

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 A post-doc fellowship

[Anandharuban Panchanathan]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Panchanathan
Name	Anandharuban
Date of birth	[20, May, 1990]

PRESENT OCCUPATION

Appointment	Structure
Research fellow	Academic

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree		
Degree	B.E.	Anna University, Chennai	2011, 72%		
Specialization	Civil Engineering				
PhD (Ph.D. dissertation titled 'Integrated modelling of rainfall-runoff process and reservoir operation for balancing water supply and flood mitigation: a case study from Chennai, India' and is submitted for evaluation)	Civil Engineering (Specialised in Water resources Engineering)	Anna University, Chennai	2021 (Thesis submitted, awaiting for the final evaluation)		
Master	M.E. in Hydrology and Water Resources Engineering	Anna University, Chennai	2013, 9.5 CGPA		



REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of	Association	City		
2018		International Association of Hydrological Sciences	Online membership		

FOREIGN LANGUAGES

Languages	level of knowledge				
Tamil	Native				
English	Advanced				

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2016	Anna Centenary Research Fellowship (Anna University, Chennai, India)

TRAINING

Indo-German Joint Scientific Workshop on, 'Innovative Technologies for Assessment and Mitigation of Groundwater Contamination', Anna University, Chennai, 16-18, September, 2019

MIKE powered DHI training on, 'Integrated 1D and 2D river flood modelling', MIKE computational lab, CWR, Anna University, Chennai, 7-9, August, 2019

Faculty Development Program on, 'Application of Soft Computing Tools in Disaster Modelling', NIT Thiruchirapalli, 29-July to 02-August, 2019

Workshop on Machine learning and deep learning', Department of Computer Science, Anna University, Chennai, 8-9, February, 2019

GIAN Course on, 'Advances in Aquifer Characterization and Parameter Estimation', Department of Geology, Anna University, Chennai, India, 26-March to 06-April, 2018

Two day seminar on 'Flooding in Cities, Warning and Dissemination', MIKE Powered DHI, NIOT, Chennai, 30-31, May 2018

SWAT advanced training workshop, SWAT International Conference 2018, IIT Madras, Chennai, 8-12, January, 2018

National Workshop On 'Water Resources System Modelling', CWR, CEG, AU, Chennai, India, 9-10, March, 2017

National Workshop On 'Reservoir Sedimentation Trends and Techniques of Measurement and Analysis', CWR, CEG, AU, Chennai, India, 9-10, February, 2017

GIAN Course on, 'Integrated modelling of subsurface flow and transport in porous media - Challenges and Opportunities', IIT Roorkee, Roorkee, India, 02-January to 14-January, 2017

GIAN Course on, 'Hydroinformatics for Integrated Water Resources Management', IIT MADRAS, Chennai, India, 28-November to 09-December, 2016

RESEARCH ACTIVITY

- Monitored three M.Sc. thesis during 2017 to 2020
- Assisted in hydrological modelling i.e. MIKESHE and HEC-HMS for the M.Sc. student



- Worked in several consultancy projects as surveying expert which involves total station and DGPS
- Worked as a flood modeller in a consultancy project, 'Identification of tentative depth and flow of water in existing Nallaha's in a project site', on the preliminary assessment report. Using HEC-HMS and HEC-RAS.
- Part of the many conference, symposium and technical course organising committees
- Fund managements in the funded projects

M.E. dissertation titled, 'Assessment of Surface Water Balance Study for an Irrigation System Tank Command'. This research work involves partly field work, conducting questionnaire survey and modelling. A irrigation tank command was chosen for the assessment in terms of crop water requirements and the participatory irrigation management

PROJECT ACTIVITY

Year	Project
September 2019 to May 2020	Project Associate-II, Anna University, Chennai, Department of Science and Technology funded project, 'Hydrogeological interventions for flood mitigations and augmentations of groundwater recharge'
	Responsibilities: Field visits, modelling expert, attending conferences and publications
April 2019 to August 2019	Junior Research Fellow, Anna University, Chennai, Board of Research in Nuclear Sciences funded project, 'Modelling of Radionuclide transport in groundwater around Gogi Uranium mining and tailing pond area'
	Responsibilities: Field visits
January 2019 to	Junior Research Fellow, Anna University, Chennai, Department of Science and Technology funded project, 'Enhancement of Groundwater recharge by Soil Ventilation'
March 2019	Responsibilities: Literature reviews, field visits, experiments
November 8 to December	Visiting Researcher, Department of Engineering, Roma Tre University, Rome, Italy, Indo- Italian bilateral research project on, 'Innovative models for assessment of water quality in coastal aquifers'
17, 2017	Responsibilities: Collaborative research, field visits and publications
January	Anna Centenary Research Fellow, Anna University, Chennai
2016 to December 2018	Responsibilities: Teaching assistantship to professor, research and publications

CONGRESSES AND SEMINARS

Date	Title	Place		
4-8, May 2020	EGU General Assembly 2020	Online		
11-14, December 2019	Asia-Pacific Coastal Aquifer Management Meeting	Anna University, Chennai		
21-24, October 2019	8 th International Groundwater Conference on sustainable management of Soil-Water	IIT Roorkee		
12 -13, October, 2019	2nd Triennial Congress of FIGA	NGRI, Hyderabad		
8-12, January 2018	SWAT International Conference 2018	IIT Madras, Chennai		
23rd February, 2018	2nd International conference on Recent	Karpaga Vinayaga College of Engg.		



	Trends i Managemer	_	cience	e, Eng	gineering	&	And Tamilr	Tech, nadu	Kancheepuram,
19th March, 2018		<u> </u>				CWR,	Anna Unive	ersity, Chennai	

PUBLICATIONS

Articles

Anandharuban P, Michele La Rocca, and Elango L, 'A box-model approach for reservoir operation during extreme rainfall events: A case study', Journal of Earth System Sciences, vol. 128 (229), 2019

Anandharuban P and Elango L, 'Spatio-temporal analysis of rainfall, meteorological drought and response from a water supply reservoir in the megacity of Chennai, India', (Accepted for publication in Journal of Earth System Sciences November 2020)

Articles in revision/preparation

Anandharuban P, Michele La Rocca, and Elango L, 'Controlled reservoir operation during extreme rainfall events for balancing water supply and flood mitigation' (Under revision)

Anandharuban P and Elango L, 'Integrated reservoir management system to envisage reservoir inflow and its water availability in near future under uncertainty of climate change', (Under preparation)

Congress proceedings

- Anandharuban P, La Rocca M and Elango L, 'Significance of reservoir operation during extreme rainfall event in flood mitigation and water demand management in a metropolitan city of India: a case study', EGU General Assembly 2020, EGU2020-6409, 4-8, May 2020
- Anandharuban P and Elango L, 'Role of a domestic water supply reservoir during hydrologic extreme events in the coastal city of Chennai, India, Asia-Pacific Coastal Aquifer Management Meeting, Anna University, Chennai, 11-14, December 2019
- Anandharuban P and Elango L, 'Impact of rainfall distribution in flood modelling of an ungauged river basin using HEC-HMS - A case study', 8th International Groundwater Conference on sustainable management of Soil-Water at IIT Roorkee, 21-24, October 2019
- Anandharuban P and Elango L, 'Trends in rainfall and peak flow estimates by modelling', 2nd Triennial Congress of FIGA, AHI Pre-Symposia Workshop on Synergic Management of Water Resources in Changing Climate, NGRI, Hyderabad, 12 -13, October, 2019
- Anandharuban P and Elango L, 'Hydrological modelling of a semi urbanized catchment with limited data availability using SWAT model', SWAT International Conference 2018, IIT Madras, Chennai, 8-12, January 2018
- Anandharuban P and Elango L, 'Morphometric Analysis and Rainfall-Runoff Modelling to Understand the Flooding Behaviour of Adyar River Basin', 2nd International conference on Recent Trends in Science, Engineering & Management, Karpaga Vinayaga College of Engg. And Tech, Kancheepuram, Tamilnadu, 23rd February, 2018
- Anandharuban P and Elango L, 'Hydrological modelling of an ungaged catchment using SWAT model: a case study of Adyar River', Advancements in Water Resources& Agricultural Engineering, National Conference, CWR, Anna University, 19th March, 2018

OTHER INFORMATION

Worked as an Assistant Professor in RMK Engineering College, Kavaraipettai, Chennai (Affiliated to Anna University, Chennai, India) from June 2013 to April 2015. Responsibilitis:

- Given lectures and conducted laboratories to bachelor Civil Engineering students in Fluid mechanics, Applied Hydraulic Engineering, Hydrology, Irrigation Engineering, Water Resources Engineering, AUTOCAD, Irrigation design and drawing
- Coordinated and part of various symposiums, field visits and conference during the tenure



Supervised several Undergraduate dissertations during the tenure

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: Chennai, India, 05-February-2021

SIGNATURE

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