




## Faculty Details proforma for DU Web-site

Title	Professor	First Name	Naresh Chandra	Last Name	Pant	Photograph
Designation		Professor				
Address Office		Department of Geology, University of Delhi, Delhi-110007.				
Residence		128, Shree Krishna Apartments, GH-10, Sector-6, Ghaziabad-201012.				
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<b>Educational Qualifications</b>						
Degree	Institution				Year	
<b>Ph.D.</b>	Ph.D. (Geology), M.L. Sukhadia University Udaipur				1992	
<b>M.Phil.</b>	M.Phil. (Geology), University of Delhi				1982	
<b>PG</b>	M.Sc. Applied Geology, University of Delhi				1980	
<b>UG</b>	B.Sc. (Hons.) Geology, University of Delhi				1977	
<b>Career Profile</b>						
<p>25 August 2011- till date- Professor, Department of Geology, University of Delhi</p> <p>1<sup>st</sup> January, 2010 – 24 August 2011: Associate Professor, Department of Geology, University of Delhi.</p> <p>August, 2008 – 31<sup>st</sup> December, 2009: Associate Professor, Indian Institute of Technology, Kharagpur.</p> <p>1982 – 2008: Geologist, Geological Survey of India.</p> <p>1981 – 1982: Assistant Geologist, ONGC (six months).</p>						
<b>Administrative Assignments</b>						
<p>2005 – 2008: National Convener, IGCP-470 (600Ma Pan-African Event).</p> <p>Adjunct Faculty, IIT Bhubaneswar (2013) and (2014)</p> <p>2016-2020 Deputy Chief Officer, Geosciences, Scientific Committee on Antarctic Research</p> <p>2016- Member, Peer Review Committee to review NCAOR</p> <p>2016-19 Member, INSA National Committee on SCAR</p> <p>2019-22 Visitors Nominee to the Court of Nagaland University</p>						

<b>Areas of Interest / Specialization</b>
Mineralogy, Petrology, Microbeam analysis, Polar studies.
<b>Subjects Taught</b>
Metamorphic Petrology, Mineralogy and Crystallography, Exploration Geology, Analytical methods in geosciences
<b>Research Guidance</b>
<p><b><i>Supervision of awarded Doctoral Thesis -(3 awarded+1 submitted)</i></b></p> <p>Goswami, Sriparna. 2010. Petrology of an inverted metamorphic sequence from the western Arunachal Himalayas, India. Indian Institute of Technology Kharagpur, Kharagpur-721302.</p> <p>Paromita Biswas : <b>2014</b> Provenance and palaeoclimatic studies off the coast of East Antarctica near Wilkes Land. University of Delhi.</p> <p>Santosh Kumar: 2015, Metamorphic evolution of the North Delhi Fold Belt (NDFB) and its implication on sulfide mineralization</p> <p>Mayuri Pandey: 2016, Provenance and depositional conditions of Miocene oceanic sediments off the coast of East Antarctica: Clues for sub-ice geology and palaeoclimate</p> <p>Abul Amir Khan- A Study of variability of Himalayan Cryosphere and precipitation and estimation of glacial melt fraction in the upper Ganga Basin in recent time</p> <p>Ravish Lal- A Study of the Late Quaternary sedimentary archives of upper Indus valley, Ladakh: Implications on paleoclimate, provenance and drainage reorganization</p> <p><b><i>Supervision of Doctoral Thesis, under progress – 5</i></b></p> <ol style="list-style-type: none"> <li>1. Vijai Rapal- Characterization of standards (ceramics and geological standards) by XRF, SEM-EDS, EPMA for developing quantification protocols for SEM-EDS (2012)</li> <li>2. Syed Muntazir Mehdi- Late Quaternary evolution of the geomorphic landscape within the Sutlej-Yamuna interfluvial region and its association with the Harappan settlements</li> <li>3. Devsamridhi- Defining a post Delhi orogeny west of Aravalli Delhi Mobile Belt in NW Indian Shield and implication for Proterozoic supercontinent reconstruction</li> <li>4. Apurva Alok- Field and experimental work</li> <li>5. Aditya Naik- Mineralization in the Delhi Fold Belt</li> <li>6. Jeev Jatan Sharma- Theoretical controls of compositions in development of assemblages in metapelites</li> </ol>
<b>Publications Profile</b>
<b><i>Research papers published in Refereed/Peer Reviewed Journals</i></b>

Suspected meteorite fragments in marine sediments from east Antarctica, 2018, Naresh C. PANT, Francisco J. JIMENEZ-ESPEJO, Cary P. COOK, Paromita BISWAS, Robert MCKAY, Claudio MARCHESI, Motoo ITO, Dewashish UPADHYAY, Junichiro KURODA, Kenji SHIMIZU, Ryoko SENDA, Tina van de FLIERDT, Yoshinori TAKANO, Katsuhiko SUZUKI, Carlota ESCUTIA, Prakash K. SHRIVASTAVA **Antarctic Science**, 30, 307-321, doi: 10.1017/S0954102018000299

Analytical Protocol for U-Th-Pb Chemical Dating of Monazite using CAMECA SXFive EPMA Installed at the Mantle Petrology Laboratory, Department of Geology, Banaras Hindu University, 2019, M Pandey, D Pandit, D Arora, NVC Rao, NC Pant, *Journal of the Geological Society of India* 93 (1), 46-50

N. C. Pant, Rasik Ravindra, Deepak Srivastava and Lonnie Thompson, 2018, The Himalayan cryosphere: Past and present variability of the 'third pole', *Geol. Soc. Lond. Sp. Pub.*, 462, doi.org/10.1144/SP462.13

Lal, R., Saini, H.S., Pant, N.C. and Mujtaba, S.A.I, (2018) Tectonics induced switching of provenance during the Late Quaternary aggradation of the Indus River Valley, Ladakh, India, *Geoscience Frontiers* (2018), <https://doi.org/10.1016/j.gsf.2017.12.016>

Pant, N.C. and Dasgupta, S., (2017) An introduction to the crustal evolution of India and Antarctica: the supercontinent connection From: Pant, N.C. & Dasgupta, S. (eds) *Crustal Evolution of India and Antarctica: The Supercontinent Connection*. Geological Society, London, Special Publications, 457, <https://doi.org/10.1144/SP457.14> # 2017

Mayuri Pandey, **Naresh C. Pant\***, Paromita Biswas, Prakash Shrivastava, Sonalika Joshi, and Neety Nagi (2017) HEAVY MINERAL ASSEMBLAGE OF MARINE SEDIMENTS AS AN INDICATOR OF PROVENANCE AND EAST ANTARCTIC ICE SHEET FLUCTUATIONS, From: SIEGERT, M. J., JAMIESON, S. S. R. & WHITE, D. A. (eds) *Exploration of Subsurface Antarctica: Uncovering Past Changes and Modern Processes*. Geological Society, London, Special Publications, 461, <https://doi.org/10.1144/SP461.2>

Devsamridhi Arora, **Naresh C. Pant\***, Fareeduddin, Surbhi Sharma, Raghu ram, and Mohd. Sadiq (2017) Inferring a Neoproterozoic Orogeny preceding the Rodinia break-up in the Sirohi Group, NW India, In: Pant, N. C. & Dasgupta, S. (eds) *Crustal Evolution of India and Antarctica: The Supercontinent Connection*. Geological Society, London, Special Publications, 457, <https://doi.org/10.1144/SP457.3>

Sandip Roy, **Naresh C. Pant\***, A. Kundu, A. Dharwadkar, P. Kumar, Sonalika Joshi, Raghu ram, Mohd. Sadiq, and Mayuri Pandey, (2017) GEOLOGICAL STUDIES IN BAALSRUDFJELLET NUNATAK BETWEEN SCHIRMACHER OASIS AND WOHLTHAT MOUNTAINS TO ESTABLISH THE CONTINUATION OF EAST AFRICAN OROGEN (EAO) IN cDM In: Pant, N. C. & Dasgupta, S. (eds)

Crustal Evolution of India and Antarctica: The Supercontinent Connection. Geological Society, London, Special Publications, 457, <https://doi.org/10.1144/SP457.3>

Naresh C. Pant, Sandip Roy, V Ravikant and Rasik Ravindra, 2017, Recent Contributions to the Antarctic Geology- An Indian perspective, Proc. Ind. National Sci. Aca., 83, 269-278. DOI: 10.16943/ptinsa/2017/48948

Syed Muntazir Mehdi , **Naresh C. Pant** , H. S. Saini , S. A. I. Mujtaba , Prabhas Pande, (2016), Identification of Palaeochannel Configuration in the Saraswati River Basin in Parts of Haryana and Rajasthan, India, through Digital Remote Sensing and GIS, Episodes, DOI: 10.18814/epiiugs/2016/v39i1/89234

Khan, Abul Amir, Pant, N.C., Tandon, S.K., Sarkar, Anindya, Thamban, M and Mahalinganatham, K (2016) The Himalayan Cryosphere- A critical assessment and evaluation of Glacial melt fraction in the Bhagirathi basin, Geoscience Frontiers, <http://dx.doi.org/10.1016/j.gsf.2015.12.009>

Mehdi, S.M., Kumar, S., **Pant, N.C.** (2015) Characterization of metamorphic conditions in the Lalsot-Bayana sub basin of the North Delhi Fold Belt (NDFB)- implications for its status within the Delhi Fold Belt, Jour. Geol. Soc. Ind., 85, 397-410.

**Naresh C. Pant**, Santosh Kumar, Mayuri Pandey, A.K. Bajaj, A. Kundu, Sonalika Joshi and R.V.S. Shimyaphy, (2015) New insights on the genesis and controls of mineralization in Khetri Copper Belt and adjacent low-grade Cu mineralization, northwest Indian shield, In: P.K. Golani (ed.) Recent Developments in Metallogeny and Mineral Exploration in Rajasthan. Geological Survey of India Special Publication, 101, 109-128.

Chakraborty, P.P., **Pant, N.C.** and Paul, P.P. (2015) Controls of sedimentation in Paleoproterozoic basins- A case study from the Gwalior and Bijawar basins, central India, Accepted for publication in Spl. Publication, Geol. Soc. London Memoirs, 43, 67–83, <http://dx.doi.org/10.1144/M43.5>

Goswami-Banerjee, Sriparna, Bhowmik, Santanu Kumar, Dasgupta, Somnath, **Pant, Naresh Chandra**, (2014) Burial of thermally perturbed Lesser Himalayan mid-crust: Evidence from petrochemistry and P-T estimation of the western Arunachal Himalaya, India, *LITHOS*, 208-209, 298-311. doi: [10.1016/j.lithos.2014.09.015](https://doi.org/10.1016/j.lithos.2014.09.015)

Kamlesh Verma, Sanjeeb Bhattacharya, P. Biswas, Prakash K. Shrivastava, Mayuri Pandey, **N. C. Pant** and IODP Expedition 318 scientific party, (2014) Clay mineralogy of the ocean sediments from the Wilkes Land margin, East Antarctica: implications on the palaeoclimate, provenance and sediment dispersal pattern, Online in International J Earth Sci (Geol Rundsch). (DOI) [10.1007/s00531-014-1043-4](https://doi.org/10.1007/s00531-014-1043-4)

Pandey, M., **Pant, N.C.** and Kumar, S. (2013) Criteria to distinguish between regional and contact zone monazite – a case study from Proterozoic North Delhi Fold Belt (NDFB), India, Episodes, v.36 (4), 275-

289. IF-1.28

Singh P, **Pant NC**, Saikia A, Kundu, A (2013) The role of amphiboles in the metamorphic evolution of the UHP rocks: a case study from the Tso Morari Complex, northwest Himalayas, *Int J Earth Sci (Geol Rundsch)*, 102, 2137-2152. DOI 10.1007/s00531-013-0920-6 IF-2.261

Singh P, Saikia A, **Pant NC** (2013) Insights into the P–T evolution path of Tso Morari metamafites of north-west Himalayas: constraints on the geodynamic evolution of the region. *J Earth Syst Sci* 122(3): 677–698. IF-0.695

N.C. Pant, P. Biswas, Prakash K. Shrivastava, S. Bhattachaya and Kamlesh Verma, Mayuri Pandey and IODP Expedition 318 Scientific Party, 2013, Provenance of Pleistocene sediments from Site U1359 of the Wilkes Land IODP Expedition- evidence for multiple sourcing from east Antarctic craton and Ross orogen, Accepted for publication in Special Publication on Antarctic Paleoclimate Evolution and Earth Surface Processes, Geological Society of London. 381, [dx.doi.org/10.1144/SP381.11](https://doi.org/10.1144/SP381.11)

N.C. Pant, A.Kundu, M.J. Dsouza and Ashima Saikia, 2012, Petrology of the Neoproterozoic granulites from Central Dronning Maud Land, East Antarctica- implications for southward extension of East African Orogen (EAO), *Precambrian Research*. 227, 389-408. [dx.doi.org/10.1016/j.precamres.2012.06.013](https://doi.org/10.1016/j.precamres.2012.06.013),

Santanu K. Bhowmik, Simon A. Wilde, Anubha Bhandari, Taraknath Pal, **Naresh C. Pant**, 2011, Growth of the Greater Indian Landmass and its assembly in Rodinia Geochronological evidence from the Central Indian Tectonic Zone, *Gondwana Research* DOI:10.1016/j.gr.2011.09.008

Mahapatro, S.N., Pant, N.C., Bhowmik, S.K., Tripathy, A.K. and Nanda, J.K., 2011, Archaean granulite facies metamorphism at the Singhbhum Craton–Eastern Ghats Mobile Belt interface: implication for the Ur supercontinent assembly, *Geological Journal*, Online, DOI: 10.1002/gj.1311.

Rekha, S., Upadhyay, D., Bhattacharya, A., Kooijman, E., Goon, S., Mahato, S., **Pant, N.C.**, 2011, Lithostructural and chronological constraints for tectonic restoration of Proterozoic accretion in the eastern Indian Precambrian shield. *Precambrian Research*, 187, 313-333, doi:10.1016/j.precamres.2011.03.015

Jayananda, M, Bannerjee, M, Pant, N.C., Dasgupta, S., Kano, T., Mahesha, N. and Mahabaleswar, B., 2011, 2.62 Ga high-temperature metamorphism in the central part of the Eastern Dharwar Craton: implications for late Archaean tectonothermal history, *Geological Journal*, Online, Wiley Interscience. DOI: 10.1002/gj.1308

Patro, Radhika, S N Mohapatro, A Bhattacharya, N C Pant, J K Nanda, A Dey and A K Tripathy. 2011. Chemical finger-printing of an enderbite-hosted pseudotachylite, eastern India: evidence for syn-deformation ultra-high temperature multi-reaction melting in pseudotachylite. *Contribution to Mineralogy and Petrology* V. 161, 547-563.

Saha, L, N C Pant, J K Pati, D Upadhyay, J Berndt, A Bhattacharya and M Satynarayanan. 2011. Neoproterozoic high-pressure margarite – phengitic muscovite - chlorite corona mantled corundum in quartz-free high-Mg, Al phlogopite-chlorite schists from the Bundelkhand craton, north central India. *Contribution to Mineralogy and Petrology* V. 161, 511-530.

Bhandari, A, N C Pant and S K Bhowmik. 2011. 1.6 Ga Ultrahigh-Temperature Granulite Metamorphism

in the Central Indian Tectonic Zone: Insights from Metamorphic Reaction History, Geothermobarometry and Monazite Chemical Ages. *Geological Journal*. 46, 198-216. 10.1002/gj.1221.

Pant, N C, Amitava Kundu, Sonalika Joshi, Aloka Dey, Anubha Bhandari and Anil Joshi. 2009. Chemical dating of monazite- Testing of an analytical protocol against independently dated standards. *Indian Journal of Geosciences*. 63(3): 311-318.

Pant, N C, Amitava Kundu and Sonalika Joshi. 2008. Age of Metamorphism of Delhi Supergroup rocks- electron microprobe age from Mahendragarh district, Haryana. *J our. Geol. Soc. Ind.* 72(3): 365-372.

Paul, D K, J H Crocket, T A K Reddy and N C Pant. 2007. Petrology and Geochemistry including Platinum Group Element Abundances of the Mesoproterozoic Ultramafic (Iamproite) rocks of Krishna District, Southern India: Implications for source rock characteristics and petrogenesis. *Jour. Geol. Soc. Ind.* 69(3): 577-596.

Pant, N C, A Kundu, Rakesh Kumar, B S Dorka and S Prasher. 2006. Palaeoproterozoic metamorphism in the Jeori-Wangtu Gneissic Complex (JWGC), western Himalayas. *Journal of Asian Earth Science*. 26(2006): 585-604.

Ray, Arijit, S K Patil, D K Paul, S K Biswas, Brindaban Das and N C Pant. 2006. Petrology, geochemistry and magnetic properties of Sadara sill: Evidence of rift related magmatism from Kutch basin, northwest India. *Journal of Asian Earth Science*. 27(2006): 907-921.

Joshi, A, N C Pant, J K Nanda and S Neogi. 2006. High-Al Gabbro In Proterozoic Anorthosite Massifs Of Orissa - Implications for Anorthosite Genesis. *Journal Geol. Soc. Ind.* 68(1): 59-71.

Fareeduddin, N C Pant and S Neogi. 2006. Petrology of Kodomali diatrema, Mainpur area Field, Chattisgarh: Implications for a Palaeozoic Orangeite field. *Jour. Geol. Soc. Ind.* 68(1): 19-34.

Verma, Pramod, Susmita Sengupta, D K Chaddha and N C Pant. 2005. Dehydration melting studies in a 'Kyanite terrain', Manali, NW Himalayas. *Journal of Asian Earth Science*. 25(2005): 345-366.

Pant, N C, A Kundu, Sanjeev Sharma, R Paul and K Kazim. 2005. Petrogenesis of iron ores of Mahendragarh district, Haryana. *Indian Minerals*. 58(issue): 41-60.

Chattopadhyay, B K, J N Goswami, S V S Murthy, A P Thapliyal, J B Ghosh, 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. *Curr. Sci.* 88(5): 774-778.

Saini, H S, S K Tandon, S A I Mujtaba and N C Pant. 2005. Lake deposits of the northeastern margin of the Thar Desert: Holocene (?) Palaeoclimatic Implications. *Current Science*. 88(12): 1994-2000.

Moitra, M, S K Bhaduri and N C Pant. 2003. Ultramafic-mafic rock ensemble of Mawpyut, Jaintia Hill District, Meghalaya- A preliminary account. *Ind. Min.* 57(1 & 2): 75-84.

Ghosh, S, S V S Murthy, P N Shukla, A D Shukla, R R Mahajan, N Bhandari, N C Pant and S Shome. 2002. Fall, classification and cosmogenic records of the Sabrum (LL6) chondrite. *Meteoritics and Planetary Science*. 37(3): 439-448.

Ghosh, S, V S Murty, P N Shukla, A D Shukla, R R Mahajan, N Bhandari, N C Pant, J B Ghose and S Shome. 2001. Devri Khera: A new L6 chondrite. *Meteoritics and Planetary Science*. 36(A): A241-A245.

Ghosh, S, N C Pant, T K Rao, C Rama Mohana, J B Ghosh, S Shome, N Bhandari, A D Shukla and K M Suthar. 2000. The Vissannapeta eucrite. *Meteoritics and Planetary Science*. 35(5): 913-917.

GhoshRoy, A.K., Adhikari, B., Pant, N.C. and Mukhopadhyay, G. 2000. Tetraferriphlogopite from carbonatite of Tamar-Porapahar shear zone, Purulia District, West Bengal. *Ind. Min.* 54(1&2): 113-118.

Bhowmik, S K, T Pal and N C Pant. 1999. Evidence for Pre-Grenvillian high-pressure metamorphism from the northern margin of the Sausar Mobile Belt in Central India. *Jour. Geol. Soc. Ind.* 53(4): 385-399.

Golani, P R, R S Rajawat, N C Pant and M S Rao. 1999. Mineralogy of gold and associated alloys in sulfides of Bhukia Gold Prospect in southeastern Rajasthan, Western India. *Jour. Geol. Soc. Ind.* 54(2):121-128.

Pant, N C. 1995. Comments on "Jasra-ultramafic-mafic alkaline complex: A new find in the Shillong Plateau, northeastern India". *Curr. Sci.* 68(7): 683-684.

Joshi, A and N C Pant. 1995. Petrology, geochemistry and evolution of the charnockite suite of the Petermann Ranges, East Antarctica. *Memoir Geol. Soc. Ind.* 34: 241-258.

Pant, N C and P K.Verma. 1994. Grain growth parameters and mineral zoning: A comparative study from the Humboldt Mountains, East Antarctica. *Jour. Geol. Soc. Ind.* 44(6): 627-635.

Rasik, Ravindra, N C Pant and M J D'Souza. 1991. Landscape evaluation of Humoldt and adjacent areas, Wohlthat Mountains, East Antarctica. *Jour. Geol. Soc. Ind.* 37(2):172-183.

Joshi, A, N C Pant and M L Parimoo. 1991. Granites of Petermann Ranges, East Antarctica and implications on their genesis. *Jour. Geol. Soc. Ind.* 38(2): 169-181.

Kumar, B, D K Jha, N C Pant, R K Shrivastava and B K Bhandaru. 1990. A revised stratigraphy of the rock of the type area Bijawar Group in Central India. *Ind. Min.* 44(4): 303-314.

Joshi, A and N C Pant. 1989. Comment on "The nature of bed-rock at Petermann-I, Wohlthat Range, Antarctica. *Jour. Geol. Soc. Ind.* 34(4): 431-433.

Ravindra, Rasik, N C Pant and M J D'Souza. 1989. A note on the PGM bearing metaultramafite from Humboldt Mountains in East Antarctica. *Ind. Min.* 43(2): 157-161.

#### **Research papers published in Academic Journals other than Refereed/Peer Reviewed Journals**

N.C. Pant and H.S. Saini, 2011, Global climate instability, Indo-Gangetic Plain and environmental concerns in south Asia. SAARC Building bridges in the south Asian Region (Eds.) Saifuddin Soz, R.N. Srivastava and Sanju Gupta. 305-318. Published by Foundation for Peace and Sustainable Development, New Delhi.



Pant, N C, A Joshi and J K Nanda. 2008. Alkaline complexes and Pan-African imprints from western and northern margins of the Eastern Ghats Mobile Belt (EGMB) in Orissa. *GSI Spl. Pub. No.91*: 136-155.

Joshi, A and N C Pant. 2008. Pan-African AMCG association from Central Dronning Maud Land, east Anatarctica and its comparison in time and space. *GSI Spl. Pub. No. 91*: 181-200.

Kundu, A, S Sundarraman, N C Pant and Sonalika Joshi. 2008. Mineral chemistry of major and accessory phases of Mandi granite: Response of a Pan-African granite of Lesser Himalaya to the influence of Himalayan Metamorphism. *GSI Spl. Pub. No.91*: 79-104.

Pant, N C, A Joshi, S Neogi and J K Nanda. 2006 Granulites from northern and southern margins of Chilka Lake Anorthosite Complex- Inference on emplacement conditions. *Indian Jour. Geochemistry. 21*(Special issue): 89-102.

Kundu, A, Sonalika Joshi, N C Pant and D Bhatnagar. 2006. Electron Microprobe Dating Technique- Critical Evaluation and application for a Pan-African granite from the Himachal Himalayas. *Indian Jour. Geochemistry. 21*(Special issue): 209-228.

Pant, N C, A Joshi and S K Bhatia. 2005. On The Origin Of The Nodular Horizon In The Coastal Regolith Profiles, Ratnagiri And Sindhudurg Districts, Maharashtra. *Travaux 36*(Special issue): 201-212.

Joshi, A, N C Pant and S K Bhatia. 2005. Regolith development in Western Ghats, Maharashtra- A petro- minealogical study of profiles at three levels. *Travaux 36*(Special issue): 133-154.

Joshi, A, N C Pant, J K Nanda and S Neogi. 2004. Petrology of the anorthosite massifs and associated charnockite suite in Orissa, Eastern Ghats, India: Implications for Rodinia reconstruction, Uniformitarianism revisited comparison between ancient and modern orogens of India. *Geol. Surv. Ind. Sp. Pub. 84*: 131-149.

Solanki, J N, B Sen, M K Soni, N S Tomar and N C Pant. 2003. Granulites from southeast of Waidhan, Sidhi district, Madhya Pradesh in NW extension of Chhotanagpur Gneissic Complex: Petrography and geothermobarometric estimation. *Gond. Geol. Mag. 7*: 297-311.

Pant, N C and H S Saini. 2001. Relevance of advanced techniques in Quaternary geological and geoenvironmental studies. *GSI Spl. Pub. No.65* (III):141-146.

Saini, H S, N C Pant and S A I Mujtaba. 2001. Indo gangetic alluvial plain- a thrust area for societal geoscience. *GSI Spl. Pub. No. 65*(3):123-130.

Bhowmik, S K, T Pal, N C Pant and S Shome. 2000. Implication of Ramakona Cordierite Gneiss in the crustal evolution of Sausar Mobile Belt in Central India, Precambrian crust in Eastern and Central India. *Geol. Surv. Ind. Sp. Pub. 57*: 131-150.

Saini, H S, S A I Mujtaba and N C Pant. 1997. Significance of geoscientific data in district level planning and environmental management- a case study of Faridabad district (National Capital Region), Haryana. *Geol. Surv. Ind. Spl. Pub. 48*(1): 101-107.

Pant, N C and D M Bannerjee. 1990. Pattern of sedimentation in the type area Bijawar Basin of Central



India. *Geol. Surv. Ind. Spl. Pub.* 28: 156-166.

Pant, N C. 1987. A note on the evolution of the mineral assemblages in the metapelites around Phyangla area, East Sikkim District, Sikkim. *Rec. Geol. Surv. Ind.* 115(3&4): 17-24.

### **Other Publications**

#### **Edited Works**

Abul Amir Khan, **Naresh C. Pant**, Anuj Goswami, Ravish Lal, Rajesh Joshi, (2015) Critical evaluation and assessment of average annual precipitation in the Indus, the Ganges and the Brahmaputra basins, Northern India, *IN R. JOSHI ET AL. (EDS.), DYNAMICS OF CLIMATE CHANGE AND WATER RESOURCES OF NORTHWESTERN HIMALAYA, SOCIETY OF EARTH SCIENTISTS SERIES, 67-84, DOI 10.1007/978-3-319-13743-8\_7, © SPRINGER INTERNATIONAL PUBLISHING SWITZERLAND*

**Pant, N.C., (2014)** Microanalytical Characterization and Application in Magmatic Rocks *In: S. Kumar and R. N. Singh (eds.), Modeling of Magmatic and Allied Processes, Society of Earth Scientists Series, 167-180, DOI: 10.1007/978-3-319-06471-0\_8, Springer International Publishing Switzerland*

**N.C. Pant** and H.S. Saini, 2011, Global climate instability, Indo-Gangetic Plain and environmental concerns in south Asia. SAARC Building bridges in the south Asian Region (Eds.) Saifuddin Soz, R.N. Srivastava and Sanju Gupta. 305-318. Published by Foundation for Peace and Sustainable Development, New Delhi.

Pant, N C, Sheo Prasad and A Kundu. 2000. Subcalcic amphibole bearing rocks from Mahendragarh district, Haryana- Implication on metamorphism of the Delhi Fold Belt. In *Crustal Evolution and Metallogeny in the Northwestern Indian Shield*, ed. M Deb, 138-157. New Delhi: Narosa.

Saini, H S, S A I Mujtaba and N C Pant. 1999. Geoenvironmental appraisal of Faridabad-Ballabgarh blocks, Haryana- A relook of urban planning approach. In *Remote Sensing of Urban Environment*, ed. B S Sokhi and S M Rashid, 156-173. New Delhi: Manak Publications.

Verma, P K and N C Pant. 1999. Mayi Hill serpentinite, Dibang Valley, Arunachal Pradesh. In *Geological Studies in The Eastern Himalayas*, ed. P K Verma, 235-250. Delhi: Pilgrim Books.

### Conference Organization/ Presentations (in the last three years)

Scientific Program Committee convener and one of the organizer of the XII International Symposium on Antarctic Earth Sciences, 2015 at Goa.

### Research Projects (Major Grants/Research Collaboration)

**Name of Project:** Paleoclimatic and magmato-metamorphic history of Wilkes Land, East Antarctica: constraints from accessory minerals, clay mineralogy and micropaleontology in oceanic sediments.

**Position in Project:** Principal Investigator

**Period:** 3-years

**Funding Agency:** National Center for Antarctic and Ocean Research, Goa (NCAOR)

**Grant:** 25 lakhs

Completed

**Name of Project:** Correlation of magmatic and metamorphic evolution of the North and South Delhi Fold Belts: constraints from chemical age dating using zircon/ allanite/ thorite/ monazite

**Position in Project:** Principal Investigator

**Period:** 3-year

**Funding Agency:** Department of Science and Technology

**Grant:** 18 lakhs

Completed

**Name of Project:** Finger printing of glacial melt water in the Ganga basin- implications for modeling hydrological cycle in a Himalayan river system

**Position in Project:** Principal Investigator

**Period:** 4-year (2013-2017) Completed

**Funding Agency:** Department of Science and Technology

**Grant:** 25 lakhs

Completed

**Name of the Project:** A 100 ka glaciation-deglaciation history of Ladakh: its comparison with Sutluj valley and signatures in the alluvial plains of NW India

**Period:** Three years- 2017-2020

**Funding Agency:** Ministry of Earth Sciences

**Grant:** 84 lakhs

#### Awards and Distinctions

National Mineral Award, 1996.

Antarctic Silver Jubilee Award- 2005

Fellowship Electron Microscope Society of India (2015)

British Council Innovation Award in form of ICECAP-2 project (2015-2017)

#### Association With Professional Bodies

##### **Editing**

Member, Editorial Advisory Board, Indian Journal of Geosciences

Editor, Indian Journal of Geochemistry, No. 21, Special Volume on Metamorphism and Geochemistry, 2006

##### **Reviewing**

Reviewer, Tectonophysics, Journal of Asian Earth Science, Journal of Geological Society of India,

Journal of Earth System Science, Episodes, Geological Society Special Publication (London), Precambrian Research and other journals

#### **Committees and Boards**

- Deputy Chief Officer, Geosciences Group of the Scientific Committee on Antarctic Research (SCAR) (2016-2020)
- National Convener IGCP-470 (Pan-African Event)
- Expert for earth science program selection for Indian Antarctic Scientific Expedition (2015)
- Program review member of Geological Survey of India, NR
- Convener Scientific Committee of International Symposium on Antarctic Earth Science 2015 (hosted by National Centre for Antarctic and Ocean Research, Goa)
- Member, DST Review Committee for major projects under IRPHA Program 2014-2017.
- Participated in a meeting at Department of State, Washington DC to discuss the outcome of a British Council funded project ICECAP (International Collaborative Exploration of Central East Antarctica through Airborne geophysical Profiling) during April 2018. This was a UK-USA-China-India collaboration.

#### **Memberships**

- Member of Exploration Research Advisory Committee (ERAC) of Northern Region, Atomic Mineral Directorate, Department of Atomic Energy
- Member (Earth Sciences), DST Expert Committee on INSPIRE Fellowship

#### **Other Activities**

Participated in 6<sup>th</sup> and 7<sup>th</sup> Indian Scientific Expeditions to Antarctica (1986-87 and 1987-88).

#### **Other Publications**

Compiled a special publication of the Geological Survey of India (No. 91), 2008.

Pant, N C, Rasik Ravindra and M J D'Souza. 1994. Terminal moraines in Grautfatet, Humboldt Mountains, East Antarctica- indicators of rate of glacial recession. Sci Report 9<sup>th</sup> Ind. Exp. Antarctica. DOD Tech. Pub. 6: 219-225.

Bibliography of geological investigations of the eastern Himalayas. 1981. University of Delhi Publication.

**Abstract in International Seminars**

Inferring a rift-thinned lithosphere based on ICECAP-2 observations in Princess Elizabeth Land, Antarctica, XXXV SCAR Open Science Conference, Davos, Switzerland 2018

ICECAP-2 aerogeophysical observations of Princess Elizabeth land, east Antarctica, 2016, **Bo Sun**, Jamin Greenbaum, Donald Blankenship, Martin Siegert, Naresh Pant, Jingxue Guo, Xiangbin Cui, Bangbing Wang, Laura Lindze, Lin Li, Devsamridhi Arora, Gregory Ng, Thomas Richter XXXIV SCAR Open Science Conference, August 2016, Kuala Lumpur, Malaysia

Polymetamorphic crust and a Neoproterozoic orogeny in the eastern Wilkes Land inferred from the marine sediments, 2016, Naresh Pant, Mayuri Pandey, Sonalika Joshi, XXXIV SCAR Open Science Conference, August 2016, Kuala Lumpur, Malaysia

A Relook at the Nature of Magmatism in CDML in the Context of Extension of the East African Orogeny in Antarctica, 2015, Pant, N. C.; Roy, S.; Joshi, A.; D'Souza, M. J., XII International Symposium on Antarctic Earth Science, Goa,

Geological Studies in Baalsrudfjellet Nunatak between Schirmacher Oasis and Wohlthat Mountains to Establish the Continuation of East African Orogen (EAO) in cDML, 2105, Sandip Roy; Naresh C. Pant; A.D. Dharwadkar; P.K. Kumar, XII International Symposium on Antarctic Earth Science, Goa,

Inferring a Neoproterozoic Orogeny Preceding The Rodinia Break-Up in NW India, 2015, Devsamridhi; Pant, Naresh. C.; Fareeduddin; Sharma Surbhi, XII International Symposium on Antarctic Earth Science, Goa,

Mineralogical and SR-ND Isotopic Signatures of Flows and Dykes from the Northeastern and Western-Central Part of the Deccan Large Igneous Province, 2015, Kumar R.; Ahmad T.; Pant N.C., XII International Symposium on Antarctic Earth Science, Goa,

The Monsoon Induced Aggradations in the Three River Valleys of NW Himalayas during MIS 3-A Comparative Evaluation on Spatial Variability in the Timing of Deposition, 2015, Saini, H.S; Mujtaba, S.A.I., Pant, N.C.; Bhattacharya, S., XII International Symposium on Antarctic Earth Science, Goa,

Sedimentary Architecture, Paleoenvironment and Provenance of Fluvio-Lacustrine Sequence in Leh: Records of Late Pleistocene Climatic Fluctuation, 2015, Syed Ali Imam Mujtaba; Lal, R.; Kumar, P.; Pant, N.C.; Saini, H.S.; Dutta, S., XII International Symposium on Antarctic Earth Science, Goa,

Evidence of Formation and Breaching of Two Palaeo Lakes around Leh in Upper Indus Valley During Late Quaternary, 2015, Lal Ravish; Pant N.C; Saini H.S; Mujtaba SAI; Kumar Pawan;

Tom Christy, XII International Symposium on Antarctic Earth Science, Goa,

Himalayan Glaciers – Climate Change and Their Heterogeneous Behavior, 2015, Deepak Srivastava; Rasik Ravindra; N. C. Pant, XII International Symposium on Antarctic Earth Science, Goa,

Implication of grain size analysis and U ratio in interpretation of Paleoenvironment-a case study from the ocean sediments off the coast of Wilkes Land, East Antarctica, 2015, Pandey Mayuri, Pant Naresh C., Shrivastava Prakash, Biswas Paromita, XII International Symposium on Antarctic Earth Science, Goa,

Dynamic to persistent transition of East Antarctic Ice Sheet (EAIS) during early Pliocene and cycles of waning and waxing of EAIS inferred from clay minerals and carbon content of ocean sediments, Abstract volume XXXIII Open Science Conference, 2014, Auckland, p. 135.

Differential thinning of the mantle lithosphere underneath East African Orogen- inferred from post orogenic magmatism, Abstract volume XXXIII Open Science Conference, 2014, Auckland, p. 430.

Inferences on provenance for Pleistocene period sediments from the sediment record of site U1359 of the Wilkes Land IODP expedition and clay mineral studies, N.C. Pant, P. Shrivastava, P. Biswas, Neha Aggarwal, S. Bhattacharya and Kamlesh Verma and IODP Expedition 318 Scientific Party, XI International Symposium on Antarctic Earth Science, Edinburgh, July 2011.

Migmatization driven metamorphic resetting in Humboldt Mountains, Central Dronning Maud Land, East Antarctica, 2005. Pant, N.C., Verma, P.K., Sharma, B.L., Kundu, A and D'Souza, M.J. In: International Seminar on Earth Science of East Antarctica, New Delhi, Abs. Volume, 26-27.

Comparative evaluation of the charnockite suite associated with massif anorthosites in Eastern Ghat Belt, India and Central Dronning Maud Land, East Antarctica, 2005. Joshi, A., Pant, N.C. In: International Seminar on Earth Science of East Antarctica, New Delhi, Abs. Volume, 16-18.

Formation of rare zirconium bearing minerals in high Al clinopyroxene rocks from Humboldt Mountains, East Antarctica, 2005. Kundu, A., D'Souza, M.J. and Pant, N.C. In: International Seminar on Earth Science of East Antarctica, New Delhi, Abs. Volume, 28-29.

Geology, Glacial morphology and lineament fabric of Petermann Ranges and adjoining areas in a part of Wohlthat Mountains, East Antarctica, 2005. Attre, J. K., Joshi, A., Pant, N.C. and Singh, A. In: International Seminar on Earth Science of East Antarctica, New Delhi, Abs. Volume, 45.

The nature of marginal rocks and temperature of intrusion of the Chilika Lake Anorthosite Complex., 1998, Joshi, A., Pant, N.C., Neogi, S. and Nanda, J.K. In: International Seminar on Precambrian Crust in Eastern and Central India, Bhubneswar (UNESCO-IUGS-IGCP-368), Abs. Volume, 118.

Metamorphic conditions in the Humboldt Mountains-Petermann Ranges Region, East Antarctica, 1993. Joshi, A., Pant, N.C. Int. Symp. On the Tectonics of East Antarctica, Univ. of Utrecht, Netherlands.

Tectonic and petrogenetic evaluation of the Petermann Ranges, East Antarctica, 1991. Joshi, A., Pant, N.C. Bejarniya , B.R. and Parimoo, M..L., 6th Int. Symp. Ant. Earth Sci., Japan. Abs. Volume, 258.

Petrogenesis of the anorthosite suite of Central Dronning Maud Land, East Antarctica. 1988. Parimoo.M..L, Joshi, A. and Pant, N.C., Penrose Conf.on the Origin and Evolution of Antarctica, Wyoming, USA, 38.

Signature of Faculty Member