CURRICULUM VITAE

Dr. RAMESH H., M.Tech., PhD.
Professor and Head,
Dept. of Water Resources & Ocean Engineering,
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Summary
Seventeen years of experience in water resources engineering and management, with a focus on supervising doctoral engineering theses, teaching for undergrad and grad students, and conducting research on water resources, hydrology, ocean engineering & processes, and natural resources management, as well as mapping land use and cover. applications for geospatial technologies, including outreach and consulting for GIS and remote sensing. Under a World Bank-funded project, further industrial experience was obtained in the fields of wind energy, water supply, and sanitation.
Details of my education, skills, area of interest, publications, etc. are presented below.

EDUCATIONAL QUALIFICATION

ACADEMIC

Course studied	**Institution**	**Year of passing**
Ph.D. (Water Resources Engineering)	National Institute of Technology Karnataka, Surathkal, India	March 2008
M.Tech (Hydraulics)	The National Institute of Engineering, Mysore, India	Nov. 2002
B.E (Civil Engg)	Sir M.Viswesvaraya Institute of Technology, Bangalore, India	Aug. 1999
Diploma (H.R.D)	Institute of Health Care Administration, Chennai, India	Oct. 1997
PUC (12^{th})	Vivekananda Junior College. Bangalore – 55, India	April- 1994
SSLC (10^{th})	Sarvodaya High School, Bangalore – 21, India	April- 1992

B: SOFTWARE & Programming Skills

Programming language	Fortran77, C, C++, VC++
GUI	Visual Basic 6
Image processing software	ERDAS Imagine, Idrisi32
GIS software	Arc view GIS, Arc Info, SWAT, MIKE21, HEC -RAS

Experience:

- Professor, NITK from 9/10/2023 to till date
- Associate Professor, NITK from 16^{th} May 2018 to 8/10/2023.
- Assistant Professor, AGP 8000/- NITK from 10/3/2015 to 15/04/2018
- Assistant Professor, AGP 7000/- NITK from 22/4/2012 to 9/03/2015
- Assistant Professor, AGP 6000/- NITK from 22^{nd} April 2009 to 21/4/2012.
- Visiting Assistant Professor, Water Engineering and Management, Asian Institute of Technology, Bangkok, Thailand, from January 2013 to April 2013.
- Assistant Professor, Nagarjuna College of Engineering & Technology, Bengaluru from 6^{th} August 2007- 21^{st} April 2009

- Research associate, CISED/ATREE, Bengaluru from 15th Feb. 2007 – 17th July 2007.
- Research scholar, NITK from 16th August 2003 – 14th Feb. 2007
- Engineer, DHV Consultants Pvt Ltd. New Delhi from 10th March 2003 to 31st August 2003.
- Trainee engineer, Enercon (India) Ltd, Daman (UT), from 10th Jan. 2000 to 31st August 2000.

Research Areas:

- Water Resources Engineering,
- Hydrological (surface water and groundwater) modeling,
- Application of remote sensing and GIS on urban and regional scales, hydrology, agriculture, soil, forestry, utilities, etc.,

Ph.D. / Research Title: "Development of Conjunctive use of Surface water and Groundwater model for sustainable development of Varada Basin, Karnataka"
Approach: Remote Sensing, GIS and Finite Element Method.
M.Tech project: Obtaining Curve Number for Lokapavani Catchment Using Remote Sensing and GIS.
Approach: Remote Sensing and GIS.
Citation by Google Scholar

	All	Since 2020
Citations	2198	1735
h-index	20	18
i10-index	32	27

R & D Projects: Completed /Ongoing

1. Study of impact of land use and land cover change on stream flows of Western ghat (Forest), India. Funded by NITK, INR 5.0 Lakhs (0.5 Million), (PI; Completed).
2. DST-FIST project of Rs. 22 Million: Upgradation of remote sensing lab and development of random wave generating facility. (PI, completed).
3. MoW-INCCC: Impact of climate change on water resources in river basins from Tadri to Kanyakumari. Rs. 70 Lakhs (7.0 Million) (Ongoing, Co-PI). With IIT Bombay, CWRDM. completed
4. NITK: Asset and Utility mapping for NITK. Rs. 5 Lakhs (0.5 Million) (Completed).
5. SERB-DST funded project "Conjunctive use of surface water and groundwater management: A new framework for strategic decision making". Cost: Rs. 30.20 Lakhs- (3.02 Million) , 9/03/2018 to 8/09/2021, Completed.
6. IMPRINT-2, DST-MHRD: Impounding of River flood waters along Dakshina Kannada Coast: A sustainable strategy for water resource development. Rs. 111.00 Lakhs (11.10 Million), 2-01-2019 to 1-11-2022 (PI, completed).
7. NCESS-MoES funded 'Submarine Groundwater Discharge from Nethravathi river to Sitha river, Karnataka Coast', Cost Rs. 10.16 lakhs (1.016 Million) (PI, completed).
8. DST- SPARC project on 'Coastal reservoirs as a sustainable strategy for Water Security. Rs. 64 Lakhs, (6.4 Million) (PI, completed), With the University of Wollongong, Australia

Member of different committees outside the institute

1. Member: Karnataka State Coastal Zone Management Authority, Govt. of Karnataka, India, from April 2021- till date
2. Member: DPR and Estimation scrutiny committee, Karnataka Maritime Board: February 2024 till date
3. Co-Chairman of Pollution Studies Committee for Raichur Growth Centre, KSPCB, Govt of Karnataka
4. Chairman of the fact-finding Committee of CRZ Violation constituted by KSCZMA (Govt. of Karnataka) with the directives of the Hon'ble High Court, Karnataka.

5. City Coordinator of Hydro-meteorological Resilient Action Plan (HmRAP) project by NCRMP Phase-II, NDMA, GoI for Mangaluru city
6. Member: Board of Examiners, Dept of Water Resources Engineering, Bangalore University, India,
7. Member: Board of Examiners, Dept of Marine Geology, Mangalore University, India
8. Member: Board of Studies, Civil Engineering Dept., The National Institute of Engineering, Mysore, India
9. Member (VTU nominated): Board of Studies, Civil Engineering Dept., Maharaja Institute of Technology, Mysore, India from May 2024 to till date.

Administrative works @ NITK

- **Head of the Department** from 07/04/2025 to till date
- **Professor-in-Charge:** Civil Infrastructure from 09/12/2023 to 05/05/2025
- **Coordinator:** Centre of Excellence for Disaster Risk Reduction, NITK from 14th June 2021 to 31st May 2023.
- NITK Campus Water Supply Faculty i/c

Paper publication:

Refereed journals

1. Sunilkumar P.S., Shushmitha Wadde, Ramesh H. 2024. Multi-Dimensional Assessment of Submarine Groundwater Discharge and Seawater Intrusion between Mangaluru and Udupi Coast of Karnataka, India.", has been accepted for publication in Journal of The Institution of Engineers (India): Series A. Accepted for publication.
2. Ahalya Nalluri, **Ramesh H**, and Pankaj R Dhote. 2024. Monitoring Water Level Fluctuations of Reservoirs in The Krishna River Basin Using Sentinel-3 and ICESat-2 Altimetry Data. IEEE Access, DOI 10.1109/ACCESS.2024.3511139 .
3. B.Y. Chinmayi, **H. Ramesh**. 2024. Evaluation of stakeholder knowledge and practices of water use management strategy: Observations from a questionnaire survey in Southern India. Volume 10, Issue 19, 15 October 2024, e38466. https://doi.org/10.1016/j.heliyon.2024.e38466
4. Vijay Suryawanshi, **Ramesh. H**, Nasar T., 2024. Large-scale Flood Forecasting in coastal Reservoir with Hydrological Modelling. Journal: Arabian Journal of Geosciences. Accepted.
5. Vijay Suryawanshi, **Ramesh. H**, Nasar T., 2024, Rejuvenating Nethravathi River: The Enhancement of Water Quality Amidst the Covid-19 Pandemic Using Remote Sensing and GIS Approach, INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY (IJERT) Volume 12, Issue 04 (April 2024), DOI : 10.17577/IJERTCONV12IS04010
6. Arvindd Kshetrimayum, **Ramesh H** & Akash Goyal (22 Jun 2024): Exploring different approaches for landslide susceptibility zonation mapping in Manipur: A comparative study of AHP, FR, machine learning, and deep learning models, Journal of Spatial Science, DOI: **:** https://doi.org/10.1080/14498596.2024.2368156
7. Arvindd Kshetrimayum, Akash Goyal, **Ramesh H** & B. K Bhadra. 2024. Semi-physical and machine learning approach for yield estimation of pearl millet crop using SAR and optical data products. Journal of Spatial Science, VOL. 69, NO. 2, 573–592 https://doi.org/10.1080/14498596.2023.2259857
8. Krishnaraj, A., and **Honnasiddaiah, R**. 2023.Multi-spatial scale land use land cover influences on seasonally dominant water quality along Middle Ganga Basin," Journal of Environmental Monitoring and Assessment. Environ Monit Assess, 195:1434, https://doi.org/10.1007/s10661-023-12059-y
9. Krishnaraj, A., and **Honnasiddaiah, R**. 2022. "Remote sensing and machine learning based framework for the assessment of spatio - temporal water quality in the Middle Ganga Basin." *Environmental Science and Pollution Research*, (0123456789).
10. Vinayak Kallannavar, Subhashchandra Kattimani and **H. Ramesh**. 2022. Influence of temperature and moisture on free vibration behavior of skew laminated composite

sandwich panels with CNTRC core. International Journal of Structural Stability and Dynamics, Vol. 22, No.08, https://doi.org/10.1142/S0219455422500833

11. Shashi Kumar, **Ramesh H**., Vijay Kumar H., Vasudev M., 2021. Experimental and numerical investigation of novel V-shaped rotor for hydropower utilization. Journal of Ocean Engineering, 224-108689,
12. Venkatesh Kolluru, Nir Y, Ehsan.sharifi, **Ramesh H**. 2020. Evaluating the Performance of Secondary Precipitation Products through Statistical and Hydrological Modeling in a Mountainous Tropical Basin of India. Journal of Advances in Meteorology. (Accepted).
13. Shu-Qing Yang, T. G. Sitharam, Muttucumaru Sivakumar, Sreevalsa Kolathayar and **Ramesh Gowda**. 2020. Strategic Analysis on the Potential of Coastal Reservoirs in Reshaping Indian Coastal Economic Corridor. International Journal of Ocean and Coastal Engineering Vol. 2, Nos. 3 & 4 (2019) 1940003 (17 pages) #.c World Scientific Publishing Company, DOI: 10.1142/S2529807019400037
14. Nitya R. Govind and **Ramesh H**., 2020. Exploring the relationship between LST and land cover of Bengaluru by concentric ring approach. 'Environmental Monitoring and Assessment', 192:650, **https://doi.org/10.1007/s10661-020-08601-x**
15. Shashi Kumar, Vasudev M., Vijay Kumar H., **Ramesh H**. 2020. Studies on application of vertical axis hydro turbine for sustainable power generation in irrigation channels with different bed slopes, Renewable Energy (Accepted for publication).
16. Divya Anand, S.Shrihari, **H. Ramesh.** 2020. Predictive simulation of leachate transport in a coastal lateritic aquifer when remediated with reactive barrier of nano iron. Groundwater for Sustainable Development. https://doi.org/10.1016/j.gsd.2020.100382
17. Venkatesh K, **Ramesh H.** 2020. Modelling stream flow and soil erosion response considering varied land practices in a cascading river basin. Journal of Environmental Management. 264, 110448 (https://doi.org/10.1016/j.jenvman.2020.110448).
18. Venkatesh K, Preethi K, **Ramesh H.** 2019. Evaluating the effects of forest fire on water balance using fire susceptible maps. J. Ecological Indicators, doi: https://doi.org/10.1016/j.ecolind.2019.105856
19. Nalluri Ahalya and **H. Ramesh**. 2019. "A comparative study of radiometric corrections on multispectral and panchromatic images." *Asian Journal for Convergence in Technology (AJCT)* (2019).
20. Nitya R. Govind and **Ramesh H.,** (2019). The impact of spatio-temporal patterns of land use land cover and land surface temperature on an urban cool island: A case study of Bengaluru". *Journal of Environmental Monitoring and Assessment* (Accepted).
21. C. A. Rishikeshan and **H. Ramesh** (2018). An automated mathematical morphology driven algorithm for water body extraction from remotely sensed images. *ISPRS Journal Photogrammetry and Remote sensing*, Elsevier, (IF: 5.994). https://doi.org/10.1016/j.isprsjprs.2018.08.014
22. Divya, S. Shrihari & **H. Ramesh**, (2018). Comparison of column and batch reactor for remediation of COD of leachate using iron nano particle. Accepted in International Journal of Engineering and Technology (UAE).
23. Shaik Salma, **Ramesh H,** Dodamani B M. (2018). A GIS topology to detect coastal groundwater Potential zones and variation of sea water temperature along west coast of Karnataka. Asian Journal of Convergence in Technology Volume V, Issue I, ISSN NO: 2350-1146: I.F-5.11
24. K. J. Sylus and **H. Ramesh**, (2018). Geo-statistical analysis of groundwater quality in an unconfined aquifer of Nethravathi and Gurpur river confluence, India. *Journal of Modeling Earth Systems and Environment*, https://doi.org/10.1007/s40808-018-0488-z
25. C. A. Rishikeshan & **H. Ramesh** (2017): A novel mathematical morphology based algorithm for shoreline extraction from satellite images, *Geo-spatial Information Science* (Taylor & Francis), DOI: 10.1080/10095020.2017.1403089
26. Rishikeshan and **Ramesh H.,** (2017). An ANN supported mathematical morphology based algorithm for lakes extraction from satellite images. *ISH Journal of Hydraulic Engineering* (Taylor & Francis), Accepted,
27. Ashwathi P Anil and **Ramesh H**., 2017. Analysis of climate trend and effect of land use land cover change on Harangi streamflow, South India-A case study. J. Sustainable Water Resources Management (Springer), DOI: 10.1007/s40899-017-0088-5.

28. Rohith John, **Ramesh H**. 2017. Colour Based Segmentation of a Landsat Image Using K-Means Clustering Algorithm. *Journal of Image Processing & Pattern Recognition Progress.* 2017; 4(3): 31–38p.
29. Ramesh Adep, Amba Shetty, **Ramesh H**, 2017. EXhype: A tool for mineral classification using hyperspectral data. *ISPR J. of Photogrammetry and Remote Sensing*, 124, 106–118 (IF- 5.994). https://doi.org/10.1016/j.isprsjprs.2016.12.012
30. Ramesh Adep, Vijayan P. Ashwin, Amba Shetty, **Ramesh H**, 2016. Performance evaluation of hyperspectral classification algorithms on AVIRIS mineral data, Perspectives in Science (Elsevier), 8, 722-726.
31. Ganasri, B.P., **Ramesh, H**., 2015. Assessment of soil erosion by RUSLE model using remote sensing and GIS - A case study of Nethravathi Basin, Geoscience Frontiers, 7, 953-961;http://dx.doi.org/10.1016/j.gsf.2015.10.007; (Elsevier).
32. **Ramesh H.** and Rashma Jain R., 2015. Satellite data and geospatial technique based mapping of groundwater potential zones in Nethravathi basin: South India. Journal of Geo Observateur, CRTS, Nº22, 49-59.
33. Konstantin J. Sylus and **H. Ramesh**, 2015. The study of seawater intrusion in coastal aquifer by electrical conductivity and total dissolved solid method in Gurpur and Netravathi river basin. Journal of Aquatic Proceedia (Proc. Of International Conf. on Water Resources, Coastal and Ocean Engineering-2015 (ICWRCOE'15)), Elsevier, Vol. 4, 57-64.
34. Parvathy K G, **Ramesh H,** Noujas V, Thomas K V, 2015. Impact of mudbanks on coastal dynamics. Journal of Aquatic Proceedia (Special Issue of Proc. Of International Conf. on Water Resources, Coastal and Ocean Engineering-2015 (ICWRCOE'15)), Elsevier. Vol. 4, 1514 – 1521.
35. Babar, S., Shobhita, M. P. and **H. Ramesh** (2015). "Assessment of Hydropower Potential in Nethravathi River Basin Using SWAT model". International Journal of Earth Sciences and Engineering (IJEE), Vol. 8, No.2, 696-702.
36. Babar F Santosh and **Ramesh H**. 2015. Streamflow Response to Land use Land cover Change over the Nethravathi River Basin, India. Journal of Hydrologic Engg., ASCE, 05015002-1-11. https://doi.org/10.1061/(ASCE)HE.1943-5584.0001177
37. Bikas, G. S., **Ramesh, H** and Vijaykumar, H. 2014. Study on Performance of Savonius rotor type Wave Energy Converter used in conjunction with Conventional Rubble Mound Breakwater. Journal of Ocean Engineering (Elsevier), 89, 62-68. (IF: 1.337).
38. Santosh Babar and **H. Ramesh**, 2014. Analysis of monsoon onset trend and extreme rainfall events over Nethravathi river basin. ISH Journal of Hydraulic Engineering, 20(2), 202-212. (Taylor and Francis).
39. Sylus J. K., and **Ramesh H**., 2014. Statistical analysis of water quality and water level of Nethravathi and Gurpur river basin, Mangalore, India, for non-monsoon season. Journal of Environment research and development, Vol. 8, pp 747-750. (F: 1.268).
40. Santosh Babar and **Ramesh H.** 2013. Analysis of southwest monsoon rainfall trend analysis using statistical techniques over Nethravathi basin. International Journal of Advanced Technology in Civil Engineering, ISSN: 2231 –5721, Volume-2, Issue-1, pp 130-136.
41. Vyshali, Mahesha, A. Lathasri U. and **Ramesh, H.**, 2012. Parameter estimation and vulnerability assessment of coastal unconfined aquifer to salt water intrusion: A case study. Journal of Hydrologic Engineering, ASCE, 17:933-943. (IF: 1.62). https://doi.org/10.1061/(ASCE)HE.1943-5584.0000524
42. Vijay Kumar Hindasageri, **Ramesh, H**. and Gourav. A., 2012. Effect of variation of wave height and ocean depth on the performance of Savonious rotors utilizing the orbital motion of ocean waves in shallow waters. Journal of sustainable energy and environment, 3, 53-57.
43. Vijay Kumar Hindasageri, **Ramesh, H**. and Kattimani, S.C. 2011. Performance of savonious rotors utilizing the orbital motion of ocean waves in shallow waters. Journal of sustainable energy and environment. Vol. 2, pp 117-119.
44. **Ramesh, H**., Pradeepa, M.P., and Putty, Y., 2010. Generating and mapping of SCS curve numbers using remote sensing and GIS for Lokapavani catchment, Karnataka. GIS Development Magazine Paper No. 213 (J. Geospatial world).

45. **Ramesh H** and Mahesha, A. 2009. Conjunctive use in India's Varada river basin. J. American Water Works Association (AWWA), Vol. 101, No 11, pp 74-83. (IF: 0.86). **https://doi.org/10.1002/j.1551-8833.2009.tb09992.x**
46. **Ramesh, H** and A.Mahesha, 2008. Simulation of Varada aquifer system for sustainable groundwater development, J. Irrig. & Drain (ASCE). Volume 134, Issue 3, pp. 387-399. https://doi.org/10.1061/(ASCE)0733-9437(2008)134:3(387)
47. **Ramesh. H** and Mahesha A, 2006. An overview on planning and management of rural water supply- a case study. ISH Journal of Hydraulic Engineering, vol.12, No. 1, pp 61-72. (Taylor and Francis)

Conferences:
National:

1. Pavithra B N and **Ramesh H**, 2015. "Evaluation of wind energy using GIS: A review" Proc. National Symposium on Geomatics for Digital India. pp 263-264. December 16-18, JKLU, Jaipur, India.
2. Santosh Babar Fulaji., and **Ramesh, H.** 2012. Analysis of Monsoon onset Trend and Extreme Rainfall events over Nethravathi Basin. Proc. of National conferences on water resources and coastal engineering, HYDRO-2012, IIT, Bombay, 6-8, December 2012. India.
3. Sylus K. J. And **Ramesh, H.** 2012. Salinity mapping of Puducherry regional aquifer by chemical parameter ration method. Proc. of National conferences on water resources and coastal engineering, HYDRO-2012, IIT, Bombay, 6-8, December 2012. India.
4. **Ramesh. H** and Mahesha A, 2010. Estimation of Evapotranspiration and Crop Water Requirement in Semi Humid Region. Proc. of Nat. conf. on Sustainable water resources and management-SWaRM-2010, 7-9 Jan 2010, NITK, Mangalore, India.
5. **Ramesh. H** and Mahesha. A, 2005. Computation of aquifer parameters using step drawdown pumping test. Proc. National Conference HYDRO-2005, pp 171-179 December 7-8, SIT, Tumkur, INDIA.
6. **Ramesh. H,** Pradeep. M.P., and Putty R.Y, 2005. Satellite image enhancement and classification for land cover area estimation. Proc. National conference HYDRO-2005, pp 271-277. December 7-8, SIT, INDIA.
7. **Ramesh. H** and Mahesha A, 2004. 'The role of participatory rural appraisal in water supply project'. Proc. National symposium on Natural resources management for sustainable development, 3-4, Dec. 2004, UVCE, Bangalore, INDIA.
8. Vijay Suryawanshi**, Ramesh H** (2020) "Identification of groundwater potential zones by using RS & GIS technique" Third Indian National Groundwater Conference, held on February, 18-20, 2020 at Centre for Water Resources Development and Management, Kozhikode, India
9. Malavika M Praveen, **H. Ramesh** and Sunil Kumar P.S (2020) "Submarine groundwater potential zone mapping using thermal remote sensing and groundwater levels" Third Indian National Groundwater Conference, held on February, 18-20, 2020 at Centre for Water Resources Development and Management, Kozhikode, India
10. Dev Anand Thakur and Ramesh H., 2020. Application of HEC-RAS in studying urban flood inundation. Five Day Virtual International Conference on "Sustainability and New Paradigms in Civil Engineering" 7th to 11th December 2020 at Dayanand College of Engineering, Bengaluru.
11. **Ramesh. H** and Mahesha A. 2005. Conjunctive use of surface water and groundwater – an overview. NITK research bulletin, vol.14, No. 2, pp 1-6.

International:

1. Roopa, N., Namratha, N., **Ramesh, H**., Manjunath, K.C. (2024). Evaluation and Prediction of Land Use and Land Cover Changes in the Kumaradhara Basin, Western Ghats, India. In: Mesapam, S., Ohri, A., Sridhar, V., Tripathi, N.K. (eds) Developments

and Applications of Geomatics. DEVA 2022. Lecture Notes in Civil Engineering, vol 450. Springer, Singapore. https://doi.org/10.1007/978-981-99-8568-5_15

2. **Ramesh H**, Dev Anand Thakur, Vijay Suryawanshi, Flood inundation modelling in the Netravati-Gurupura basin: A 2D HEC-RAS approach for comprehensive mapping", Int. Conference on Water Resources Management and Sustainability: Solutions for Arid Regions, 26-28 February 2024, Dubai, UAE.
3. V. Suryawanshi, **H. Ramesh** and T. Nasar, "Groundwater Quality Evaluation In The Gurupura River Basin Using GIS and Remote Sensing Approach," *2023 IEEE India Geoscience and Remote Sensing Symposium (InGARSS)*, 10-13, Dec.2023, Bangalore, India, 2023, pp. 1-4, **DOI:** 10.1109/InGARSS59135.2023.10490433
4. Krishnaraj, A., and **Honnasiddaiah, R**. "A remote sensing and LSTM based water quality prediction along Middle Ganga Basin" , *AGU fall meeting 2021* (Poster presentation)
5. Namitha Thomas and **Ramesh H**., 2021. Flood hazard mapping of Netravati river basin using remote sensing and GIS techniques. HYDRO 2020 INTERNATIONAL 25th International Conference on Hydraulics, Water Resources and Coastal Engineering, held at National Institute of Technology Rourkela Odisha, India, March 26-28, 2021. (Fetched **Best paper award**).
6. Sumanth A and **Ramesh H**., 2021. Hydrological modelling of the upper Cauvery river basin using SWAT. HYDRO 2020 INTERNATIONAL25th International Conference on Hydraulics, Water Resources and Coastal Engineering, held at National Institute of Technology Rourkela Odisha, India, March 26-28, 2021. (Fetched Best presentation award).
7. **Ramesh H**., 2020. The opportunities and challenges of coastal reservoir strategy for sustainable water resources development- Indian perspective. Proc. Of 8th International Conference on the Application of Physical Modelling in Coastal and Port Engineering and Science, Coastlab 2020. Zhoushan, China - Dec. 9th - 12th, 2020 (Virtual mode), page. 531.
8. Anirudha Katua and **Ramesh H**., 2020. "Deep Learning and ANN Techniques Based Satellite Image Classification for Land-use Landcover Extraction. 2020 IEEE International Conference for Innovation in Technology (INOCON) Technically Co-sponsored by IEEE Bangalore Section 06th - 08th November 2020.
9. Chinmayi B.Y., and **Ramesh H.,** 2019. Spatio-temporal analysis trend and non-stationarity of rainfall in Hemavathi basin. Prof. of Int. Conf., 24th HYDRO held at Osmania University from 18-20, December 2019. Pp 1802-1808.
10. Nitya R Govind, Chinmayi B.Y., and **Ramesh H.,** 2019. Spatio-temporal variations in land surface temperature due to urbanization: A case study of Bengaluru India. Prof. of Int. Conf., 24th HYDRO held at Osmania University from 18-20, December 2019. Pp 2745-2751.
11. Nitya R Govind and **H. Ramesh**, (2019). Comparison of different PAN sharpening techniques using Landsat 8 imagery. Proc. Of 5th int. conference for Convergence in technology 2019, 5th International Conference for Convergence in Technology (I2CT) Pune, India. Mar 29-31, 2019 (IEEE digital explore).
12. Venkatesh K. and **H. Ramesh**, (2018). Impact of land use land cover change on runoff generation in Tungabhadra river basin. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume IV-5, 2018 ISPRS TC V Mid-term Symposium "Geospatial Technology – Pixel to People", 20–23 November 2018, Dehradun, India. Pp 367-374.
13. Divya, S. Shrihari & **H. Ramesh**, (2018). Modeling of the transport of leachate contaminant in a landfill site: A case study in Mangaluru. Proceedings of the international conference in emerging trends in engineering, science and technology (ICETEST 2018), January 18–20, 2018, Thrissur, Kerala, India, Published by CRC press, Taylor & Francis.
14. K. J. Sylus, and **Ramesh H.** (2018), Modelling of groundwater quality using bicarbonate chemical parameter in Netravathi and Gurpur river confluence, India, Published by the American Institute of Physics, AIP Conference Proceedings 1952, 020044 (2018); doi: 10.1063/1.5032006.
15. Vidya Ganesh R and **Ramesh H**. 2017. Effectiveness of Contrast Limited Adaptive Histogram Equalization Technique on Multispectral Satellite Imagery. *ICVIP 2017*,

Proceedings of the International Conference on Video and Image Processing, December 27–29, 2017, Singapore, Singapore. Association for Computing Machinery-Digital Library. Pp 234-239. https://doi.org/10.1145/3177404.3177409

16. C. A. Rishikeshan, **H. Ramesh**, Anjali Vijay, 2017. An mm based approach for glacial lakes extraction. 3rd International Conference on the Status and Future of the World's Large Rivers, 18-21 April 2017, New Delhi, India.
17. C. A. Rishikeshan, **H. Ramesh** and D. Ritiksha, 2016. A Mathematical Morphology Assisted Approach for Shoreline Extraction from Satellite Imageries. ISRS - ISG National Symposium on Recent Advances in Remote Sensing and GIS with Special Emphasis on Mountain Ecosystems December 7 - 9, 2016 Dehradun (India).
18. C.A. Rishikeshan, **H. Ramesh**, T.M. Sharanya, 2016. Comparison of delineated watersheds and its parameters derived from open source DEM datasets using geospatial tools. Proceedings of International Conference on Hydraulics, Water Resources and Coastal Engineering (Hydro2016), CWPRS Pune, India 8th – 10th December 2016.
19. **Ramesh H.** and Chinthu V S. 2016. Extraction of Land Surface Temperature, NDVI, Land Use/Land Cover and Runoff from Satellite Images. 8th International Conference on Applied Research in Engineering and Management Sciences held on August 12 – 17, 2016, Kuala Lumpur, Malaysia
20. **Ramesh. H**. and Soorya P.P., 2016. Application of EO-1 hyperion Data for mapping and discrimination of agricultural crops.Proc. of Int. Conf. on Water, Environment, Energy and Society (ICWEES-2016) held on 15-18, March 2016, Bhopal, India
21. Parvathy K G, **Ramesh H,** Noujas V, Thomas K V, 2014. "A numerical modeling approach for study of mudbank impact on coastline," *Oceans - St. John's, 2014*, vol., no., pp.1, 5, 14-19 Sept. 2014 doi: 10.1109/OCEANS.2014.7003115, IEEE. (Canada).
22. Konstantin J. Sylus and **H. Ramesh**, 2013. The study of sea water intrusion in coastal aquifer by chemical parameter ratio method. Proc. of HYDRO 2013 International, 4-6 December 2013, IIT Madras, Chennai, India.
23. Babar Santosh Fulaji and **H. Ramesh**, 2013. Distribution of high streamflow and relative high precipitation event using directional statistics. Proc. of HYDRO 2013 International, 4-6 December 2013, IIT Madras, Chennai, India. Pp 1198-1203.
24. Kavyasee and **Ramesh H.** 2013. Wetland mapping and change detection using remote sensing and GIS. Proc. Int. conf. & exhibition on water, wastewater and isotope hydrology (ICE-WWISH 13), 25-27, July 2013. UVCE, Bangalore, India. Pp 187-191.
25. **Ramesh, H.** And Vani. 2012. Selection of Suitable sites for Small Hydropower generation using GIS and Remote Sensing. Proc. of international conference on water resources and environmental engineering, Asia Pacific young water professional conference -2012 (APYWP2012), IWA, 7-9, December, 2012, Tokyo, Japan
26. **Ramesh, H**., Santhosh L. and Jagadeesha C. J., 2012. Simulation of hydraulic parameters in water distribution network using EPANET and GIS. Proc. of an International Conf. on Ecology, Environment and Biological Sciences (ICEEBS'2012), held during January 7-8, 2012, Dubai, UAE.
27. **Ramesh. H** and Mahesha A, 2011. Groundwater Modeling to Simulate Groundwater Levels Due to Interlinking of Rivers in Varada River Basin, India. 4th IEEE int. conf. on modeling, simulation and optimization, ICMSO-2011, 978-1-4577-0005-7 (19th -21st April 2011, Kuala Lumpur, Malaysia).
28. **Ramesh H** and Mahesha. A. 2006. Steady groundwater flow modeling of Varada basin, Karnataka. Proceedings of International Perspective on Environmental and Water Resources conference, EWRI, ASCE, New Delhi, India, December 18-20, 2006, CD-ROM.
29. **Ramesh, H** and Mahesha, A. 2005. Importance of Participatory Rural Appraisal in water supply and sanitation project. Proceedings of the Third Conference 5-9 March 2005 (Atlanta, Georgia USA) Publication Date 5 March 2005, 701P0105. Published by the American Society of Agricultural and Biological Engineers, St. Joseph, Michigan www.asabe.org.
30. **Ramesh. H** and Mahesha A, 2004. 'Watershed planning and management- an integrated approach'. Proc. International conference, LAKE 2004, 13-18, Dec. 2004, Bubaneswar, INDIA.

Book/Chapter Publication:

1. Karthika B. S. and **Ramesh, H.,** 2011. Estimation of Evapotranspiration and water productivity-Using Remote sensing data. Lambert Academic Publishing, UK. ISBN 978-3-8465-4053-4, Pages 76.
2. **Ramesh H.** and Mahesha A., 2011. "Conjunctive use of surface water and groundwater for sustainable water management" a chapter contributed to a book "Sustainable Development-Energy, Engineering and Technologies – Manufacturing and Environment. Edited by ***Chaouki Ghenai***, Intech Publications. Pp 173 - 208. ISBN 978-953-51-0165-9. Available online: http://www.intechopen.com/articles/show/title/conjunctive-use-of-surface-water-and-groundwater-for-sustainable-water-management
3. **Ramesh. H**. and Soorya P.P., 2017. Application of EO-1 hyperion Data for mapping and discrimination of agricultural crops. A chapter contributed to a book "Hydrologic Modeling". Edited by V. P. Singh, Springer Publications.
4. Prerna Kumari and **Ramesh H.,** 2020. Extraction of Nearshore Bathymetry of Mangaluru Coast for Planning Coastal Reservoir using Remote Sensing Image. 13th chapter in the Book "Sustainable water resources development using Coastal reservoir". Edited by T. G. Sitharam et el., Elsevier. ISBN: 978-0-12-818002-0, pp 247-265.
5. Ahalya N., **Ramesh H.** (2021) Water Level Retrieval and Water Body Mapping: A Case Study of Nagarjuna Sagar Reservoir. In: Narasimhan M.C., George V., Udayakumar G., Kumar A. (eds) Trends in Civil Engineering and Challenges for Sustainability. Lecture Notes in Civil Engineering, vol 99. Springer, Singapore. ISBN 978-981-15-6827-5. https://doi.org/10.1007/978-981-15-6828-2_58, pp 797-808
6. Chinmayi B.Y., **Ramesh H.** (2023). "Evaluation of morphometric parameters of drainage networks derived from topographic maps and DEM using Geographical Information System – A study on semi-arid river basin, India". B.P. Chaitanya (Ed.). Surface and Groundwater Resources Development and Management in Semi-arid Region: Surface and Groundwater Resources Development and Management (pp. X,496). Springer, Cham. https://link.springer.com/book/9783031293931
7. Roopa, N., **Ramesh, H**., Dhanush, B.M., Meghana, C.S. (2024). Assessment of Soil Loss in Wet Tropical Region: A Case Study in Kumaradhara Basin, Western Ghats, India. In: Ksibi, M., *et al.* Recent Advances in Environmental Science from the Euro-Mediterranean and Surrounding Regions (4th Edition). EMCEI 2022. Advances in Science, Technology & Innovation. Springer, Cham. https://doi.org/10.1007/978-3-031-51904-8_184
8. Diana A.R, Vijay Suryawanshi1, **Ramesh H**, and M.S. Ganesh Prasad. 2024. Saline Intrusion Dynamics and Groundwater Quality Monitoring in the Coastal Mangalore Delta via Visual MODFLOW Flex. Book titled "Emerging Contamination Remediation and Management", Edited by
9. Dev Anand Thakur , Vijay Suryawanshi , **H. Ramesh** and Mohit Prakash Mohanty. 2024. Evaluating the reliability of open-source hydrodynamic models in flood inundation mapping: an exhaustive approach over a sensitive coastal catchment.Chapter-7 Hydrosystem Restoration Handbook edited by Saeid Eslamian and Faezeh Eslamian. DOI: https://doi.org/10.1016/B978-0-443-29802-8.00007-8, pp 83-108.

Consultancy projects executed:

1. Identification and Assessment of sand bars in Kali, Aghanashini, Gangolli, Sharavathi rivers, Uttakara Kannada, M/s. Mines and Geology, (*PI-Ramesh H, Co-PI-Prof. PC Deka*), March 2017.
2. A report on construction of proposed connecting drain in Kardi-Kambla road for flood relief in Mangaluru city, M/s. Mangaluru City Corporation Mangaluru. (*PI- Ramesh H, Co-PI-Dr. Pruthviraj U, Prof. Amba Shetty*), February 2020.

3. Design of treated sewage pipeline from Pachchanady treatment plant to Gurupura river, Mangaluru, M/s. Mangaluru City Corporation, (*PI- Ramesh H, Co-PI-Prof. Amba Shetty)*, July 2020.
4. Report on analysis of stormwater drains for flood waters in Kottara Chowki area. M/s. Mangaluru City Corporation. May 2020 (*PI-Amba Shetty, Co-PI-Dr. Ramesh H*)
5. Rapid EIA report on comprehensive coastal protection works proposed in vulnerable reaches of the coast at Someshwar, Hosabettu and Sasihithlu, D. K. District. ?s Port and Fisheries, GoK (*PI-Ramesh H, Co-PI-Prof. Amba Shetty*), August 2021.
6. Rapid EIA Report for the proposed sea wall construction at Hejamadi, Padubidri, Muloor, Kaipunjal, Parampalli and Kota-Padukere, Udupi District. M/s Port and Fisheries, GoK (*PI-Ramesh H, Co-PI-Prof. Amba Shetty*), November 2021.
7. Comprehensive Environmental Impact Assessment Report on Removal of Bhagavathi Prem Vessel- A Dredger at Guddekopla, Surathkal, Mangaluru. M/s Sonar Impex. (*PI-Ramesh H, Co-PI-Prof. Amba Shetty*), June 2021,
8. Identification and Assessment of sand bars in Kali, Aghanashini, Gangolli, Sharavathi rivers, Uttakara Kannada, M/s. Mines and Geology, (*PI-Ramesh H, Co-PI-Prof. Dodamani*), October 2021.
9. Identification and Assessment of sand bars in Sita, Swarna, and Udyavara, rivers, Udupi, M/s. Mines and Geology, (*PI-Pruthviraj U, Co-PI-Dr. Ramesh H*), November 2021.
10. Detailed Rapid EIA Report for Implementation of Work at Koderi Minor Fishing Harbour in Kirimanjeshwara Village of Byndoor Taluk in Udupi District, Karnataka. M/s Dept of Port and Fisheries, GoK (*PI-Ramesh H, Co-PI-Prof. Rajmohan*), January 2022.
11. Detailed Rapid EIA Report on Implementation Work of Construction of Outer Harbour (2nd stage) at Maravanthe in Byndoor Taluk, Udupi District. M/s Dept of Port and Fisheries, GoK (*PI-Ramesh H, Co-PI-Prof. Rajmohan*), February 2022.
12. Post-facto EIA: Detailed Rapid EIA Report for the Construction of Fish Landing Centre at Koderi in Byndoor Taluk, Udupi District. M/s Dept of Port and Fisheries, GoK (*PI-Ramesh H, Co-PI-Prof. Rajmohan*), April 2022.
13. Detailed Rapid EIA Report on Construction of Jetty at St. Mary's Island near Malpe, Udupi. M/s PWD, GoK *(PI-Prof. Dodamani, Co-PI:Ramesh H, Prof. Rajmohan and Dr. Pruthviraj U*), February 2022.
14. Comprehensive Environmental Impact Assessment Report for the Removal of Sunken Vessel Called 'MV Ocean Blessing' at Thannirbhavi Beach, Mangaluru. M/s KK Enterprises. (*PI-Prof. Dodamani, Co-PI:Ramesh H, Prof. Rajmohan and Dr. Pruthviraj U*), March 2022.
15. Detailed Rapid EIA Report for the Construction of Coastal Berth at Hangarakatte in Brahmavara Taluk, Udupi District. (*PI-Ramesh H, Co-PI-Prof. Rajmohan*), June 2022.
16. Detailed Project Report (DPR) on the installation of lightning arrestors with/without structures for bus shelters and other government institutional buildings in the coastal region of Karnataka state under NCRMP phase-II, M/s Dept of Revenue, GoK. (*PI-Ramesh H, Co-PI:Dr. Subhash Chandra Kattimani, Prof. Subhash Yaragal, Prof. Venkatesh Perumal and Dr. Nagendrappa H*),
17. Detailed Rapid EIA Report for Construction of Siren Towers in CRZ area of Coastal Karnataka. M/s Dept. of Revenue, GoK. (*PI-Dr. Ramesh H*).
18. City Coordinator: Hydrometeorological Resilient Action Plan (HmRAP) for Mangaluru city. M/s. NDMA/Royal Haskoning Pvt Ltd. August 2019-August 2022.(*Ramesh. H*)
19. Preparation of DPR for development of Mangrove belt in coastal Karnataka, Dept of Disaster Management, Revenue Dept, Govt of Karnataka.-2022-2023 (*PI: Ramesh H, Co-PI: Poornesh K.K*)
20. Detailed Rapid EIA Report for the Construction of Floating Jetties (8 No.) in Nethravathi - Gurupura rivers, Dept. of Port and Fisheries, Mangalore, Govt. of Karnataka. August 2023 (*PI: Ramesh H, Co-PI: Poornesh KK and Rajmohan B*)
21. Detailed Rapid EIA Report for the Construction of Kharland Bund to reclaim salt-affected areas in Udupi district, Dept. of Minor Irrigation Dept., Govt. Karnataka. September 2023. (*PI: Ramesh H, Co-PI: Poornesh K.K*.)
22. Detailed Rapid EIA Report for the Modernization of Fishing Harbours at Mangalore, Malpe and Gangolli. Dept. of Fisheries, Malpe. Govt. Karnataka. June 2024. (*PI: Ramesh H, Co-PI: Poornesh K.K*. Subhash Chandra Kattimani).

23. Detailed Rapid EIA Report for maintenance dredging of Tadri, Belekeri, Harwada and Amdalli fishing habours in Uttara Kannada District. Dept. of Fisheries, Malpe. Govt. Karnataka. October 2024. (*PI: Ramesh H, Co-PI: Rajmohan B, Poornesh K.K*., Subhash Chandra Kattimani).

24. Preparation Pre-feasibility report (PFR) for Mangalore International Cruise Terminal. Karnataka Maritime Board, Karwar (PI: Ramesh).

Review and Vetting of the following Detailed Project Report as Third Part:

1. DPR for providing drinking water supply to 291 habitations of Hanur Assembly Constituency in Kollegal Taluk, Chamarajanagar district, Karnataka state, Phase-II works (193 Habitations). Rural Drinking Water Supply and Sanitation Division, Govt. Karnataka.
2. DPR for providing drinking water supply to Toranagallu and other 5 habitations and Daroji and other 2 habitations of Sandur taluk, Bellary district, Karnataka state. Rural Drinking Water Supply and Sanitation Division, Govt. Karnataka.
3. DPR for providing drinking water supply to 69 villages and 1904 enroute habitations of Karkala, Hebri and Kaup taluks of Udupi district Rural Drinking Water Supply and Sanitation Division, Govt. Karnataka.
4. Detailed Project Report (DPR) for the multi-village water supply scheme under the Jal Jeevan Mission to provide drinking water to Alkod, Hegde and other 238 habitations in Kumta taluk of Uttara Kannada district. Rural Drinking Water Supply and Sanitation Division, Govt. Karnataka.
5. Review and Vetting of Technical Detailed Project Report on Restoration of Hulikeri Tank Waste Weir, Hulikeri Village, Dharwad, Minor Irrigation Department, Dharwad, Govt. of Karnataka.
6. Review and vetting of the report on 'Hydrological studies and their impact on Panna dam reservoir, Jamnagar'. Reliance Industries Limited, Mumbai. July 2024.
7. Consultancy services for Panna Reservoir study and its impact on surrounding plots at Reliance Jamnagar-Proof check of hydrological and hydraulic analysis included in a detailed project report. 2024. M/s. Multimedia Consultant Pvt Ltd, Ahmedabad, Gujarat.
8. A peer review for hydrology, flood risk assessment & mitigation, and drainage management of RG expansion at Reliance Industries Limited (RIL), Jamnagar, May 2025.

Conference/Symposium organized

1. One day national symposium on "outstanding issues for hydrological research in India" held on October 21, 2013 fully funded by Ministry of Earth Science, MoES, GoI. (Worked as Co-coordinator).
2. Three days international conference on "water resources, coastal and ocean engineering" held between March 12-15, 2015, (Worked as Treasurer).
3. Five days training workshop on "Design and management of lift irrigation schemes" organized for Karnataka state PWD and Irrigation Engineers, from 27/07/2015 to 31/07/2015 sponsored by Karnataka Engineering staff college, Mandya. India.
4. Five days training workshop on "flood forecasting, flood routing and emergency preparedness of reservoir" organized for Karnataka state PWD and Irrigation Engineers, from 19/09/2016 to 23/09/2016 sponsored by Karnataka Engineering staff college, Mandya. India
5. NRDMS-DST, Govt. of India funded "21 days Training on Geo-Spatial Technologies" held from 11-31, July 2019, (PI), Rs. 10.00 Lakhs.
6. NGP-DST, Govt. of India funded "21 days training on Geo-Spatial Technologies" held from 11-31, May 2022, (PI), Rs. 10.00 Lakhs.
7. NGP-DST, Govt. of India funded "21 days training on Geo-Spatial Technologies" held from 4-24, December 2024, (PI), Rs. 10.00 Lakhs.

Projects Guided:

Sl. No.	Project Title	UG/PG Course	Status

1.	Design of rainwater harvesting technique for NCET campus, Bangalore	BE.(Civil Engg), 2008	Completed
2.	Planning and design of rainwater harvesting technique for proposed buildings.	BE. (Civil Engg), 2009	Completed
3.	Estimation of evapotranspiration and water productivity using remote sensing data (Mr. Karthik)	M.Tech. (2009)	Completed
4.	Development of Tourism Information System for Karnataka State using GIS, India. (Mr. Savali)	M.Tech. (2010)	Completed
5.	Mapping the potential hydropower sites in Sitha river basin using remote sensing and GIS (Mrs. Vani)	M.Tech (2010)	Completed
6.	Simulation of hydraulic parameters in water supply network using GIS and EPANET (Mr. Santhosh, L. G.)	M.Tech (2010)	Completed
7.	Potential hydropower estimation in Nethravathi River basin (Ms. Shobitha M. Prasad)	M.Tech. (2011)	Completed
8.	Assessment of soil erosion in Nethravathi river basin using GIS and remote sensing (Ms. Ganasree)	M.Tech. (2011)	Completed
9	Dynamic change analysis of Sunderban estuary using Remote sensing and GIS (Mr. Kiran)	M.Tech. (2011)	Completed
10	Groundwater potential mapping using remote sensing and GIS (Mrs. Rashma R Jain)	M.Tech (2013)	Completed
11	Groundwater quality analysis and mapping of Dakshina Kannada district adopting RS and GIS (Mr. Hemanth)	M.Tech (2013)	Completed
12	Evaluating the impact of canal irrigation on land use land cover and its after effects (Ms. Chintu)	M.Tech (2013)	Completed
13	Mapping and characterization of wetland using remote sensing and GIS (Ms. Kavyasree)	M.Tech (2013)	Completed
14	Study of impact of wave energy converter on conventional rubble mound breakwater(Mr. Bikas)	M.Tech (2013)	Completed
15	Evaluating the suitability of EO-1 Hyperion data from mapping agricultural crops (Ms. Soorya)	M.Tech (2014)	Completed
16	Development of web-based GIS application using open source (Mr. Bhanu Mogatra)	M.Tech (2014)	Completed
17	Study of mud banks (Ms. Parvathy, K. G.)	M.Tech (2014)	Completed
18	Effect of land use land cover change on Harangi Streamflow, (Aswathi P Anil)	M.Tech (2015)	Completed
19	Ambient air quality monitoring of south Indian cities using remote sensing (Abid Parari)	M.Tech (2015)	Completed
20	Cyclone track monitoring using hwrf model over north Indian ocean (H. Hitheshkumar)	M.Tech (2015)	Completed
21	Automatic histogram Based Fuzzy C-Means Clustering of Satellite Imagery (Mr. Mohammad Fassil)	M.Tech (2015)	Completed
22	Effect of Inter-basin water transfer on stream flow regime of Nethravathi river (Mr. Sachin Ramesh VV)	M.Tech (2016)	Completed
23	Color based segmentation of a Landsat image using K-Means clustering (Mr. Rohith John)	M.Tech (2016)	Completed
24	Experimental studies on core replaced by geotextile sand containers for rubble mound breakwater (Mr. Udayakumar P V)	M.Tech (2016)	Completed
25	Expert system for mineral classification using hyperspectral data (Mr. Ramesh N.A)	M.Tech. by Research (2016)	Completed

26	Windfarm site selection and evaluation of wind energy potential using GIS (Ms. Pavithra B. N.)	M.Tech. by Research (2016)	Completed
27	Reservoir storage simulation using ANN (Mr. Satish Peddinti)	M.Tech (2017)	Completed
28	Asset and utility mapping of NITK campus using GIS and remote sensing (Mr. Abhijit Chaatri)	M.Tech (2017)	Completed
29	Estimation And Modelling Of Rice Yield For Palakkad Region (Ms. Viveka Satheesh)	M.Tech (2018)	Completed
30	Evapotranspiration estimation over Indian region derived from Geostationary satellite data (Mr. Vamsi Krishna G)	M.Tech (2018)	Completed
31	Identifying groundwater recharge potential sites using satellite images (Mr. Rahul Kumar Gupta)	M.Tech (2019)	Completed
32	Extraction of reservoir water level elevation through Sentinel data (Ms. Ahalya N)	M.Tech (2019)	Completed
33	Comparative Study for Assessment of Soil Erosion by RUSLE & Morgan Morgan Finney (MMF) Model Using Remote Sensing and GIS for Hemavathi River Basin Karnataka, India (Mr. Rajat Kumar)	M.Tech (2019)	Completed
34	Derivation of bathymetry information from high resolution Satellite images (Ms. Prerna Kumari)	M.Tech (2019)	Completed
35	Modelling soil erosion in Tungabhadra river basin using SWAT model (Mr. Venkatesh Kolluru)	M.Tech by Research (2019)	Completed
36	Identification Submarine Groundwater Discharge (SGD) through thermal remote sensing (Ms. Malavika)	M.Tech (2020)	Completed
37	Flood mapping using GIS and remote sensing (Ms. Namitha Thomas)	M.Tech (2020)	Completed
38	Modelling land use and land cover change over Mangalore city using high resolution satellite images (Mr. Doddu Yacob)	M.Tech (2020)	Completed
39	Assessment of relationship between air and Land surface temperature derived by satellite images using retrieval algorithms and LSE models over Indian cities (Mr. Aniruddha Katua)	M.Tech (2021)	Completed
40	Satellite image fusion using FDCT for land cover classification (Ms. Sushmita Naik)	M.Tech (2021)	Completed
41	Flood inundation mapping of Nethravathi – Gurupura river basin using HEC-RAS 2D model (Mr. Dev Anand Thakur)	M.Tech (2021)	Completed
42	Evaluation of suspended sediment concentration using ANN & wavelet in Brahmaputra river (Mr. Ritesh R. Moon)	M.Tech(2021)	Completed
43	Flood inundation modelling of the Periyar river basin using HEC-RAS model- Kerala (Ms. Dilna S.)	M.Tech(2022)	Completed
44	Crop monitoring and classification of rice crop using Sentinel-1 SAR time series (Ms. Sandra K.T.)	M.Tech(2022)	Completed
45	Impact of coastal reservoir on shoreline change using mike 21(Mr. Gunta Stanley Philip)	M.Tech(2022)	Completed
46	Assessment of urban sprawl and LST variation in built-up area using machine learning approach (Mr. Arjun Mansotra)	M.Tech (2022)	Completed
47	A model comparison in landslide susceptibility zonation mapping in Manipur. (Mr. Arvindd Kshetrimayum)	M.Tech (2023)	Completed
48	Comparative analysis of object-based image classification algorithms for urban land cover mapping. (Ms..Gugulothu Srilatha)	M.Tech (2023)	Completed
49	Shoreline Change Assessment Of Mangalore Coast Between	M.Tech (2023)	Completed

	Talapadi And Mulki Using High Resolution Satellite Images. (Mr. Nandagiri Surya Teja Chakri)		
50	Semantic Segmentation-Based Deep Learning For Sentinel-2 Image In Land Use Land Cover Mapping Of Hyderabad City, Telangana State. (Mr. Swarnadeep Sinha)	M.Tech (2024)	Completed
51	Rainfall=Runoff modelling for Yettinahole diversion scheme. (Ms. Gayathri Niveda).	M.Tech (2024)	Completed
52	Comparative Analysis of Deep Learning Models for Reservoir Inflow Prediction: A Study on Harangi Reservoir. (Mr. Prashanth Chauwan)	M.Tech (2024)	Completed
53	Remote sensing image fusion using deep neural networks with multi – skip connection (Mr. Moni Aravind)	M.Tech (2024)	Completed
54	Machine Learning Approaches for SAR-Based Urban Built-Up Area Detection of Mangalore Region. (Mr. Rahul)	M.Tech (2024)	Completed
55	Downscaling of GRACE data to find terrestrial water storage (Ms. Gayathri Nivedha R).	M.Tech (2024)	Completed
56	Forest fire analysis and modelling using remote sensing (Anisha)	M.Tech (2025)	Ongoing
57	Mineral mapping using hyperspectral images (Devyani)	M.Tech (2025)	Ongoing
58	Hydrological modelling for flood risk mapping (Bhushan)	M.Tech (2025)	Ongoing
PhD Thesis			
1.	Study of streamflow response to land use land cover over Nethravathi river basin (Mr. Santosh Babar)	PhD (2015)	Completed
2	Feature Extraction Strategies Based on Mathematical Morphology for the Analysis of Remotely Sensed Imagery (Mr. Rishikeshan)	PhD (2019)	Completed
3.	A framework for groundwater quality modelling in the coastal aquifer of Nethravathi and Gurpur river confluence (Mr. Konstantin J Sylus)	PhD (2020)	Completed
4.	Groundwater contaminant modelling in and around land fill sites (Mrs. Divya)	PhD (2021)	Completed
5	Spatio-temporal analysis and modelling of water quality in the middle Ganga basin, (Ashwitha)	PhD (2023)	Completed
6.	Impact of land use land cover change due to urbanization on Land surface temperature (Mrs Nitya)	PhD (2023)	Completed
7.	Short term and long term climate impacts on hydrologic regime of Upper Cauvery river basin, India (Mr. Sumanth)	PhD	Ongoing
8	Modelling Conjunctive use of surface water and groundwater strategies for sustainable water resources management (Chinmayi)	PhD	Ongoing
9	Conceptual framework study of the coastal reservoir as a strategy for sustainable water security (Vijay Suyawanshi)	PhD, 2025	Thesis submitted, Feb
10	Satellite-derived bathymetry for reservoir water level retrieval (Ahalya)	PhD	Ongoing
11	Submarine groundwater discharge modelling between Mangaluru-Udupi coast (Mr. Sunilkumar PS)	PhD	Ongoing
12.	Soil erosion modelling in Kumaradhara river basin (Ms. Roopa N)	PhD	Ongoing

13	Flood Alleviation and Flood Risk Mapping of Muvattupuzha River Basin. (Ms. Shilpa M)	PhD	Ongoing

Awards and Fellowships:

1. National Doctoral Fellowship **(NDF)** from AICTE, Govt. of INDIA for PhD programme.
2. Global Water Partnership – University of Dundee International Water Law Scholarship 2014. For attending an International water law course at the University of Dundee, UK.
3. Certificate of achievement for Best M.Tech Thesis of Mr. Venkatesh Kolluru supervised by Dr. Ramesh H won the First Prize for the year 2020, awarded by the Indian Society of Technical Education, New Delhi.

Institute and Dept. work: worked as Secretary in Dept Undergraduate Committee (DUGC), Dept Post Graduate Committee (DPGC) and Doctoral Research Progress Committee (DRPC)

Invited Lecture

1. Coastal Reservoirs: Concepts and design aspects. Department of Environmental Engineering at Sri Jayachamarajendra College of Engineering, JSS Science and Technology University, Mysuru is organizing a TEQIP-III sponsored 2-day workshop on "Water Conclave – for a better future", on 15th and 16th March, 2021, an initiative towards the goal of Australia India Water Centre.
2. Coastal Reservoir and submarine groundwater discharge as an alternate source of water resources. 5 day FDP on Innovative construction materials and waste management practices held from 4-8th April 2022 at Dayananda Sagar College of Engineering, Bengaluru.
3. Latest trends and Satellite Applications in Maritime Search and Rescue (M-SAR). Delivered in Maritime search and rescue workshop and regional search and rescue exercise (ReSAREX-20) organized by Indian Coast Guard-Karnataka, Mangaluru, India on 29-30, December 2020
4. "Open Source GIS and Applications" in Faculty Development Programme held from 5-9th October 2020 at UBDT College of Engineering, Davanagere, India
5. "Remote sensing and GIS application in stream flow response and soil erosion studies in the Nethravathi basin" in Faculty Development Programme held from 2-6th August 2021 at Department of Civil Engineering, Bharati Vidyapeeth (Deemed to be University) College of Engineering, Pune , India
6. Coastal reservoirs as a strategy for sustainable water resources development" in a two day workshop on Coastal reservoirs held from 27-28th August 2019 at Dept. of Civil Engineering, Andra University, Vishakapatnam, India.

Short-term courses/Seminar attended:

Sl. No.	Nature of Programme	Period	Institution /Place	Remarks
1	DST sponsored Workshop on "Management of Stressed coastal aquifers"	18-22, June 2016	Pondicherry University, Pondicherry	One week
2	Monsoon School on "Urban floods"	4-9, July, 2014	IISc, Bangalore	One week
3	Workshop on International Water Law.	9-19, June 2014	University of Dundee, UK	Two weeks
4	Two-day training on Surge Analysis Programme (SAP)	6-8th Oct. 2013	IISc, Bengaluru	Two days

5	AICTE-MHRD, Fuzzy logic, genetic algorithm with wavelet transformation in civil engineering	27th June - 1st, July 2011	NITK, Surathkal	One week
6	DAAD sponsored "Eco-hydrological modeling in rural watersheds"	14th -30th Sept 2010	Kiel University, Germany	Two weeks
7	DST sponsored training for faculty development programme on entrepreneurship	19th -30th July 2010	STEP-NITK, Surathkal	Two Weeks
8	AICTE-MHRD sponsored Short term course on Soft computing techniques in Water Resources Engineering	5th – 9th July 2010	NITK-Surathkal	One week
9	WIPRO sponsored training programme on High Impact teaching Skills- A Dale Carnegie training	17-22, May 2010	NITK-Surathkal	One Week
10	AICTE-MHRD sponsored Short term course on Applied numerical methods for Scientists and Engineers	21-25, Dec. 2009	VNIT, Nagpur	One Week
11	TISS and GWA Sponsored, South Asian training programme on Gender, Water and Equity	20-24, October 2008	Goa	One week
12	AICTE-MHRD sponsored Short term course on Integrated Water Resources and Management	28th July – 08th Aug, 2008	NITK-Surathkal	Two weeks
13	5th IHDP-APN International Human Dimensions Workshop on Institutional Dimensions of Global Environmental Change: Water, Trade and Environment	13-26, October, 2006	Chiang Mai, Thailand	Two weeks
14	DST (Govt. of INDIA) sponsored short term training on " groundwater flow and mass transport modeling for assessment and management of aquifers"	13- 30, , October, 2005	TNAU, Coimbatore	Three weeks
15	AICTE-ISTE sponsored short term course on "integrated water resources management using numerical models" like FEM, FDM, ANN, GA and RS &GIS	12 -20, Nov.2004	IIT-Bombay	Two weeks
16	"Winter school in essentials in 'GIS and Limnology'	21st -30th Dec 2001.	IISc, Bangalore	Two weeks

Memberships:

1. Life time member of "Indian Society for Agriculture Information and Technology", Dharwad, India (Membership No. 106).
2. Life member of Indian Society of Remote Sensing, Dehradun, India (L-3947).
3. Life member of Indian Society for Hydraulics (ISH), Pune, India (LM-809).
4. Member of International Association of Hydro-Environment Engineering and Research (IAHR)-Membership No.: 21308).
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1. Irrigation and Drainage ASCE,
2. Sustainable Water Resources Management

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