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## Education

- Doctor Of Philosophy (Ph.D.) Civil Engineering | 2013-2018 | Osmania University, Hyderabad  
Topic: Simulation of reservoir sedimentation of Sriram Sagar reservoir
- Master of Technology (M. Tech) Water Resources | 2002-2004 | Jawaharlal Nehru Technological University, Hyderabad  
Topic: Generation of Synthetic Model for forecasting of Reservoir Inflows and the Integrated Optimal Reservoir Operation, developed at CMC, Hyderabad.  
Being a University Topper with an overall 86% of marks, with name listed in the roll of honors.
- Bachelor of Engineering (B.E)(Civil Engineering) | 1992-1996 | Muffakham Jah College of Engineering & Technology (Osmania University), Hyderabad  
Being the Second Topper in Civil Engineering Department with an overall 85% of marks.

## Field of Research:

Water Resources Engineering, Reservoir Sedimentation, Applications of AI tools- ANN, Fuzzy Logic in Water Resources, Water Quality and Ground Water Resources.

## Experience (*Overall: 26 years---Industry-5years: Teaching-21years*)

- Associate Professor - Muffakham Jah College of Engineering & Technology | 1st May 2018– Till Date (7 Years)
- Assistant Professor (Senior Grade Scale) - Muffakham Jah College Of Engineering & Technology | 2009–30th April 2018 (9 Years)
- Assistant Professor - Deccan College of Engineering & Technology | 2005-2009 (*4 Years*)
- Assistant Professor - Progressive College of Engineering & Technology | 2004-2005 (*1 Year*)  
Faculty And Project Guide - Scantech Computers, Hyderabad | 1996-2001 (5 Years)

## Honours and Recognitions

### ➤ Awards

- **BHARAT RATNA Dr. ABDULKALAM GOLD MEDAL AWARD** for meritorious service and achievements in Education on occasion of National Unity Conference for the year 2018, by  
Global Economic Progress & Research Association (GEPRA), New Delhi.
- **Prof. Indira Parikh 50 Women in Education 2018** Award by World Education Congress
- **Madina Gold Medal Award 2018** for achievements in Education.
- Titled **Chartered Engineer** [India] by the Institution of Engineers (India).
- **Advisory Council Member** for the **World Education Congress 2019**.
- **IARDO Award for the Best Teacher-2018**, by International Association for Research and developed Organization., <http://www.iardo.com/member/awardees-2018>.
- **IARDO Award for the Best Thesis-2018**, by International Association for Research and

developed Organization., <http://www.iardo.com/member/awardees-2018>

- **DEWANG MEHTA – National Education Awards - BEST PROFESSOR IN CIVIL ENGINEERING - 2018.**
- **Inspirational Woman Award 2020** (On International Day of the Girl Child) in the International Award Conference on Empowering Girls for a Brighter Tomorrow 2020, on 11<sup>th</sup> Oct 2020, by the International Association of Research and Developed Organization, under the banner of India Educational Charitable Trust (Regd.).
- **Faculty Excellence Award 2021** for Excellence in caring for students' career (on Teacher's Day occasion) on 5<sup>th</sup> September 2021, by Ed & ImmiGo, Overseas Education, Immigration, and Coaching A company of CORP2CORP INC-USA.
- **Gurukul Academic Awards-2022 for Teaching and Research Excellence**, organized by JS University Mainpuri and Institute of Social Reforms & Higher Education Charitable Trust, UP, India.
- **Best Inspiring Teacher award 2024** in recognition of outstanding contribution in teaching and learning on 15th August 2024 on occasion of International Award Ceremony on Independence Day Education Awards [IDEA-2024] by the Knowledge Research Academy.

#### ➤ **Patents Published**

- Patent published on “Structured Transmission Towers Vibrations of latticed steel Conductive Cable” in The Patent Office Journal No. 24/2022 Dated 17/06/2022, Application No.202241030585 A.

#### ➤ **Funded Projects**

- **HydroScout:** Precision Water Body and Silt Depth Analysis—Rs. 69,000 funded by R & D Cell, MJCET.
- **HydroScout:** A Dual-Mode UAV for Precision Water body and Silt Depth Analysis.--Rs.15 Lakhs funded by MSME, Hackathon 4.0.

#### ➤ **Reviewer for Journals:**

- Sustainable Water Resources Management Journal
- Water Resources Management Journal
- Academia Letter
- Quaestiones Geographicae
- Sri Lankan Journal of Technology
- Brazilian Journal of Water Resources
- Asian Journal of Environment & Ecology

➤ **Coordinator for :**

- Memorandum of Understanding between M. N. Constructions & Developers and the Civil Engineering Department, MJCET on 25th July 2024 for mutual cooperation in student projects, technical visits and internships.
- Memorandum of Understanding between MUTECH Engineering Consultants Pvt. Ltd. and the Civil Engineering Department, MJCET on 25th July 2024 for mutual cooperation in student projects, technical visits and internships.
- Technical Talk on “Paving the Way- Career Options for Civil Engineering Graduates” in the Civil Engineering Department, MJCET on 25th July 2024.
- Organizing webinar on “Sustainable Wastewater and Solid Waste Management- Case Studies” organized by the Department of Civil Engineering Department, Muffakham Jah College of Engineering & Technology, Hyderabad on 5<sup>th</sup> June 2021.
- Organizing “3-Day International Conference on Recent Advances in Civil Engineering Infrastructure (RACEI- 2019)” organized by the Department of Civil Engineering Department, Muffakham Jah College of Engineering & Technology, Hyderabad during 16-18 December 2019.

- **Editor** of the proceedings of the “3-Day International Conference on Recent Advances in Civil Engineering Infrastructure (RACEI- 2019)” organized by the Department of Civil Engineering Department, Muffakham Jah College of Engineering & Technology, Hyderabad during 16-18 December 2019.

➤ **Professional Memberships In**

- Life Member "Indian Society for Technical Education"(ISTE), LM-98709
- Life Member "Indian Water Resources Society" (IWRS), LM-2014-7518
- Life Member "Indian Society of Geomatics"(ISG), L-1653
- Life Fellow "The Institution of Engineers"(IEI), FIE, F-1240044
- Life Member "Indian Association of Hydrologists" (IAH), LM-1821
- Life Member “Indian Society for Hydraulics” (ISH), LM-1469

➤ **Workshops and FDP’s Attended: 63**

➤ **Research Publications -38**

• **Books: 1**

1. Qamar Sultana [2024], “Surface Water Hydrology in Urban Environments- Challenges and Solutions”, Prashas Publishing House, June 2024. ISBN : 978-81-970632-8-2.

• **Book Chapters: 5**

1. Qamar Sultana and M. Gopal Naik [2023], “Trap Efficiency of Reservoirs: Concept, Review and Application”, Water, Land and Forest Susceptibility and Sustainability: Geospatial Approaches & Modeling, Elsevier Publishing House. pp. 29-57, Jan 23, <http://dx.doi.org/10.1016/B978-0-323-91880-0.00035-0> (Scopus Indexed).
2. Sultana, Q., Sultana, A., & Ara Z. [2023], “Assessment of the Landuse and Landcover Changes using Remote Sensing and GIS Techniques”, Water, Land and Forest Susceptibility and Sustainability: Geospatial Approaches & Modeling, Elsevier Publishing House. 267-291, Jan 2023, <http://dx.doi.org/10.1016/B978-0-323-91880-0.00022-2> (Scopus Indexed)
3. Zakwan, M., Sultana, Q., & Ahamad, G. (2022). Magnitude frequency analysis of sediment transport: Concept, review, and application. Current Directions in Water Scarcity Research, 7, 497-512. <https://doi.org/10.1016/B978-0-323-91910-4.00028-5>
4. Qamar Sultana, Asma Sultana [2021], “Exploring the Changes in Land Use of Godavari Middle Sub Basin”, Environmental and Unsustainable Human Life, VL Media Solutions Publishers, New Delhi (India), First Edition, ISBN: 978-93-91308-37-7, Volume-IX; pp. 167-179.
5. Qamar Sultana, Uzma Mahreen [2021], “Psychological Impact of a Pandemic on the General Population”. Psychological Impact of Pandemics in Different Eras. Adhyayan Publishers & Distributors, New Delhi (India), First Edition 2021, ISBN : 978-93-91943-30-1; pp.21-44.

• **International Journal Publications: 13**

1. G.Sailaja, Arshad Mohammad, Qamar Sultana, V Suvarna Kumar, Mohd. Abdul Muqet, Mohammed Sajid [2022]. “Nutritional Deficiencies and Growth Challenges in Underweight Children: A Path to Recovery”, IJFANS INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES, Volume 11, Issue 10, 2022, pg 7282-7290. ISSN PRINT 2319 1775 Online 2320 7876. UGC CARE GROUP-I listed.
2. Asma Sultana, Qamar Sultana [2021]. “Application of Computational Fluid Dynamics in Civil Engineering-A Review”, published in International Journal of Current Engineering and Technology, E-ISSN 2277 – 4106, P-ISSN 2347 – 5161, Special Issue-9 (Aug 2021), <http://inpressco.com/category/ijcet/special-issue-9-aug-2021/>
3. Qamar Sultana, Asma Sultana [2021]. “A Review of the Deterioration of River Musi and its Consequences in Hyderabad City”, published in International Journal of Current Engineering and Technology, E-ISSN 2277 – 4106, P-ISSN 2347 – 5161, Special Issue-9 (Aug 2021), <http://inpressco.com/category/ijcet/special-issue-9-aug-2021/>

4. Qamar Sultana. (2020). "Prediction of Ground Water Quality Index Using Artificial Neural Networks", published in Science and Engineering Journal, 24(8), August 2020, pp. 283-295, ISSN: 0103-944X, listed in UGC approved journal group-II.
5. Qamar Sultana. (2020). "Analysis of Uncertainty of Sediment Rating Curve Parameters", published in International Journal of Advanced Science and Technology, 29(6s), 3646-3657, June 2020, ISSN: 2207-6360, Retrieved from <http://sersc.org/journals/index.php/IJAST/article/view/23276>.
6. Qamar Sultana, Gopal Naik M. [2019]. "Comparison of soft Computing Techniques for Trap Efficiency – A Reservoir Case Study.", Published in International Journal of Innovative Knowledge Concepts, IJIKC, ISSN No.: 2454-2415, UGC Journal No: 64094, Volume VII, Issue 7, July 2019, pp. 78-90.
7. Qamar Sultana, Asma Sultana [2019]. "Comparative Study of Different Empirical Methods for Determination of Trap Efficiency of Reservoir", Published in International Journal of Scientific Research and Review, IJSRR, ISSN No.: 2279-543X, UGC Journal No: 64650, Volume 07, Issue 06, June 2019, pp. 454-470., [http://www.ijsrr.co.in/images/full\\_pdf/1560516065\\_P428.pdf](http://www.ijsrr.co.in/images/full_pdf/1560516065_P428.pdf)
8. Asma Sultana, Qamar Sultana [2019]. "Design of Water Supply Distribution System: A Case Study", Published in International Journal of Scientific Research and Review, IJSRR, ISSN No.: 2279-543X, UGC Journal No: 64650, Volume 07, Issue 06, June 2019, pp. 435-453.
9. Qamar Sultana, Asma Sultana [2019]. "Application of Soft Computing Techniques - A Case Study of Reservoir", Published in International Journal of Scientific Research and Review, IJSRR, SSN No.: 2279-543X, UGC Journal No: 64650, Volume 07, Issue 06, June 2019.
10. Qamar Sultana, Asma Sultana [2019]. "Assessment of Groundwater Quality-A Case Study Of Hyderabad City", Published in International Journal of Research and Analytical Reviews, IJRAR ( [www.ijrar.org](http://www.ijrar.org) ) UGC Approved (Journal No : 43602) & 5.75 Impact Factor, Volume 6 Issue 2 May 2019, pp. 941-946.
11. Qamar Sultana, Gopal Naik M. (2017). "Useful Life of a Reservoir and its Dependency on Watershed Activities", Agri Res & Tech: Open Access J. 2017; 8(5): 555749. DOI: 10.19080/ARTOAJ.2017.08.555749.,pp.1-5., <https://juniperpublishers.com/artoaj/ARTOAJ.MS.ID.555749.php>
12. Qamar Sultana, Gopal Naik M. (2016). "Forecast of Reservoir Sediment Trap Efficiency using Artificial Neural Networks", International Journal of Research in Engineering and Technology, Vol. 05, Special Issue:02,DPMRSS-2016, Feb-2016,pp.1-5., <https://ijret.org/volumes/2016v05/i14/IJRET20160514001.pdf>, DOI: <https://doi.org/10.15623/ijret.2016.0514001>

13. Qamar Sultana, Gopal Naik M. (2015) “Estimation of Trap Efficiency of Sriramsagar Reservoir”, International Journal of Research in Engineering and Technology, Vol. 04, Special Issue: 11, NIT Warangal CSWM-2015, Oct’ 2015, pp.116-122. DOI: <https://doi.org/10.15623/ijret.2015.0423020>

• **International Conference Publications: 12**

1. Qamar Sultana, Asma Sultana (2024). “Groundwater Pollution and its Assessment – A Review”, Proc. 4th International Symposium of Scientific Research and Innovative Studies, ISSRIS’24, organized by Bandırma Onyedi Eylül University TURKEY during 13th to 16th March 2024, PP:92-104 ISBN: 978-625-94317-1-0.
2. Qamar Sultana, Asma Sultana (2021). “Restoration of Lakes in Hyderabad City of Telangana State - a Review”, Proc. 7th International Seminar of HATHI on “Tribute to 60 Years of River Basin Management in Indonesia: Infrastructures Management for Sustainable Water Security”, held by Indonesian Association of Hydraulic Engineers, in Surabaya, Indonesia on 30th October 2021, ISBN 978-602-6289-29-2.
3. Qamar Sultana, Gopal Naik M. (2019). “Prediction of Suspended Sediment Load by Sediment Rating Curve” Proc. 24<sup>th</sup> Hydro-2019, International Conference, organized by the Department of Civil Engineering Department, University College of Engineering (A), Osmania University, Hyderabad, India, in association with The Indian Society for Hydraulics (ISH), held during 18-20 December 2019, PP. 2477-2488, ISBN: 978-93-8935-484-3
4. Qamar Sultana, Gopal Naik M. (2019). “Assessment of Useful Life of Reservoir” Proc. International Conference on Recent Advances in Civil Engineering Infrastructure (RACEI-2019) organized by the Department of Civil Engineering, Muffakham Jah College of Engineering & Technology, Hyderabad during 16-18 December 2019, pp: 314-319, ISBN: 978-93-8935-486-7.
5. Qamar Sultana, Asma Sultana (2019). “Study of Variation of Watershed Characteristics” Proc. International Conference on Recent Advances in Civil Engineering Infrastructure (RACEI-2019) organized by the Department of Civil Engineering, Muffakham Jah College of Engineering & Technology, Hyderabad during 16-18 December 2019, pp: 327-334, ISBN: 978-93-8935-486-7.
6. Qamar Sultana, Mahmmad Afrose, Mohammed Mashood Ali and Hussain Syed (2019). “Analysis of Ground Water Quality and its Management” Proc. International Conference on Recent Advances in Civil Engineering Infrastructure (RACEI- 2019) organized by the Department of Civil Engineering Department, Muffakham Jah College of Engineering & Technology, Hyderabad during 16-18 December 2019, pp: 335-339, ISBN: 978-93-8935-486-7.



7. Asma Sultana, Qamar Sultana (2019). “Study of Physio-Chemical Parameters and Quality Assessment of Ground Water” Proc. International Conference on Recent Advances in Civil Engineering Infrastructure (RACEI- 2019) organized by the Department of Civil Engineering Department, Muffakham Jah College of Engineering & Technology, Hyderabad during 16-18 December 2019, pp: 340-344, ISBN: 978-93-8935-486-7
8. Qamar Sultana, Asma Sultana (2019). “Comparative Study of Different Empirical Methods for Determination of Trap Efficiency of Reservoir” Proc. 7th International Conference on Research Developments in Applied Science, Engineering & Management (AEM- 2019) organized at Mahratta Chamber of Commerce, Industries and Agriculture Tilak Road, Pune (India) , on 15th and 16th June 2019, pp: 128-145. [http://proceeding.conferenceworld.in/AEM-2019\\_June/13PJDNGwUulMLP428.pdf](http://proceeding.conferenceworld.in/AEM-2019_June/13PJDNGwUulMLP428.pdf)
9. Asma Sultana, Qamar Sultana (2019). “Design of Water Supply Distribution System: A Case Study” Proc. 7th International Conference on Research Developments in Applied Science, Engineering & Management (AEM- 2019) organized at Mahratta Chamber of Commerce, Industries and Agriculture Tilak Road, Pune (India), on 15th and 16th June 2019, pp:108-127. [http://proceeding.conferenceworld.in/AEM-2019\\_June/12PQJrXfllTRMP427.pdf](http://proceeding.conferenceworld.in/AEM-2019_June/12PQJrXfllTRMP427.pdf)
10. Qamar Sultana, Asma Sultana (2019). “Application of Soft Computing Techniques - A Case Study of Reservoir” Proc. 6th International Conference on Multidisciplinary Research” organized jointly by AR Research Publication & Conference World on 30th & 31st May, 2019 at Osmania University Centre for International Program, Osmania University Campus, Hyderabad, India, pp:573-586. [http://proceeding.conferenceworld.in/ICMR-2019\\_OUCIP/72OVWbIUdeEvhO787.pdf](http://proceeding.conferenceworld.in/ICMR-2019_OUCIP/72OVWbIUdeEvhO787.pdf).
11. Qamar Sultana, Gopal Naik M. (2017). “Simulation of Trap Efficiency of Sriramsagar Reservoir using Artificial Neural Network Techniques.” Proc. IAHR 2017, of 37th IAHR World Congress held from 13-18 August 2017 at Kuala Lumpur, Malaysia, ISSN 2521—7119 (Print)- ISSN 2521-716X (Online)-ISSN 2521-7127 (USB).
12. Qamar Sultana, Gopal Naik M. (2015). “Estimation of Trap Efficiency of Sriramsagar Reservoir using Artificial Neural Network Technique.”, Proc. International Conference on “Innovations in Structural Engineering (IC-ISE-2015)”, organized by University College of Engineering (A), Osmania University, held at Osmania University, Hyderabad, India, from Dec’ 14-16, Vol.1, pp.1868-1882.

• **National Conference Publications: 7**

1. Gopal Naik M., Qamar Sultana (2017). “Model Development for Prediction of Trap Efficiency of Sriramsagar Reservoir Using Soft Computing Techniques” , Proc. National Conference on “Sustainable Water and Environment Management (SWEM – 2017)”, organized by Centre for Water Resources, Institute of Science and Technology, JNTUH, held at IST, JNT University of Hyderabad, Kukatpally, Hyderabad from Dec 21st – 23rd , Vol.1, pp. 46--52.

2. Qamar Sultana, Gopal Naik M. (2016). “Forecast of Reservoir Sediment Trap Efficiency using Artificial Neural Networks”, Proc. National Conference on “Disaster Preparedness, Mitigation and Reconstruction of Sustainable Society (DPMRSS)”, organized by the Centre of Excellence for Disaster Mitigation, Department of Civil Engineering, VNR VJIET in association with TEQUIP-II, from Feb’ 11-12, Vol-1, pp.67-73.
3. Qamar Sultana, Gopal Naik M. (2015). “Estimation of Trap Efficiency of Sriramsagar Reservoir”, Proc. National Conference on “Climate change and Sustainable Water Resources Management (CSWM-2015)”, organized by Civil Engineering Department, National Institute of technology, Warangal, India in association with the Indian Society for Hydraulics (ISH), from September 3-5, Vol.1, pp.121-127., [https://www.academia.edu/download/42193273/ESTIMATION\\_OF\\_TRAP\\_EFFICIENCY\\_OF\\_SRIRAMSAGAR\\_RESERVOIR.pdf](https://www.academia.edu/download/42193273/ESTIMATION_OF_TRAP_EFFICIENCY_OF_SRIRAMSAGAR_RESERVOIR.pdf)
4. Qamar Sultana, Gopal Naik M. (2015). “Estimation of Sediment Retained in Sriramsagar Reservoir using Artificial Neural Technique and Conventional Method”, Proc. National Conference on “World, Environment and Society(NCWES-2015)”, organized by Centre for Water Resources, Institute of Science and Technology, JNTUH, held at IST, JNT University of Hyderabad, Kukatpally, Hyderabad from July 30th -31st, Vol.1, pp. 580-586.
5. Qamar Sultana, Venkateswara Rao B. (2007) “Development of Stochastic Model for the forecasting of the reservoir inflows”. Proceedings of Conference on Watershed Management and Impact of Environmental Changes on Water Resources(WMEC-2007), organized by the Department of Civil Engineering, JNTU College of Engineering, Hyderabad (under TEQIP) during 22-23 Feb 2007, Vol.1, pp:228-239.
6. Qamar Sultana, Venkateswara Rao B., and Prasad D.V.S. (2004) “Integrated Optimal Operation of Srisailem and Nagarjuna Sagar Reservoir”. Proceedings of Conference on Water Resources Development and Management Practices (WARM-2004),” organized by M.V.S.R Engineering College, Hyderabad, Vol.1, pp: 143-154.
7. Qamar Sultana, Venkateswara Rao B. (2004) “Development of Stochastic Model for the forecasting of the reservoir inflows”. Proceedings of Conference on Water Resources Development and Management Practices (WARM-2004),” organized by M.V.S.R Engineering College, Hyderabad, Vol.1, pp:175-183.