

CURRICULAM VITA

Personal Information

- Name : Dr. K.R. Hari
- Designation: Professor
- Address : (Off) School of Studies in Geology and Water Resource Management
Pt. Ravishankar Shukla University, Raipur,
Chhattisgarh, India
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Career details

Professor - From December 2012 onwards

Assistant Professor - From 1987 to 2012

Summary of Educational Qualifications

- M.Sc. : Geology : Vikram University, India, 1985
- M.Phil : Geology : Vikram University, India, 1986
- Ph.D : Geology : Vikram University, India, 1992

Research Interests

Petrology, Geochemistry, Tectonics

Awards received

M.P. Young Scientist's (Geology) Award - 1991

Research Projects Completed

- Title: "Petrological, Geochemical and Fluid inclusion studies of Deccan basalts, carbonatites and associated rocks around Chhaktalao area, Jhabua district, Madhya Pradesh."

Name of funding agency: Department of Science and Technology, New Delhi, India. Project No. : SR/SY/A-01/93

- Title: “An integrated study of the dyke swarms and Deccan Traps of Chhotaudepur province, Lower Narmada Valley”

Name of funding agency: Department of Science and Technology, New Delhi, India.

Project No. : ESS/16/295/2006

Co-investigator- Dr. N.V. Chalapathi Rao, Banaras Hindu University, Varanasi, India.

- Title: “ Petrological and geochemical studies of the ultrabasic rocks around Boradilh area, northeastern fringes of Bastar craton”

Name of funding agency: Department of Science and Technology, New Delhi, India.

Project No. : SB/S4/ES-686/2013

Co-investigator-Dr. N.V. Chalapathi Rao, Banaras Hindu University, Varanasi, India

Academic visits to foreign countries and invited talks

- Under Osaka City University study exchange programme, field work and laboratory studies were carried out at Japan from 22nd October 1999 to 2nd November 1999 (Invited by Prof. K. Furuyama)
- Delivered a lecture on the various aspects of Deccan flows of Pavagadh on 23rd October 1999 at Osaka City University, Japan.
- Visited Peking University, China from 21st to 30th October 2008 for the discussions on the on-going research on dyke swarms (Invited by Prof. Guiting Hou)
- Delivered two lectures at School of Earth and Space Sciences, Peking University, China on 22nd and 23rd October 2008
- Visited National Taiwan Normal University, Taipei, Taiwan from 12th June to 18th June 2016 by the invitation of Dr. J.G.Shellnutt for discussions for future collaborative research work
- Delivered two lectures at National Taiwan Normal University, Taipei, Taiwan on 15th June and 17th June 2016.

Supervision of Doctoral work

Doctoral degree Awarded - Four

- Geochemistry and thermobarometry of corundum bearing gneisses and charnockites in a part of Bhopalpattanam granulite belt
Name of the candidate: Mr. Sandeep Vansutre
- Geochemistry and petrogenesis of Baghmara formation (Sonakhan Group) Raipur district, Chhattisgarh. (Co-supervisor - Dr. P. Diwan)
Name of the candidate: Mr. S.D. Deshmukh
- Petrogenesis of the flows and dykes in north-western part of Kawant, Vadodara district, Gujarat
Name of the candidate: Mr. Vikas Swarnkar
- Petrogenetic study of the mafic and ultramafic rocks of Sonakhan Greenstone Belt, northeastern fringes of Bastar craton- implications for crustal evolution
Name of the candidate: Mr. Manu Prasanth M.P

Academic-related social activities

- Guest Co-Editor the Part-II of the Special Issue (MAFIC-ULTRAMAFIC ROCKS AND ALKALINE-CARBONATITIC MAGMATISM) of Central European Journal of Geosciences (CEJG)
- Guest co-Editor of the special issue entitled “Evolution of the Indian subcontinent” of Geological Journal
- Convener of two symposia (Theme-16, symposia- 16.7- Dynamics of magmatic process; Theme-19, Symposia - Plume related mineralization) in 36th International Geological Congress 2020
- Reviewer of research papers submitted to *Gondwana Research, Journal of Asian Earth Sciences, Geoscience Frontiers, Journal Geological Society of India, Ore Geology Reviews, Mineralogy and Petrology, Current Science, Journal of Earth System Science, Lithos etc.*
- Member - Journal Geological Society of India and Mineralogical Society of India

LIST OF PUBLICATIONS

1. The Bastar craton, central India: A window to Archean–Paleoproterozoic crustal evolution; *Gondwana Research*, 2020; Volume 79, Pages 157-184
<https://doi.org/10.1016/j.gr.2019.09.012>

Authors: M Santosh, T Tsunogae, Cheng-Xue Yang, Yue-Sheng Han, KR Hari, MP Manu Prasanth, Sam Uthup

2. Evolution of the Indian subcontinent: Introduction; 2019; Geological Journal; <https://doi.org/10.1002/gj.3592>

Authors: KR Hari, E Shaji, S Ganguly, VJ Rajesh, M Santosh

3. A petrogenetic relationship between 2.37 Ga boninitic dyke swarms of the Indian Shield: Evidence from the Central Bastar Craton and the NE Dharwar Craton; 2019; Gondwana Research; 69; 193-211

Authors: Alice C-Y Liao, J Gregory Shellnutt, K R Hari, Steven W Denyszyn, Neeraj Vishwakarma, Chandra B Verma

4. Tholeiitic basalts of Deccan large igneous province, India: An overview; 2019; Geological Journal; <https://doi.org/10.1002/gj.3497>

Authors: M.P. Manu Prasanth, K.R. Hari and M. Santosh

5. Petrogenesis of the 1.85 Ga Sonakhan mafic dyke swarm, Bastar Craton, India; 2019; Lithos; <https://doi.org/10.1016/j.lithos.2019.03.015>

Authors: J. Shellnutt; K.R. Hari, A C -Y Liao, Steven Denyszyn, Neeraj Vishwakarma and S.D.Deshmukh

6. Neoproterozoic suprasubduction zone magmatic imprints from the Sonakhan greenstone belt, Bastar craton, India: implications on the subduction initiation and melt extraction episodes; Geological Journal; 2018: <https://doi.org/10.1002/gj.3398>

Authors:- M.P. Manu Prasanth, K.R. Hari, N.V. Chalapathi Rao, M. Santosh; Guiting Hou, Toshiaki Tsunogae, Dinesh Pandit

7. Evidence for the Contrasting Magmatic Conditions in the Petrogenesis of A-type Granites of Phenai Mata Igneous Complex: Implications for Felsic Magmatism in the Deccan Large Igneous Province; Journal of the Indian Institute of Science; 2018, DOI: <https://doi.org/10.1007/s41745-018-0079-z>

Authors: K. R. Hari, M. P. Manu Prasanth, Vikas Swarnkar, Jami Vijaya Kumar and Kirtikumar R. Randive

8. A 1.88 Ga giant radiating mafic dyke swarm across Southern India and Western Australia. Precambrian Research, 2018; V-38 , pp- 58-74.

Authors :- J. Shellnutt; K.R. Hari, Alice Liao, Steven Denyszyn, Neeraj Vishwakarma

9. Significance of Assimilation and Fractional Crystallization (AFC) process in the generation of basaltic lava flows from Chhotaudepur area, Deccan Large Igneous Province, NW India; Journal of Earth System Science

Authors:- K. R. Hari, Vikas Swarnkar, M. P. Manu Prasanth

10. The Mantle Source of Thermal Plumes: Minor Elements in Olivine & Major Oxides of Primitive Liquids (And Why the Olivine Compositions Don't matter). American Mineralogist 2018; v-103; pp - 1253 - 1270

Authors: - Keith Putirka, Yan Tao, K.R. Hari, Perfit, M., Jackson, M. and Arevalo Jr., R

11. Oldest lamproites from Peninsular India track the onset of Paleoproterozoic plume-induced rifting and the birth of Large Igneous Province. Gondwana Research; 2018, 55, 1-20.

Authors :- M. Santosh, K.R. Hari, Xiao-Fang He, Yue-Sheng Han, M.P. Manu Prasanth

12. Geochemical constraints on the tectonic setting of Sonakhan Greenstone belt, Bastar craton, Central India", Acta Geochimica, DOI 10.1007/s11631-017-0213-z

Authors: S.D.Deshmukh, K.R.Hari, P.Diwan and M.P.Manu Prasanth

13. Interaction of coeval felsic and mafic magmas from Kanker granite, Pithora region, Bastar Craton, Central India". Journal of Earth System Science, 2017, DOI 10.1007/s12040-017-0886-z

Authors: R. Elangovan, Kumar Krishna, Neeraj Vishwakarma, K.R. Hari and M. Ram Mohan

14. An island-arc tectonic setting for the Neoproterozoic Sonakhan Greenstone Belt, Bastar craton, Central India: Insights from the chromite mineral chemistry and geochemistry of the siliceous high-Mg basalts (SHMB), Geological Journal, 2017, DOI: 10.1002/gj.2971

Authors: M.P. Manu Prasanth, K.R. Hari, N.V. Chalapathi Rao, Guiting Hou and Dinesh Pandit

15. Mechanism of Paleo-Mesoproterozoic rifts related to breakup of Columbia supercontinent: A paleostress field modeling. *Journal of Geodynamics*, 2017, 107, pp-46-60
Authors: S Sun, G Hou, KR Hari, S Liu, S Guan
16. The model of fracture development in the faulted folds: The role of folding and faulting, *Marine and Petroleum Geology*, 2017, <https://doi.org/10.1016/j.marpetgeo.2017.05.025>
Authors: Yong Li, Guiting Hou, KR Hari, Yuan Neng, Ganglin Lei, Yangang Tang, Lu Zhou, Shuai Sun, Chunfang Zheng
17. Geochemistry and petrogenesis of felsic metavolcanic rocks of Baghmara formation, Sonakhan greenstone belt, Central India; *Journal of Geosciences Research*, 2017, vol-2, No-1, pp-69-74
Authors: S.D.Deshmukh, K.R.Hari, P.Diwan and M.P.Manu Prasanth
18. Dyke emplacement in the Narmada rift zone and implications for the evolution of Deccan Traps, *Geological Society of London Special Publication*; 2016; doi:10.1144/SP445.1
Authors: Wei Ju, Guiting Hou, and K.R. Hari
19. Two episodes of structural fractures and their stress field modeling in the Ordos Block, northern China, *Journal of Geodynamics* ; 2016; vol-97; pp – 7 - 21
Authors: Wentao Zhao, Guiting Hou and K.R. Hari
20. Study of Fluid Inclusions: Methods, Techniques and Applications; *Gondwana geological Magazine*; V. 29(1 and 2), June and December, 2014. pp.19-28
Authors: K. R. Randive, K. R. Hari, M. L. Dora, D. B. Malpe and A. A. Bhondwe
21. Geochemical and isotopic constraints on the evolution of Late Paleozoic dyke swarms in West Junggar, Xinjiang, China; *Journal of Asian Earth Sciences*; doi:10.1016/j.jseaes.2014.07.012
Authors: Yan Zhan, Guiting Hou, K.R. Hari and Wulin Shu
22. Alkali feldspar syenites with shoshonitic affinities from Chhotaudepur area: Implication for mantle metasomatism in the Deccan large igneous province ; *Geoscience Frontiers*; Volume 5, Issue 2, March 2014, Pages 261–276
Authors: K.R. Hari, N.V. Chalapathi Rao , Vikas Swarnkar and Guiting Hou

23. Mesozoic-Cenozoic extension of the Bohai Sea: contribution to the destruction of North China Craton ; *Frontiers of Earth Science*; June 2014, Volume 8, Issue 2, pp 202-215
Authors :- Guiting Hou and K.R. Hari
24. Implications of Geochemistry in support of Palaeo-Proterozoic Tectonothermal Evolution of Bhopalpatnam Granulite Belt, Bastar Craton, Central India; *Journal Geological Society of India*, 2013, vol-81, pp 503- 513
Authors :- Sandeep Vansutre, K.R. Hari and Neeraj Viswakarma
25. Mechanics of mafic dyke swarms in the Deccan Large Igneous Province: Palaeostress field modelling, *Journal of Geodynamics*, 2013, V-66, pp- 79-91
Authors :- Wei Ju, Guiting Hou, K.R. Hari
26. Petrogenesis of gabbro and orthopyroxene gabbro from the Phenai Mata Igneous Complex, Deccan volcanic province: a product of concurrent assimilation and fractional crystallization" *Journal Geological Society of India*, 2011, V- 78, pp- 501-509.
Authors: K.R. Hari, N.V. Chalapathi Rao and Vikas Swarnkar
27. $^{40}\text{Ar}/^{39}\text{Ar}$ ages of mafic dykes from the Mesoproterozoic Chhattisgarh basin, Bastar craton, Central India: Implication for the origin and spatial extent of the Deccan Large Igneous Province. *Lithos*, 2011, V- 125 (2011) 994–1005.
Authors: N.V. Chalapathi Rao, R. Burgess, B. Lehmann, D. Mainkar, S.K. Pande, K.R. Hari, and N. Bodhankar
28. Granulite belts of Central India with special reference to the Bhopalpatnam Granulite Belt: Significance in crustal evolution and implications for Columbia supercontinent. *Journal of Asian Earth Science*, 2010, V-39, pp- 794– 803.
Authors: Sandeep Vansutre and K.R. Hari
29. The Late Triassic and Late Jurassic stress fields and tectonic transmission of North China craton. *Journal of Geodynamics*, 2010, V-50, pp- 318–324
Authors: Guiting Hou, Yanxin Wang and K.R. Hari
30. Mafic dykes of Deccan age in the Chhattisgarh (Mesoproterozoic) Basin, Central India: implications for the origin and original spatial extent of the Deccan Large Igneous Province. www.largeigenousprovinces.org, March 2010.
Authors: N. V. Chalapathi Rao, B. Lehmann, R. Burgess, S. K. Pande and K. R. Hari
31. Spinifex Textured Metabasalt from Sonakhan Greenstone Belt, Central India, *The Indian Mineralogist*, 2008, V-42, No. – 1, pp – 71 – 83.
Authors: S.D.Deshmuk, K.R.Hari, P.Diwan and H.T.Basavarajappa

32. Pillow Lavas of Baghmara Formation (Sonakhan Greenstone Belt), Central India: Geochemical Constraints from Major Elements, *Gond. Geol. Magz.*, 2006, V - 21(1), June, pp. 37-42.
Authors: S.D.Deshmukh, K.R.Hari and P.Diwan
33. Petrology, fluid inclusions and metamorphic history of Bhopalpatnam granulites, Central India, *Journal of Asian Earth Sciences*, 2006, v-28, pp –81 – 98.
Authors: M.Santosh, T. Tsunogae, T. Iki, S. Vansutre and K.R. Hari.
34. Some Geochemical and Petrogenetic Relations between Flows and Dykes of Deccan Trap from Chhaktalao Area, Madhya Pradesh, *Journal Geological Society of India*, 2002, V – 59,. pp – 225-232.
Authors: K.R. Hari, C.G. Nambiar, K. Furuyama and Suneet Kumar Rai.
35. Crystallization History of Primitive Deccan Basalt from Pavagadh Hill, Gujarat, Western India, *Gondwana Research*, 2001, V. 4, No. 3, pp. 427-436.
Authors: K. Furuyama, K. R. Hari and M. Santosh.
36. Melt inclusion in olivine and pyroxene phenocrysts from lamprophyres of Chhaktalao Area, Madhya Pradesh, India, *Journal of Asian Earth Sciences*, 2000, V. 18, pp. 155-161.
Authors: K. R. Hari, M. Satish Kumar, M. Santosh and Suneet Kumar Rai.
37. Melt inclusions in pyroxene and plagioclase phenocrysts from Pavagadh igneous suite, Gujarat, India, *Journal of Geosciences*, Osaka City University, 2000, V. 43, Art. 7.
Authors: K. R. Hari, M. Santosh and Furuyama Katsuhiko.
38. The Pavagadh Hill, A Unique Outcrop of the Deccan Trap, Gujarat, India, *Gondwana Research* (Gondwana Newsletter Section), 1999, V. 2, No. 4, pp. 676-679.
Authors: K. R. Hari, K. Furuyama and K. P. Shabeer
39. Mildly alkaline basalts from Pavagadh Hill, India: Deccan flood basalts with an asthenospheric origin, *Mineralogy and Petrology*, 1998, V. 62, pp. 223-245.
Authors: J. D. Greenough, K.R. Hari, A. C. Chatterjee and M. Santosh.
40. Petrology, Geochemistry and Stable Isotope Studies of Carbonate-rich Dyke-like Bodies, Chhaktalao Area, Madhya Pradesh, *Journal Geological Society of India*, 1998, V. 52, pp. 591-595.
Authors: K. R. Hari, M. Satish Kumar, M. Santosh and Suneet Kumar Rai.
41. Mineralogical and Petrological Studies of the Lamprophyres around Chhaktalao area, Madhya Pradesh, *Journal Geological Society of India*, 1998, V- 51, pp. 28-30.
Author: K. R. Hari.
42. A Note on the Dyke Swarms Around Chhaktalao, Jhabua District, Madhya Pradesh, *Gondwana Research* (Gondwana Newsletter Section), 1997, V- 1, pp. 146-147.
Authors: K. R. Hari and S. K. Rai.

43. Primary Silicate-melt Inclusions in Olivine Phenocrysts from the Pavagad Igneous Suite, Gujarat, *Journal Geological Society of India*, 1991, V- 37, pp. 343-350.
Authors: K. R. Hari, M. Santosh and A C. Chatterjee.
44. Occurrence of six basaltic flows around Ujjain, M. P., *Bulletin of the Indian Geologists Association*, 1990, V- 23(2), pp. 139-141.
Authors: K. R. Hari, and A C. Chatterjee.
45. Fluid Inclusions in Deccan Basalt, *Memoirs Geological Society of India*, V. 11, pp. 37-43.
Authors: M. Santosh, K. R. Hari and A C. Chatterjee.
46. Iron-Titanium Oxides in the Deccan Trap Basalts of Ujjain, *The Indian Mineralogist*, 1987, V- 28, Nos. 1&2, pp. 18-23.
Authors: A C. Chatterjee and K. R. Hari.
47. Gravitative sinking of plagioclase phenocrysts in the Deccan Traps of Ujjain, *Bulletin of the Indian Geologists Association*, 1987, V- 20(2), pp. 177-178.
Author: K. R. Hari.

Publication in conference proceedings

- Petrogenesis of basaltic and doleritic dykes from Kawant, Chhotaudepur province, Deccan Traps. 2011 Chapter 17. Page No. 283-299. In "*Dyke Swarms: Keys for Geodynamic Interpretation.*" Rajesh Srivastava (Ed). Springer-Verlag, Heidelberg.

Authors : K.R. Hari and Vikas Swarnkar