

PROFILE

1. Name : **DR. B. Veerananarayana Rao (B.V. Rao)**
2. Designation : Professor
3. Date of joining in service : 29th August 1997
4. Email : bvrao97@yahoo.com ; bvrao@nagalanduniversity.ac.in
5. Contact No : + 91- 9436001911
6. Educational Qualifications : M.Sc., P.G.D.G.G; Ph. D.(Andhra University)
7. Specialization/Area of Interest: Igneous Petrology, Applied Geochemistry and Hydrogeology

8. **Teaching Experience: (Total 22 years)**

In various capacities in the Department of Geology, Nagaland University, Kohima Campus, Meriema.

- 1) Senior lecturer : 29th August 1997 to 28th August 2002,
- 2) Reader : 29th August 2002 to 31st December 2005,
- 3) Associate Professor : 01st January 2006 to 07th December 2012,
- 4) Professor : 08th December 2012 to till date (Under Open Selection).

9. **Research Experience: (Total 36 years)**

- 1) Doctoral work (1982-87), with UGC JRF fellowship
- 2) Post-Doctoral Experience: 10 years (1987-97) with National Fellowships in the Deptt of Geology, Andhra University, Visakhapatnam (Andhra Pradesh) like:
 - a. CSIR, Pool Officer(1990-93)
 - b. DST, Research Scientist (1993-95)
 - c. UGC, Research Associate (1995-97)
- 3) Research work at Nagaland University as a faculty since 1997 to till date

10. **Supervision of Ph.D. Thesis**

(a) **PhD Awarded (4)**

- 1) Dr (Ms) Chonchibeni Ezung (2007) "Petrology and geochemistry of volcanic rocks of the Ophiolite Suite in and around Zipu, Phek District, Nagaland (PhD awarded on 17th July 2007).
- 2) Dr . Chisoi (2011) "Petrology and geochemistry of mafic and ultramafic cumulates from parts of Phek dist. Nagaland with special reference to PGM." (PhD awarded on 1st November, 2011).
- 3) Dr. Merangsoba (2012)" Petrology and geochemistry of the Serpentinites of the Ophiolite suite from parts of Phek dist. Nagaland with emphasis on their genesis ." (PhD awarded on 11th July , 2012).
- 4) Dr .Ranjit Nayak (2014) "Petrology and geochemistry of plagiogranite associated with Naga Ophiolite Belt from Phek and Kiphire district, Nagaland" (Awarded on 6th June 2014).

(b) **PhD Registered (4), work under progress :**

- 1) Mr. R. Peseyie (2014) “Hydrogeochemical studies in Dimapur District, Nagaland with special reference to quality of ground water” (Ph.D Regd No 622/2014).
- 2) Mr Shyamong Pchongri (2016) “ Petrography and Geochemistry of Limestones from parts of Phek District, Nagaland with special reference to genesis and economic viability. (Ph.D Reg No: 752/2007 dated: 10-5-2016).
- 3) Ms Akhrulu Viro (2018) “ Geological and geochemical studies of groundwater in Kohima Town, Nagaland (Ph.D Reg No: PhD/GEL/000187 dated: 29-8-2018).
- 4) Ms Vilavonuo Keditsu (2018) “ Geological and geochemical studies of groundwater from Kohima village to Botsa area, Kohima District, Nagaland (Ph.D Reg No: PhD/GEL/0001193 dated: 29-8-2018).

11. **Supervision of M.Sc Dissertations: (Total 32)**

In the field of Igneous Petrology, Applied Geochemistry and Hydrogeology.

12. **Research Projects Completed: (Total 3)**

- 1) DST SYS Research Project on “Petrochemistry , Genesis and Economic Modelling of Iron ore deposits of Eastern Ghats, Andhra Pradesh” during 01-09-1993 to 31-08-1995. Ref.No:SR/OY/A-11/92 dated: 22-6-1993.
- 2) DST-Major Research Project (As PI) on “Petromineralogical, Geochemical and Economical mineralization Studies in the Naga Ophiolite Complex and their bearing on the nature of deep continental/ oceanic crust” Ref. No: ESS/16/153/2002 during December 2002 to March 2006.
- 3) D.S.T. Major Research Project (As Co-PI) on “Shillong Basin and Trust and Ophiolite Belt of IM M Belt, NE India, An integrated approach from Magnetostatigraphy and palaeomagnetism.” Ref:No.ESS/16/249 (4)/2005).

13. **Life Membership in Scientific/ Professional Societies:**

- 1) Geological Society of India, Bangalore
- 2) Journal Applied Geochemistry, Hyderabad,
- 3) Association of Hydrologists of India, Visakhapatnam.

14. **Member of Academic Bodies:**

- 1) Member: Kohima Campus development board, Meriema since 2010.
- 2) Member: Academic Council, Nagaland University since 2006 to till date
- 3) Member: Academic Council, Kohima Science College since 2015 to 17
- 4) Member: Nagaland University Court as Dean of Student’s welfare in 2006-09
- 5) Member of School Board of Sciences, Nagaland University for 1998-2000 & 2005-'07 and 2007 to till date.
- 6) Member of Board of Post Graduate Studies in Geology (BPGS) since 1997.
- 7) Member in different Committees in the Department of Geology, as well as Nagaland University in various capacities since 1997.
- 8) Member of Governing body as University Representative in BB College, Wokha for 2001

to 2003 and Mt. Olive College, Kohima for 2004-2006; Sazole College 2007-10, Baptist College, Kohima 2011 to till date.

15. Achievements/Awards/Certificates/Recognisations

- 1) Elected as Executive Member, Indian Society of Applied Geochemists, Hyderabad for the year 2013-16 and 2017 to 2020.
- 2) Biographical note was published in Reference Asia Volume IX, Page No.344, and Indo- American “Who’s Who” Volume 1995, Page No691. and Asian/ American Who’s Who.1998.
- 3) Awarded-DST. Young Scientist Project through UPSC for 1993-‘95.
- 4) Elected as President, Nagaland University Teachers Association (NUTA), Kohima Campus for two years w.e.f. June 2018.
- 5) Convener of the Inspection team for grant of BSc Geology course at Model Christian College, Kohima and Immanuel College, Dimapur.
- 6) Attended as University representative during NAAC team visit to affiliated colleges like Jakhama College, Jakhama, Model Christian College, Kohima and Immanuel College, Dimapur.
- 7) Convener of the Inspection team : to inspect academic and infrastructural availability as per UGC guidelines, norms and standards in respect of Baptist College, Kohima (Ref No: NU-CDC/Gen-9/2009(pt-II) Dt 13-11-2016.

16. Abroad Visits:

Attended International conference & Field work at Osaka City University, Japan during October- 2002) and also visited USA (2015,2017) and UAE (2012) etc

17. Editorial Board Member:

- 1) Nagaland University, Research Journal (A Multi –Disciplinary journal) during: 2006-09.
- 2) Nagaland University Research Journal Sp. Volume 2008 on “ Geology and Energy Resources of N-E India: Progress and Perspective” (ISSN0973-0346).
- 3) Acted as Co Editor “ Indian Society of Applied Geochemistry” Special volume (2017) in connection with National Seminar held at the Department of Geology, Nagaland University, Kohima during 9-11,2016 as Convener.

18. Geological / Technical Reports:

- 1) DOEn, Research Project completion Report in 1989 as SRF.
- 2) CSIR Pool Officer Research Project completion Report in 1993.
- 3) DST SYS Research Project completion Report in 1995.
- 4) UGC Research Associate ship completion Report in 1997.
- 5) DST Major Research Project completion Reports-2006 as PI. and 2012 as co PI.

19. Courses / Trainings/Faculty Development Programmes attended:

- 1) UGC Refresher course” Hydrology with Special reference to Costal Aquifer System organised by Dept. of Geology, Andhra University, Visakhapatnam during 24-5-1998 to 16-6-1998. (3 weeks).
- 2) UGC 37th Orientation Course on “Teaching Methods “organised by University of Hyderabad, Hyderabad during 24-11-2000 to 22-12-2000. (3 weeks).
- 3) UGC Refresher course ”Geology of N-E India” Deptt of Geology, Nagaland University, Kohima during 25-3-2003 to 14-4-2003 (3 weeks).
- 4) Cruise Participant (216 Cruise of R.V. Gaveshani) in the Bay of Bengal along the A.P. off Shore, organised by National Institute of Oceanography, Goa & Andhra University, Visakhapatnam during 19-8-1989 to 3-9-1989 .(2 weeks).
- 5) Geo-scientific Writing and Editing organised by Dept. of Geology, Andhra University, Visakhapatnam during 29-4-1992 to 2-5-1992. (1 Week).

20. **Events Organized :**

- 1) National Seminar on “Geology and Energy Resources of NE India” Progress and perspectives” & AGM of Geological Society of India ” Department of Geology, NU, Kohima during 9-11 November 2005 **as Co-convener**
- 2) Regional Workshop for Young Earth Scientists on Tectonics, Sedimentation and Geohazards with Special Reference to North East India (November 2015) as a member of organising committee.
- 3) National Seminar on “Geology, Geochemistry, Tectonics, Energy and Mineral Resources of NE India” & AGM of Indian Society of Applied Geochemists” Department of Geology, NU, Kohima during 9-11 November 2016 **as convener**
- 4) MSc Geology students- Geological field work used to conduct once in every three years since 1997 to today in various parts of India

21. **Examiner / Evaluator (MSc / PhD / Projects)**

- 1) Andhra University, Visakhapatnam
- 2) Osmania University, Hyderabad
- 3) Indian school of Mines ,Dhanbad
- 4) Gauhati University, Guwahati
- 5) Manipur University, Imphal
- 6) Mizoram University, Aizawl
- 7) Dibrugarh University, Dibrugarh
- 8) Assam University, Silchar
- 9) NGRI, Hyderabad
- 10) Amaravati University, Nandhade (Maharashtra)
- 11) Union Public Service Commission (UPSC), Delhi

22. **Administrative Experience:**

- 1) **Warden** - P.G Men & Women’s Hostel at Kohima .Science College area, (Nagaland University) 1st Aug 2001 to 31st Aug 2003.
- 2) **Dean of Students Welfare** –Nagaland University, for 3 years (14th Dec 2006 to 13th Dec 2009).
- 3) **Head, Deptt. of Geology, Nagaland university**, for three years (5th Mar 2010 to 4th Mar 2013).

- 4) **Academic In-charge (Examination Cell)**, Nagaland University, Kohima Campus Meriema for Two years (November 2017 to November 2019).

23. **Member of Selection Committees**

- 1) Member of selection Committee for the recruitment of Museum curator & Sampling Assistant Post in June 2011 (Nominated by Vice Chancellor)
- 2) Member of selection Committee for the recruitment of Assistant Professor/Associate Professor in June 2012 (Nominated by Vice Chancellor)
- 3) Member of selection Committee for the recruitment of JRF/SRF/Project Assistant in various external funding Projects since 2006 till date (Nominated by Dean/Head/vice Chancellor)

24. **Important Assignments given by University**

- 1) Member of Framing the policy and guidelines regarding utilization of Overhead grants for all the Research Projects under taken in Nagaland University (Ref No: F2-138/Acad/2005-1710 dt 12 th September 2006).
- 2) Member of Committee to work out the Seniority list of professor, Reader/lecturer of the university (Ref no: NU/ESTT /G-34/2007-3996 dated 19-12-2007).
- 3) Member of drafting committee for framing of sports policy /rules and Regulations for Nagaland University Sports” (Ref no: NU-Sp-31/2008-1373, dated; 23-7-2008).
- 4) Member of Drafting Committee ‘ for outlining the guidelines for Departmental Purchase Committee of sports goods/Equipments in Nagaland University (Ref No: Sp-53/GEN/416, dated; 8-5-2009).
- 5) Member of drafting committee for Ordinance of Nagaland University (Ref no: NU-ADMN/GEN/14/2006-319 dt 4-5-2009 and Ref No NU/ORD/2009-01 Dated 5 th May 2009).

25. **Published Papers in Journals/ Proceeding Volumes: Total 30.**

- 1) **Veeranarayana Rao B.** 1988. Petrogenesis of Addanki Amphibolites, Prakasam Dist., A.P. Indian Journal of Earth Sciences, Vol. No. 15, No.3, pp. 201-208.(ISSN-0379-5128, peer reviewed).
- 2) **Veeranarayana Rao B.** 1989. Geochemistry and origin of hornblende schists of Ongole area, Prakasam Dist., A.P. Geophysical Research Bulletin. Vol. 27, Nos. 3 & 4, Sept., Dec., 1989, pp. 88-94. (ISSN-0378-6307, peer reviewed).
- 3) **Veeranarayana Rao B.** and Moeen S., 1990. Trace elements Geochemistry of magnetite-quartzites of Ongole area, Prakasam Dist. A.P. Indian Journal of Geochemistry, Vol. 5, No (1&2), Dec. 1989, pp 25-30.(ISSN-0970-9088, peer reviewed).
- 4) **Veeranarayana Rao B.** and Chandra Rao M. 1990. Iron formations of Prakasam Dist., Andhra Pradesh. Indian Mining & Engineering Journal. Vol. Dec. 1990. pp. 35-39. (ISSN-0019-5944, peer reviewed).
- 5) **Veeranarayana Rao B.** 1992 Origin of Pyroxene granulites of Ongole – Vemparala area, Prakasam Dist., A.P. Indian Journal of Geology, Vol. 64, No. 3, pp. 284-292. (ISSN-0970-1354, peer reviewed).

- 6) Rao, A.T., Sanjeeva Rao P. Ch. and **Veeranarayana Rao B.** 1992. Tectonics, Sedimentation and Mineralization in the Cuddapah Basin, Andhra Pradesh. *Indian Mining & Engineering Journal*, Vol. 31, No. 11, pp. 3-9. (ISSN-0019-5944, peer reviewed).
- 7) Rao, A.T. and **Veeranarayana Rao B.** 1994. Coexisting Pyroxenes from the Banded Iron – Formations from the Eastern Ghats Granulite Belt, South India. *Journal of the Indian Academy of Geosciences*, Vol. 37, No. 1, pp. 12-16. (ISSN-0379-5160, peer reviewed).
- 8) Rao, A.T. and **Veeranarayana Rao B.** Venkata Rao, M. and Yoshido, M. 1996. Petrology and Geochemistry of banded Iron-Formation from Ongole-Konijedu areas in the Eastern Ghats belt, South India. *Indian Minerals* Vol. 50, Nos. 1 & 2; pp. 19-28. (ISSN-0016-7622, peer reviewed).
- 9) **Veeranarayana Rao B.** and Thong, G.T. 1998. Petrochemistry and genesis of Charnockites from Addanki-Ongole area, Prakasam Dist., A.P. *Journal of the Indian Academy of Geosciences*, Vol. 41, No. 1, pp. 41-46. (ISSN-0379-5160, peer reviewed).
- 10) Rao, A.T., **Veeranarayana Rao B.**, and Raghuramu, M., 1998. Calc-Silicate Skarn veins from Srungavarapukota, Visakhapatnam Region in the Eastern Ghats Granulite Belt. *Journal of the Indian Academy of Geosciences*, Vol. 41, No. 1, pp. 7-12. (ISSN-0379-5160, peer reviewed).
- 11) Rao, A.T. and **Veeranarayana Rao B.** 1999. Temperature of metamorphism of the basic granulites around Addatigala and Devipatnam in the Eastern Ghats Granulite Belt, A.P. *The Indian Mineralogist*, Vol. 33, No. 2, pp. 65-69. (ISSN-0019-5928, peer reviewed).
- 12) G.T.Thong and **Veeranarayana Rao, B.** 1999. “Petrochemical Studies of the Barail Sediments of Botsa, Kohima District, Nagaland” *Journal of the Indian Academy of Geosciences*, Vol 42, no2 pp32-37. (ISSN-0379-5160, peer reviewed).
- 13) **Veeranarayana Rao, B.** and Thong. G.T. 2003. Rare Calcium poor Pyroxenes from the Banded Iron Formations of Ongole area in the Eastern Ghats Belt, South India. *Nagaland University Research Journal* ,Vol. No1. pp.67-71. (ISSN-0973-0346).
- 14) Subba Rao. M. V, **Veeranarayana Rao, B.**, Nirmal Charan S, Balaram. V, Srikanth B, and Chonchibeni Ezung. 2004 Geochemical signatures in the mafic and ultramafic assemblages of the Naga Ophiolite Belt: Implication for petrogenesis and tectonic environment of emplacement. *Deep Continental Studies in India*, , Dept. of Science and Technology, Newsletter, Vol. 14 No.1, pp. 6-8.
- 15) Thong G.T. and **Veeranarayana Rao, B.**, 2004. Ground water Investigation in the Khondalitic Terrain of Vemulapudi area, Visakhapatnam District, Andhra Pradesh. *Bulletin of Pure & Applied Sciences*, vol. 23, F (No. 1-2), pp. 25-29. (ISSN-0970-9088, peer reviewed).
- 16) Subba Rao, M.V., Srikanth, B., Balaram, V., Nirmal Charan, S., **Veeranarayana Rao, B.**, Chonchibeni E. and Chisoi, 2004: Estimation of Platinum Group Elements (PGE) by ICP-MS in the Ultramafic and Mafic Cumulates of the Naga Hills Ophiolite Belt, Nagaland: Implications for petrogenesis and potential of PGE occurrence in the Belt; 11th ISMAS Workshop on Mass Spectrometry, Oct. 7-12, 2004, Shilon Bagh, Shimla; pp. 210-214.
- 17) Subba Rao, M.V., Balaram, V., **Veeranarayana Rao, B.**, Charan, S.N., Srikanth, B. and Ezung, C., (2005): Prospects of Platinum Group of Elements (PGE) occurrence in the ultramafic rock associations of the Naga Hills Ophiolite Belt, Northeast India: Need for detailed investigations. *Proceedings on . “Science, & Technology for Regional development: case for N-E India.* SK Dolui and C Mahanta (Eds), pp. 84-88.

- 18) **Veeranarayana Rao, B;** Chisoi and Merangsoba,(2005) Field excursion guide on the Naga Ophiolite Belt. Published in connection with National Seminar and AGM of the GSI during 9-11 November 2005, pp.1-9.
- 19) Thong, G.T. and **Veeranarayana Rao B.**, (2006). Geochemical Investigations of the Disang Sandstones of Botsa, Nagaland, NE India . Journal of the Geological Society of India, Vol-68, pp715-722. (ISSN-0016-7622, peer reviewed).
- 20) **Veeranarayana Rao B.**(2006). Mineral resources of Nagaland Progress and Perspectives. “ Economic Development in Nagaland Prospects and constraints, Edit by NUTA, Nagaland University, pp309-318.
- 21) **Veeranarayana Rao, B** and Merangsoba,(2008). Ore mineralogy and Textures of Banded Iron Formation from Ongole –Vemparala area in Prakasam District, Andhra Pradesh. Nagaland University Res. Journal , Vol.5,) pp.135-144. (ISSN 0973-0346, peer reviewed).
- 22) 23. Subba Rao, M.V., Srikanth, B. **Veeranarayana Rao, B.**, Balaram, V., Charan, S.N., Ezung, C and Chisoi (2008). Major, trace and Highly Siderophile element(HSE) Geochemistry of the Mafic Cumulates (Gabbros) from the Naga Hills Ophiolite (NHO) Belt : Implications for petrogenesis and possible PGE Occurrence. Nagaland University Res. Journal, Sp. Public. (ISSN 0973-0346).. pp.11-14.(ISSN0973-0346).
- 23) **Veeranarayana Rao, B** Ezung, C and Ranjit Nayak (2010).Geology, Genesis and Tectonic setting of Volcanic rocks from Zipu area, Phek District , Nagaland. Geological Society of India Memoir- Vol. No: 75, pp 317-327. (ISSN 0973-0346).
- 24) Ranjit Nayak , **B.V. Rao** and Merangsoba (2013) Clinopyroxene compositions of the gabbro from Naga Ophiolite Belt : new evidence on supra-subduction zone type magm genesis. Journal of Applied Geochemistry .Vol.15 No1 pp66-69-189. (ISSN-0972-1967).
- 25) Watitemsu Imchen, S.K. Patil, **V. Rino, Glenn T. Thong**, T. Pongen and **B.V. Rao** (2015) Geochemistry, Petrography and Rock magnetism of the Basalt of Phek District, Nagaland, Current Science, vol.108,No.12, june 2015 pp 2240-2249.
- 26) **B.V. Rao** and Ranjit Nayak (2016) Ultramafic cumulates from Naga Ophiolite Belt, India: Implications for petrogenesis and tectonic setting. In: Srivastava, S.K. (Ed) Recent trends in Earth Science research with special reference to NE India. Today and Tomorrow's Prints and Publishers, New Delhi pp 197-212.
- 27) **B.V.Rao** and S.Pechongri (2016) “ Water quality and health related problems” National Seminar Souvenir volume pp pp24-28 (Deptt of geology, Nagaland university, Kohima.
- 28) Ranjit Nayak and **B.V. Rao** (2017) Petrogenesis and geochemical characteristics of plagiogranites from Naga Ophiolite Belt, North East India: Fractional crystallization of MORB type magma Elsevier publication Chemieder Erde, 77(2017) pp183-194.
- 29) **B.V. Rao** & R. Peseyie (2017) “Assessment of Groundwater quality for drinking purpose in and around Dimapur Town, Nagaland” Journal of Applied Geochemistry Vol.19,No-4(2017),pp 464-470.

26. **Resource Person /Delivered Lecture on Invitation:**

- 1) Delivered lectures on “Geology and Tectonic setting of Naga Ophiolite Belt” and at Regional Workshop for Young Earth Scientists on Tectonics, Sedimentation and Geohazards with Special Reference to North East India (November 2015).
- 2) Delivered lectures on “Mineral Resources of Nagaland and prospects of mineral based industries in Nagaland” at Regional Workshop for Young Earth Scientists

on Tectonics, Sedimentation and Geohazards with Special Reference to North East India (November 2015).

- 3) Delivered keynote address on “Geology and Mineral Resources of Nagaland, N-E India” at National Seminar on Emerging Trends in Exploration and Management of Earth Resources, Department of Geology, Andhra University, Visakhapatnam (28th March 2016).
- 4) Delivered guest lecture on “Geology and Mineral Resources of Nagaland” , for BSc Geology students, VRS & VRN College, Chirala, Prakasam District AP on 20-1-2016.
- 5) Delivered guest lecture on “Naga Ophiolite Belt and Mineral Resources of Nagaland , Progress and perspective for BSc geology students, VRS & VRN College, Chirala, Prakasam District AP on 25-1-2017.
- 6) Delivered lecture on “Importance of water and its quality: Influence on physical and mental health in the (ICSSR) during 8-21, May 2018 organized by the Department of Education and Department of Teacher Education, NU, Kohima.

27. **Attended Seminars/Conference/Workshop and Presented Research Papers:**
(Total 34)

- 1) Veerananarayana Rao B. and Chandra Rao M. 1987. Petrography and Genesis of Iron ores (Magnetite-quartzites) of Ongole area, Prakasam Dist., A.P. National Symposium, I.S.M. Dhanbad.
- 2) Chandra Rao M. and Veerananarayana Rao B. 1987. Ore Petrology of magnetites of Addatigala area, East Godavari Dist., A.P. National Symposium, I.S.M. Dhanbad.
- 3) Veerananarayana Rao B. 1988. Petrography and Geochemistry of granites of Ongole area Prakasam Dist., A.P. National Seminar – Sivaji University, Kolhapur.
- 4) Veerananarayana Rao B. and Chandra Rao M. 1988. Ore Mineralogy and textures of magnetite deposits from Prakasam Dist., A.P. National Seminar, Andhra University, Waltair.
- 5) Chandra Rao M. and Veerananarayana Rao B. 1988. Ore Petrography of magnetites and Geochemistry of host rocks of Addatigala area, East Godavari Dist., A.P. National Seminar, Andhra University.
- 6) Veerananarayana Rao B. and Devavarama D. 1988. Ground Water investigation in Khondalitic terrain, A case study of Vemulapadu Village. National Symposium, Andhra University, Waltair.
- 7) Veerananarayana Rao B. and Swamy A.S.R. 1989. Beach Morphodynamics along Gangavaram to Bhimunipatnam, East Coast of India. National Symposium, Tamil University, Tanjavur.
- 8) Veerananarayana Rao B. 1990. Basic Charnockites from Ongole area, A.P. National Seminar, Madras University, Madras.
- 9) Veerananarayana Rao B. and Moeen S. 1990. Petrology and Geochemistry of Peninsular gneiss from Ongole area, Prakasam Dist., A.P. National Seminar, Madras University, Madras.
- 10) Veerananarayana Rao B. 1992. Petrochemistry and Genesis of Charnockites from Addanki-Ongole area, Prakasam Dist., A.P. 79th Indian Science Congress, Baroda.
- 11) Veerananarayana Rao B. and Rao A.T., 1993. Geochemistry and Origin of BIF from Ongole area in the Eastern Ghats Belt, South India. Presented at International Seminar on “Iron Ore 2000 and Beyond”, Bhubaneswar.
- 12) Rao, A.T. Veerananarayana Rao, B., Venkata, Rao, M. and Yoshido, M. 1994. Petrology and Geochemistry of BIF from Ongole-Konijedu area in the Eastern Ghats

- Belt, South India. Workshop on Eastern Ghats Mobile Belt, at Andhra University, Visakhapatnam.
- 13) Venkata Rao, M., Yoshido, M., Rao, A.T. and Veerananarayana Rao B. 1995. Geochemical study of mafic granulites from the Umpavalli area in the Eastern Ghats, India. Implications of Palaeo-tectonic setting and crustal evolution in the high-grade terrains. International Symposium (UNESCO/ IUGS/ IGCP-368) at Andhra University, Visakhapatnam.
 - 14) Thong, G.T. and Veerananarayana Rao B., 1998. Petrochemistry and Genesis of Disang Sandstones, Kohima Dist., Nagaland, India. Association of Sed. at Guwahati, 18-20 Nov. 1998.
 - 15) Veerananarayana Rao, B. 2000. Ore mineralogy and textures of Banded –Iron formation from Ongole- Vemparala area in the Nellore Schist Belt, South India. 87th Indian Science Congress at University of Pune, Pune on 3-7 January 2000.
 - 16) Veerananarayana Rao, B. 2001. Petrochemistry and Genesis of magnetite ores from Addatigala and Devipatnam area, Eastern Ghats Belt, South India. International Symposium at Osaka City University, Osaka (Japan) - 26-30th October 2001.
 - 17) Veerananarayana Rao, B., Subba Rao, M.V.; Nirmal Charan, S; Srikanth ,B. Balaram .V and Chonchibeni .E. 2003: Major, Trace and Platinum Group Element geochemistry of ultramafic rock assemblages of the Nagaland Ophiolite Belt: Implications for petrogenesis and PGE occurrence. National Symposium at Hyderabad, September 10-11, 2003.
 - 18) Srikanth, B Subba Rao, M.V, Veerananarayana Rao, B., Nirmal Charan, S., Balaram, V. and Chonchibeni, E. 2003: Geochemical signatures in the Basaltic rocks of Naga Ophiolite Belt: Implications for petrogenesis and tectonic environment of emplacement. National Symposium at Hyderabad, September 10-11, 2003.
 - 19) Balaram V. Srikanth, B Subba Rao, M.V., Veerananarayana Rao, B., Nirmal Charan, S., and Chonchibeni E., 2003: Platinum Group Elements (PGE) Concentrations in the Ultramafic rocks of Naga Ophiolite Belt, India; 32nd International Geological Congress (IGC).
 - 20) Subba Rao, M. V., Srikanth, B., Charan, S.W., Veerananarayana Rao, B., Balaram, V., Gnaneswara Rao, Ramavati, M., Chonchibeni Ezung, O. and Chisoi, 2004: Highly Siderophile Element (HSE) geochemistry of the Ultramafic Assemblages and Mafic Cumulates (Gabbros) of the Naga Hills Ophiolite (NHO) Belt, Nagaland: Implications for petrogenesis.
 - 21) Subba Rao, M.V., Srikanth, B., Balaram, V., Nirmal Charan, S., Veerananarayana Rao, B. and Chonchibeni Ezung, O., 2004: Platinum Group Elements (PGE) Geochemistry of the Ultramafic and Mafic Cumulates of the Naga Hills Ophiolite (NHO) Belt; Workshop on Indian Geo-transects, Nov. 25-26, 2004, Abstracts; pp. 37-38.
 - 22) Subba Rao, M.V., Srikanth, B., Veerananarayana Rao, B. Balaram, V., Nirmal Charan, S., and Chonchibeni Ezung, O., 2004: Geochemical signature in the granites of the Phukungri-Avankhu area of Naga Hills Ophiolite : Implications for petrogenesis and tectonic environment of emplacement “Precambrian Continental Growth and Tectonism” on Feb. 22-24, 2005, at Jhansi)
 - 23) Veerananarayana Rao, B., 2005: Banded Iron Formation from Ongole-Vemparala and Tumurukota areas in the Eastern Ghats Belt, South India: Implications for Petrogenesis (Accepted in International Conference on “Precambrian Continental Growth and Tectonism” on Feb. 22-24, 2005, at Jhansi).
 - 24) Veerananarayana Rao B., Chubala Pongen, N, Balaram.V, Subba Rao M. V., Merangsoba and Charan, S.N. 2005.Petrography and Geochemistry of the Limestone deposits From Satuza–Wazeho–Moki area of the Naga Hills Ophiolite (NHO) Belt,

- Phek District, Nagaland: Implications for petrogenesis and depositional environment. National Seminar & AGM of GSI, during 9-11th November 2005 at Nagaland University, Kohima.
- 25) Charan, S.N, Subba Rao, M.V, Veerananarayana Rao, B., Balaram,V, Chisoi., Srikanth, B & Chonchibeni E, 2005 Mineralogical characteristics of granites from Phokungri-Avangkhu and Luthur areas, Naga Hills Ophiolite Belt. National Seminar & AGM of GSI, during 9-11th November 2005 at Nagaland University, Kohima.
 - 26) Subba Rao, M.V, Srikanth, B, Veerananarayana Rao, B., Charan, S.N., Balaram V., Chonchibeni E. and Chisoi 2005, Major, Trace and Highly Siderophile Element (HSE) Geochemistry of the Mafic Cumulates (Gabbros) from the Naga Hills Ophiolite (NHO) Belt: Implications for Petrogenesis. National Seminar & AGM of GSI, during 9-11th November 2005 at Nagaland University, Kohima.
 - 27) Veerananarayana Rao, B Ezung, C and Ranjit Nayak (2008).Geology, Genesis and Tectonic setting of Volcanic rocks from Zipu area, Phek District , Nagaland. GSI Seminar on Indo-Myanmar Ranges, organised by Dept of Earth Sciences, Manipur University, Imphal.(IMRO8-AE3) during November27-29,2008.
 - 28) Charan, S.N, Subba Rao, M.V, Balaram,V, and Veerananarayana Rao, B., 2008. Petrology of Phokungri-Avangkhu and Luthur granites, Naga Hills Ophiolite Belt, India. GSI Seminar on Indo-Myanmar Ranges, organised by Dept of Earth Sciences, Manipur University, Imphal.(IMRO8-AE3) during November, 27-29,2008.
 - 29) C.V.Raman, G.Satyanarayana,B.V.Rao and G.Suresh (2009) “Heavy mineral studies in a part of Andhra coast of India” international seminar on prospects of marine sediments as resource base for the growth of mankind.Organised by Deptt of Geology, Andhra University, Visakhapatnam during 5-7 October-2009.
 - 30) Ranjit nayak and B.V. Rao (2014) “ Ultramafic cumulates from Naga Ophiolite Belt , India: Implications for petrogenesis and Tectonic setting” Deptt of Geology, Kumaun University, Naintal during 27-29 March 2014.
 - 31) Veerananarayana Rao, B., 2016. “Geology and Mineral Resources of Nagaland” National Seminar on ‘Emerging Trends in Exploration and Management of Earth Resources’” organized by Department of Geology, Andhra University, Visakhapatnam, Andhra Pradesh, during 28-29 March 2016.
 - 32) R.Peseyie and B.V. Rao (2016) “Quality assessment of groundwater for drinking in Dimapur valley, Nagaland “National Seminar & AGM of ISAG, during 9-11th November 2016 at Nagaland University, Kohima.p-84.
 - 33) Ranjit nayak and B.V. Rao (2016) “ Petrological and geochemical studies of gabbro from parts of Naga Ophiolite Belt, NE India. National Seminar & AGM of ISAG, during 9-11th November 2016 at Nagaland University, Kohima.p-84.
 - 34) S.Chanu and BVRao (2016) Delineation of Ground water potential zones in Thoubal District,Manipur by using remote sensing and GIS techniques. National Seminar & AGM of ISAG, during 9-11th November 2016 at Nagaland University, Kohima.p-80.

28. Scientific Articles published in News papers for Public Awareness

- 1) Veerananarayana Rao B. Prakasam Zillalo Eenapa Dhatu Nikashepalu, Eenadu News Paper (Telugu), Prakasam Dist. Edition, dated ; 01.07.1991.
- 2) Veerananarayana Rao B. Andhra Pradesh, Eenupa Dhatu Nikshepalu, Udayam News Paper, Prakasam Dist., Edition, dated 22.04.1992.
- 3) Veerananarayana Rao B., Rastramulo 340 Million Tonnula Eenupa Dhatu Nikshepalu, Eenadu News Paper (Telugu), Prakasam Dist., Edition, dated 31.08.1992.
- 4) Veerananarayana Rao B. Zillalo 388 M. Tonnes Eenapu Dhatu Nikshepalu: , Eenadu News Paper (Telugu), dated 07.09.1993.

- 5) Veerananarayana Rao B., Kosta Zillalo Eenapa Dhatu Nikshepalu; Eenadu News Paper (Telugu), dated 11.12.1996.
- 6) Veerananarayana Rao B., 2005: Mineral resources and prospects of mineral based industries in Nagaland, Souvenir volume in connection with National Seminar and AGM of the GSI, 9-11 November 2005 at Kohima.
- 7) Veerananarayana Rao B., 2005: Mineral resources of Nagaland, Seminar organized by the NUTA in during 3-4 December 2005 at Lumami.
- 8) BVRao and S.Pechongri (2016) “ Water quality and health related problems” Souvenir volume in connection with National Seminar and AGM of the ISAG, conducted on 9-11 November 2016 at the Department of geology, Nagaland university, Kohima.

29. Participated National & International seminars/symposiums: (Total 30)

- 1) National Symposium on "Development of India's Mineral and fuel resources – Geological and Environmental aspects. Indian School of Mines, Dhanbad, July 03.04.1987.
- 2) National Seminar on "Development of Ore Petrology, its impact on resource evaluation and mineral economics". Geology Dept., Andhra University, March 19-21, 1988.
- 3) National Symposium on "Hydrological teaching, training and development in the context of National Water Resources", Dept. of Geophysics, Andhra University, June 29-30, 1988.
- 4) National Symposium on "Application of Geochemistry" Shivaji University, Kolhapur, 19-20 Dec., 1988.
- 5) National Seminar on "Sea level variations and its impact, particularly to the coastal zones and management, Tamil University, Tanjayuru, June, 1989.
- 6) National Seminar on "Precambrian Geology", Madras University, Madras, 14 -16 Feb., 1990.
- 7) 79th Indian Science Congress, M.S. University, Baroda, 3-8 Jan., 1992.
- 8) Workshop on "Geoscientific writing & editing" held at Geology Dept., A.U. Visakhapatnam, 29th April to 2nd May, 1992.
- 9) GSI Workshop on "Eastern Ghats Mobile Belt", at Andhra University, Visakhapatnam, 3-5 June, 1994.
- 10) **International Symposium** on "India and Antarctica during the Precambrian and Granulite and crustal processes in East Gondwana" 1-3 Dec., 1995.
- 11) **International Field Workshop on** "The Proterozoic Continental Crust of Southern India" at Trivandrum, 20-27 Aug., 1996.
- 12) Indian Assoc. of Sedimentologists' Seminar at Guwahati University, Guwahati, 18-20 Nov., 1998.
- 13) 87th Indian Science Congress at University of Pune, 3-7 Jan., 2000.
- 14) UGC sponsored refresher course on Hydrology with Sp reference to coastal aquifer system, at Andhra University, (24.05.98 to 16.06.98).
- 15) 37th UGC sponsored orientation course attended at Hyderabad University, from 24.11.2000 to 22.12.2000.
- 16) Indian Statistical Institute Seminar “Image Processing, Pattern Recognition and Their Applications in Remote Sensing, Kohima Science College on 26-28 September 2001
- 17) **International Symposium** on the Assembly and Break-up of Rodinia and Gondwana, and Growth of Asia attended at Osaka City University, Osaka (Japan)-during 26-30th October 2001.

- 18) National Seminar-cum-Workshop on “Improvement of Quality Education in Nagaland” at Nagaland University, on 23-24 April 2002.
- 19) National Seminar on “Plate Tectonics- Some Recent Thinking” held at Mangaldai College, Mangaldai, Assam, on 21-22 September 2002.
- 20) National Symposium on Applied Geochemistry in exploration for minerals and oil held on 10-11 Sep. 2003 at AMD, Hyderabad.
- 21) **International Conference** on “Precambrian continental growth and tectonism-PCGT-2005)” at Bundelkhand University, Jhansi during 22-24 February -2005.
- 22) National Seminar & AGM of GSI, during 9-11th November 2005 at Nagaland University, Kohima.
- 23) Inter-University National Cultural Board meeting held on 3 and 4th May 2007 at Jadavpur University, Kolkata as Dean of Students’ Welfare.
- 24) 3rd All India Students’ conference on “Science and Spiritual Quest (AISSQ-2007)” at Tirupati (Andhra Pradesh) during 22-23 December-2007.
- 25) National Seminar on Indo-Myanmar & AGM of GSI, during 27-29th November 2008 at Manipur University, Imphal.
- 26) DST Sponsored Brainstorming Session on Landslides of NE India on 5-6th May 2009 at Nagaland University, Kohima.
- 27) **International seminar** on prospects of marine sediments as resource base for the growth of mankind. At Deptt of Geology, Andhra University, Visakhapatnam during 5-7 October-2009.
- 28) **International Seminar** on Magmatism, Tectonism and Mineralisation” at Deptt of Geology, Kumaun University, Nainital during 27-29 March 2014.
- 29) National Seminar on ‘Emerging Trends in Exploration and Management of Earth Resources” organized by Department of Geology, Andhra University, Visakhapatnam, Andhra Pradesh, during 28-29 March 2016.
- 30) National Seminar and AGM of the ISAG, conducted on 9-11 November 2016 at the Department of geology, Nagaland University, Kohima.
