

ZEENAT ARA

Assistant Professor,
Civil Engineering Department, Polytechnic,
Maulana Azad National Urdu University (MANUU)
Gachibowli, Hyderabad, TS
Mobile:8143504720.
E-mail ID:zeenatiitd@rediffmail.com

Professional Summary

- Working as **Assistant professor** in Civil Engineering department in Polytechnic, MANUU (A Central University), Hyderabad since Jan 2015.
- Worked as **Assistant professor** in MJCET Hyderabad from 2010 to 2014
- Worked as Assistant Engineer in Consulting Engineering Services (India) for about 1.5 years.

Education

- Pursuing PhD from National Institute of Technology Patna
- Master of Technology (Water Resources) from India Institute of Technology, Delhi
- B.E (civil) from R.P.S. Institute of Technology, Patna

Work Experiences

Assistant Professor in Civil engineering Polytechnic, Maulana Azad National Urdu University, Hyderabad since Jan 2015

Assistant Professor in Civil engineering department, M J College of Engineering & Technology, Hyderabad starting from Feb 2010 to Jun 2014.

Subjects Teaching

- Environmental Engineering II
- Material Science & Technology
- Fluid Mechanics & Hydraulics
- Irrigation Engineering & Water Resources
- Environmental Engineering-I
- Construction Quality and Management
- Civil Engineering Drawing
- Engineering Graphic
- Engineering Mechanic
- Engineering Workshop
- Advanced Survey

Academic Responsibilities

- Designed syllabus for courses
- Developed resources for online teaching and learning
- Member of NAAC (National Assessment and Accreditation Council) committee of University
- In-charge of Advanced Survey Laboratories
- In-charge of Engineering Mechanics Laboratories
- In-charge of Time table for Polytechnic
- Question Paper setter
- Worked as Examination In-charge for Polytechnic

- Worked as Hydraulic Lab In – charge

Assistant Engineer (Water Resources) in Consulting Engineering Services (India) Private Limited, Nehru Palace, New Delhi starting from Jun 2008 to Dec 2009.

- Water Availability Study
- Time series analysis
- Design Flood study
- Performed flood routing analysis for calculating MWL
- Rating curve using FMW
- Power Simulation Studies
- Quantity Estimation of Canal and Hydraulic Structures
- Design of Penstock, Intake and Anchor Block
- Drawing of detail map, longitudinal section, canal cross-section, canal fall,
- Finding FSL at main canal, distributaries, minor and sub-minor canal outlet
- Design and Estimation of Retaining wall, Footing and Box
- Design of Barrage, under sluice and Head Regulator
- Stability Analysis of Power House, Hydraulic Structure
- Quantity Estimation of Canal and Hydraulic Structures
- Design of Road culvert Head Regulator Cross Regulator, Combined Structures
- Monitor day to day work progress and prepare the daily, weekly and monthly program and report
- Report to the Project Manager about the current work progress and make comparison between plan and actual progress
- Progress monitoring including civil, structural & finishing activities
- Preparation of project Schedule in (MSP, Microsoft Excel)
- Comparing the Daily, weekly, Monthly Progress Back Logs

Academic Project(s)

- Land use classification using remotely sensed images during M. Tech. (July 2007 – Dec 2007)
- Assessing implications of change in the land use on the hydrology of selected area using ERDAS 9.0, ILWIS Software during M. Tech. (Jan 2008 – May 2008)
- Presenting a methodology to compute runoff from satellite image, using ILWIS software during M. Tech. (Jan 2008 – May 2008)
- Planning, Analysis and designing of a three storied hospital building during B.Sc. (Civil Engg.)

Technical Skills:

- MS office, MS-project, AutoCAD, Staad-Pro
- FORTRAN, Matlab, GIS software (Geomedia, Arc Gis),

- ERDAS software, ILWIS 3.3., HEC-RAC5.5,
- Flow master (FMW), Breach Software, Dam Break Analysis

Memberships & Society

- Indian Society for Hydraulic –LM-1395

Conference Papers

- Zeenat Ara, Mohammad Zakwan "Estimating Runoff Using SCS Curve Number Method" in **International Journal of Emerging Technology and Advanced Engineering** Website: www.ijetae.com (ISSN 2250-2459, ISO 9001:2008 Certified Journal, Volume 8, Special Issue 5, May 2018)
- Ara, Zeenat (2018) "Land Use Classification Using Remotely Sensed Images: A Case Study of Eastern Sone Canal-Bihar" at International Conferences on **STIWM-2018**, IIT Roorkee
- Zeenat Ara and Mohammad Zakwan (2018) "RESERVOIR SEDIMENTATION ANALYSIS: A CASE STUDY" at 5th National Conference on Water, Environment & Society (**NCWES-2018**) (under publishing)
- Ara, Z. and Zakwan, M. (2018) "Rainfall Runoff Modelling for Eastern Canal Basin" in **Water and Energy international**, Vol. 61(6), p. 63-67.
- Mohammad Zakwan, Iqbal Khan, Zeenat Ara, Z. A. Rahim and S. M. V. Sharief "Trend Analysis of Rainfall in Bihar" at National Conference on Water Resources Management (**WRM2019**), March 15 - 16, 2019 Civil Engineering Department, AMU, Aligarh
- Zeenat Ara and Mohammad Zakwan "Establishing Sediment rating curve using optimization technique" at International at Hydro 2018 International Conferences at NIT, Patna during 19-21 Dec 2018.
- Ara, Zeenat (2021) "Evolution in application of Satellite data for Land use /Land Cover Classification and Change Detection: A Review" at International Conferences on Hydraulic, Water Resources and Coastal Engineering HYDRO-2021.

Book Chapter

Ara, Z. (2021). Land Use Classification Using Remotely Sensed Images: A Case Study of Eastern Sone Canal—Bihar. In: Pandey, A., Mishra, S., Kansal, M., Singh, R., Singh, V. (eds) Water Management and Water Governance. Water Science and Technology Library, vol 96. Springer, Cham. https://doi.org/10.1007/978-3-030-58051-3_4

Workshop and Training

- Participated in workshop "Software Applications in Water Supply & Sewerage Systems" Organized by MJCET, Hyderabad
- Participated in a Two-week ISTE WORKSHOP on Computational Fluid Dynamics conducted by IIT, Bombay
- Participated in a Two-week ISTE WORKSHOP on Engineering Mechanics conducted by IIT, Bombay
- Faculty Development Training programme by MJCET, Hyderabad.
- 33rd Orientation Programme Organizing Agency UGC-HRDC MANUU
- Participated in Faculty Development Program on "Mat lab Applications in Engineering and Science" conducted by Technical Education Quality Improvement Program – III.

- Participated Online Faculty Development Program on "Machine Learning and Deep Learning Applications in Engineering & Science" conducted by Technical Education Quality Improvement Program – III.
- Faculty Development Program on Application of Remote Sensing And GIS in Civil Engineering. Organized By Civil Department Silicon Institute Of Technology, Sambalpur
- Participated in Online Faculty Development Program on "Sustainable Environment – An Engineering Perspective, 2020. Sponsored by Technical Education Quality Improvement Program-III) organized by Department of Civil Engineering, Assam Engineering College Jalukbari, Guwahati
- Participated Online Faculty Development Programme on "ICT Tools for Teaching, Learning Process and Institute". Organized by Electronics and ICT Academies
- Participated Faculty Development Program me On "Research Opportunities in Environmental Engineering. Organized by Department of Civil Engineering, Bharati Vidyapeeth (Deemed to be University), College of Engineering, Pune in association with Department of Civil Engineering Shahajirao Patil Vikas Pratishthan's S. B. Patil College of Engineering, Indapur, Pune
- Participated Faculty Development Programme. On Advanced Pedagogy. Organized by Regional Telecom Training Centre (RTTC), Bharat Sanchar Nigam Limited (BSNL), Hyderabad
- Participated in Regional Telecom Training Centre (RTTC), Bharat Sanchar Nigam Limited (BSNL), Hyderabad. Industrial Training.
- Participated in Training Program on Urban Flood Management: Technology Driven Solution" . Organized by BITS Pilani, Hyderabad Campus.
- Participated in Workshop on "Research Methodology "Organized by BITS Pilani, Hyderabad Campus
- Participated in Training Program on Academic Leadership Organized by UGC-HRDC MANUU.
- Participated in Online International Workshop on "Development of Assessment Methodologies and Smart Information System for Water Resources" Organized by Department of Civil Engineering, St. Martin's Engineering College, Dhulapally, Secunderabad, T.S, India

External Examiner

- External examiner for viva voce examination of Master of Technology in Construction Management of Government College of Engineering, Karad (An Autonomous Institute of Government of Maharashtra) affiliated to Shivaji University, Kolhapur (M. S., India))