

FACULTY PROFILE



Name : Dr. Abdu Rahiman K U
Designation : Professor
Date of Birth : 08.11.1967
Official address : Professor
Division of Civil Engineering
School of Engineering
Cochin University of Science & Technology
Home Address: Kizhakke Kalathil House
Mannam P O, North Paravur
Ernakulam District
Pin 683520

Education qualifications

Sl. No.	Degree	University	Year	Specialization	Percentage (CGPA)
1.	B.Tech	Mahatma Gandhi University (Mar Athanasious College of Engineering, Kothamangalam)	1991	Civil Engineering	First Class
2.	M.Tech	Kerala University (College of Engineering, Trivandrum)	1993	Hydraulics Engineering	First Class
3.	Ph.D	National Institute of Technology Karnataka, Surathkal	2009	Water Resources Engineering	

Teaching experience : 30 Years
Research Experience : 18 Years
Industrial Experience : 1 Year
Areas of interest : Water Resources Engineering

Date of joining (CUSAT) : 18.04.1996(Lecturer – On contract)
: 07.06.1999 (Lecturer)

1st promotion (Date & designation) : 16.08.1999 (Lecturer- Senior scale)

2nd Promotion (Date & designation) : 16.08.2004 (Reader)

3rd Promotion (Date & designation) : 16.08.2007 (Associate Professor)

4th Promotion (Date & designation) : 16.08.2010 (Professor)

Pervious/ other experience : 1) Assistant Engineer, Bhagheeratha Engineering Limited, Cochin, at Narmada Project site, Vadodara. (from 18 October 1993 to 12 August 1994)
2) Lecturer in Civil Engineering, Anjuman Engineering College, Bhatkal, Karnataka (from 16 August 1994 to 17 April 1996)

No. of Publications

International journals : 3

National Journal : 1

International Conferences : 7

National Conferences : 10

Details of Publications

Type of publications	Year	Papers published
International Journal	2009	Abdu Rahiman, K.U, and Dwarakish, G.S, (2009), “Hydrological Changes Associated with the Dams in Periyar River Basin, Kerala, India.” <i>International Journal of Earth Sciences and Engineering</i> Vol.2, No.3, pp. 224-230.
	2009	Shushma Shashi B, Preeti Jacob, Dwarakish, G.S and Abdu Rahiman, K.U, (2009), “RS and GIS Applications in LU/LC Change Detection and Flood Zonation Studies for Coastal Zone of Dakshina Cannada District, India.” <i>International Journal of Earth Sciences and Engineering</i> , Vol.2, No.6, pp. 596-606.
	2008	Abdu Rahiman, K.U, Dwarakish, G.S, and Babita M Kawal, (2008) “Changes in Land-Ocean Sediment Flux due to the Interference of Dams.” <i>International Journal of Earth Sciences and Engineering</i> , Vol.1, No.1, pp.17-23.

International Conference	2020	Ginu S Malakeel, K U Abdu Rahiman, and Subha V (2021) “Flood Risk Assessment – A Review”, Lecture Notes in Civil Engineering, Springer, pp.197-208 (ICRACE 2020)
	2020	Reshma Antony, K U Abdu Rahiman, and Subha V (2021) “Flood Hazard Assessment and Flood Inundation Mapping– A Review”, Lecture Notes in Civil Engineering, Springer, pp.209-218 (ICRACE 2020)
	2020	Mohan Kavitha, , Subha V, and K U Abdu Rahiman (2021) “Feasibility Study of Using Coir Geotextiles in Permeable Pavement Construction for Storm Water Management”, Lecture Notes in Civil Engineering, Springer, pp.63-72 (ICRACE 2020)
	2016	Rani Tenison, Abdu Rahiman K U and Subha V. (2016). “Wave Hindcasting along Triandrum Coast Using Fuzzy Logic Approach”. Proceedings of the International Conference on Recent Advances in Civil Engineering at CUSAT, Kochi, pp.290-295.
	2016	Sindhu H, Abdu Rahiman K U, Subha V and Saritha H. (2016). “Optimisation of Water Supply Networks using Genetic Algorithms”. Proceedings of the International Conference on Recent Advances in Civil Engineering at CUSAT, Kochi, pp.296-301.
	2009	Abdu Rahiman, K.U, and Dwarakish, G.S, (2009), “Interference of Dams in Periyar River Basin, Kerala, on Coastal Sedimentation”, Proc. 3 rd International Conference in Ocean Engineering, IITM, Chennai, pp. 755 – 765.
	2009	Dwarakish, G.S., Abdu Rahiman, K.U., and Usha Natesan, (2009), “Changes in River Hydrology and Coastal Sedimentation by Dams in Periyar River Basin, Kerala, India” Proc. 4 th IASME/WSEAS International Conference on Water Resources, Hydraulics and Hydrology, Cambridge, UK, pp. 84 – 89.
National Journal	2009	Abdu Rahiman, K.U, Dwarakish, G.S, and Babita M Kawal, (2009), “Changes in Hydrology and Coastal Sedimentation by Dams – A Case Study.” <i>ISH Journal of Hydraulic Engineering</i> , Vol.15, No.3,pp. 51-64.
National Conference	2021	David S J, Abdu Rahiman K U, and Subha V, (2021), “A Novel Statistical Approach for Infiltration Model Analysis” Lecture Notes in Civil Engineering, Vol.176, Springer, pp.575-583 (National Conference on Advanced Modelling and Innovations in Water Resources Engineering, NIT, Jamshedpur.)
	2012	Geeja K George, Subha, V, and Abdu Rahiman, K.U, (2012), “Sand Mining from Rivers: Bless or Curse to Society” Proc. Fifth CUSAT National Conference on Recent

		Advances in Civil Engineering, Kochi, pp. 231 – 234.
	2012	Sindhu, H, Abdu Rahiman, K.U, and Subha, V, (2012), “Multi Objective Optimisation of water distribution Networks” Proc. Fifth CUSAT National Conference on Recent Advances in Civil Engineering, Kochi, pp.241 – 246.
	2012	Rani Tenison, Abdu Rahiman, K.U., and Subha, V, (2012), “Wave Hind casting using Numerical Prediction Models – A Review” Proc. Fifth CUSAT National Conference on Recent Advances in Civil Engineering, Kochi, pp.253 - 256.
	2010	K.U.Abdu Rahiman and G.S.Dwarakish. (2010).” River Runoff Changes Induced by Dams – A Comparative Study”. Proceedings of the National Conference on Sustainable Water Resources Management at NITK, Surathkal.
	2008	Abdu_Rahiman, K.U, Dwarakish, G.S, and Babita M Kawal, (2008), “Changes in Hydrology and Coastal Sedimentation by Dams-A Case Study” Proc. National Conference on Hydraulics, Water Resources and Environment, MNIT, Jaipur, pp.409- 420.
	2008	Abdu_Rahiman, K.U, Dwarakish, G.S, and Babita M Kawal, (2008), “Changes in Land Use/Land Cover and Hydrology of Periyar River Basin due to the Impact of Dams” Proc. 3 rd CUSAT National Conference on Recent Advances in Civil Engineering, CUSAT,Cochin, pp. 157 – 163.
	2008	Abdu_Rahiman, K.U, Dwarakish, G.S, and Babita M Kawal, (2008), “Impacts of Dams on Coastal Regime – An Overview” Proc. 2 nd National Conference on Focusing on Advances in Civil Engineering, TKM College of Engg, Kollam, pp. 499 – 504.
	2007	Abdu_Rahiman, K.U, Dwarakish, G.S, and Babita M Kawal, (2007), “Effects of Dams on River Hydrology- An Overview” Proc. National Conference on Hydraulics and Water Resources, SVNIT, Surat, pp. 63 – 68.
	2007	Abdu_Rahiman, K.U, Dwarakish, G.S, and Babita M Kawal, (2007), “Impacts of Dams on Hydrological and Coastal Processes – An Overview.” Proc. 4 th Indian National Conference on Harbour and Ocean Engineering, NITK, Surathkal, pp. 784 – 790.

- Awards & Professional recognition:**
1. Government of India Scholarship for M Tech studies
 2. Government of India Scholarship for PhD studies
 3. Member, Board of Studies in Civil Engineering, CUSAT (From 2014 to 2024).
 4. Head, Division of Civil Engineering, School of Engineering, CUSAT (29/04/ 2019 – 28/04/2021)
 5. Formerly Member, Technical Committee, Department of Harbour Engineering, Government of Kerala

6. Research Supervisor, CUSAT and Guiding 8
Research Scholars

Memberships in professional bodies: Life Member ISTE, IGS

Short Term courses/ Conferences/Workshops/ Invited Lecture/ Training Programme

No.	Name of the programme	Type	Sponsoring agency	From-To (weeks)
1	Induction training programme for Engg College Teachers	Orientation course	AICTE	8-8-95 to 28-8-95 (three weeks)
2	Management of Water Resources	Training programme	AICTE	15-11-99 to 26-11-99 (two weeks)
3	Disaster Mitigation-Update for Civil Engineers	Training programme	AICTE	16-10-2000 to 29-10-2000 (two weeks)
4	Contamination of Land by Waste Disposal and its Remedial Technologies	Training programme	AICTE	19-11-2001 to 30-11-2001 (two weeks)
5	Geosynthetics in Civil Engg	Training programme	AICTE	2-12-2002 to 13-12-2002 (two weeks)
6	Challenges in Geotechnical Engg and Solutions	Training programme	AICTE	24-11-2003 to 5-12-2003 (two weeks)
7	Water Conservation and Watershed Management	Training programme	AICTE	1-3-2004 to 12-3-2004 (two weeks)
8	Water Resources Development & Management	Training programme	AICTE	28-7-2008 to 8-8-2008 (two weeks)
9	Geoinformatics for Integrated Coastal Zone Management	Training programme	AICTE	19-1-2009 to 30-1-2009 (two weeks)
10	Geoinformatics for Integrated River Basin Development	Training programme	AICTE	20-7-2009 to 31-7-2009 (two weeks)
11	Geographical Information System	Orientation course	TEQIP	17-9-2005 to 18-9-2005
12	Remote Sensing & GIS	Orientation course	TEQIP	10-3-2007
13	Energy Conservation and Management	Training programme	TEQIP	5-11-2012 to 9-11-2012
14	Safety and Fire Protection in Buildings and Industries	Training programme	TEQIP	3-12-2012 to 7-12-2012

15	Sustainable Technologies in Engineering	Training programme	TEQIP	18-3-2013 to 22-3-2013
16	Advanced Engineering Materials and their Applications	Training programme	TEQIP	21-1-2013 to 25-1-2013
17	Study of Total Station	Training programme	TEQIP	26-10-2016 to 28-10-2016
18	Inland Waterways Systems in India- Its Perspectives & Problems	Seminar	TEQIP	04-03-2017
19	Sustainable Construction, Environment and Climate	Workshop	TEQIP	08-12-2017
20	Outcome based Education - A Gate way for NBA Accreditation	Training programme	TEQIP	12-02-2018 to 16-02-2018
21	Mechanobiology- Exploring the Relevance of Engineering in Biological Systems	Training programme	TEQIP	22-10-2018 to 26-10-2018
22	Housing Literacy for Rebuilding of Kerala	Workshop	TEQIP	16-11-2018
23	Advances in Machine Learning	Workshop	TEQIP	26-11-2018 to 30-11-2018
24	Land Slides: Analysis, Mitigation and Case Studies	Symposium	IGS	01-12-2018
25	Green Energy, Environment, Engineering and Technology for Sustainable Future	Training programme	TEQIP	10-12-2018 to 14-12-2018
26	Challenges and Opportunities in Construction Industry	Workshop	TEQIP	03-09-2019 to 04-09-2019
27	Sustainable Technologies for Waste to Energy & Waste to Wealth	Workshop	TEQIP	16-12-2019
28	Advancements in Civil Engineering With Emphasis on Water Resources, Environment Engineering and Climate Change	Training programme	TEQIP	02-11-2020 to 07-11-2020
29	Mathematical Approaches in Mechanics	FDP	TEQIP	24-12-2020 to 31-12-2020

30	Formwork for Concrete Structures-Industry Practices in Technology and Safety	Webinar	TEQIP	28-01-2021
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Faculty Interaction with outside world

Sl. No	Year	Type of Institution/R&D labor Industry	Type of Activities	Details of any Orders
1	2024	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “Flow Simulation, Flow Control and Seepage Loss Analysis OF an Irrigation Canal System”	
2	2024	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “Seepage Analysis Under Hydraulic Structure in Different Soil Conditions Using ANSYS FLUENT”	
3	2024	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “ESTIMATION OF SOIL EROSION AND SEDIMENT YIELD USING GIS-BASED RUSLE-SDR TECHNIQUES: A CASE STUDY OF MANNARKKAD WATERSHED, PALAKKAD, KERALA”	
4	2022	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “A Study on Impact of Climate Change on Hydrological Variables”	
5	2022	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “Flood Control Structure Using RRI and HEC-HMS Models”	
6	2022	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “Flood Modelling of Manimala River using HEC-RAS”	
7	2020	Visvesvaraya Technological University, Karnataka	External Examiner for the Ph D Open Defense and Viva-voce examination for the Thesis entitled “Characterization of Ground Water Resources and Irrigated Agriculture in Coastal Region of Uttar Kannada District, Karnataka”	research@vtu.ac.in
8	2019	College of Engineering, Trivndrum, KTU	External examiner for the M Tech viva voce examination for the project entitled “A STUDY OF FLOW PATTERN AND SEDIMENT DEPOSITION	

			IN RECTANGULAR SHALLOW RESERVOIRS”	
9	2019	College of Engineering, Trivndrum, KTU	External examiner for the M Tech viva voce examination for the project entitled “MODELLING OF TURBULENT CHARACTERISTICS AND AIR ENTRAINMENT IN HYDRAULIC JUMP”	
10	2019	College of Engineering, Trivndrum, KTU	External examiner for the M Tech viva voce examination for the project entitled “ASSESSMENT AND MODELLING OF GROUNDWATER SYSTEM IN THE CATCHMENT AREA OF VAMANAPURAM RIVER”	
11	2019	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “ DYE REMOVAL FROM TEXTILE WASTEWATER BY MODIFIED ALUMINIUM FUMARATE METAL ORGANIC FRAMEWORKS”	
12	2019	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “PREVENTION AND TREATMENT OF CaCO ₃ SCALE FORMATION IN PIPES BY CHEMICAL AND MAGNETIC METHODS”	
13	2019	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “ TREATMENT OF TEXTILE INDUSTRY WASTEWATER BY ELECTROCOAGULATION USING PERFORATED ELECTRODES”	
14	2018	Anna University, Chennai	External Examiner for the Ph D Open Defense and Viva-voce examination for the Thesis entitled “Multicriteria Analysis and GIS Based Hydro Geochemical Studies of Ground Water in Salem Taluk, Tamilnadu, India”	Lr.No. 11160232004 Dated 24/10/2017
15	2018	College of Engineering, Trivndrum, KTU	External examiner for the M Tech viva voce examination for the project entitled “ Energy Dissipation and Flow Characteristics Over Stepped and Pooled Stepped Spillways”	
16	2018	College of Engineering, Trivndrum, KTU	External examiner for the M Tech viva voce examination for the project entitled “Modelling of Open Channel Flow with Rigid Vegetation”	
17	2018	College of Engineering, Trivndrum, KTU	External examiner for the M Tech viva voce examination for the project entitled “Experimental Analysis and Numerical Simulation of Flow Over Broad Crusted	

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18	2017	College of Engineering, Trivndrum University of Kerala	External examiner for the M Tech viva voce examination for the project entitled “ Prediction of Flood Hazard Areas in Achankovil River Basin Using HEC-RAS”	
19	2017	College of Engineering, Trivndrum KTU	External examiner for the M Tech viva voce examination for the project entitled “ Numerical Modelling of Submerged Hydraulic Jump”	
20	2017	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “ Three Dimensional Simulation of Flow at Open Channel Confluence Using Computational Fluid Dynamics”	
21	2017	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “ Ground Water Flow and Solute Transport Simulation of Eloor Municipality”	
22	2017	Government Engineering College, Trissur, KTU	External examiner for the M Tech viva voce examination for the project entitled “ Flood Modelling and Flood Inundation Mapping of Mangalam River Using GIS and HEC RAS”	
23	2015	Harbour Engineering Department, Kerala	Member in the 3 member Technical Committee constituted by the order of Government of Kerala for the technical sanction of projects in the Harbour Engineering Department.	Order No.12195/D6/10/CE dated 28/07/2015
24	2015	Government Engineering College, Trissur, Calicut University	External examiner for the M Tech viva voce examination for the project entitled “Rainfall-Runoff Modelling of Kurumali River Basin using Hydro-geological Models & ANN”	
25	2015	Government Engineering College, Trissur, Calicut University	External examiner for the M Tech viva voce examination for the project entitled “Stream Flow Predictions of Karuvannur River Basin using ANFIS, ANN and Minor Models”	
26	2005	College of Engineering, Trivndrum University of Kerala	External examiner for the M Tech viva voce examination for the project entitled “Modeling of River flow time series by AR and ANN models”	No.EE.II. A.1/2005 dated 17/2/2005
27	2005	College of Engineering, Trivndrum University of Kerala	External examiner for the M Tech viva voce examination for the project entitled “SCS Model of a catchment using Remote Sensing and GIS”	No.EE.II. A.1/2005 dated 17/2/2005
28	2003	College of Engineering, Trivndrum University of Kerala	External examiner for the M Tech viva voce examination for the project entitled “Computer aided Flood Frequency Analysis”	No.EE.II. A.1/2003 dated 30/7/2003

29	2003	College of Engineering, Trivndrum University of Kerala	External examiner for the M Tech viva voce examination for the project entitled “Stepped Spillway Design for Pambar Dam”	No.EE.II. A.1/2003 dated 30/7/2003
30	2001	College of Engineering, Trivndrum University of Kerala	External examiner for the M Tech viva voce examination for the project entitled “Computer aided Analysis of River Behaviour due to Flood with special reference to Achenkovil River”	
31	2000	College of Engineering, Trivndrum University of Kerala	External examiner for the M Tech viva voce examination for the project entitled “Numerical Modelling of Wave Refraction at Thalai Fishery Harbour”	
32	2000	College of Engineering, Trivndrum University of Kerala	External examiner for the M Tech viva voce examination for the project entitled “Regional Flood Studies for the Southern River Basins of Kerala”	
33	2000	College of Engineering, Trivndrum University of Kerala	External examiner for the M Tech viva voce examination for the project entitled “An Experimental Study on Scouring of Submerged Soils”	
34	2009 onwards		Chief Examiner in B Tech Degree University Examinations of CUSAT.	
35	2013		Chairman of 4 th semester valuation camp	ES/B Tech CV Camp IV Sem/ April 2013
36	2001 onwards		Question paper setter for B Tech & M Tech University Examinations of CUSAT, University of Kerala & MG University	