CURRICULUM VITAE

Dr. H. RAMESH, M.Tech., PhD.

Assistant Professor,

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EDUCATIONAL QUALIFICATION

A: ACADEMIC

Course studied	Institution	Year of
		passing
Ph.D.	National Institute of Technology Karnataka, Surathkal,	March 2008
(Water Resources	India	
Engineering)		
M.Tech (Hydraulics)	The National Institute of Engineering, Mysore, India	Nov. 2002
B.E (Civil)	Sir M. Viswesvaraya Institute of Technology, Bangalore,	Aug. 1999
	India	
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: KNOWLEDGE OF SOFTWARE

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

Experience:

- As Assistant Professor, NITK from 22nd April 2009.
- Visiting Assistant Professor, Water Engineering and Management, Asian Institute of Technology, Bangkok, Thailand, from January 2013 to April 2013.
- As Assistant Professor, Nagarjuna College of Engineering & Technology, Bengaluru from 6th August 2007- 21st April 2009
- As research associate, CISED/ATREE, Bengaluru from 15th Feb. 2007 17th July 2007.
- As research scholar, NITK from 16th August 2003 14th Feb. 2007
- As an Engineer, DHV Consultants Pvt Ltd. New Delhi from 10th March 2003 to 31st August 2003.
- As trainee engineer, Enercon (India) Ltd, Daman (UT), from 10th Jan. 2000 to 31st August 2000.

The courses I teach are in line with my research interests - Surface Water hydrology, Groundwater hydrology, Fluid Mechanics & hydraulic machines, Introduction to GIS, Advanced GIS, Introduction to Remote sensing and Photogrammetry, Engineering Mechanics (Statics).

Research Interest:

- Water resources engineering,
- Hydrological (surface water and groundwater) modeling,
- Application of remote sensing and GIS,

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.

Paper publication:

Refereed journals

- 1. 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. Ocean Engineering, Elsevier (In press).
- 2. Santosh Babar and H. Ramesh, 2014. Analysis of monsoon onset trend and extreme rainfall events over Nethravathi river basin. ISH Journal of Hydraulic Engineering, PP-1-10. (Taylor and Francis).
- 3. 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.
- 4. 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.
- 5. VijayKumar 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.
- 6. VijayKumar 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.
- 7. **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).
- 8. **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
- 9. **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.
- 10. **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)
- 11. **Ramesh. H** and Mahesha A. 2005. Conjunctive use of surface water and groundwater an over view. NITK research bulletin, vol.14, No. 2, pp 1-6.

Conferences: National:

- 1. 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.
- 2. 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.
- 3. **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.
- 4. **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.
- 5. **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.

6. **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.

International:

- 1. 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.
- 2. 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.
- 3. 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.
- 4. **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
- 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.
- 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, 19th -21st April 2011, Kuala Lumpur, Malaysia.
- Ramesh H and Mahesha. A. 2006. Steady groundwater flow modeling of Varada basin, Karnataka. Proc. Intl. Conference of EWRI of ASCE, December 2006, New Delhi (CD-ROM).
- 8. **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.
- 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:

- 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.
- 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

Short term courses/Seminar attended:

Sl. No.	Nature of Programme	Period	Institution /Place	Remarks
1	Workshop on International Water Law. (To be held during June 2014)	9-19, June 2014	University of Dundee, UK	Two weeks
2	Two day training on Surge Analysis Programme (SAP)	6-8 th Oct. 2013	IISc, Bengaluru	Two days
3	AICTE-MHRD, Fuzzy logic, genetic algorithm with wavelet transformation in civil engineering	27 th June - 1 st , July 2011	NITK, Surathkal	One week
4	DAAD sponsored "Eco-hydrological modeling in rural watersheds"	14 th -30 th Sept 2010	Kiel University, Germany	Two weeks
5	DST sponsored training for faculty development programme on entrepreneurship	19 th -30 th July 2010	STEP-NITK, Surathkal	Two Weeks
6	AICTE-MHRD sponsored Short term course on Soft computing techniques in Water Resources Engineering	5 th – 9 th July 2010	NITK- Surathkal	One week
7	WIPRO sponsored training programme on High Impact teaching Skills- A Dale Carnegie training	17-22, May 2010	NITK- Surathkal	One Week
8	AICTE-MHRD sponsored Short term course on Applied numerical methods for Scientists and Engineers	21-25, Dec. 2009	VNIT, Nagpur	One Week
9	TISS and GWA Sponsored, South Asian training programme on Gender, Water and Equity	20-24, October 2008	Goa	One week
10	AICTE-MHRD sponsored Short term course on Integrated Water Resources and Management	28 th July – 08 th Aug, 2008	NITK- Surathkal	Two weeks
11	5 th 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
12	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
13	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
14	"Winter school in essentials in 'GIS and Limnology'	21 st -30 th Dec 2001.	IISc, Bangalore	Two weeks

Memberships:

- 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 Hydrology and Environment (IAHR).
- 5. Member in good standing of Environmental & Water Resources Institute of The ASCE, USA. Grade-Student.
- 6. Life Member of India Water Partnership-Global Water Partnership

Award : National Doctoral Fellowship (NDF) by AICTE, Govt. of INDIA

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

Research Projects:

1. Study of impact of land use and land cover change on stream flows of Western ghat (Forest), India. Funded by NITK, INR 500,000.00 (Ongoing)

Projects Guided:

Sl. No.	Project Title	UG/PG Course	Status
1.	Design of rainwater harvesting technique for NCET campus,	BE.(Civil	Completed
	Bangalore	Engg), 2008	
2.	Planning and design of rainwater harvesting technique for	BE. (Civil	Completed
	proposed buildings.	Engg), 2009	
3.	Estimation of evapotranspiration and water productivity	M.Tech. (2009)	Completed
	using remote sensing data		
4.	Development of Tourism Information System for Karnataka	M.Tech. (2010)	Completed
	State using GIS, India.		
5.	Mapping the potential hydropower sites in Sitha river basin	M.Tech (2010)	Completed
	using remote sensing and GIS		
6.	Simulation of hydraulic parameters in water supply network	M.Tech (2010)	Completed
	using GIS and EPANET		
7.	Potential hydropower estimation in Nethravathi River basin	M.Tech. (2011)	Completed
8.	Assessment of soil erosion in Nethravathi river basin using	M.Tech. (2011)	Completed
	GIS and remote sensing		
9	Dynamic change analysis of Sunderban estuary using	M.Tech. (2011)	Completed
	Remote sensing and GIS		
10	Groundwater potential mapping using remote sensing and	M.Tech (2013)	Completed
	GIS		
11	Groundwater quality analysis and mapping of Dakshina	M.Tech (2013)	Completed
	Kannada district adopting RS and GIS		
12	Evaluating the impact of canal irrigation on land use land	M.Tech (2013)	Completed
	cover and its after effects		
13	Mapping and characterization of wetland using remote	M.Tech (2013)	Completed
	sensing and GIS		
14	Study of impact of wave energy converter on conventional	M.Tech (2013)	Completed
	rubble mound breakwater		
15	Evaluating the suitability of EO-1 Hyperion data from	M.Tech (2014)	Completed
	mapping agricultural crops		

16	Development of web-based GIS application using open	M.Tech (2014)	Completed	
	source			
17	Study of mud banks	M.Tech (2014)	Completed	
18	03 M.Tech thesis are ongoing (Title yet to be decided)	2014-2015	Ongoing	
M.Tech	02 Nos. (Title yet to be decided)	2014-2016	Ongoing	
(Research)				
PhD Thesis				
1.	Impact of Climate change on hydrological regime	PhD	Ongoing	
2.	Groundwater modeling in a coastal aquifer	PhD	Ongoing	