

### DR. SARVENDRA PRATAP SINGH

Research Associate Birbal Sahni Institute of Palaeosciences 53 University Road, Lucknow-226007, India © +91 7398270925, 7992027367

Spsingh.jrf@bsip.res.in, chauhansp122@gmail.com

Palaeomagnetism, rock and environmental magnetism, archaeomagnetism, magnetostratigraphy, and palaeointensity, with applications to Earth's critical events (mass extinctions, hyperthermal events, Deccan volcanism) and Sedimentary petrography

# Educational Details

Educational Details	
<b>Ph.D., Geology</b> Banaras Hindu University, Varanasi - 411005, India	2018 - 2024
<b>Thesis Title:</b> Magnetostratigraphy of Deccan basalts and Sedimentology of its associated intertrappean deposits in parts of central India.	
Post-graduation (M.Sc.), Geology University of Lucknow, Lucknow - 226007, India	2014 - 2016
Graduation (B.Sc.), Physics, Maths, Geology University of Lucknow, Lucknow - 226007, India	2011 - 2014
Intermediate/UP Board Surabhi Public College, Lucknow - 22602, India	2009 - 2011
<b>High School/UP Board</b> Surabhi Public College, Lucknow - 22602, India	2007 - 2009
CSIR-NET-JRF, Earth Science Council of Scientific and Industrial Research Rank - 39 (AIR)	2016
Graduate Aptitude Test in Engineering (GATE) in 2017 (AIR-209), 2018 (AIR-738), 2019 (AIR-365)  Research Experience	
Research Associate	March 2025 - Present

Research Associate Birbal Sahni Institute of Palaeosciences	March 2025 - Present
CSIR- Senior Research Fellow Birbal Sahni Institute of Palaeosciences	May 2020 to April 2023
CSIR- Junior Research Fellow Birbal Sahni Institute of Palaeosciences	May 2018 - April 2020

M. Sc. dissertation January - June 2016

Department of Geology, University of Lucknow

Title - Texture and Facies of Lateral and Recessional Moraines of Gangotri Glacier Area, Uttarkashi District, Garhwal Himalaya, India

**Summer Internship** 2014

Birbal Sahni Institute of Palaeosciences, Lucknow. Title - Callovian -Tithonian Nannofossils from Chari and Katrol Formations of Gangeshwar Dome, Kachchh

## > Laboratory and Instrumentation Experience

- (1) Well versed in handling the sophisticated rock magnetic, palaeomagnetic instruments of Bartington (MS2B magnetic susceptibility meter, MS2WF furnace); AGICO (JR-6 dual speed spinner magnetometer and MFK2 Multi-Function Kappabridge); ASC Scientific (IM 10-30 Impulse magnetizer, D-2000 Alternating Field demagnetizer and TD-48 Thermal demagnetizer).
- (2) Experience of handling the gasoline powered portable diamond fitted rock core drill used for the collection of the rock cores for palaeomagnetism and laboratory lapidary core drill for the core drilling of the oriented block samples.
- (3) Leica DM2700 EP polarizing microscope for the petrographic analysis.

# > Field Experience

- (1) Fieldwork in Arunachal Pradesh for the sample collection from Siwalik group of rocks for the magnetostratigraphy and palaeoenvironmental reconstruction.
- (2) Fieldwork in and around Jabalpur district of Madhya Pradesh in December 2024. During fieldwork, high resolution sampling was done from the Lameta Formation and its basement rocks.
- (3) Fieldwork in Bhuj, Rajasthan for the sample collection from Umarsar Lignite Mine for Palaeomagnetic, rock magnetic, isotopic and sedimentological analysis in January 2024.
- (4) Fieldwork in Dhar (Deccan volcanic Province) district of Madhya Pradesh in January 2022.
- (5) Rigorous fieldwork in the Jabalpur and Dhar (Deccan volcanic Province) districts of the Madhya Pradesh in December 2019. The fieldwork included the sampling of the Deccan basalts for the palaeomagnetism and rock magnetism along with the sampling of the intertrappean deposits for the sedimentology, palynology and geochemical analysis.
- (6) Detailed sedimentological and stratigraphic fieldwork in and around Chitrakoot, Uttar Pradesh, India, 2016.
- (7) Detailed structural mapping in and around Almora, Uttarakhand, 2015.
- (8) Geological Fieldwork on sedimentology and Geomorphology in and around Rishikesh, Uttarakhand, 2014.
- (9) Petrology and rock identification in and around Ajmer, Rajasthan, India, 2013.

### > Awards and Recognitions/Fellowships

- (1) Selected as Research Associate (Council of Scientific and Industrial Research) in 2025
- (2) Selected as Research Associate at Birbal Sahni Institute of Palaeosciences in March 2025
- (3) Financial support to attend the 17<sup>th</sup> Castle Meeting New Trends on Paleo, Rock and Environmental Magnetism held at Trakošćan, Croatia.
- (4) Awarded second prize in Quiz competition conducted by Birbal Sahni Institute of Palaeosciences, Lucknow to celebrate the Azadi ka Amrit Mahotsav on 21st September 2021.
- (5) Qualify Graduate Aptitude Test in Engineering (GATE) in 2017 (AIR-209), 2018 (AIR-738), 2019 (AIR-365)
- (6) Qualify NET-JRF (Centre of Scientific and Industrial Research) with All India Rank 39 in December 2016
- (7) Stood second in "English Eassay writing competition" in Class-12th at Surabhi Public College, Lucknow
- (8) Pursued as DISCIPLINE PREFECT at Surabhi Public College, Lucknow

# > Professional Societies Membership

- (1) American Geophysical Union
- (2) Geological Society of America

## > Computer knowledge/Software handling

MS Office Suite, CorelDraw, Origin, Sigma Plot, Arc GIS, Surfer, Remasoft, PMGSC, Cureval

## > Short Course/Training

- (1) Got grade A certificate in on-line short graduate course GSA5973 Special topics in Applied Geology on "Anisotropy of Magnetic Susceptibility (AMS) and its applications" conducted by Universidade de SAO Paulo (Instituto Oceanografica Recursos Minerais e Hidrogeologia.
- (2) Online Training on "Refresher Course on Igneous, Sedimentary and Metamorphic Petrology" conducted by RTD, ER, GSITI, Kolkata during June 21 28, 2021.
- (3) Popular Science Writing and News Reporting Workshop held at the Birbal Sahni Institute of Palaeosciences, Lucknow on 26th March, 2021
- (4) One week training program on "Role of Remote Sensing & GIS in Natural Resources Management" in Remote Sensing Application Centre, Lucknow

# > Research Publications

- (1) Mishra, S., **Singh, S.P.,** Arif, M., Singh, A.K., Srivastava, G., Ramesh, B.R. and Prasad, V., 2022. Late Maastrichtian vegetation and palaeoclimate: palynological inferences from the Deccan Volcanic Province of India. *Cretaceous Research*, 133, p.105126.
- (2) **Singh, S.P.,** Singh, A.K., Arif, M., Prasad, V., Venkateshwarlu, M. and Naik, A.S., 2024. Magnetostratigraphy and Sedimentology of Deccan Intertrappean Succession from Sagar, Central India: Insights into Palaeoenvironment and End-Cretaceous Palaeogeography. *Journal of the Geological Society of India*, 100(8), pp.1129-1139.
- (3) Nag, D., Sangode, S.J., **Singh, S.P.,** Uddandam, P.R., Choudhuri, A., Phartiyal, B. and Prasad, V., 2024. Magnetostratigraphy and rock magnetic studies on the Cretaceous-Paleogene transition strata along the Um Sohryngkew River, Therriaghat, Meghalaya, India. *Geological Journal*, 59(11), pp.3048-3067.
- (4) Nag, D., Sangode, S.J., **Singh, S.P.** and Phartiyal, B., 2025. Magnetostratigraphic and mineral magnetic characteristics of the Middle Eocene Climatic Optimum (MECO) from the equatorial perioratonic basin of Kutch in Panandhro mine, Gujarat, India. *Geosciences Journal*, 29(2), pp.226-243.
- (5) Singh, S.P., Arif, M., Singh, A.K., Mishra, S., Kapur, V.V., Prasad, V., Venkateshwarlu, M. and Naik, A.S., 2025. Magnetostratigraphic perspectives and palaeoenvironmental implications of Deccan volcanosedimentary succession within the Malwa subprovince, Central India. *Evolving Earth*, 3, p.100061.
- (6) Wazir, W.A., Patnaik, R., Arif, M., Singh, S.P., Phartiyal, B., Gilbert, C., Sehgal, R.K., Choudhary, D., Kumar, R. and Wazir, M.A., 2025. New paleomagnetic data from the Ladakh Molasse Group provide a Late Oligocene (26.5 Ma) age for the first post India–Asia collision continental sediments: Biostratigraphic implications: WA Wazir et al. *Journal of Earth System Science*, 134(3), p.171.