

### Brief Profile

Name of Teaching Staff	<b>Dr. V. P. Huggi</b>		
Designation	Professor		
Date of Joining the Institution	03-08-1984		
Contact Number	08352-261120, +91 98457 28646		
Qualification with Class	UG	PG	Ph.D.
	B.E.(Civil)	M.Tech.(HWRE)	IIT Bombay
	FC	FC	
Total Experience	Teaching	Industry	Research
	36	-	10
Papers Published	<b>International Journals</b>		
	1)“Estimation of solute transport parameters of ground water systems using Genetic Algorithm” Paper published in “Water and Energy International” Journal in the volume Oct. – Dec. 2003.		
	2)“Estimation of parameters of a coupled flow-mass transport model by genetic algorithm and weighted least squares (WLS)” Paper published in ASCE Journal of Hydrologic Engineering Nov-Dec. 2007		
	3)“Application of simulated annealing for a coupled process parameter inversion model based on weighted least squares (WLS) method” Paper published in ASCE Journal of Water Resources Planning and Management March 2006.		
	4)“Optimum Model structure Identification based on reliability of flow and mass transport parameters using simulated annealing” accepted for publication in International journal of computing in civil engineering after reviews.		
	5)“Estimation of system parameters of Groundwater systems by auto calibration using GNM and GA” communicated to International ASCE journal of Hydrologic Engineering		
	6)“Hybrid modelling to estimate coupled flow-mass transport parameters” communicated to International ASCE Journal of computing in civil engineering.		
	7)“Estimation of system parameters in groundwater systems by inverse modeling using GNM and GA-A case study” communicated to International ASCE journal of Hydrologic Engineering		
	8)“Estimation of system parameters in groundwater systems by inverse modelling using GNM and SA-A case study” communicated to International ASCE journal of Water Resources Planning and Management		
	<b>National Journals</b>		
1)“Application of simulated annealing for a coupled process parameter			

	inversion model” accepted for publication in Hydrology Journal of IAH and appeared in the issue 28(3) in 2007.
	<b>International Conferences</b>
	1) International Conference on “Computer Simulation in Risk Analysis and Hazard Mitigation” Organized by Wessex Institute of Technology, Southampton, United Kingdom from 27-29 Sept. 2004. Title of paper “Application of Genetic Algorithm and Simulated Annealing for Inverse modeling of Ground Water systems”.
	2)Application of genetic algorithm and simulated annealing to estimate solute transport parameters in groundwater systems” International conference organized by AOGS-2005 (Asia Ocean Geoscience Society) Singapore from 20 <sup>th</sup> to 24 <sup>th</sup> June 2005.
	3)International conference on “Calibration and reliability in groundwater modeling from uncertainty to decision making” held in Netherlands in the month of June 2005. Title of paper is “Application of genetic algorithm and simulated annealing for inverse modeling of groundwater systems”.
	4)International Conference on “Civil Engineering in the New Millennium: Opportunities and Challenges” Organized by Department of Civil Engineering, Bengal Engineering and Science University, Shibpur, Howrah-711103, W.B., India. Title of the paper “GNM, GA and SA For Parameter Inversion in Porous Media”.
	5)International Conference on “Emerging Challenges in Design and Manufacturing Technologies-2007” Organized by Sathyabama University in association with Combat Vehicles Research and Development Establishment Chennai from 28 <sup>th</sup> to 30 <sup>th</sup> November 2007. Title of the paper “Simulation of flow and mass transport in Groundwater systems using Finite Element Model”
	6)International Seminar on “ Reforms in the Irrigation Management for effective IWRM” Organized by Central board of Irrigation and Power, Govt of Karnataka and its subsidiaries, ICID, FAO,NDC-WWC, IWRA (India) from 18 <sup>th</sup> Dec. to 20 <sup>th</sup> Dec-2008 at Bangalore. Title of Paper “Estimation of system parameters in groundwater systems using inverse modeling: A case study”
	7)The Ninth International Conference on “Hydro-Science and Engineering (ICHE 2010)” Organized by Indian Institute of Technology Chennai, India from 2 <sup>nd</sup> Aug to 5 <sup>th</sup> Aug. 2010. Title of the paper “Reliability analysis of the estimated parameters in Groundwater systems”
	<b>National Conferences</b>
	1)National Conference on “Ground water management Future challenges and its Impact on Environment” Organized by Aligarh Muslim University

	during March 7-8, 2003. Title of paper “Estimation of Solute Transport Parameters in Ground Water Systems by using G-N-M algorithm.”		
	2)National Seminar on “Ground Water Management and Rural Development” Organized by Anjuman Engineering College for Men during March 9-10,2002. Title of paper “Estimation of Parameters in Ground Water Systems by Inverse Modeling.”		
	3)Bharatha Rathna Sri. M. Vishveshwaraiah Memorial National Seminar on “Environment Pollution and Management” organized jointly by National Pollution Control and Environment Conservation Committee and Mangalore University on 05-06-2002. Title of paper “Estimation of solute Transport Parameters in Ground Water Systems by Inverse Modeling.”		
	4)National Conference on “New Paradigms in Civil Engineering Practices” organized by Anjuman Engineering College for Men during Dec. 1-2, 1996. Title of paper “Salt Tolerance of crops and Salinity Control through Leaching.”		
Projects Guided	UG	PG	Ph.D.
	04	08+01 M.Sc. Research	Guiding 4
Books Published /Patents/ IPR/ Monographs	“Estimation of system Parameters in Groundwater Systems” Book Published by International Publisher VDM Verlag Dr. Muller Germany. Book Published in USA,UK and Germany with ISBN:978-3-639-20736-1		
Professional Membership	ISTE, FIE		
Consultancy Services	Water supply Schemes, Minor Irrigation Tank Filling Project of Bijapur and Bagalkot District of worth 200 Crores		
Awards	-		
Grants Fetched	Principal Investigator VTU Sponsored Research Fund 13.47 Lakhs. 2008-2011		
Interaction With Professional Institutions	Resource Person for FDP and STTP, VTU Member of board of Studies and Examination, <u>Executive Council (EC) member VTU Belgaum,</u> <u>Technical Director KNNL(Karnataka Neeravari Nigam) Govt. of Karnataka and Technical Director VJNL(Visvesvaraya Jala Nigam) Govt. of Karnataka</u>		
Subjects Taught	Fluid Mechanics, Optimization Techniques, Hydraulics and Hydraulic Machines, Water Resources, Operation Research, Engineering Mechanics, Strength of Materials and Continuum Mechanics.		

(b) Area of Interest:

- a) Soft computing techniques and evolutionary algorithms
- b) Hydrologic analysis and design of surface and Groundwater systems
- c) Computational Hydraulics
- d) Contaminant Transport Modeling and Inverse Modeling
- e) Water quality Modeling
- f) Pipeline and sewerage design