

RESEARCH PROFILE OF PROFESSOR Dr. MANJUNATHA S, DEPARTMENT OF GEOLOGY, KSCD



Dr.MANJUNATHA S.

Professor
Department of Geology
Karnatak Science College
Karnatak University
Dharwad-580001
Email:manjunathas29@yahoo.in
(O) 0836-2215410
(M) 09449682560

ADDRESS

Office:

Department of Geology
Karnatak Science College
Karnatak University
Dharwad-580001, Karnataka, India
E-mail:manjunathas29@yahoo.in
(O) 0836-2215410
(M) 09449682560

Residential:

Door No 341, II main, 5th Cross
Narayanapur, Dharwad-58 0008,
Karnataka, India.

ACADEMIC QUALIFICATION

Sl No.	Examination passed	University	Class	Subject
1	B.Sc	University of Mysore	II	CGH
2.	M.Sc	University of Mysore	FIRST	GEOLOGY
3.	Ph.D	Karnatak University	-----	GEOLOGY

TITLE OF THE DOCTORAL THESIS

Mineralogy, Geochemistry and Genesis of Machanur copper deposit, Karnataka, Southern India.

TEACHING EXPERIENCE (1998 to till date)

Undergraduate -26 years

RESEARCH INTERESTS

1. Economic Geology
2. Sedimentology
3. Hydrogeology
4. Remote sensing and GIS

RESEARCH EXPERIENCE 26 YEARS

ACADEMIC ID'S

ORCID ID	Web of Science ID	Scopus ID	Vidwan ID
0009-0006-9205-3661	IYT-0152-2023	55361529700411704	

RESEARCH PROJECTS UNDERTAKEN: 03

1. **UGC Minor Research Project** entitle “Geology, Petrology and Fluid Inclusion studies of Kallur copper deposit, Eastern Dharwar Craton, Southern India.” **Rs. 70,000 (Seventy Thousand only)** as Principal Investigator (2007-2009). **F.No.MRP(S)568/2007(X plan)/KAKA056/UGC-SWRO dated 12.12.2006 (Completed).**
2. **UGC Major Research Project** entitle “Geology, Petrology and Geochemistry of the clastic sediments of Naragund, Navalgund and Dhumwad, Karnataka”. **Rs.12,08,800=00 (Twelve Lakhs Eight Thousand Eight Hundred only)**as Principal Investigator (2013-2017)**F No. 42-68/2013 (SR) dated 12th March 2013.(Completed).**
3. **DST-SERB Major Research Project** entitled “Integrated Hydrogeological condition of Lingasugur Taluk, Raichur District, Karnataka.” **Rs. 23,10,000=00 (Twenty Three Lakhs Ten Thousand only)** as Principal Investigator (2018 to 2021)**F.No. EEQ/2017/000525 dated 04.09.2018 (Completed).**

DETAILS OF Ph.D. DEGREE SUSESFULLY GUIDDED: 04

1. Mr. Manjunatha Dalwai- Awarded Ph. D. in 2018, Entitled “**Hydrogeological Investigation of Karanja River Basin, Bidar District, Karnataka, India Using Remote Sensing and GIS**”. Uni.Notification KU/Aca/Ph.D RGH/418/2018-19/99/3702 dated 30th November 2018.
2. Mr. Raju Sukhaye Awarded Ph. D. in 2019. Entitled “**Petrography and Geochemistry of Proterozoic clastic sedimentary rocks around Naragund and Dhumwad, Northern Karnataka**” Uni.Notification KU/Aca/Ph.D AMT/615/2019-20/71/3045 dated 09 December 2019.

3. Mr. Chandrashekhara Kalyani Awarded Ph. D. in 2021. Entitled "**Hydrogeological studies in Shalamala sub basin, Karnataka**" Uni. Notification KU/Aca/Ph.D AMT/755/2021-22/126/3053 dated 11 December 2021.

4. Mr. Swanand Ajgaonkar Awarded Ph. D. in 2023. Entitled "**Hydrogeological studies of Lingusugur taluk, Raichur District, Karnataka using remote sensing and GIS techniques**" KU/Aca/Ph.D./JMK/851/2023-24/212 dated 24th April 2023.

DETAILS OF Ph.D CANDIDATES CURRENTLY WORKING: 05

1. Riyaz A.S. "**Hydrogeological studies of Raichur taluk, Karnataka using remote and GIS techniques**" Registration No. KU/Aca/Ph.D RGH/418/2016-17/99/1374 dated 2nd July 2016.

2. Basavaraj Chikkasumshi "**Integrated Hydrogeological Studies of Hiranyakeshi Water Shed, Belgaum District, Karnataka, India using Remote Sensing and GIS Techniques**" Registration No. KU/Aca/Ph.D RGH/418/2016-17/99/1374 dated 2nd July 2016.

3. Rakesh Patil "**Hydrogeological analysis of Tattihalla basin using remote sensing and GIS techniques**" Registration No. KU/Aca/Ph.D RGH/418/2016-17/99/1374 dated 2nd July 2016.

4. Nagalingaswamy Vishvabramina "**Hydrogeological studies with special reference to fluoride in groundwater of Yadagiri taluk, Karnataka state.**" Registration No. KU/Aca/Ph.D RGH/418/2016-17/638 dated 2nd July 2016.

5. Sujith Kulkarni "**Integrated hydrological studies of Shorapur taluk, Yadgir districts, Karnataka**" Registration No. KU/Aca/Ph.D RGH/418/2016-17/99/1374 dated 2nd July 2016.

DETAIL OF Ph.D THESIS ADJUDICATED: 04

1. Miss. Shubhangi Kala. "**Integrated Geoscientific studies on unconventional Permian Shale gas resources of Kommugudem and Mandapeta area, Krishna Godavari Basin, India**" University of Petroleum and Energy studies, Dehradun 24800

2. Mr. Siddaraju M.S. "**Petrochemical studies of Rayadurga to Kalyandurga gap area of Closepet granite Dharwar craton**". Department of studies in Earth Science, University of Mysore, Mysore 570 008

3. Mr. Sharath Raj B. "**Influence of lineaments and dykes on the groundwater system in Lingasugur area, Raichur district, Karnataka, India**" Department of Geology, School of Earth Science, Central University of Karnataka (CUK) Kalaburagi 585367

4. Mr.Abhijit “**Synthesis and Characterization of Uncommon Minerals of Deccan trap, Western Maharashtra, India**” Department of studies in Earth Science, University of Mysore, Mysore 570 008

LIST OF PUBLICATION /PAPER PUBLICATION: 40

1. Ugarkar, A.G., **Manjunatha, S.** and Solankar, S.N. (2003) Geology, mineralization and tectonic setting of granitoid hosted Precambrian Machanur copper deposit, Eastern Dharwar Craton. Indian Mineralogist, v.37, No.2, pp.50-63, **ISSN No.0019-5928**

2. **Manjunatha, S.**, Ugarkar., A.G., Solankar, S.N. and Suresha K.J. (2005) Fluid Inclusions associated with the copper mineralization at Machanur, Karnataka. Indian Mineralogist, Sp.v.1, pp.10-15,**ISSN No.0019-5928.**

3. Ugarkar, A.G., **Manjunatha, S.** and B.V. Nadagouda. (2007) Geology Petrography, Mineralogy and Geochemistry of Precambrian Granitoid Hosted Machanur Copper Deposit of Karnataka, India. Bull. Indian. Geol. Assoc., v. 40, No. 1-2, pp.13-25, **ISSN: 0379-5098**

4. **Manjunatha, S.** and Ugarkar, A.G. (2008) Mineral Chemistry of ore zone of Machanur copper deposit, Karnataka. Jour. Appl. Geochemistry, v.10, No.1, pp.79-93.**ISSN: 0972-1967.**

5. **Manjunatha, S.** and Ugarkar, A.G. (2011) Physicochemical characteristics of ore fluids of granitoid hosted Kallur copper deposit, Eastern Dharwar craton. International Journal of Earth Science and Engineering, v.04, No.1, pp.26-33.**ISSN:0974-5904**

6. Pujar, G.S. and **Manjunatha, S.** (2011) Statistical analysis of Kaladgi quartzarenites around Belgaum, Karnataka State. International Journal of Earth Science and Engineering v.04, No.3, pp.522-531.**ISSN:0974-5904**

7. Lakshamma., Nagaraju.D, Mahadevaswamy, G. Siddalingamurthy.S., **Manjunatha.** (2011)Morphometric analysis of Gundal watershed, Gundlupet taluk, Chamarajanagar district, Karnataka, India. International Journal of Geomatics and Geosciences. v 1, No 4, pp.758-775.**ISSN No.0976-4380.**

8. Sunil Kumar, R.K., Suresh Kumar B.V. and **Manjunatha, S** (2012)Estimation of surface and ground water pollution due to mining activity by geo-chemical methods and re-vegetation site selection using remote sensing and gis techniques in the parts of the Sandur schist belt, south India. Journal of nature, Environment and Pollution Technology, v.11,No.(3), pp.403-408. **ISSN:0972-6268**

9. M.A.Malapur, **Manjunatha, S.**, Chandan Kumar, B. and A.G.Ugarkar (2012) Ore fluids associated with the metasediment hosted central auriferous zone of Gadag gold field, Karnataka. International Journal of Earth Science and Engineering, v.5, No.5, pp.402-492, **ISSN:0974-5904(Indexed in Scopus)**

10. **Manjunatha S** and Devithuraj, J. (2013) Morphological analysis of Upper Bennihalla basin Karnataka, India. In Special issue on Hydrology and Water Resources International Journal of Earth Science and Engineering, v.6, No.5 (01),pp. 1213-1221. **ISSN:0974-5904(Indexed in Scopus)**
11. Devithuraj, J. and **Manjunatha, S.** (2014) Groundwater fluctuation in Upper Bennihalla Basin, Karnataka. In Indian Journal of Applied research. V.4, issue.3, pp.202-204. **ISSN:2249-555X(Peer reviewed)**
12. Devithuraj, J and **Manjunatha, S.** (2014) Hydrogeochemical analysis of groundwater of Upper Bennihalla basin Karnataka. Jour. Appl. Geochemistry. V.16,No.2 pp.148-160. **ISSN: 0972-1967(UGC care list).**
13. Devithuraj, J and **Manjunatha, S.** (2014) Assessment of groundwater quality for drinking and irrigation purposes of Upper Bennihalla basin, Karnataka. Journal of Nature, Environment and pollution Technologies.V.13, No.1,pp.57-62. **ISSN:0972-6268. (UGC care list).**
14. **Manjunatha S** and Davithuraj J.(2014) Evaluation of Groundwater Quality in Shallow and Deep Aquifers in Parts of Uttara Kannada District, Karnataka. International Journal of Recent Trends in Science and Technology, ISSN 2277-2812, Volume 11, Issue 1, 2014 pp 95-104. **ISSN 2249-8109 (Peer reviewed).**
15. **Manjunatha, S.,** Prakash Narasimha and Ugarkar, A.G. (2015) Ore fluids associated with the gold mineralization in Mangalur, Karnataka. Jour. Appl. Geochemistry. V.17,No.3 pp.290-295, **ISSN: 0972-1967. (UGC care list)**
16. Vishwanath.R, Prakash Narasimha.K.N and **Manjunath. S (2015)** X-ray, EPMA, FTIR and TGA studies of vermiculitized micas in the mafic rocks, Kamasamudra, Kolar schist belt, eastern Dharwar craton, south India. African Journal of Geo-Science Research, 3(4): 15-18 **ISSN: 2307-6992.Pp.15-18 (Peer reviewed)**
17. Basavaraj Chikkasamshi, **Manjunatha. S.,** Raju Sukhaye and Chandan Kumar, B (2016) Evaluation of groundwater quality of Chintamani Taluk, Karnataka. International Research Journal of Earth sciences, vol.4 (2),15-22, **ISSN:2321-2527. (UGC care list)**
18. Davithuraj., Raju Sukhaye and **Manjunatha. S.** (2016) Hydrogeological condition of Uttara Kannada district, International journal of Geology and Earth, Vol. 2, No. 1, pp.31-46. **SciencesISSN 2395-647X (Peer reviewed).**
19. **Manjunatha.S.,** Raju Sukhaye and Davithuraj J.(2016) Hydrochemical facies and assessment of groundwater for drinking purpose in Goa, India, International journal of Earth Science and Engineering, v.09,No.01, pp.35-42. **ISSN:0974-5904(Indexed in Scopus)**

20. Prakash Narasimha.K.N, Vishwanath.R, Suresh Kumar and **Manjunatha. S (2016)** Mafic rock hosted Vermiculite occurrence from Ajjampalli area,Kolar schist belt, eastern Dharwar craton, south India.International Journal of Earth Science and Engineering, v.09, No.01, pp.150-156,**ISSN:0974-5904(Indexed in Scopus)**
21. **Manjunatha, S** and Ugarkar, A.G. (2016) Mineralization and fluid inclusions studies of pre-cambrian granitoid hosted copper occurrences, eastern Dharwar craton. Journal of Applied Geochemistry, V.18, No.3, pp.271-278, **ISSN: 0972-1967(UGC care list)**.
22. **Manjunatha. S.**, Dalawai M, Raju Sukhaye and Davithuraj J(2016) Study of ground water potential zone of Karanja river basin using remote sensing and GIS techniques International Journal of Geomatics and Geosciences. v 6, No 4, pp.1782-1795, **ISSN: 0976-4380(UGC care list)**.
- 23.**Manjunatha, S**,Raju Sukhaye, S. Pujar G. S and Chandan Kumar, B (2016). Petrography and Geochemistry of Proterozoic clastic sediments of Naragund, Karnataka, India: implications for their provenance and tectonic settings. Journal of Earth Science and Engineering, v.09, No.05, pp.1983-1988, **ISSN:0974-5904(Indexed in Scopus)**.
24. **Manjunatha. S.**, Dalwai M, Raju Sukhaye and Davithuraj J. (2017) Morphometric analysis Karanja river basin using remote sensing and GIS techniques. Journal of Geoscience Research (Gondwana Geological Magazine),v.2, No.1, pp.45-53, **ISSN:2455-1953. (UGC care list)**
- 25, **Manjunatha. S**and Raju Sukhaye(2019)Geochemical and Petrographic studies of Proterozoic sandstone of Dhumwad, Karnataka, India:Implications on Provenanceand Tectonic Setting.India Journal of Applied Geochemistry. Vol 19,No.2, pp-120-136.**ISSN: 0972-1967(UGC care list)**.
26. Chandrashekhar Kalyani, **Manjunatha S**, Swanand A. Ajgaonkar(2019) Assessment of Groundwater Quality for Drinking and Irrigation Purposes of Shalmala River Sub-Basin, Dharwad District, Karnataka.Journal of emerging technologies and Innovative Research.Volume 6, Issue 5. PP.569-578.**ISSN-2349-5162 (UGC care list)**.
27. Chandrashekhar Kalyani, **Manjunatha S**, Swanand A. Ajgaonkar (2019) Physico-Chemical Characteristics of Shalmala river sub-basin, Dharwad District, Karnataka. Volume 6, Issue 6Journal of emerging technologies and Innovative Research.V.6, Issue.6pp.557-567**ISSN-2349-15162, (UGC care list)**.
- 28.Chandrashekhar Kalyani, Swanand A. Ajgaonkar and **ManjunathaS**(2020) Impact of precipitation, temperature and humidity on groundwater fluctuation in Shalmala river sub-basin Dharwad district, Karnataka, India Journal of Engineering Sciences. Vol 11, Issue 4, April/2020, pp-824-830.**ISSN NO:0377-9254 (UGC care list)**.

29. Swanand A. Ajgaonkar and **Manjunatha S** (2020). A GIS based assessment of Morphometric analysis of Lingasugur Taluk in Raichur District, Karnataka, India. Vol 11, Issue 4, April/2020, pp.857-865. **ISSN NO:0377-9254 (UGC care list)**.

30. Chandrashekhara Kalyani, Swanand A. Ajgaonkar and **Manjunatha S** (2020) Morphometric analysis of Shalmala River subbasin Dharwad district, Karnataka, using RS and GIS techniques. Journal of Engineering Sciences, Vol 11, issue 4, April/2020, pp. 882-889. **ISSN NO:0377-9254 (UGC care list)**.

31. Swanand A. Ajgaonkar and **Manjunatha S** (2021). Mapping of Groundwater potential zones in Lingasugur Taluk in North-eastern part of Karnataka, India, using Remote Sensing, GIS, and multi-criteria data analysis. Disaster Advances, Vol.14 (12), PP. 13-22. **22784543, 0974262X (UGC care list and Indexed in Scopus)**

32. **Manjunatha. S.**, Dalawai M, Raju Sukhaye and Swanand A. Ajgaonkar (2021) Hydro-geochemistry and suitability of groundwater for drinking and irrigation purpose of the Karanja River Basin (KRB), Bidar District, Karnataka, India. Journal of Applied Geochemistry, Vol.23(1), PP.59-78. **ISSN: 0972-1967 (UGC care list)**.

33. Riyaz, **S. Manjunatha** and Ajaykumar N. Asode (2021) Assessment of Sub-surface water quality for irrigation suitability in Raichur taluk, one of the hard rock regions of Karnataka. Indian Journal of Applied Geochemistry, Vol.23(2), PP.99-107. **ISSN: 0972-1967 (UGC care list)**.

34. Swanand A. Ajgaonkar and **Manjunatha S** (2022). Groundwater Quality Assessment in Lingasugur Taluk, Karnataka Using Water Quality Index (WQI) and Geographic Information System. Indian journal of environmental protection Indian Journal of environmental Protection, Vol.42, No.10, PP 1194-1201) **ISSN No. 0253-7141 (UGC care list and Indexed in Scopus)**.

35. Rajendrakumar Y. Budihal, **Manjunatha. S**, Swanand A. Ajgaonkar (2023) Petrography, Geochemistry and Tectonic Settings of Granitic Gneisses from Swarnagadde Plateau of Western Ghats, Karnataka International Advanced Research Journal in Science, Engineering and Technology ISO 3297:2007 Vol. 10, Issue 1, January 2023 **ISSN (O) 2393-8021, ISSN (P) 2394-1588 DOI: 0.17148/IARJSET.2023.10129 (Peer reviewed)**.

36. Rajendrakumar Y. Budihal, **Manjunatha. S**, Swanand A. Ajgaonkar (2023) Mineralogical characterization using XRD (X-ray diffraction) for Laterites of Swarnagadde Plateau, Western Ghats, Karnataka. International advanced Research journal in Science, Engineering and Technology, ISO 3297:2007, Vol. Issue 2, PP. 88-96. **ISSN (O) 2393-8021, ISSN (P) 2394-1588 DOI: 0.17148/IARJSET.2023.10129 (Peer reviewed)**.

37. Rajendrakumar Y. Budihal, **Manjunatha S** (2023) Geological Setting, Petrography and Mineralogy of Laterites from Swarnagadde Plateau of Western Ghats, Karnataka. International journal of Geography, Geology and Environment. Vol.5, Issue 1, PP.25-31. **P-ISSN:2706-7483, E-ISSN: 2706-7491. (Peer reviewed).**

38. Basavraj Chikkansamshi, Swanand A. Ajgaonkar, J Devaraju and **Manjunatha S** (2023) Prioritization of Sub-watersheds through morphometric analysis in the Lower Hiranyakeshi Sub-basin, Karnataka. Disaster Advances, Vol.14 (12), PP. 13-22. **ISSN No.22784543, 0974262X(Scopus indexed).**

39. Riyaz, Swanand A. Ajgaonkar and **Manjunatha. S (2023)** Seasonal variation in the groundwater quality of Raichur Taluk, Karnataka, India. Indian Journal of environmental Protection, Vol.43, No.10, PP 877-888) **ISSN No. 0253-7141 (UGC care list and Indexed in Scopus).**

40. Basavraj Chikkasanshi., Swanand A. Ajgaonkar and **Manjunatha S** (2024) Evaluation of Groundwater Potential Zone in Hiranyakeshi lower basin, Belagavi District, Karnataka: a Geospatial Approach. Indian Journal of Environmental Protection, Vol.44, No.6, PP 495-506) **ISSN No. 0253-7141 (UGC care list and Indexed in Scopus).**

MEMBERSHIP OF PROFESSIONAL BODIES

- a. Life member of Geological Society of India
- b. Life member of Mineralogical Society of India
- c. Life member of Science Academy
- d. Life member of Mining Engineering Association

PAPERS PRESENTED IN NATIONAL/INTERNATIONAL SEMINARS/CONFERENCES /SYMPOSIUMS

1. International seminar on Earth and Resource Management, Department of Geology, Kuvempu University, Shimoga, from 28-01-2004 to 30-01-2004.
2. National seminar on Earth Resources and sustainable Development organized by Department of Earth Science, Annamalai University, Annamalai Nagar, Chidaram during 23rd and 24th February 2005.
3. National Symposium on “Geological Processes, Mineral and Fossil Fuel Exploration and Environmental Geology” at Departmental Geology, Anna University Chennai during 26-28, November 2009.

4. National seminar on Geodynamics and Mineral Resources of Proterozoic basins of India (GAMP-2010) held at Yogi Vemana University Kadapa, Andhra Pradesh, India during 4-6th March 2010.
5. International conference on “Sustainable water resource development and management”, organized by Department of Environmental Science, Shivaji University, Kholhapur, from 20-12-2012 to 21-12-2012.
6. UGC sponsored National seminar on “Coastal Environmental and Their Management” at Department of Marine Geology, Mangalagangothri, Mangalore University, Mangalore during 21-01-2013 to 23-01-2013.
7. National seminar on” Current Trends of Research in Precambrian Geology and Vision-2020”organized by XIII convention of Mineralogical Society and Department of Geology, University of Mysore, Mysore during 20-03-2013 to 21-03-2013.
8. International Conference & exhibition on “Integrated water, Wastewater & Isotope Hydrology” organized at Department of Civil Engineering, UVCE, Bangalore University, Bangalore during 25-7-2013 to 27-7-2013.
9. UGC sponsored National Seminar on “Linking of river: Boon or Bane” held at SKL Society’s Govindram Seksaria Science Degree college, Belgaum on 13 & 14 September 2013.
10. International Conference on “Environmental Management for Sustainable Development” organize by Department of Geography, Karnatak University’s Karnatak Science College, Dharwad, India on 20-21th December 2013.
11. International seminar on Sedimentary processes and Metallogeny through Time (SPMT)-2014 on 21st to 23rd January 2014, organized by SDM Engineering College, Dharwad.
12. National seminar on “Recent Advances in Research on Precambrian Terrains in India” organized by XIV convention of Mineralogical Society and Department of Earth Science, University of Mysore, Mysore on 31st March 2015.
- 13.UGC sponsored National seminar on “Estuaries of India; past, present and future” organized by department of Geology, S.K.E Society ‘s G.S.S. College, Belgavi from 24.07.2015 to 26.7.2015.
14. UGC sponsored two days national seminar on Earth Resource assessment and management during 24th and 25th November 2015at Department of Applied Geology, Kuvempu University, Shimoga.
15. International conference on “Geoscience and Environment” and 32 Annual convention of Indian Association of Sedimentologist and One day workshop on Shale Oil & Gas

Exploration organized by department of Earth Science, Annamalai University, Annamalainagar, Tamil Nadu, India from 7th to 10th January 2016.

16. National symposium on “ Geoscientific Approaches for Sustainable Future of Life and XL the Indian Social congress held during 19-23, December 2016, at Manasagangtri Campus of the University of Mysore, Mysore.

17. National seminar on “Zeolites and Allied Mineral Deposits of India” organized by department of Geology, G.S.S College, Belgavi from 6-7 October 2017.

18. National Seminar on Waste Water Management and Sustainable Development” organized by department of Geology, S.K.E Society ‘s G.S.S. College, Belgavi from 21.01.2018 to 22.01.2018.

19. National Seminar “ Challenges and Opportunities inEarth Science Education and Research” organized Department of Studies in Earth Science, University of Mysore, Mysore held during 29.2018 to 30.02.2018, at Manasagangtri Campus of the University of Mysore, Mysore.

20. International seminar on “ Earth Resource and Sustainability” organized by the School of Earth science, Central University of Karnataka, Kalaburagi on 19th and 20th February 2018.

21. International seminar on “ Climate change and Geoscience” organized by the Department of Geology, Bangalore University Bangalore on 5th and 6th February 2024.

WORKED AS CHAIRPERSON / RAPPORTEUR IN NATIONAL/INTERNATIONAL SEMINAR/CONFERENCES

1. Acted as Rapporteur for the technical sessions of the international conference on ‘environmental management for sustainable development’ organize by Department of Geography, Karnatak University’s Karnatak Science College, Dharwad, India on 20-21th December 2013.

2. Acted as Rapporteur for the session 1 of the National symposium on “Geoscientific Approaches for Sustainable Future of Life and XL the Indian Social congress held during 19-23, December 2016, at Manasagangotri Campus of the University of Mysore, Mysore.

3. Acted as Chairman in the International seminar on “ Earth Resource and Sustainability” organized by the School of Earth science, Central University of Karnataka, Kalaburagi on 19th and 20th February 2018.

4. Acted as Chairman in the International seminar on “ Climate change and Geoscience” organized by the Department of Geology, Bangalore University Bangalore on 5th and 6th February 2024.

WEBINARS/ONLINE CONFERENCES ATTENDED

1. International Conference on Water Resources conducted by Central University of Karnataka, Kalaburgi. 16-17th Oct 2020
2. International Webinar on 'Climate change, geo-hazard, and sustainable development' conducted by Karnatak science college, Dharwad. 26-27 Nov 2020
3. National Webinar on 'Why and How to Reconstruct the past climate using foraminifera (Microfossil) in Holocene marine sediments of India?' Conducted by University of Mysore, Mysuru. 10 Dec 2020
4. National Webinar on 'Springwater supply and its sustainability in parts of western ghat regions' Conducted by National Institute of Hydrology, Hard rock regional center, Belagavi. 28-29 Dec 2020

**NATIONAL/INTERNATIONAL SEMINARS/CONFERENCES/SYMPOSIUMS
ATTENDEDED**

1. National Seminar of Recent Advances of Mineral Sciences and their Applications held at Department of Geology, University of Mysore, Mysore during 17th -18th March 2011.
2. XXIV AHI National Seminar on "Hydrology" with special reference to "Urban Groundwater Pollution" organized by Association of Hydrologists of India and Department of studies in Geology, Karnataka University, Dharwad held during 27th -28th December 2005.
3. Seminar on "Atomic energy for Development of the Nation" organized at Karnatak Science College, Dharwad on Saturday the 2nd September 2006 in association with the Indian Nuclear Society.
4. UGC Extension Programme on "Rain Water harvesting and Water Management" an awareness programme conducted at Harogeri, Belgaum District on 1st March 2007.
5. National Seminar of "Integrated Water Management Challenges Ahead" organized by G.S.S College Belgaum on 9-03-2007 to 10-03-2007.
6. 15th Convention of Indian Geological Congress and National Seminar on " Geoexploration and Metal Mining: vision 2025" . Department of Studies in Geology, Karnatak University Dharwad on 27th -29th September 2007.
7. International Seminar on "Crustal Evolution Sedimentary Processes and Metallogeny" from 28th to 30th November, 2007, organize by Department of Civil Engineering, S.D.M college of Engg. And Tech., Dharwad and Geological Society of India.
8. Practical applications of Remote Sensing, Photogeology and Hydrology on 28.01.2008 at Department of Studies in Geology, Karnatak University, Dharwad.
9. National seminar on Konkan coastal DEED (Diversity, Environment, Ecology and Development) at G.S. Science college, Belgaum on 12 -13th September 2008.

10. National Seminar on Hydro-Fracturing, Rainwater harvesting and other techniques for enhancing the yield of groundwater structures on 18-02-2010 at Belgaum.

11. National Seminar of Recent Advances of Mineral Sciences and their Applications held at Department of Geology, University of Mysore, Mysore during 17th -18th March 2011.

12. Orientation programme for translators in Kannada from 22nd February 2012 at Prasaranga Kuvempu University, Jnanasahyadri, Shankaragatta, Shimoga under Department of higher education, Ministry of Human Resource Development, Govt. of India.

13. National seminar on “ Geospatial and Ecological Mapping of Biodiversity Tools & Techniques, 2012” at Department of Earth Science, University of Mysore, Mysore under Institution of Excellence Project financed by MHRD, UGC, Govt of India during 30-5-2012 to 31-5-2012

14. Postgraduate Earth Science special lecture series program from 29th to 31st October 2014 jointly organized by Karnataka Science and Technology academy, Government of Karnataka and Department of Earth Science, University of Mysore, Mysore

