

CURRICULUM VITAE

Dr. A. MAHESHA

Professor of Water Resources Engg.
Formerly, Associate Dean (PG & Research)

Contact

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Member- ASCE, AGU, NGWA, IAHS, IAHR, MIE, ISH, IAH, ISTE

Education

B.E. (Civil Engg) KREC Surathkal 1985

M.Tech. (Hydraulics & Water Resources Engg.) KREC Surathkal 1987

Ph.D. (Water Resources Engg) IIT Bombay 1993

Postdoctoral Research (Water Resources Engg) Technical University, Halifax, Canada
1995-1996

Awards / Distinction

Prof. Satish Dhawan State Award 2012- The Department of Science & Technology, Govt. of Karnataka had conferred Prof. Amai Mahesh with Prof. Satish Dhawan Young Engineer State Award 2012.



**Prof. Satish Dhawan Young Engineer State Award 2012
conferred to Dr.Amai Mahesh**

Professional experience

Lecturer	KREC Surathkal	1996
Senior Lecturer	KREC Surathkal	2000
Asst. Professor	NITK Surathkal	2003
Assoc. Professor	NITK Surathkal	2006
Professor	NITK Surathkal	2010

Administrative Responsibilities – Institute Level:

1. Associate Dean (PG & Research) – Aug. 2007 – Aug. 2010.
2. Professor in-charge of Guest House – May 2013 – June 2015
3. QIP Coordinator – Jan. 2008- Aug. 2010.
4. Member, Implementation Committee, DASA – 2010
5. Presiding Officer for JMET, GATE and JEE during 2008, 09 and 2010.
6. Member, Common Admission Committee for MTech Program for NITs
7. Academic Committee for Convocation during 2008, 2009 and 2010
8. Convener of Green Engineering during Engineer 2008, 09 and 10.
9. Faculty Adviser for Events during INCIDENT of 2008, 09 and 10.
10. Member, Anti-Ragging Committee during July – September of 2008, 09 and 10.
11. Counselor, IGNOU for Open Channel Flow and Hydraulic Structure for Civil Engg Students during 2008, 09 and 10.
12. Member, Institute Water Management Committee

Administrative Responsibilities – Department Level:

1. Departmental TEQIP Coordinator - 2004-09.
2. Departmental Academic Affairs Committee Member - 2004-2009.
3. Secretary, DPGC 2005-06.
4. Time-table In-charge 2001-2004.
5. Secretary DRPC 2006-07.
6. Chairman, DUGC- 2011-12.
7. Coordinator for NBA accreditation program of MTech (WREM) – 2016

Research Publications (615 reads; 133 citations as on July 10, 2016 as per Google Scholar)

International Journals

1. Lathashri UA and A.Mahesha (2015). Predictive simulation of seawater intrusion in a tropical, coastal aquifer. **J. Environ. Engg., ASCE D 4015001**
[http://dx.doi.org/10.1061/\(ASCE\)HE.1943-5584.0000789](http://dx.doi.org/10.1061/(ASCE)HE.1943-5584.0000789)
2. Mahesha, A. and Lakshmikant, (2014). Saltwater intrusion in coastal aquifers subjected to freshwater pumping, **J. Hydrologic Engg., (ASCE)**, 19(2), 448-456.
[http://dx.doi.org/10.1061/\(ASCE\)HE.1943-5584.0000789](http://dx.doi.org/10.1061/(ASCE)HE.1943-5584.0000789)
3. Mahesha, A., Vyshali, U.A. Lathasri and H. Ramesh (2012). Parameter estimation and vulnerability assessment of coastal unconfined aquifer to saltwater intrusion: A case study, **J. Hydrologic Engg., ASCE**, 17(8), 933-943.
[http://dx.doi.org/10.1061/\(ASCE\)HE.1943-5584.0000524](http://dx.doi.org/10.1061/(ASCE)HE.1943-5584.0000524) (Cited 9 times as per Google Scholar)

4. Shetkar R.V. and A.Mahesha 2011. Tropical, seasonal river basin development: Hydro-geological analysis, **J. Hydrologic Engg., ASCE**, 16(3), 280-291.
[http://dx.doi.org/10.1061/\(ASCE\)HE.1943-5584.0000328](http://dx.doi.org/10.1061/(ASCE)HE.1943-5584.0000328) (Cited 9 times as per Google Scholar)
5. Shetkar R.V. and A.Mahesha. 2011. Tropical, seasonal river basin development through a series of vented dams, **J. Hydrologic Engg., ASCE**, 16(3), 292-302.
[http://dx.doi.org/10.1061/\(ASCE\)HE.1943-5584.0000316](http://dx.doi.org/10.1061/(ASCE)HE.1943-5584.0000316) (Cited 2 times as per Google Scholar)
6. Mahesha, A. 2009. Conceptual model for the safe withdrawal of freshwater from coastal aquifers, **J. Env. Engg., ASCE**, 135(10), 980-988.
[http://dx.doi.org/10.1061/\(ASCE\)EE.1943-7870.0000081](http://dx.doi.org/10.1061/(ASCE)EE.1943-7870.0000081) (Cited 3 times as per Google Scholar)
7. Ramesh, H. and A.Mahesha, 2009. Conjunctive Use in India's Varada River Basin, **J. American Water Works Association**, 101:11,74-83.
<http://www.awwa.org/publications/journal-awwa/abstract/articleid/22201.aspx> (Cited 2 times as per Google Scholar)
8. Ramesh, H. and A.Mahesha, 2008. Simulation of Varada aquifer system for sustainable groundwater development, **J. Irrig. Drain., ASCE**, 134(3), 387-399.
[http://dx.doi.org/10.1061/\(ASCE\)0733-9437\(2008\)134:3\(387\)](http://dx.doi.org/10.1061/(ASCE)0733-9437(2008)134:3(387)) (Cited 6 times as per Google Scholar)
9. Mahesha, A. and Lakshmikant, 2006. Effect of subsurface barrier conductivity on saltwater intrusion in coastal aquifers, **Water and Energy International**, 63(2), 24-32.
<http://www.indianjournals.com/ijor.aspx?target=ijor:wei&volume=63&issue=2&article=003>
10. Mahesha, A. and M.G. Satish, 2004. Transient motion of seawater interface due to freshwater injection - seawater extraction wells combination, **Water and Energy International Journal**, 61(3), 43-50.
<http://www.indianjournals.com/ijor.aspx?target=ijor:wei&volume=61&issue=3&article=005>
11. Mahesha, A. 2001. Effect of strip recharge on sea water intrusion into coastal aquifers. **J. Hydrological Sciences**, 46(2), 199-210. <http://dx.doi.org/10.1080/02626660109492816> (Cited 4 times as per Google Scholar)
12. Mahesha, A. and M. Mohanbabu. 2001, Effect of subsurface barrier on salt water intrusion. **Water and Energy International**, 58(3), 20-24.
13. Mahesha, A. 1996. Steady state effect of fresh water injection on sea water intrusion, **J. Irrigation & Drainage, ASCE**, 122(3), 149-154.(Cited 24 times as per Google Scholar)
[http://dx.doi.org/10.1061/\(ASCE\)0733-9437\(1996\)122:3\(149\)](http://dx.doi.org/10.1061/(ASCE)0733-9437(1996)122:3(149))
14. Mahesha, A. 1996. Transient effect of battery of injection wells on sea water intrusion, **J. Hydraulic Engineering, ASCE**, 122(5), 266-271. (Cited 20 times as per Google Scholar)
[http://dx.doi.org/10.1061/\(ASCE\)0733-9429\(1996\)122:5\(266\)](http://dx.doi.org/10.1061/(ASCE)0733-9429(1996)122:5(266))
15. Mahesha, A. and S.H. Nagaraja, 1996, Effect of natural recharge on sea water intrusion in coastal aquifers, **J. Hydrology, Elsevier**, 174(3-4), 211-220.(Cited 38 times as per Google Scholar) [http://dx.doi.org/10.1016/0022-1694\(95\)02777-7](http://dx.doi.org/10.1016/0022-1694(95)02777-7)
16. Mahesha, A. 1996, Control of sea water intrusion through injection/extraction well system, **J. Irrigation & Drainage, ASCE**, 122(5), 314 - 317, 1996.(Cited 27 times as per Google Scholar) [http://dx.doi.org/10.1061/\(ASCE\)0733-9437\(1996\)122:5\(314\)](http://dx.doi.org/10.1061/(ASCE)0733-9437(1996)122:5(314))

17. Mahesha, A. 1995, Parametric studies on the advancing interface in coastal aquifers due to linear variation of fresh water level. **Water Resources Research**, American Geophysical Union, 31(10), 2437-2442
<http://onlinelibrary.wiley.com/doi/10.1029/95WR02040/full> (Cited 8 times as per Google Scholar)
18. Mahesha, A. and S.H. Nagaraja, 1995, Effect of surface source variation on sea water intrusion into aquifers, **J. Irrigation & Drainage, ASCE**, 121(1), 109-113.
[http://dx.doi.org/10.1061/\(ASCE\)0733-9437\(1995\)121:1\(109\)](http://dx.doi.org/10.1061/(ASCE)0733-9437(1995)121:1(109)) (Cited 8 times as per Google Scholar)
19. Shetkar R.V. and A.Mahesha, 2010. Effect of climate change on Netravathi river flow. *Int J. Earth Sci. & Engg.*, 3(4), 553-560.
20. Vyshali and A.Mahesha, 2011. Hydro-geomorphology of Shambhavi and Pavanje river Basins using remote sensing and GIS. *Int. J. Earth Sciences & Engineering*, 4(3), 54-62.
21. Honnanagoudar, S.S., D. Venkat Reddy and A.Mahesha. 2012. Terrain analysis and hydro Geochemical environment of aquifers of southern west coast of Karnataka, India. *Int. J. Earth Sciences & Engineering*, 5(6), 1619-1629.
22. Honnanagoudar, S.S., D. Venkat Reddy and A.Mahesha, 2013. Geomorphology and Hydrogeology of coastal tracts of the central west coast of India. *Int. J. Earth Sciences & Engineering*, 6(5), 964-971.
23. Honnanagoudar, S.S., DV Reddy and A.Mahesha, 2014. Analysis of vulnerability Assessment in the coastal Dakshina Kannada district, Mulky to Talapady area, Karnataka. *International J. Computational Engg. Research*, 4(5), 19-24.
http://www.ijceronline.com/papers/Vol4_issue05/version-2/D04502019024.pdf
24. Lathashri U.A. and A.Mahesha 2015. Groundwater sustainability assessment under climate change and overdraft scenarios in coastal aquifers. *J. Earth System Sciences*, DOI 10.1007/S 12040-016-0719-5.

National Journals

- 25 Vyshali, Moumita, P. and A.Mahesha, 2008. Simulation of saltwater intrusion in the Pavanje-Gurpur basins of Karnataka, **ISH J. Hydraulic Engg.**, 14(2), 49-60.
<http://www.tandfonline.com/doi/abs/10.1080/09715010.2008.10514904>
26. Shetkar, R.V. and A.Mahesha, 2008. Tropical river basin development – A case study in the selection of sites for vented dams. **ISH J. Hydraulic Engg.**, 14(3), 18-27.
<http://www.tandfonline.com/doi/abs/10.1080/09715010.2008.10514919>
27. Ramesh, H. and A. Mahesha, 2006. An overview of planning and management of rural water supply- A case study. **ISH J. Hydraulic Engg.**, 12(1), 61-72.
<http://www.tandfonline.com/doi/pdf/10.1080/09715010.2006.10514817>
28. Nageshwara Rao, K. and A.Mahesha, 2005. Seawater intrusion due to freshwater draft in coastal aquifers. **J. Hydrology Review**, 20, 15-27.

29. Mahesha, A. and M.G. Sathish., 2004. Effect of hydraulic conductivity on seawater-fresh water interface motion in coastal aquifers. **ISH J. Hydraulic Engg.**, 10(2),36-48.
<http://www.tandfonline.com/doi/abs/10.1080/09715010.2004.10514752>
30. Mahesha, A. and M. Mohan Babu, 2002. Effectiveness of subsurface barrier on saltwater intrusion, **ISH J. of Hydraulic Engg.**, 8(1), 60-67.
<http://www.tandfonline.com/doi/abs/10.1080/09715010.2002.10514707> (Cited 2 times as per Google Scholar)
31. Mahesha, A. 2001. An overview of control of saltwater intrusion in coastal aquifers. **ISH J. of Hydraulic Engg.**, 7(1), 58 – 71.
<http://www.tandfonline.com/doi/abs/10.1080/09715010.2001.10514690>
32. Mahesha, A. and K.B. Abdul Khader, 1993, Irrigation season for arecanut palms, **Indian J. Meteorology, Hydrology and Geophysics (Mausam)**, 44(2),106-107.
33. Mahesha, A. and N. Lakshman, 1993, Influence of weather variables on coconut yield, **Indian J. Meteorology, Hydrology and Geophysics (Mausam)**, 44(1), 102-104.
34. Mahesha, A. and K.B. Khader, 1992, Effect of weather variables on arecanut palms, **Indian J. Meteorology, Hydrology and Geophysics (Mausam)**, 43(2), 211-212.
35. Mahesha, A. K.B. Abdul Khader, G. Ranganna, 1992, Consumptive use and irrigation requirement of coconut in coastal sandy soils, **Indian J. Agric Scs.**, 62(1), 13-15.
36. Mahesha, A. K.B. Abdul Khader and G. Ranganna. 1990, Consumptive use and irrigation requirement of arecanut palm, **Indian J. Agric Scs.**, 60(9), 609-611.
37. Lathashri, U.A. and A.Mahesha, 2008. Assessment of aquifer vulnerability to saltwater intrusion in the D.K. district, Karnataka, **J. Applied Hydrology**, XXI (1&2), 113-123.
38. Jugul P. S., Vyshali and A.Mahesha, 2009. Characterization of a coastal aquifer – A case study. **ISH J. Hydraulic Engg.**, 15(2), 33-49.
<http://www.tandfonline.com/doi/abs/10.1080/09715010.2009.10514939>
39. Archana, J. and A.Mahesha, 2012. Harvesting of seasonal, tidal rivers- A case study. **ISH J. Hydraul. Eng.**, 12(1), 37-44
<http://www.tandfonline.com/doi/full/10.1080/09715010.2012.662426>

Conferences

40. A. Mahesha and S.H. Nagaraja, 1993, Studies on advancing interface in coastal aquifers, Proc. 12th Sea Water intrusion Meeting, Barcelona, Curso International de Hydrologia Subterranea, pp.333-341.
41. A. Mahesha and S.H. Nagaraja, 1993, Control of seawater intrusion through battery of injection wells, Int. Conf. Hydrology and Water Resources, New Delhi, National Institute of Hydrology, Roorkee.
42. A. Mahesha and M.G. Satish, 2001. Performance of battery of injection wells in coastal aquifers. International Conference on Civil Engineering, IISc, Bangalore, July 23 – 25.
43. M.K. Nagaraj, A. Mahesha, K. Subrahmanya and K.M. Shivananda, 2000. Sea Water Intrusion in Gurupur River – A Case Study. Proc. of International Conference on "Innovative Technologies for Rural Water Supply and Environmental Sanitation" RUWATSS-2000 Vol. I, University of Roorkee, Roorkee, 159-172.
44. B.M. Doddamani, A. Mahesha and M.K. Nagaraj, 2003. Ground water quality monitoring in aquifer management: A case study. Proc. 2nd International Conference on Water Quality Management, CBIP held at New Delhi,. I –77 to I- 83.
45. Ramesh, H. and A.Mahesha, 2004. Watershed planning and management- an integrated approach, Proceedings of LAKE 2004, Int. Conf. on Conservation, Restoration and Management of Lakes and Coastal Wetlands, 9-13 December, 2004.
46. H. Ramesh and A.Mahesha, 2006. Steady groundwater flow modeling of Varada aquifer systems using finite element method, Proc. Int. Specialty Conf. Env. & Water Resour., EWRI of ASCE, New Delhi, pp.125.
47. M.K. Nagaraj, A. Mahesha and B.M. Doddamani, 2002. Spatial variability of aquifer parameters in a regional ground water system. Proceedings of National Conference on Hydraulics, Water Resources and Ocean Engineering (HYDRO 2002) held at IIT, Bombay, 151-153.
48. B.M. Dodamani, M.K. Nagaraj and A. Mahesha, 2003. Aquifer zonation based on electric resistivity test. Proc. National Conference on Hydraulics and Water Resources, HYDRO 2003, ISH Pune and CWPRS, Pune, pp 152-154.
49. Mahesha A., and H.Ramesh, 2004. The role of participatory rural appraisal in water supply and sanitation project, Proc. Of National Symposium on Natural Resoruces Management for Sustainable Development, December 3-4, UVCE, Bangalore, 108-113.
50. H.Ramesh, MRY Putty and A.Mahesha, 2005. Computation of aquifer parameters using step drawdown pumping test. National Conf. on Hydraulics, Water Resources, Coastal & Environmental Engg (HYDRO 2005), SIT Tumkur, India, 171-179.
51. Shetkar R.V. and A.Mahesha (2006). Vented dam: An effective water harvesting structure across the river Netravathi, Karnataka, Proc. Int. Symp. Desalination and Water Purification : Water Resources and their Management, MNIT Jaipur & Indian Desalinization Association, p.99.
52. Vyshali , Moumita Palchaudhury and A.Mahesha, 2007. Simulation of saltwater intrusion in the coastal aquifer of Karnataka, Proc. Indian National Conference on Harbour and Ocean Engineering, INCHOE, Dept. of Applied Mechanics & Hydraulics, NITK, Surathkal and NMPT Panambur, Vol I, 34-41.

53. Lathashri.U.A and A. Mahesha, 2007. Assessment of aquifer vulnerability to saltwater in coastal Karnataka, Proc. Indian National Conference on Harbour and Ocean Engineering, INCHOE, Dept. of Applied Mechanics & Hydraulics, NITK, Surathkal and NMPT Panambur, Vol I, 9-17.
54. Shetkar Rajeev V.and A. Mahesha, 2007. Hydrological analysis of the Netravathi river flow for sustainable development, Proc. Indian National Conference on Harbour and Ocean Engineering, INCHOE, Dept. of Applied Mechanics & Hydraulics, NITK, Surathkal and NMPT Panambur, Vol II, 667-673.
55. Shetkar, R.V. and A.Mahesha, 2007. Tropical river basin development – A case study. Proc. Nat. Conf. Hydraul. Water Resour., HYDRO 2007, 32-38.
56. Shetkar Rajeev V. and A.Mahesha, 2008.Assessment of aquifer vulnerability to seawater intrusion through the tidal river of tropical region. Proc. International Conference on Water Science and Technology, International Water Association, KCT Coimbatore and INRA, France, p.77.
57. Vyshali, U.A. Lathashri, P.C. Moumita and A.Mahesha, 2008. Studies on the vulnerability assessment of a coastal aquifer. Proc. International Groundwater Conference on Groundwater Dynamics and Global Change, March 19-22, 2008, University of Rajasthan, Jaipur, 143-144.
58. Vyshali, Moumitha P.C. and A.Mahesha, 2008. Saltwater intrusion assessment in the coastal D.K. district, Karnataka, Proc. National Conference on Advances in Civil Engg., ACE, Anjuman Engg. College, Bhatkal, 116-119.
59. Shetkar, R.V. and A.Mahesha, 2010. River water harvesting through vented dams. Paper presented at the National Conference on Sustainable Water Resources Management (SWARM-2010) held at NITK Surathkal during Jan. 7-8, 2010.
60. Ramesh, H. and A.Mahesha, 2010. Estimation of evapo-transpiration and crop water requirement in semi-humid region. Paper presented at the National Conference on Sustainable Water Resources Management (SWARM-2010) held at NITK Surathkal during Jan. 7-8, 2010.
61. Vyshali and A.Mahesha, 2010. Saltwater intrusion into tropical, coastal basins – A case study. Paper presented at the National Conference on Sustainable Water Resources Management (SWARM-2010) held at NITK Surathkal during Jan. 7-8, 2010.
62. Mahesha, A., Vyshali, Lathashri, U.A. and Moumitha P. 2010. Studies on saltwater intrusion in Gurpur-Pavanje river basin, Karnataka. Proc. Nat. Seminar on Rainwater Harvesting and Artificial Recharge to Groundwater with special reference to Coastal Areas, Central Groundwater Board, Bangalore and Mangalore University, 53-60.
63. Vyshali and A.Mahesha, 2010. Tropical, coastal aquifer management – A case study. Proc. Int. Conf. Hydro-Science & Engg., held at IIT Madras during Aug. 2-5, 2010, IIT Madras, IAHR and ICHE.
64. Mythri, D.J. and A.Mahesha, 2011. Climate change impact on river hydrological processes- A case study. Proc. Int. Geography Congress on Sustainable Natural Resources Management under Chaning Climatic Scenarios, Centre for Water Resources Development and Management, Kozhikode, Kerala, 129-132.
65. Ramesh, H. and A.Mahesha, 2011. Groundwater modeling to simulate groundwater levels due to interlinking of rivers in Varada river basin, India, Proc.4th Int. Conf. Modeling, Simulation and Applied Optimization (ICMSAO), IEEE,ISBN 978-1-4577-0005-7/11.
66. Honnanagoudar, S.S., DV Reddy and A.Mahesha, 2012. Hydrogeological studies along the coastal tracts of Dakshina Kannada district, Karnataka. Nat. Conf. Advances in Earth Sciences, Structural, Geotechnical and Earthquake Engg. (AESG2E-2012),Hyderabad, 4-5 Oct., 2012, 1-9.

67. Honnanagoudar, SS., DV Reddy and A.Mahesha, 2013. Aquifer characterization and water quality investigations of tropical aquifer of west coast of India. Third Int. Engg. Symposium (IES2013), 4-6 March, 2013, Japan.
68. Honnanagoudar, SS., DV Reddy and A.Mahesha, 2013. Terrain analysis of pumping test and vertical electrical resistivity test of the southern west coast of Karnataka, India, Int. Conf., 23-24 May, 2013, Chennai.
69. Vyshali and A. Mahesha, 2013. An Integrated Approach For The Assessment Of Saltwater Intrusion Into Coastal Aquifers- A Case Study from Karnataka, India, presented at Int. Conf. Integrated Water, Wastewater and Isotope Hydrology held during 25-27 July 2013, at Bangalore University, Bangalore. 125-127.
70. Lathashri.U.A and A. Mahesha, 2014. Solute transport modelling of saltwater intrusion in coastal aquifers. Proc. International conference on Emerging trends in Engineering, Department of Civil Engineering, NMAM Institute of Technology, NITTE, Udupi District, Karnataka. ISBN: 978-93-83083-80-0.
71. Lathashri U.A. and A.Mahesha, 2014. Solute transport modeling in tropical, coastal aquifer - A semi-conceptual approach. Proc.4th Int. Conf. Hydrology and Watershed Management. Eds: K. Ramamohan Reddy and B. Venkateswara Rao, Centre for Water Resources, Institute of Science and Technology, J.N.T.U., Hyderabad, India
72. Priyanka BN and A.Mahesha (2015). Parametric studies on saltwater intrusion into coastal aquifers for anticipated sea level rise. Elsevier Aquatic Procedia 4, 103-108.
73. Lathashri UA and A.Mahesha (2015). Simulation of saltwater intrusion in a coastal aquifer in Karnataka, India. Elsevier Aquatic Procedia 4, 700-705.
74. Amogh Mudbhatkal, B. Venkatesh, RV Raikar and A.Mahesha (2015). Climate change impact on small scale western ghat catchment, India. Int. Conf. Hydraulics, Water Resources and River Engineering, (HYDRO 2015), IIT Roorkee, 76.
75. Archana K. and A.Mahesha (2015). Studies on climate change impact on west flowing rivers of Karnataka, India. Int. Conf. Hydraulics, Water Resources and River Engineering, (HYDRO 2015), IIT Roorkee, 99.
76. Vineeth, V., P. Ramachandran and A.Mahesha (2016). Impact of water pricing on equity in water supply of Bengaluru city. International Water Loss Conference, held at Bengaluru during Feb. 1-3, 2016, International Water Association.
77. Priyanka B.N., M.S. Mohankumar and A.Mahesha (2016). Large Scale Modeling of Seawater Intrusion: A Case Study. International Conference on Lowland Technology held at Mangaluru during September 15-17, 2016, International Association of Lowland Technology, Japan and NITK Surathkal

Other Publications

- 78 S.G. Mayya, N.Lakshman, M.K. Nagaraj, A. Mahesha, 2001. Prefeasibility report for the vented dam across Gurupur River. D.K.Zilla Panchayath, Mangalore, 28 pp.
79. S.G. Mayya, N.Lakshman, M.K. Nagaraj, A. Mahesha, 2002. Rural water supply scheme under Rajiv Gandhi Drinking Water Mission for eleven villages of Mangalore Taluk, Conceptual Design Report, 178 pp.
80. S.G. Mayya, N.Lakshman, M.K. Nagaraj, A. Mahesha, Mr. Manu, 2003. Rural water supply scheme under Rajiv Gandhi Drinking Water Mission for Eleven Villages of Mangalore Taluk, Final Design Report, 264 pp.

81. Ramesh, H. and A.Mahesha, 2006. Conjunctive use of groundwater and surface water- An overview, NITK Research Bulletin, 14(2), 1-6.
82. H. Ramesh and A.Mahesha, 2011. Book chapter on ‘Sustainable Water Resources Management.In: Sustainable Development by C. Ghenai (Ed), INTECH Publishers, Croatia, 171-208.

Technical Papers Reviewed for:

1. ASCE J. Hydrologic Engg.
2. ASCE J. Irrigation & Drainage
3. Water Resources Management
4. Hydrological Sciences Journal
5. International J. Lowland Technology
6. Arabian J. Hydro-geology
7. Journal of Food and Agriculture
8. Sadhana
9. Current Science
10. ISH Journal of Hydraulic Engineering
11. Hydrology Review
12. International Journal of Earth Sciences and Engineering

Research Interest:

Climate change effect on water resources, Saltwater Intrusion Modeling, Conjunctive Use Modeling of surface water and groundwater, Hydrogeology of wetland system

Sponsored Research Projects:

Sponsoring Agency	Title of the Project	Amount (Rs.)	Period	Co-investigators
New Mangalore Port Trust, Mangalore, India.	Ground water assessment and management	6.5 Lakhs	Jan. 2000- Jan 2003 Completed	Dr. M.K. Nagaraj, Dr. A. Mahesha
Indian National Committee on Hydrology, Ministry of Water Resources, New Delhi, India	Studies on salt water intrusion in coastal D.K. district	14.5 Lakhs	3 years (Nov. 2004- Mar.08), Completed	Dr. A. Mahesha
Department of Science and Technology, New Delhi	Status report on the efficacy of vented dams across the river Netravathi of DK district, Karnataka	40,000/-	October, 2007 – February, 2008 Completed	Dr. A Mahesha

Research Supervision

Sl No	Name of the Scholar	Title of the Thesis	Doctoral Level	Year of award	Co-guide
1.	Mr. H. Ramesh	Integrated water resources management for sustainable development	Ph.D	2008	---

2.	Mr. B.M. Dodamani	Ground water assessment and management for a coastal aquifer system	Ph.D.	2008	M.K. Nagaraj
3.	Mr. Rajeev Shetkar	Studies on efficacy of vented dams across the rivers of DK district	Ph.D.	2009	--
4	Ms. Vyshali	Studies on saltwater intrusion in coastal D.K. District.	Ph.D.	2009	--
5.	Mr. K. Subrahmanya	Hydro-geological studies on coastal wetland – A case study	Ph.D.	2010 (On-going)	--
6.	Mr. S.S.Honnanagoudar	Hydro-geological investigation of coastal D.K. district using GALDIT method.	Ph.D.	2014 (Thesis submitted)	Prof. D.V. Reddy
6.	Chandregowda C.	Stream flow modelling technique for ungauged catchments and operation policy for vented dams in series	Ph.D.	2015	S.G. Mayya
7.	Lathashri U.A.	Predictive Simulation of Flow and Solute Transport for Managing the Coastal Aquifer of Dakshina Kannada District, Karnataka, India	Ph.D.	2016	-
8.	K. Subrahmanya	Hydro-geological studies on coastal wetland – A case study	Ph.D.	2010 (On-going)	-
9.	Amogh M.	Impact of climate change on rivers originating in the western ghats, India	PhD	2015 (On going)	--
10.	Shilpa R.	Sustainability and vulnerability issues of groundwater and surface water resources in Bellary Nala catchment of Belgaum taluk	Ph.D.	2015 (Ongoing)	--
11.	Surajit Deb Berma	Modeling of groundwater and surface water interaction for large basins.	Ph.D.	2015 (Ongoing)	--
12.	Chythanya Krishnan	Development of Groundwater Flow Models and Preparation of Aquifer Management Plans for west coast basins	Ph.D.	2015 (Ongoing)	--

M.Tech. Guidance

Sl No	Name of the Student	Title of the Thesis	Master's Level	Year	Co-guide
1.	Mr. Shivanand K	Studies on water quality around MRPL area	M.Tech.	1998	M.K.Nagaraj
2.	Mr. Mohan Babu	Effect of spatial variability of hydraulic conductivity on salt water intrusion	M.Tech.	1999	---
3.	Mr. P.V. Sathyanarayana	Effect of subsurface barrier on salt water intrusion	M.Tech.	2000	---
4.	Mr. G. Nagasekhar Reddy	Subsurface barrier analysis for the control of saltwater intrusion	M.Tech.	2001	---
5.	Mr. Rahim Khan P.	Effect of subsurface barrier for the control of salt water intrusion under multiple drawdown conditions	M.Tech.	2002	---
6.	Mr. Lakshmikanth	Performance of the subsurface barrier under multiple fresh water pumping scenarios against salt water intrusion in coastal aquifers	M.Tech.	2003	---
7.	Mr.Nageshwara Rao	Draft operation policy for coastal aquifers	M.Tech.	2004	---
8.	Ms. Moumita P.C.	Saltwater intrusion modeling using SUTRA	M.Tech.	2005	--
9.	Ms. Lathasri	Assessment of Vulnerability of Coastal Aquifer to Saltwater Intrusion	M.Tech.	2007	--
10.	Mr. Jugul P. Saldanha	Characterization of coastal aquifer system – A case study	M.Tech.	2009	--
11.	Ms. Archana	Hydrological analysis of Pavanje river	M.Tech.	2010	--
12.	Ms. Mythri	Effect of climate change on Netravathi river flow	M.Tech.	2010	--
13.	Santhosh, K.C.	Groundwater flow and transport modeling of Pavanje basin using GMS	M.Tech.	2011	--
14.	Arjun Rao	Urban flood modeling using LiDAR data	M.Tech.	2011	--
15.	Sumanth Shetty	Studies on instream water storage of Pavanje river in marine environment	M.Tech.	2011	--
16.	Ms. Archana Kumar	Climate change impact on west flowing rivers of Karnataka	M.Tech.	2012	--
17.	Ms. Seethalraj	Deficit irrigation management for some major tropical crops	M.Tech.	2012	--
18.	Mr. Shashidhar	Watershed characterization of sub-basin of Gurpur river	M.Tech.	2012	--

19.	Ms. Priyanka B.N.	Parametric studies on saltwater intrusion into coastal aquifers using SEAWAT	M.Tech	2013	--
20.	Ms.Usha A..	Characterization of large diameter wells in shallow, coastal unconfined aquifers	M.Tech	2013	--
21	Ms. Vijayalaxmi	Cash flow projection refinement using risk analysis	M.Tech	2013	--
22.	Mr. Vysakh A.	Risk management of construction companies in the context of recession	M.Tech	2013	--
23.	Mr. M. Shafeer K.T.	Construction delay analysis	M.Tech	2013	--
24.	Mr. Pankaj Dhote	Modeling of river-aquifer interactions : A case study	M.Tech.	2014	--
25.	Ms. Neenu K.	Studies on the effect of freshwater draft on saltwater intrusion in coastal aquifers	M.Tech.	2014	--
26.	Ms. K. Indu Sowmya	Simulation of shallow water waves along west coast of Karnataka using SWAN wave model	M.Tech.	2014	--
27.	Jibin Joseph	River basin scale hydrological modelling and climate change impact assessment using SWAT	M.Tech.	2015	--
28.	Hima Bindu B.	Design of proposed rural water supply scheme from Gurpur river	M.Tech.	2015	-
29.	Vineeth V.	Evaluation of domestic water tariff	M.Tech.	2015	--
30.	Shivali Dubey	A global view of variations in aerosol optical properties using OMI data sets (2005-2014)	M.Tech.	2016	--
31.	Vijay Suryawanshi	Assessment of soil erosion and groundwater potential of Pavanje river basin	M.Tech.	2016	--
32.	Haritha M.	Trend analysis of rainfall and evaluation of standardized precipitation index for Karnataka	M.Tech.	2016	--
33.	Anjali V.	Trend analysis of climatic variables and extreme indices for Kerala	M.Tech.	2016	--

Undergraduate Project

Sl No	Name of the Student	Title of the Thesis	Bachelor's Level	Year	Co-guide
1.	Ms. Vinitha C	Effect of fresh water pumping in salt water intruded areas	B.Tech.	2003	---
2.	Niranjan A.	Hydraulic transient analysis and surge protection system for domestic water supply	B.Tech.	2014	SG Mayya

Courses Organized/ Coordinated

1. **A. Mahesha: Refresher Course on Hydrology** for Engineers for PWD Engineers held at KREC, Surathkal during Aug. 19 – 23, 1997.
2. **Prof. N.B.S. Rao, Dr. M.C. Narasimhan and A. Mahesha : Finite Element Course** for KPCL Engineers held at SJCE, Mysore during 15-20 November, 1999.
3. **Dr. N. Lakshman and A. Mahesha :ISTE Winter School on Water Resources Assessment and Management** held at KREC, Surathkal during 8-20 January, 2001.
4. **A.Mahesha:** Refresher course on ‘**Irrigation Water Management**’ for PWD and Irrigation Engineers of Karnataka held at NITK, Surathkal during Aug.6-10, 2007.
5. **A.Mahesha** (Joint Secretary): **National Conference** on Sustainable Water Resources Management (SWaRM- 2010) held at NITK Surathkal during Jan. 7-8, 2010.
6. **A.Mahesha** (Coordinator): **Deans’ (Academic) Meet** of NITs held at NITK Surathkal during April 3-4, 2010.
7. **A.Mahesha** (Joint Secretary) to The National Workshop on “Conservation of West Flowing Rivers in Coastal Karnataka” held at NITK Surathkal during Dec. 14-15, 2012.

Courses taught:

Advanced Fluid Mechanics, Advanced Irrigation & Drainage, Applied Hydromechanics, Finite Element Application to Flow Problems, Groundwater Engineering, Hydrology and Water Power Engineering, Computational Hydrology, Infrastructural Project Management, Irrigation Technology & Water Management, Irrigation Design & Drawing, Mechanics of Solids, Strength of Materials, Sustainable Water Management, Water Conveyance Systems & Hydraulic Machines

Services/Consultancy Works

Sponsoring Agency	Title of the Project	Period	Investigators
Mangalore Refinery & Petrochemicals Ltd.,	Design of Storm Water Drainage	1997-98	Dr. K. Ramamurthy, Dr. N. Lakshman Dr. A.Mahesha
Mangalore Refinery & Petrochemicals Ltd.,	Investigations on water logging and source of pollution around MRPL	Jan. - May 2000	Dr. S.G. Mayya, Dr. N. Lakshman Dr. A.Mahesha

Mangalore Refinery & Petrochemicals Ltd.,	Design of Oil catcher	Jan-Mar., 99	Dr. S.G. Mayya, Dr. A.Mahesha Dr. M.K. Nagaraj
D.K. Zilla Panchayath	Design of Vented Dam at Maravoor for rural water supply project for 11 villages of Mangalore Taluk from Gurupur River under Rajiv Gandhi Drinking Water Mission	Nov. 02 – till date - Ongoing	Dr. S.G. Mayya, Dr. M.K. Nagaraj, Dr. Subba Rao, Dr. A.Mahesha, Dr. N. Lakshman
New Pai Sales Corporation, Mangalore	Design of effluent treatment plant	Nov. 03	Dr. A.Mahesha Dr. S.G. Mayya
Resident Engineer, NITK, Surathkal	Yield Test for open and bore wells in the campus	May, 05	Dr. A.Mahesha Dr. MK Nagaraj
Mangalore Refineries and Petro Chemicals Ltd.	Design of water storage tanks at the ground level	Sept., 05	Dr. SG Mayya, Dr. Subba Rao Dr. A.Mahesha Dr. MK Nagaraj,
NMPT, Mangalore	Yield test of a new open well	May, 06	Dr. A.Mahesha Dr. K.Varija
Pavoor Gram Panchayat	Depth and yield of well along the bank of river Netravathi	April, 07	Dr. A.Mahesha
MRPL, Mangalore	Consultancy on the adequacy study of existing raw water system	Sept., 07	Prof. Lakshman, Dr. A.Mahesha and K. Subrahmanya
Biome Env. Soln. Pvt. Ltd., Bangalore	Hydrogeology of Kudur Farm, Kundapur	July, 08	Prof. N.Lakshman, Dr. A.Mahesha
MSEZ Ltd.	Cost estimation of AMR dam	Mar-May, '09	Prof. SG Mayya, Dr. A.Mahesha & K. Subrahmanya
MSEZ Ltd	Adequacy of drainage in MSEZ area	April-June, '09	Prof. SG Mayya & A.Mahesha
MSEZ Ltd	Storm water drainage study in MRPL, MSEX Corridor and OMPL areas	April-June, '10	Prof. SG Mayya & A.Mahesha
MSEZ Ltd	Comprehensive drainage of underground streams	Feb – April, '12	Prof. SG Mayya & A.Mahesha
MSEZ Ltd	Temporary drainage system for graded plots	Feb.- May, '12	Prof.SG Mayya & A.Mahesha
Superintending Engineer, ISRMC Circle, Eluru, AP	Surge analysis for lift 1,2 and 3 of Chintalputti irrigation scheme	March - June 2013	Prof. SG Mayya and A.Mahesha

Invited Talk

1. Salt-water intrusion and its prevention at the workshop on Ground water Development on Jan. 17, 1998 held at M.I.T., Manipal.
2. Ground water Flow Modelling using Finite Elements - at the Course on Finite Element Method on April 24, 1998 at KREC, Surathkal.
3. Well design and maintenance - at the refresher course on Hydrology for PWD Engineers held at KREC, Surathkal during 9-13 Nov., 1998.
4. Hydrographs - at the Refresher course on Hydrology for PWD Engineers held at KREC, Surathkal during 9-13 November, 1998.
5. Weighted Residual Methods - at the Finite Element Course for KPCL Engineers held at SJCE, Mysore during 15-20 November, 1999.
6. Seepage Analysis Under Gravity Dams Using Finite Element Method - at the Finite Element Course for KPCL Engineers held at SJCE, Mysore during 15-20 November, 1999.
7. Ground water Management in Coastal Areas - Methods to Combat Salt Water Intrusion - at the AICTE/ISTE Winter school on Role of Geology and Geotechnology in Country Planning and development held at KREC, Surathkal during Dec. 27, 1999-Jan. 8, 2000.
8. Delivered guest lectures for faculty training course on Groundwater Assessment Techniques held at CWRDM, Calicut during October 3 – 20, 2001 on
 - i) Numerical techniques in Groundwater modeling.
 - ii) Mathematical modeling of saline water intrusion.
9. Salt water intrusion problems-data collection, simulation and validation of numerical model. Work shop on Latest Trends in Ground Water Assessment and Management held at NITK, Surathkal during 18-20 June, 2002.
10. Galerkin finite element method- AICTE/ISTE Winter school on Finite Element application to Engineering Problems, during Dec. 6- 18, 2004 at NITK,Surathkal.
11. Finite element application to groundwater modeling- AICTE/ISTE Winter school on Finite Element application to Engineering Problems, during Dec. 6- 18, 2004 at NITK,Surathkal
12. Urban drainage system- AICTE/ISTE Winter school on Design and Management of Urban Core Infrastructure in India during Dec. 20-31, 2004 at NITK, Surathkal.
13. Saltwater-freshwater interfaces in coastal aquifers- UGC/SERC School on Modeling Groundwater Pollution during 2-29 May, 2005 at UVCE Bangalore.
14. Control of seawater intrusion in coastal aquifers -- UGC/SERC School on Modeling Groundwater Pollution during 2-29 May, 2005 at UVCE Bangalore.
15. Coastal aquifers management- Refresher Course for PWD Engineers at NITK Surathkal during 18-21 December, 2006
16. Microirrigation system – Refresher Course for PWD and Irrigation Engineers of Karnataka at NITK Surathkal during Aug. 6-10, 2007.
17. Coastal aquifer management – AICTE/ISTE Summer school on ‘Water Resources Development and Management’ held at NITK Surathkal during July 28- Aug. 8, 2008.
18. Canal recharge – Refresher course for PWD Engineers held at NITK during October, 2008.
19. Galerkin finite element method – Short term course on Application of Finite Element Method in Civil Engineering, May 30- June 3, 2011, NMAMIT Nitte.
20. Application of Galerkin finite element method – Short term course on Application of Finite Element Method in Civil Engineering, May 30-June 3, 2011, NMAMIT Nitte.
