



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B post-doc fellowship

KAUSHIKA GUJJANADU SURYAPRAKASH

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	
Name	KAUSHIKA GUJJANADU SURYAPRAKASH
Date of birth	18, DECEMBER, 1987

PRESENT OCCUPATION

Appointment	Structure
POST DOCTORAL RESEARCH ASSOCIATE (UPTO 31 JAN 2022)	Pay structure of INR. 60,760/- (INR. 49,000+HRA)

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	BACHELOR OF ENGINEERING	Bangalore University	2010
Specialization	CIVIL ENGINEERING		
PhD	Irrigation scheduling under changing climate	Indian Institute of Technology Roorkee	2019
Master	Civil Engineering	Indian Institute of Technology Roorkee	2012
Degree of medical specialization			
Degree of European specialization			
Other			



REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	of Association	City

FOREIGN LANGUAGES

Languages	level of knowledge
English	Proficient

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2010	SCHOLARSHIP FOR M TECH COURSE BY GOVERNMENT OF INDIA
2013	SCHOLARSHIP FOR PHD BY GOVERNMENT OF INDIA
2018	GRANT FOR POSTER PRESENTATION AT AGU FALL MEETING 2018 BY IIT ROORKEE

TRAINING OR RESEARCH ACTIVITY

During my PhD I worked on, "Irrigation scheduling under changing climate." The research involved the modeling of root-water uptake by plants by using the Richard's equation using FORTRAN and MATLAB programming. The input variables were obtained from the experimental investigations I carried out at spatially well distributed locations in the basins in the north of India under the collaboration with local farmers using prevailing farming techniques. This model is in turn applied to the forecasted data to obtain the optimal frequency of irrigation for future scenarios. The research was carried out under the project titled "Mitigating Climate Change Impacts on India Agriculture by Improved Irrigation Water Management". Funded by Ministry Of Earth Sciences, Govt. of India and NERC, U K .

My M Tech project on "Application of SWAT Model to the upper Ganga catchment", was carried out as a part of the Ganga River Basin Management Plan (GRBMP) project, funded by Government of India and involved a consortium of 7 IITs. The hydrological modeling of upper Ganga catchment including the Himalayan snow melt modeling was carried out here.

My current research includes the integrated management of urban flood systems with ground water management, flood water reuse and flood mitigations strategies.



PROJECT ACTIVITY

Year	Project
2012	As Junior Research Fellow under project titled “Preparation of the Ganga River Basin Management Plan” funded by Ministry Of Environment And Forests, Govt. of India at IIT Roorkee
2012	As Senior Research Fellow under project titled “Mitigating Climate Change Impacts on India Agriculture by Improved Irrigation Water Management” . Funded by Ministry Of Earth Sciences, Govt. of India and NERC, U K at IIT Roorkee.
2019	As Post Doctoral Research Associate, at Interdisciplinary Center for Water research, (Post PhD) Indian Institute of Science Bangalore in project titled “Urban Flood Model for Bangalore City” , funded by Dept. of Science and Technology, Govt. of India.
2021	As Post Doctoral Research Associate-II, at Interdisciplinary Center for Water research, Indian Institute of Science Bangalore in project titled “Urban Modelling: Development of Multi-sectorial Simulation Lab and Science-Based Decision Support Framework to Address Urban Environmental Issues” funded by the Ministry of Electronics and Information Technology (MeitY), GoI under the National Supercomputing Mission

PATENTS

Patent: nil

CONGRESSES AND SEMINARS

Date	Title	Place

PUBLICATIONS

Books: NIL

Articles in journals
G.S., Kaushika, Arora, H., & Hari, H. P. (2019). “ Analysis of climate change effects on crop water availability for paddy, wheat and berseem.” Agricultural Water Management, 225(July), 105734. https://doi.org/10.1016/j.agwat.2019.105734 .
I Sonkar, Kaushika G S , K S Hari Prasad(2018) “Modeling Moisture Flow in Root Zone: Identification of Soil Hydraulic and Root Water Uptake Parameters” ASCE Journal of Irrigation and Drainage Engineering. https://doi.org/10.1061/(ASCE)IR.1943-4774.0001342
Mujumdar, P. P.; Mohan Kumar, M. S.; Sreenivasa Reddy, G. S.; Avinash, Shubha; Chawla, Ila; Kaushika, G. S. ; Sharma, Aisha; Davis, Saimy; Thomas, Tom; Thomas, Claris Ann; Jahagirdar, Vanishri S.; Arpitha, H. M.; Parashuram, K.; Kumar, Anjan., “Development of an urban flood



model for Bengaluru city, Karnataka, India ", Current Science, Vol. 120, no. 9, 10 May 2021, p.1441, doi: 10.18520/cs/v120/i9/1441-1448

Congress proceedings

1. Kaushika G S, Ojha CSP, "Application of SWAT to Initial Stretch of Ganga Catchment.", National Students' Conference On River Basin Planning (BRiP), 4-5 November, 2011 at Indian Institute of Technology Kanpur.(poster presentation)
2. Sharad K Jain, Kaushika G S, Ojha CSP "Modeling Upper-Ganga Catchment Using Arc SWAT 2009", SWAT International Conference, New Delhi, July, 2012
3. Hatiye, S.D., Hariprasad, K.S., Ojha, C.S.P., Kaushika, G.S. (2014). "Estimation of deep-percolation from rice paddy field using lysimeter experiments on sandy loam soil. Presented at the HYDRO International-2014 conference at MANIT Bhopal.
4. Kaushika G S, K S Hari Prasad, Samuel Dagalo Hatiye, C S P Ojha (2014). "Crop-water balance studies and yield assessment for a deficit irrigated winter crop." Presented at the HYDRO International-2015 conference at IIT Roorkee.
5. Kaushika G S, K S Hari Prasad 2018., "Analysis of Decadal Variation of Plant Root-water Uptake for Winter Cropping of Wheat and Berseem" Presented at AGU Fall meeting, 2018, Washington DC.
6. Sreekanth Janardhanan, Akhilesh Nair, Indu Jaya, Gs Kaushika, 2019, Probabilistic approach for regional groundwater balance in the Ganga Basin using land surface and groundwater models Asia Oceania Geosciences Society, Annual Meeting, Singapore, Jul 2019
7. Kaushika G S, Aisha Sharma, Shubha Avinash, Claris Ann Thomas, Saimy Davis, Vanishri Jahagirdar , 2020, "Urban Flood Model for Bangalore City" , Presented at AGU Fall meeting, 2020

OTHER INFORMATION

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Bengaluru, INDIA and 11 April 2022

SIGNATURE