastern coast of India: Inferences from the Chilika Lagoon, *The Holocene*, 32#10, 1081-1090
15. RR Mahajan, D Raychaudhuri, A Dutta, **A D Shukla** (2022) Cosmogenic records and noble gases in Mukundpura CM2. O carbonaceous chondrite, *Planetary and Space Science*, 105465 Volume 215, June 2022, 105465
16. A. Chavan, S. Sarkar, A. Thakkar, J. Solanki, C. Jani, S. Bhandari, S. Bhattacharya, B. G Desai, D. Ray, **A. D Shukla**, K.S. Sajinkumar, S. Mitra, S. Gupta, G. Chauhan, M. G. Thakkar (2022) Terrestrial Martian Analog Heritage of Kachchh Basin, Western India *Geoheritage* volume 14, Article number: 33(2022)
17. A. Zarasvandi, Z. Fereydouni, B. Alizadeh, N. Absar, **A. D. Shukla**, M. Q. Raza, M. Ashok, M. Zentilli (2021) Phosphogenesis in the Zagros Fold-Thrust Belt, Iran: The link between the Tethyan Paleoenvironment and Phosphate Ore Deposition, *Ore Geology Reviews*, 104563
18. M. Dabhi, A. Chavan, A. Thakkar, G. Chauhan, R. Bhagora, N. Chauhan, **A. D. Shukla**, and S. Bhandari (2022) Climatic history from early Weichselian (MIS 5D-C) valley-fill deposits and associated factors for basin sedimentation, mainland Kachchh, western India. *Quaternary International*, 642, 17-28 ;<https://doi.org/10.1016/j.quaint.2021.10.019>.
19. B. Maibam, K. A. Sharma, **A. D. Shukla**, K. Argyrios; B. Elena, (2022) Geochemical and geochronological study of rodingites from the northeast India ophiolites: Petrogenetic significance and timing of rodingitisation; <https://doi.org/10.1002/gj.4301>; **V57#2, 768-781**
20. S. N. Ali and **A. D. Shukla** (2021) An Exigency for Ice Core Studies to Determine Spatio-temporal Variability in Moisture Sources and Impact of Black Carbon–Mineral Aerosols on the Himalayan Glaciers, *Journal of Atmospheric Science Research* 4 (3)
21. M. Dabhi, A. Thakka, A. Chavan, G. Chauha, R. Bhagora, N. Chauhan, **A. D. Shukla**, S. Bhandari, M. G. Thakkar (2022) Mid-late Holocene climatic reconstruction from coastal dunes of the western Kachchh, India; *Quaternary International*, <https://doi.org/10.1016/j.quaint.2021.09.011> Volume 642, 30 December 2022, Pages 29-40
22. D. Ray, **A. D. Shukla**, S. Bhattacharya, S. Gupta, P. Jha, A. Patra and U. Chandra (2021) Hematite concretions from the Late Jurassic Jhuran sandstone, Kutch, western India: implications for sedimentary diagenesis and origin of “blueberries” on Mars, *Planetary & Space Sciences*, 197, 105163.
23. A. M. Lone, S. Sharma, H. Achyuthan, Anil D Shukla, R. A. Shah, S. J. Sangode, Fousiya A (2021) Climatic implications of late Holocene loess and intervening paleosols, Southern Zaskar range, northwestern Himalaya, *Physical Geography*, <https://doi.org/10.1080/02723646.2021.193850>
24. S. Sebastian, R. Bhutani, S. Balakrishnan, Tomson J. K., **Anil D. Shukla** (2021), Geochemical and isotopic studies of potassic granite from the western Dharwar craton, southern India: Implications for crustal reworking in the Neoproterozoic (2021) *Geological Journal* <https://doi.org/10.1002/gj.4085>
25. S. Sathiyaseelan, D. K. Panda, D. Banerjee, D. Ramesh and **A. D. Shukla** (2021) Chronology of coastal dune ridges in Vaigai prodelta Region, southeastern Tamil Nadu, India, *Current Science* (00113891) 120 (2)
26. A. Patra, **A. D. Shukla**, S. Kumar, and B. P. Singh (2021) Signatures of hyperthermal events in the Late Paleocene–Early Eocene limestone succession of the Jaisalmer basin, India, *Carbonates and Evaporites*, 36:1 <https://doi.org/10.1007/s13146-020-00666-6>
27. S. Baliyan, H. Moitra, S. Sarkar, D. Ray, DK Panda, **AD Shukla**, S. Bhattacharya, S. Gupta (2021) Mineralogy and Spectroscopy (Visible Near Infrared and Fourier Transform Infrared) of Mukundpura CM2: Implications for asteroidal aqueous alteration, *Geochemistry*, 125729, 14/12/2020
28. A. Sarkar, A. D. Mukherjee, S. Sharma, T. Sengupta, F. Ram, M. K. Bera, S. Bera, O. Biswas, M. G. Thakkar, G. Chauhan, M. G. Yadava, Anil D. Shukla and N. Juyal (2021) New evidence of early Iron Age to Medieval settlements from the southern fringe of Thar Desert (western Great Rann of Kachchh), India: Implications to climate-culture co-evolution, *Archaeological Research in Asia*, Volume 21, 100163

29. **Anil D Shukla**, S. Sharma, N. Rana, P. Bisht and N. Juyal (2020) Optical chronology and climatic implication of glacial advances from the southern Ladakh Range, NW, Himalaya, India, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 539, 109505
30. D. K Panda, D. Ray and **Anil D Shukla** (2020) The petrochemical constraint and cosmogenic records of Mahadeva (H5/6) chondrite: a new fall in India, *Planetary & Space Science*, Volume 194 December 2020, 105111
31. A. S. Majumdar, D. Ray, and **Anil D. Shukla** (2020) Serpentinization of olivine–gabbro in Central Indian ridge: Insights into H₂ production during alteration in lower oceanic crust and sustenance of life at slow–spreading ridges. *Lithos*, <https://doi.org/10.1016/j.lithos.2020.105730> Volumes 374–375, 105730
32. A. Patra and **Anil D. Shukla** (2020) Geochemical signatures of Late Paleocene sandstones from the Sanu Formation, Jaisalmer basin, western India: Implication for provenance, weathering and tectonic setting, *Journal of Earth System Science* 129 (1), 1-12.
33. S. Sharma, G. Chauhan, **Anil D. Shukla**, R. Nambiar, R. Bhushan, B. G. Desai, S. Pandey, M. Dhabi, S. Bhandari, S. Bhonsle, A. Lakhote and N. Juyal (2020) Causes and implication of mid to late Holocene relative sea-level change in the Gulf of Kachchh, western India. *Quaternary Research*, 100,98-121, <https://doi.org/10.1017/qua.2020.86>
34. S. Chakraborty, A.S. Majumdar and, **Anil D. Shukla** (2020) Role of fluid in strain softening within the Main Central thrust in Sikkim: The origin of quartz-rich mylonites. *Journal of Structural Geology* V 140,104145 (online 22 July 2020),
35. D. Dave, S. Sarma, P Parmar, A. Shukla, D. Goswami, **Anil Shukla** and M.Saraf (2020) Microbes as a *Environmental Sustainability* boon for the bane of heavy metals. . <https://doi.org/10.1007/s42398-020-00112-2>
36. A. Chatterjee, J.S. Ray, **Anil D. Shukla** and K. Pande(2019). On the existence of a perennial river in the Harappan heartland. *Sci Rep* 9, 17221 (2019) doi:10.1038/s41598-019-53489-4
37. N Rana, S Sharma, SN Ali, S Singh, **AD Shukla** (2019) Investigating the sensitivity of glaciers to climate variability since the MIS-2 in the upper Ganga catchment (Saraswati valley), Central Himalaya, *Geomorphology*,346 (2019)106854.
38. **AD Shukla**, BG George, JS Ray (2020) Evolution of the Proterozoic Vindhyan Basin, Rajasthan, India: insights from geochemical provenance of siliciclastic sediments, *International Geology Review*, 62 No.2, 153-167.
39. O. Kingson, R. Bhutani, S Balakrishnan, JK Dash, **Anil D Shukla** (2019) Subduction-related Manipur Ophiolite Complex, Indo-Myanmar Ranges: elemental and isotopic record of mantle metasomatism, *Geological Society, London, Special Publications* 481.9.
40. Navin, S Sarkar, TN Kumar, D Ray, S Bhattacharya, **AD Shukla**, H Moitra, (2019) Mineralogy and spectroscopy (VIS near infrared and micro-Raman) of chromite from Nidar ophiolite complex, SE Ladakh, India: Implications for future planetary exploration, *Planetary and Space Science* 165, 1-9.
41. RK Sinha, S Vijayan, **AD Shukla**, P Das, F Bhattacharya (2019) Gullies and debris-flows in Ladakh Himalaya, India: a potential Martian analogue, *Geological Society, London, Special Publications* 467 (1), 315-342
42. S Sharma, **AD Shukla** (2018) Factors governing the pattern of glacier advances since the Last Glacial Maxima in the transitional climate zone of the Southern Zaskar Ranges, NW Himalaya, *Quaternary Science Reviews* 201, 223-240.
43. B. G. George, J. S. Ray, **Anil D. Shukla**, A. Chatterjee, N. Awasthi, A. H. Laskar (2018) Stratigraphy and geochemistry of the Balwan Limestone, Vindhyan Supergroup, India: Evidence for the Bitter Springs $\delta^{13}\text{C}$ anomaly, *Precambrian Research* 313, 18-30
44. J. T. Teller, R. A. McGinn, H. M. Rajapara, **Anil D. Shukla**, Ashok K. Singhvi (2018) Optically stimulated luminescence ages from the Lake Agassiz basin in Manitoba *Quaternary Research*, 89 Issue 2,478-493.
45. K Akhilesh, S Pappu, HM Rajapara, Y Gunnell, **Anil D. Shukla**, AK Singhvi (2018) Early Middle Palaeolithic culture in India around 385–172 ka reframes Out of Africa models *Nature* 554 (7690), 97.
46. D. Ray and **Anil D. Shukla** (2018) The Mukundpura meteorite, a new fall of CM chondrite, *Planetary and Space Science*, 151,149-154

47. D. Ray, **Anil D. Shukla** and J. S. Ray (2017) Early 2017 activity of the Barren island Volcano,: facts versus hype; *Current Science*, 113,1657-1659.
48. R. Bhushan, S.P. Sati, N. Rana, **A. D. Shukla**, A.S. Mazumdar and N. Juyal (2018) High resolution millennial and centennial scale Holocene monsoon variability in the Higher Central Himalayas; *Palaeogeography Palaeoclimatology Palaeoecology*, [https:// dx.doi.org /10.1016/ j.palaeo.2017.09.032](https://dx.doi.org/10.1016/j.palaeo.2017.09.032). 489,95-104
49. F. Bhattacharya, **Anil D Shukla**, R C Patel, B K Rastogi, N Juyal (2017).Sedimentology, geochemistry and OSL dating of the alluvial succession in the northern Gujarat alluvial plain (western India) - a record to evaluate the sensitivity of a semiarid fluvial system to the climatic and tectonic forcing since the late Marine Isotopic Stage 3; *Geomorphology*,297,1-19.
50. D. K. Panda, D. Banerjee, S.K. Goyal, A. R. Patel and **A. D. Shukla** (2017) Development of a Cerium bromide gamma ray spectrometer for space applications. *Advances Space Research*, 60, 1307-1314.
51. S. Sharma,, **A.D. Shukla** , S.K. Bartarya , B.S. Marh, and N. Juyal (2017) The Holocene floods and their affinity to climatic variability in the western Himalaya, India;*Geomorphology*;290;317-334.
52. D Ray, RR Mahajan, **AD Shukla**, TK Goswami, S Chakraborty (2017) Petrography, classification, oxygen isotopes, noble gases, and cosmogenic records of Kamargaon (L6) meteorite: The latest fall in India *Meteoritics & Planetary Science* 52 (8), 1744-1753
53. K. Sharma, N. Bhatt, **A. D. Shukla**, D. Cheong, A. K. Singhvi (2017) Optical dating of late Quaternary carbonate sequences of Saurashtra, western India; *Quaternary Research* (2017), 87, 133–150.
54. M. Ngangom, S. Bhandari, M.G. Thakkar, **A. D. Shukla**, N. Juyal (2017) Mid-Holocene extreme hydrological events in the eastern Great Rann of Kachchh, western India, *Quaternary International*, 443/188-199
55. A. Das, T. Singh, P.A. LokaBharathi, P. K. Dhakephalkar, S. Mallik, P. R. Kshirsagar, N.H. Khadge, B. N. Nath, S. Bhattacharya, A. K. Dagar, P. Kaur, D. Ray, **Anil D. Shukla**, C. E.G. Fernandes, S. Fernandes, T. R. A. Thomas, M. S.S., B. S. Mourya, R. M. Meena (2017) Astrobiological implications of dim light phototrophy in deep-sea red clays, *Life Sciences in Space Research* 12; 39–50.
56. G. Kothiyari, **Anil D. Shukla**, N. Juyal (2017) Reconstruction of Late Quaternary climate and seismicity using fluvial landforms in Pindar River valley, Central Himalaya, Uttarakhand, India, *Quaternary International*, 443.248-264.
57. B. Maibam, R. Y. Singh, **A. D. Shukla** and A. L. Ramnathan (2016) Geochemical Study of The Granitoids Around Chhota Shigri Area, Himachal Pradesh, India , *Journal of Applied Geochemistry*, Volume 18, No. 4, 408-416.
58. S. Saharma, P. Chand, P. Bisht, **Anil D. Shukla**, S. K. Bartarya, Y. P. Sundriyal and N. Juyal (2016) Factors responsible for driving the glaciation in the Sarchu Plain, eastern Zaskar Himalaya, during the late Quaternary, *JQS*, 31(5),495–511
59. D. K. Panda, D. Banerjee, S. K. Goyal, A. R. Patel and **Anil D. Shukla** (2016) Development of a Cerium-doped Lanthanum bromide gamma ray spectrometer for planetary missions and feasibility studies for determination of elemental abundances of radioactive elements (Th, K and U), *Current Science*,110,2135-2138.
60. Y.P. Sundriyal, **A. D. Shukla**, N. Rana, R. Jayangondaperumal, P. Srivastava, L.S. Chamyal, S.P. Sati and N. Juyal (2015) Terrain response to extreme rainfall event of June 2013, evidence from the Alaknanda and Mandakini river Valleys, Garhwal Himalaya, India *Episodes*, V 38 No.3 179-188.
61. P. Bisht, S.N.Ali, **Anil D. Shukla**, S. Negi, Y.P. Sundriyal, M G Yadava and N. Juyal (2015) Chronology of Late Quaternary glaciation and landform evolution in the upper Dhauliganga valley, (Trans Himalaya), Uttarakhand, India *Quaternary Science Reviews* 129, 147-162.
62. M. Chakarvorty. A.K. Dwivedi. **A.D. Shukla**. S. Kumar. A. Niyogi. M. Usmani. J.K. Pati (2015): Geochemistry and magnetic measurements of suspended sediment in urban sewage water vis-à-vis quantification of heavy metal pollution in Ganga and Yamuna Rivers, India *Environ Monit Assess* (2015) 187:604 DOI 10.1007/s10661-015-4794-x.
63. P. Morthekai, P. R. Chauhan, M. Jain, **A. D. Shukla**, H. M. Rajapara, K. Krishnan, D. A. Sant, R. Patnaik, D. V. Reddy, A. K. Singhvi (2015) Thermal re-distributed IRSL (RD-IRSL): A new possibility of dating sediments near B/M Boundary and beyond, *Quaternary Geochronology*, 30,154-160.

64. S. P. Sati, S. N. Ali, N. Rana, F. Bhattacharya, R. Bhushan, **Anil D. Shukla**, Y. P. Sundriyal and N. Juyal (2014) Timing and extent of Holocene glaciations in the monsoon dominated Dunagiri valley (Bangni glacier), Central Himalaya, India, *Journal of Asian Earth Sciences*, 91, 125-136.
65. J. S. Ray, K. Pande, R. Bhutani, **Anil D. Shukla**, V. K. Rai, A. Kumar, N. Awasthi, R.S. Smitha and D. K. Panda (2013) Age and geochemistry of Newania dolomite carbonatites, India: implications for the source of primary carbonatite magma, *Contributions to Mineralogy and Petrology*. 166 (6), 1613-1632.
66. L. Alappat, P. Seralathan, **Anil D. Shukla**, K.P. Thrivikramji, A. K. Singhvi (2013) Chronology of Red dune aggradations of South India and its Palaeo-environmental significance, *Geochronometria* 40(4): 274-282. [4.5]
67. S. Nawaz Ali, R.H. Biswas, **A.D. Shukla** and N. Juyal (2013) Chronology and climatic implications of Late Quaternary glaciations in the Goriganga valley, Central Himalaya, India, *Quaternary Science Reviews*, 73, 59-76.
68. R.D. Deshpande, A.S. Maurya, R.C. Angasaria, M. Dave, **A. D. Shukla**, N. Bhandari and S.K. Gupta (2013) Recent falls of Megacryometeors in Western India: Isotopic Investigations, *Current Science*, V-104 No-6, 728-737.
69. W. Rahman, S. K. Singh and **A. D. Shukla** (2012) Rhenium in Indian Rivers: Sources, fluxes and its contribution to oceanic budgets, *Geochemistry, Geophysics, Geosystems (G³)* doi: 10.1029/2012GC004083.13(8)
70. A. K. Tyagi, **A. D. Shukla**, R. Bhushan, P. S. Thakker, M. G. Thakkar and N. Juyal (2012) Mid Holocene sedimentation and landscape evolution in the western Great Rann of Kachchh, India, *Geomorphology*. 151, 89-98.
71. Y.C. Nagar, M.D. Sastry, B. Bhushan, A. Kumar, K.P. Mishra, A. Shastri, M.N. Deo, G. Kocurek, J.W. Magee, S.K. Wadhawan, N. Juyal, M.S. Pandian, **A. D. Shukla** and A.K. Singhvi (2010) Chronometry and formation pathways of gypsum using Electron Spin Resonance and Fourier Transform Infrared Spectroscopy; *Quaternary Geochronology*; Volume 5, Issue 6, 691-704.
72. J. S. Ray, **A. D. Shukla** and L. K. Dewangon (2010) Carbon and oxygen isotopic compositions of Newania Dolomite Carbonatites, Rajasthan, India: implications for source of carbonatites; *Mineralogy and Petrology*; , DOI 10.1007/s00710-009-0073-2.
73. H. C. Sheth, J. S. Ray, R. Ray, L. Vanderkluysen, J. J. Mahoney, A. Kumar, **A. D. Shukla**, P. Das, S. Adhikari, B. Jana (2009) Geology and geochemistry of Pachmarhi dykes and sills, Satpura Gondwana Basin, central India: problems of dyke-sill flow correlations in the Deccan Traps, "*Contributions to Mineralogy and Petrology*". DOI 10.1007/s00410-009-0387-4. **158**, 357–380
74. R. Ray, **A. D. Shukla**, H. C. Sheth, J. S. Ray, R. A. Duraiswami, L. Vanderkluysen, C. S. Rautela, J. Mallik (2008) Highly heterogeneous Precambrian basement under the central Deccan Traps, India: Direct evidence from xenoliths in dykes, *Gondwana Research*, V 13, 375-385.
75. N. Bhandari, S. V. S. Murty, P. N. Shukla, R. R. Mahajan, **A. D. Shukla**, G. Lashkari, M.S. Sisodia, R.P. Tripathi, G. Parthasarathy, H. C. Verma and I.A. Franchi (2008) Ararki (L5) chondrite : first meteorite find in Thar desert of India, *Meteoritics and Planetary Science*, 43(4), pp. 761–770.
76. N. Bhandari, S. V. S. Murty, P.N. Shukla, R. R. Mahajan, **A. D. Shukla**, K. M. Suthar, G. Parthasarathy and B.S. Paliwal (2005) Bhawad LL6 chondrite: chemistry, petrology, noble gases, nuclear tracks and cosmogenic radionuclides. *Meteoritics & Planetary Science*, 40, 1015-1021.
77. P. N. Shukla, **A. D. Shukla**, V. K. Rai, S. V. S. Murty, N. Bhandari, J. N. Goswami, K. Duorah, P. Phukon, A. Mazumdar, R. E. Greenwood and I. A. Franchi (2005) Dergaon (H5) chondrite: Fall, classification, petrological and chemical characteristics, cosmogenic effects and noble gas records. *Meteoritics & Planetary Science*, 40, 627-637.
78. K. L. Shrivastava, V. Gaur, J. Swadia, N. Bhandari and **A. D. Shukla** (2005) Iron meteorite fall at Bhuka Village, Barmer District, Rajasthan, *Current Science*, 89, #5, 741-742.
79. B. K. Chattopadhyay, J. N. Goswami, S. V. S. Murty, A.P. Thapliyal, P. N. Shukla, **A. D. Shukla**, P. K. Mondal, N. C. Pant and N. Sinha (2005) Meteorite Falls over India during 2003: Petrographic and chemical characterization and cosmogenic records. *Current Science*, 88, #5, 774-778.

80. M. S. Sisodia, U. K. Singh, G. Lashkari, P. N. Shukla, **A. D. Shukla** and N. Bhandari (2005) The Volcanic origin of the Siliceous Earth of Barmer Basin, *India J. Earth. Sys. Sci.*, 114, 111-124.
81. D. Dhingra, N. Bhandari, P. N. Shukla, S. V. S. Murty, R. Mahajan, G. M. Ballabh, G. Lashkari, **A. D. Shukla**, and G. Parthasharthy (2004) Spectacular fall of the Kendrapara H5 chondrite, *Meteorit. & Planet. Sci.*, 39, #8, A121-132.
82. S. V. S. Murty, V. K. Rai, **A. D. Shukla**, G. Srinivasan, P. N. Shukla, K. M. Suthar, N. Bhandari and A. Bischoff (2004) Devgaon (H3) chondrite: classification and complex cosmic ray exposure history, *Meteorit. & Planet. Sci.*, 39, #3, 387-399.
83. **A. D. Shukla**, N. Bhandari and P. N. Shukla (2002) The chemical signatures of the Permian-Triassic transitional Environment in Spiti Valley, India *Proceedings of Catastrophic Events and Mass Extinction: Impacts and Beyond, Geol. Soc. Am. Special paper*, 356, 445-454.
84. **A. D. Shukla** and P. N. Shukla (2002) Comments on the paper: "No K/T boundary at Anjar, Gujarat, India: Evidence from magnetic susceptibility and carbon isotopes"-H.J. Hansen, D. M. Mohabey and P. Toft in *Proc. Indian Acad. Sci. (Earth Planet Sci.)*, 110, No.2, June 2001, 133-142. *Proc. Indian Acad. Sci. (Earth Planet Sci.)*, 111, #4, 489-491.
85. P. Ghosh, S. K. Bhattacharya, **A. D. Shukla**, P. N. Shukla, N. Bhandari, G. Parthasarthy and A. C. Kunwar (2002) Negative $\delta^{13}\text{C}$ excursion and anoxia at the Permian-Triassic Boundary in the Tethys Sea, *Current Science*, 83, #4, 498-502.
86. H. C. Verma, C. Upadhyay, R. P. Tripathi, **A. D. Shukla** and N. Bhandari (2002) Evidence of impact at Permian/Triassic boundary from Mössbauer spectroscopy, *Hyperfine Interactions*, 141/142, 357-360.
87. N. Bhandari, S. V. S. Murty, P. N. Shukla, **A. D. Shukla**, R. R. Mahajan, M. M. Sarin, G. Srinivasan, K. M. Suthar, M. S. Sisodia, S. Jha and A. Bischoff (2002) Itawa Bhopji (L3-5) chondrite regolith breccia: Fall, classification and cosmogenic records. *Meteoritics and Planetary Science*, 37, 549-564.
88. S. Ghosh, S. V. S. Murty, N. C. Pant, J. B. Ghosh, S. Shome, **A. D. Shukla**, R. R. Mahajan, P. N. Shukla, and N. Bhandari (2002) Fall, Classification and Cosmogenic records of the Sabrum (LL6) chondrite. *Meteoritics and Planetary Science*, 37, 439-448.
89. **A. D. Shukla**, N. Bhandari, Sheela Kusumgar, P. N. Shukla, Z. G. Ghevariya, K. Gopalan and V. Balaram (2001) Geochemistry and magnetostratigraphy of Deccan flows at Anjar Kutch, *Proc. Indian Acad. Sci. (Earth Planet. Sci.)*, 110, No.2, 111-132.
90. P. N. Shukla, N. Bhandari, Anirban Das, **A. D. Shukla** and J. S. Ray (2001) High Iridium concentration of alkaline rocks of Deccan and implications to K/T boundary. *Proc. Indian Acad. Sci. (Earth Planet. Sci.)*, 110, No.2, 103-110.
91. M. S. Sisodia, **A. D. Shukla**, K. M. Suthar, R. R. Mahajan, S. V. S. Murty, P. N. Shukla, N. Bhandari and R. Natarajan (2001) Lohawat Howardite: mineralogy, chemistry and cosmogenic effects. *Meteoritics and Planetary Science* 36, 1457-1466.
92. B. S. Paliwal, R. R. Mahajan, S. V. S. Murty, **A. D. Shukla**, P. N. Shukla, N. Bhandari, R. Natarajan, R. Hutchison, S. Russell and I. A. Franchi (2001) Chemical and isotopic characteristics of the Didwana-Rajod (H5) chondrite, *Meteoritics and Planetary Science*, 36, 1249-1256.
93. G. Bonino, N. Bhandari, S. V. S. Murty, R. R. Mahajan, K. M. Suthar, **A. D. Shukla**, P. N. Shukla, G. Cini Castagnoli and C. Taricco (2001) Solar and galactic cosmic ray records of the Fermo (H) chondrite regolith breccia, *Meteoritics and Planetary Science*, 36, 831-840.
94. S. Ghosh, N. C. Pant, T. K. Rao, C. Ramamohana, J. B. Ghosh, S. Shome, N. Bhandari, **A. D. Shukla** and K. M. Suthar (2000) The Vissannapeta Euclite *Meteoritics and Planetary Science*, 35, 913-917.
95. N. Bhandari, J. N. Goswami, S. K. Bhattacharya, S. V. S. Murty, **A. D. Shukla**, V. G. Shah, P. Ghosh, V. K. Rai, S. K. Acharya, A. Chaudhary, S. Ghosh, P. Pandey, R. Subramanian and N. Raghavan (1999) Leonid Shower and Recovered objects, *Current Science*, 76, p619.
96. N. Bhandari, S. V. S. Murty, K. M. Suthar, **A. D. Shukla**, G. M. Ballabh, M. S. Sisodia and V. K. Vaya (1998) The Orbit and Exposure History of the Piplia Kalan Euclite. *Meteoritics and Planetary Science*, 33, 455-461

97. **A. D. Shukla**, P. N. Shukla, K. M. Suthar, N. Bhandari, V. K. Vaya, M. S. Sisodia, S. Sinha Roy, K. N. Rao and R. S. Rajawat (1997) Piplia Kalan Eucrite: Fall, Petrography and Chemical Characterization: *Meteoritics and Planetary Science*, 32, 611-615.
98. P. N. Shukla, **A. D. Shukla** and N. Bhandari (1997) Geochemical characterization of the Cretaceous – Tertiary Boundary sediments at Anjar, India: *Palaeobotanist*, 46 (1,2): 127-132.

About 80 Short communications/Extended abstracts

Participated in more than 40 Conference/ Symposia/meetings/workshops

(Prof. Anil D. Shukla)