



Dr. Subrahmanya Kundapura, M. Tech., Ph. D.

Faculty of Water Resources Engineering

Department of Water Resources and Ocean Engineering

National Institute of Technology Karnataka

Qualifications:

Doctor of Philosophy in	Water Resources Engineering
Master of Technology in	Hydraulics and Water Resources Engineering
Bachelor of Technology in	Civil Engineering
Diploma in	Civil Engineering

Areas of Research Interests:

Water Resources and Geoinformatics

Artificial Intelligence and applications in Hydro-Geoinformatics

Ocean Engineering Applications of Mechanics and Materials

Systems Applications in Water Resources Engineering

Courses Handled:

Doctoral and Masters level:

Soft Computing Techniques and Applications

Artificial Intelligence Applications in Hydro-Geoinformatics

Systems Approach in Water Resources Engineering

Infrastructural Project Management

Design of Hydraulic Systems

Bachelors' level:

Design of Hydraulic Structures

Design and Drawing of Hydraulic Structures

Irrigation and Drainage Engineering

Fluid Mechanics and Machinery

Water Resources Engineering

Mechanics of Solids

Engineering Mechanics

Laboratory course on Fluid Mechanics and Machinery

Laboratory course on Strength of Materials

Research Guidance:

Doctoral Research

Completed	On-going
2	8

Master of Technology by Research

Completed	On-going
1	1

Master of Technology – Major Project

Completed	On-going
32	6

Bachelor of Technology - Major Project

Completed	On-going
12 Batches	3 batches

Design Projects (M Tech – Geoinformatics)

Completed	On-going
18	4

Minor Projects (M Tech – Geoinformatics)

Completed	On-going
8	1

Mini – Projects (B Tech – Civil Engineering)

Completed	On-going
23 batches	3 batches

M Tech – Seminars

Completed	On-going
42	6

Recent Research Publications:

Journals:

Ravi Verma and Subrahmanya Kundapura (2020), “Urban Weighted Green Index- A study of urban green space in relation to Land Surface Temperature for Lucknow city, India”, Remote Sensing Applications Society and Environment, <https://doi.org/10.1016/j.rsase.2020.100429>

Abhilasha Garkoti and Subrahmanya Kundapura (2021), Deriving water level and discharge estimation using satellite altimetry for Krishna River, Karnataka, Remote Sensing Applications: Society and Environment, <https://doi.org/10.1016/j.rsase.2021.100487>

Lambe, B.T., Kundapura, S. Analysis of meteorological variability and tendency over Bilate basin of Rift Valley Lakes basins in Ethiopia (2021). Arab J Geosci 14, 2692 (2021). <https://doi.org/10.1007/s12517-021-08962-8>

Abraham, A., Kundapura, S (2022). Evaluating the long-term trends of the climatic variables over three humid tropical basins in Kerala, India. Arab J Geosci 15, 811 (2022). <https://doi.org/10.1007/s12517-022-10056-y>

Abraham, A., Kundapura, S. (2022), Spatio-temporal Dynamics of Land Use Land Cover Changes and Future Prediction Using Geospatial Techniques. J Indian Soc Remote Sens (2022). <https://doi.org/10.1007/s12524-022-01588-7>

P. Palanikumar, N. Gnanasekaran, K. Subrahmanya, Vadivuchezhian Kaliveeran (2020)“ Effect of sliding speed and rise in temperature at the contact interface on coefficient of friction during full sliding of SS304 ”, Materials Today: Proceedings, Pages 1996 1999, ISSN 2214 7853, <https://doi.org/10.1016/j.matpr.2019.09.046>

P. Palanikumar, N. Gnanasekaran, K. Subrahmanya, Vadivuchezhian Kaliveeran (2020) “Identification of Effective location of Thermocouples from the Contact Interface” Materials Today: Proceedings, Pages 2811-2814, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2019.12.373>

Sahana T S, Vadivuchezhian Kaliveeran, and Subrahmanya Kundapura (2022) “Mechanical characterization of adhesive layer using Double strap joint specimens”, *Materials Today : Proceedings*. <https://doi.org/10.1016/j.matpr.2022.05.591>

Book Chapter:

Alka Abraham and Subrahmanya Kundapura (2022), Selection of Suitable General Circulation Model Outputs of Precipitation, for a Humid Tropical Basin, *Innovative Trends in Hydrological and Environmental Systems*, Lecture Notes in Civil Engineering 234, https://doi.org/10.1007/978-981-19-0304-5_30, The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd. 2022.

Conferences:

Alka Abraham and Subrahmanya Kundapura (2021), “Analysis of Rainfall trends and extreme precipitation indices in a humid tropical basin”, HYDRO 2020, 25th International Conference on Hydraulics, Water Resources and Coastal Engineering, National Institute of Technology Karnataka Rourkela, in association with Indian Society for Hydraulics (ISH), 26th to 28th March 2021.

Arya Sajeev and Subrahmanya Kundapura (2021), “Streamflow and Hydrological Trend Analysis and Forecasting”, HYDRO 2020, 25th International Conference on Hydraulics, Water Resources and Coastal Engineering, National Institute of Technology Karnataka Rourkela, in association with Indian Society for Hydraulics (ISH), 26th to 28th March 2021.

Parthasarathy and Subrahmanya Kundapura (2022), “Mapping of flood inundated urban regions using Sentinel 1 SAR imagery for the 2018 and 2019 Kerala floods”, 2nd International Conference on River Corridor Research and Management, held from 30th May 2021 to 1st June 2022, by IIT Guwahati and IIT Jammu.

Alka Abraham and Subrahmanya Kundapura (2022), “Identifying the potential impacts of climate change in streamflow in a tropical humid basin”, 2nd International Conference on River Corridor Research and Management, held from 30th May 2021 to 1st June 2022, by IIT Guwahati and IIT Jammu.

Sahana T S, Vadivuchezhian Kaliveeran, and Subrahmanya Kundapura (2022) “Mechanical characterization of adhesive layer using Double strap joint specimens”, International Conference on Advances In Materials Processing (ICAMP-2022), NIT Raipur, January 8- 9, 2022.

Awards:

BEST PAPER AWARD: Alka Abraham and Subrahmanya Kundapura (2021), “Analysis of Rainfall trends and extreme precipitation indices in a humid tropical basin”, HYDRO 2020, 25th International Conference on Hydraulics, Water Resources and Coastal Engineering, National Institute of Technology Karnataka Rourkela, in association with Indian Society for Hydraulics (ISH), 26th to 28th March 2021.

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R & D Projects:

Completed:

Management of Tidal Inlets, ICMAM, PD, 63.14 Lakhs.

Ongoing

Partial Slip Fretting Studies on Aluminium Alloys At Sub-Zero Temperatures, “Materials & Manufacturing” of the AR&DB, DRDO, 2019 – 2022, 18.19 Lakhs.

Consultancy Projects handled:

Number	Total amount
12	23 lakhs