Dr. Mohammed Hussain, Professor of Civil Engineering has obtained his Ph. D in Water Resources Engineering from Jawaharlal Nehru Technological University Hyderabad (JNTUH) in 2002. He has graduated with B.Tech degree in Civil Engineering from National Institute of Technology Warangal (Formerly, Regional Engineering College, Warangal). He has obtained his M.E. (Master of Engineering) degree in Hydromechanics and Water Management from University College of Engineering, Osmania University, Hyderabad. He has PG Diploma in Design and Construction of Concrete Structures from Annamalai University. He has another PG degree ,MHRM (Master of Human Resources Management), from Pondicherry University.



He was former Irrigation Engineer in Irrigation and Command Area Development Department, Government of Andhra Pradesh (then Undivided) for 22 years, out of which fourteen years he worked as Faculty Member in Water and Land Management Training and Research Institute (WALAMTARI), Hyderabad.

During his tenure at WALAMTARI, he has trained hundreds of officers of Agriculture Department and Irrigation Department and thousands of Farmers in the area of Irrigation Management and associated issues under World Bank aided Hydrology Project (HP), National Water Management Project (NWMP),Irrigation Water Management Training Project of USAID (United States Agency for International Development) & Andhra Pradesh Economic Restructuring Project (APERP) i.e. Participatory Irrigation Management(PIM).

He underwent training in many reputed institutes in the area of Irrigation Water Management & Water Resources like WALAMTARI, Hyderabad; National Water Academy, Pune; Central Water and Power Research Station (CWPRS), Pune; CCS- Haryana Agricultural University; Irrigation Management Training Institute (IMTI), Tiruchy; National Institute of Hydrology (NIH), Roorkee; Administrative Staff College of India (ASCI), Hyderabad; Engineering Staff College of India, Hyderabad; National Institute of Rural Development & Panchayat Raj (NIRD&PR), Hyderabad; Indian Institute of Management (IIM), Khozikode; National Geophysical Research Institute (NGRI), Hyderabad; IIT Bombay; IIT Hyderabad; IIT Kharagpur etc.

He underwent six week training in "Applied MicroComputer Use in Irrigation and Drainage" in International Irrigation Centre, Utah State University, Utah, USA in 1992.

Under his able guidance, two batches of students (2003-04 & 2005-06) won the prestigious National Award "ISTE-NIT Kozhikode National Award for Best B.E. Project in Civil and Architecture" during his period at Muffakham Jah College of Engineering and Technology(MJCET), Hyderabad.

He was former Founder Principal of Mallareddy Institute of Technology (MRIT), Hyderabad.

He was Key note speaker in the area of Irrigation Management in two national seminars of JNTUH. He is currently guiding two Ph.D students of JNTUH in the area of Water Resources Engineering.

He has thirty six years of Professional experience (includes seventeen years of Teaching experience)

He was former Professor and HOD (August 2013 to March 2017) of the Department of Civil Engineering, Gokaraju Rangaraju Institute of Engineering and Technology(GRIET), Hyderabad. He is founder coordinator for three centres at GRIET:

Centre for Continuous Excellence in Life Skills (CEL), Centre for Water Resources Engineering and Management (CREAM) & Centre for Sustainable Technologies for Eco-Social Resilience to Global Climate Change (CST-ERG).

He has been organizing various competitions from 2011 onwards, on the themes given , on the occasion of Engineers' day, United Nations (UN)International Day of Peace, UN International Day of Nonviolence and World Mental Health Day; UN World Water Day, UN International Mother Earth day, UN World Health day , UN World Day for Cultural Diversity for Dialogue and Development & UN International Day of Biodiversity.

He has been organizing National Workshops on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies(STEPS)" from 2011.

He is founder member of Energy Conservation Mission of Institution of Engineers (India), AP centre (now Telangana Centre) in 2004.

He has delivered thirteen management lectures and five technical lectures at Institution of Engineers(India), Hyderabad from 2001 to 2011. He was resource person at UGC-Academic Staff College of JNTUH for the topic on "Human Resources Management in Engineering Colleges". He was former member of Board of Studies in Civil Engineering of JNTUH.

His areas of Interest:

Capacity Building in Participatory Irrigation Management; Prestressed Concrete, Green Buildings, Preparation and Implementation of Operation Plans of Irrigation systems, Design of Concrete Bridges (trained in MIDAS software), Engineering Mechanics (Statics and Dynamics), Fluid Mechanics, Water Resources Engineering (trained in SWAT software in GIAN course at IIT Hyderabad), Sustainable Technologies, Optimization methods and Numerical methods in Water Resources, Water Resources Systems Engineering & Life Skills Education for Engineers and students.

Contact:

Dr. Mohammed Hussain Professor

Department of Civil Engineering

GRIET, Bachupally, Hyderabad -500090

Email:mohd_hussain@griet.ac.in

Ph:

Curriculum Vitae

Education Details:

- Ph.D in Water Resources Engineering from Jawaharlal Nehru Technological University Hyderabad , Hyderabad
- M.E. in Hydromechanics and Water Management from Dept. of Civil Engineering, University College of Engineering, Osmania University, Hyderabad
- MHRM (Master of Human Resources Management), PONDICHERRY UNIVERSITY
- PG Diploma in Design and Construction of Concrete Structures , Annamalai University
- B.Tech in Civil Engineering from National Institute of Technology, Warangal (formerly, Regional Engineering College, Warangal)

Experience & Other Academic Contributions:

- 1. Professor, Civil Engineering, Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyderabad from 2011-present
- 2. Former Principal, Mallareddy Institute of Technology, Secunderabad from 2008-2010
- 3. Former Associate Professor, Muffakhamjah College of Engineering and Technology, Hyderabad, 2003-2007
- 4. Former Faculty Member, Water and Land Management Training and Research Institute (WALAMTARI), Hyderabad 1989-2003

Major Career Interests

Capacity Building of all stakeholders in the area of Participatory Irrigation Management, Entrepreneurship development of students , Life Skills development of students , Design skills of Concrete structures and Natural Resources Management skills of Civil Engineers using MIDAS for Bridges design, WMS for watershed management , TORA for Linear Programming , QGIS for Geographical Information System , SciLAB and MATLAB applications in Civil Engineering ,Google Earth Engine (GEE) and Bhuvan for spatial data and other open source softwares.

Procurement of new equipment for Laboratories: Double Ring Infiltrometer test equipment for determination of Infiltration rates of soils, Parshall flume for determination of Volumetric irrigation flow in the farmer fields. Soil Augers to determine the properties of soil at different depths.

Association with Professional Bodies

- Life member of Administrative Staff College of India (ASCI) Alumni Association.
- Life member of Indian Water Resources Society (IWRS)
- Fellow of Institution of Engineers India(IEI)
- Member of Energy Conservation Mission of Institution of Engineers(India), Telangana

Centre, Hyderabad

Life Member of Indian Institution of Bridge Engineers

Research Interests:

Capacity Building in Participatory Irrigation Management; Prestressed Concrete, Green Buildings, Preparation and Implementation of Operation Plans of Irrigation systems, Design of Concrete Bridges and Steel Bridges(trained in MIDAS software), Engineering Mechanics (Statics and Dynamics), Fluid Mechanics, Water Resources Engineering(trained in SWAT software), Sustainable Technologies, Optimization methods and Numerical methods in Water Resources, Water Resources Systems Engineering & Life Skills Education for Engineers and students.

Subjects Taught:

- 1. Engineering Mechanics (Statics and Dynamics)
- 2. Operations Research
- 3. Fluid Mechanics
- 4. Water Resources Engineering -I
- 5. Water Resources Engineering- II
- 6. Gender Sensitization
- 7. Research Methodology and Intellectual Property Rights

Journal Publications/Conference Proceedings:

International Journals	3
National Journals	1
International Conferences	17
National Conferences	28
Total =	48

ACHEIVEMENTS AND AWARDS

- -National Merit Scholarship holder from Junior Intermediate to Final Year B.Tech
- -Proficiency Prizes during high school and college days
- -Certificate of Recognition by United States Agency for International Development (USAID) for having successfully undergone six week training in "Applied Microcomputer Use in Irrigation and Drainage" at International Irrigation Centre, Utah State University, USA.
- -Two of B.E.Projects guided won the prestigious national award "ISTE –NIT Khozikhode National Award for Best B.E. Project in Civil and Architecture for the years 2003-04 and 2005-06.
- -Recognition for giving the highest number of lectures at Institution of Engineers(India),AP Centre (then), Hyderabad.
- -Best Paper Award as coauthor for the paper titled "Application of Worldwide free and Open source software in numerical computation "Sci Lab (similar to MATLAB) in Water, Wastewater and Irrigation Engineering: Certain Examples" in the 5 th National Conference on "Water, Environment and Society (NCWES-2018) during 04-06 June
- 2018, Organized By Centre for Water Resources, IST, JNTUH, Kukatpally, Hyderabad.

INVITED LECTURES

Delivered <u>Thirteen Management Lectures</u> And <u>Five Technical Lectures</u> In The Institution Of Engineers, A.P. Centre(Now Telangana Centre), Hyderabad, India During <u>2001-11</u>.

- i) May 4, 2001 Active Listening Skill for managers
- ii) July 29, 2001 Improving Communication Skill with Transactional Analysis
- iii) September 20, 2001 Developing Holistic thinking skill of managers through the re-orientation of self-talk for improving the performance effectiveness and efficiency
- iv) Febraury 6, 2002 Developing the spontaneous resolution skill of the Psychological conflict
- v) June 6, 2002 Positive Assertiveness Skill for effective communication and WIN –WIN management.
- vi) November 7, 2002 Preparation and Implementation of operation plans of all irrigation projects of India : An urgent need (**Technical**)
- vii) March 5, 2003 Insights of leadership from Panchatantra
- viii) May 7, 2003 Annual Practice of Multi-disciplinary Diagnostic Analysis (M.D.A) of irrigation systems : A key task to increase the Crop Productivity and Project efficiency (**Technical**)
 - ix) August 29, 2003 Anger Management and Release (A.M.A.R)
 - skill for Psycho-biological fitness and socio-organisational

fitness.

- x) December 3, 2003 G.O.O.D. Skill (Genuine and Openminded Organisational Deaddicted Behaviour Skill) to overcome the seven major addictions of 2^{1st} Century to improve the organizational productivity
- xi)July 20, 2004 F.A.C.E. Skill (Fears, Anxieties and Chicken-heartedness Emancipation Skill) to overcome the rational fears and irrational phobias of 21st century to improve the proactive -decision making process.
- xii) December 13, 2004 Abundance Mentality for the proactive focus of WIN-WIN Management Scarcity Mentality for the reactive focus of WIN-LOSE Management.
- xiii)January 25, 2006 A.S.P.I.R.E. Skill to work with Emotional Intelligence for continuous development of individuals and organizations
- xiv) January 18, 2007- Attitude of Self- Enquiry, Self- Respect and Self-Acceptance for even more Effectiveness and Efficiency
- xv) December 10, 2007 Decision Support Systems for Effective Water Resources Management in the world (<u>Technical</u>)
- **xvi**)May 15, 2008 "Preparation and Implementation of Operation plans in Irrigation Projects of India: An urgent need" at Vijayawada Local Centre of Institution of Engineers (Technical)
- **xvii**)December 7,2010 "Role of civil Engineers to achieve United Nations Millennium Development Goals by the year 2015" at Institution of Engineers , Hydrabad (**Technical**)
- xviii) June,22,2010- "Human Resources Management in Engineering Colleges" at UGC-Academic Staff college of JNTU for college teachers in ORIENTATION COURSE
- xix) June,22,2011- Human Resources Management in Engineering Colleges" at UGC-Academic Staff college of JNTU for college teachers in ORIENTATION COURSE
- xx)March,13,2012- Human Resources Management in Engineering Colleges" at UGC-Academic Staff college of JNTU for college teachers in ORIENTATION COURSE
- xxi)November19,2011-"Engineering Management Practices for the sustainability of quality and quantity of water resources under climate change",Invited lecture in one day workshop on "Recent Advances in Climatic Modeling for water resources planning and management" at BITS-PILANI-HYD.
- xxii)March,21 2012-"Engineering Management Practices for the sustainability of quality and quantity of water resources in 21st Century",Invited lecture in one day workshop on "Recent Trends in Civil Engineering" at JB Institute of Technology(JBIT)-HYD.
- xxiii) 6 August,2014- "Participatory Irrigation Management" at National Institute of Rural Development (NIRD)" to fifty participants from 12 states of India

xxiv) 22 June 2011-" How to prepare Mind mapping notes"-One day seminar at GRIET

xxiv) 6 September 2014, "Preparation and Implementation of Operation Plans in Irrigation Projects" in one day seminar at Institution of Engineers (IEI),AP Centre

- xxv) Delivered eight lectures on "Human Resources Management" at Gokaraju Rangaraju College of Pharmacy
- xxvi) Delivered seven lectures on "Complete Listening Skill for Even more Effectiveness and Efficiency" under "Centre for Continuous Excellence in Life Skills" in GRIET
 - a) 29 June 2012 to Faculty of Civil Engg., Dept. of Civil Engg., GRIET
 - b) 3 April 2012 to students of III B.Tech, ME ,A-Section
 - c) 4 April 2012 to students of I B.Tech ,ECE ,B-Section
 - d) 26 April 2012 to students of I B.Tech, EEE, A section
 - e) 16 May 2012 to students of I B.Tech, IT, A section
 - f) 19 May 2012 to students of I B.Tech, CE-A
 - g) 19 May 2012 to students of I B.Tech, IT-B

PROFESSIONAL PROGRAMMES ATTENDED

TRAININGS UNDERGONE IN INDIA AND ABROAD

- i. Ten Month Training Programme in Irrigation Management in WALAMTARI, Hyderabad from 01.07.1987 to 30.04.1988.
- ii. Six week International Training Programme in "Applied Micro Computer Use in Irrigation and Drainage" at International Irrigation Centre of UTAH state University, Logan, USA from January 5th to February 15th, 1992.
- iii. Eleven day National Training course on "Computer aided On- Farm Water Management" from 11-21 April, 1994 at CCS Haryana Agricultural University, HISSAR, Haryana
- iv. Four week National Training Programme on "Training of Trainers (T.O.T) programme in Hydrometry" from 2nd to 26th September, 1997 at Central Training Unit (CTU) of Central Water Commission of Government of India, PUNE.
- v. Five day "Direct Trainer Skills" (DTS) course from 22.06.1998 to 26.06.1998 at Dr. MCR Human Resource Development Institute, Hyderabad Sponsored by Ministry of Human Resource Development, Govt. of India.

- vi. Five day "Design of Training" (DOT) course from 13.07.1998 to 17.07.1998 at Dr. MCR Human Resource Development Institute, Hyderabad Sponsored by Ministry of Human Resource Development, Govt. of India.
- vii. Seven day National Training Course on "Water Management in Command Areas" at National institute of Hydrology, Roorkee from January 3-9, 1995.
- viii. Twelve day National training course on "Participatory Irrigation management (PIM) at WALAMTARI, Hyderabad from December, 12-23, 1995.
- ix. Six day National Training Course on "Stress Management" at National Institute of Rural Development (NIRD), Hyderabad from February 19-24, 1996.
- x. Three week National Transfer Course on "Diagnostic Studies for Rehabilitation of Irrigation System" at Irrigation Management Training Institute (IMTI), Tirchy, from 11.03.1996 to 30.03.1996.
- xi. "Project Planning and Management for Water Resources Development," from 5th to 9th March 1999, organised by Engineering Staff College of India, Hyderabad.
- xii. "Management of Waterlogged areas in Irrigation Commands" from 1st -6th November, 1999 organised by Administrative Staff College of India, Hyderabad Sponsored by the Ministry of Water Resources, Government of India.
- xiii. Refresher Course on "Training of Trainers in Hydrometry" from 1st 10th May, 2002, organized by National Water Academy of Central Water Commission, Pune.
- xxvi. Training course on "Water Harvesting and Artificial Recharge Their applications in drinking water supply Programme " from May 28 June 3, 2001 at National Geophysical Research Institute (NGRI), Hyderabad
- xxvii. Participated in one day workshop on "Construction Technologies for durable low cost housing ", 22nd April,2006, organized by University College of Engineering, Osmania University, Hyderabad.
- xxviii. Participated in one day workshop on "Advances in Computational Structural Mechanics and Fluid Flows (COSMECFLOWS), 5th December 2005,organized by University College of Engineering , Hyderabad.
- xxix. Participated in two week ISTE workshop on "Computational Fluid Dynamics" conducted by Indian Institute of Technology, Bombay from 12th to 22nd June, 2012 at JNTUH College of Engineering, Hyderabad under National Mission on Education through ICT(MHRD)
- xxx. Participated in three day workshop on "Good Governance and Institutional Assessment for Chairmen, BoG and Heads of TEQIP Institutions" from May 05-07,2014 ,organized by Administrative Staff College of India, Bellavista, Hyderabad.
- xxxi. Participated in two week ISTE workshop on "Fluid Mechanics" Conducted by Indian Institute of Technology, Kharagpur from 20 -30 May ,2014 at Gokaraju Rangaraju Institute of Engineering and Technology(GRIET), Hyderabad under National Mission on Education through ICT (MHRD)
- xxxii. Participated in three day workshop on "Surge Analysis and Design of water conveyance systems in lift irrigation schemes " from 18-20, June, 2014, organized by Water and Environment Division, Department of Civil Engineering, National Institute of Technology, Warangal.
- xxxiii. Participated in the workshop on "Teacher effectiveness: Nurturing well-being" jointly organized by the

- department of liberal arts and material science & metallurgical engg @ IIT Hyderabad during 1-2 May 2015.
- xxxiv. Participated in the Management Development Programme (MDP) on "Academic Leadership Programme for TEQIP Institutions " during October 26-31 , 2015 , Organized by Indian Institute of Management (IIM), Kozhikode .
- xxxv. Participated in two day training programme on "Urban Flood Management: Technology Driven Solutions" on November 20-21,2015, Organized by Centre of Excellence in Water Resources Management, Dept. of Civil Engineering, BITS Pilani Hyderabad Campus.
- xxxvi. Participated in the course "Hydrological Modelling with SWAT from 14-23rd Dec 2015 held @ Global Initiative for academic Networks (GIAN), IIT Hyderabad.
- xxxvii. Participated in one day national workshop on "STEPS-2016" held @ GRIET on 2nd Dec 2016.

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- xxxviii. Participated in the GIAN course on ground water flow & transport modelling through fractured geologic media from 27th June 2016 to 08th July 2016 organized by Civil Dept., IIT Hyderabad.
- xxxix. Participated in All India seminar on "Disaster-Mitigation of floods & Urban drainage issues" held at the Institution of Engineers (INDIA), Telangana state Centre on 6 & 7th Jan 2017.
- Participated in 4th international conference on "Transformations in Engineering Education" held during 6- 8th Jan 2017@ Vardhaman College of Engineering, Hyderabad, India
- Participated in "Technology Entrepreneurship Programme (TEP)" at Indian School of Business (ISB) on 26 July 2014 along with students and other faculty.
 - xlii. Participated and Obtained Certificate in FDP programme on "Pedagogy for Online and Blended Teaching
 - Learning Process" conducted by Indian Institute of Technology Bombay from September 14, 2017 to October 12, 2017 from Remote Centre ID 1080.
- liii. Participated and Obtained Certificate in FDP programme on "Foundation Programme in ICT for Education" conducted by Indian Institute of Technology Bombay from August 3, 2017 to September, 2017 from Remote Centre ID 1080.
- liv. Participated in Six Day Faculty Development Programme on "Computational Methods in Hydraulics and Water Resources Engineering "on 19 24 March 2018, organized by the Department of Civil Engineering in association with the Teaching Learning Centre, National Institute of Technology Warangal
- lv. Participated in two day workshop on "Data Mining & Soft Computing Techniques in Civil Engineering", on April 13-14, 2018, organized by Centre of Excellence in Water Resources Management, Dept. of Civil Engineering at BITS PILANI, Hyderabad Campus.
- lvi. Participated in One day Workshop on "Design Thinking" on November 8, 2018 organized by J- Lab at Gokaraju Rangaraju Institute of Engineering and Technology (GRIET).
- lvii. Participated in two day workshop on "Fuzzy Logic and Applications in Civil Engineering" on March 15-16, 2019, organized by Centre of Excellence in Water Resources Management, Dept. of Civil Engineering, BITS PILANI, Hyderabad campus
- lviii. Participated in Three days training on "Bhuvan Overview", May 07-09, 2019, Organised by National Remote Sensing Centre, Indian Space Research Organization, Dept. of Space, Hyderabad-500037
 - Attended one week STTP on "Applications of Neuro-Fuzzy Techniques in Civil Engineering" from 9 November to 14 Nov. 2020 to 14 Nov. 2020 by MVSR Engineering College, Hyderabad
 - Attended two week on line FDP on "Advanced Optimization Techniques and Hands on with MATLAB/ SCILAB from 13-14 July 2020, Jointly organized by MNIT, Jaipur; NIT Patna and PDDM IIT DM, Jabalpur

Attended two week Course on "Digital Transformation in Teaching and Learning Process" from April 6 to 22,2020; organized by IIT Bombay under TEQIP-3

Attended three day FDP on "Recent Advances in Concrete Technology and Sustainable Infrastructure" during 21-23 May 2020 by the Dept. of Civil Engineering, GRIET, Hyderabad

Attended one week FDP on "SCILAB - An Opensource substitute for MATLAB", jointly organized by JNTUH College of Engineering, Sultanpur , Sangareddy and Spoken Tutorial Project, IIT Bombay from 25 May to 30 May 2020

Attended Five day FDP on "Recent Modelling Approaches in Water Resources Engineering (RMAWRE-2020)" by thye dept. of Civil Engineering, University College of Engineering, Osmania University from 17 to 21 August 2020

Attended one week FDP on "Soft Computing Techniques" from 2/11/2020 to 6/11/2020 by AICTE Training and Learning Academy (ATAL) at Dr. S &SS Ghandhy Govt. Engineering College.

Attended On line One week Training Programme on "Geospatial Analysis using QGIS and R "from 1-6 February, 2021, Organised by Indian Council of Agriculture Research NAARM (National Academy of Agriculture Research Management), Hyderabad

Sponsored Projects

Associated with two year Collaborative Research Project with National Geophysical Research Institute (NGRI) during my period at WALAMTARI.

Name of the Project: "Captive Resource and Groundwater Sanctuary Development for creating Drinking Water Source in Chittoor District". The project was sponsored by "Rajiv Gandhi Drinking Water Mission of Ministry of Rural Development, Government of India".

Publications

LIST OF PAPER PUBLICATIONS

JOURNAL PUBLICATIONS

S.Bahauddin and Mohd.Hussain(1995), "Optimal surface irrigation under conditions of limited water supply — A case study in Sriram Sagar Project" Journal of India Water Resources Society, Vol. 1, No. 2,3 & 4 June, July & October, 1995.

Y. Kamalaraju and Mohd.Hussain(2018)," Reinforced Cement Concrete Bridge Deck Design of a Flyover with analysis for Dynamic Response due to moving loads for urban development in Transportation systems – A case Study ", International Journal of Engineering Research in Mechanical and Civil Engineering , Vol.3, Issue 2, Febraury 2018.

Y.Kamala Raju and Mohd.Hussain(2019), "Field Evaluation of Sprinkler Irrigation to improve crop productivity — A case study , International Journal of Civil Engineering and Technology(IJCIET), Volume 10, Issue 10, October 2019, pp 107-114, ISSN Online 0976-6316

JOURNALS:

INTERNATIONAL:

"Fitting Infiltration Equations using Double Ring Infiltrometer to Design and Evaluate Irrigation Methods" International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878

Y. Kamalaraju and Mohd.Hussain(2018)," Reinforced Cement Concrete Bridge Deck Design of a Flyover with analysis for Dynamic Response due to moving loads for urban development in Transportation systems – A case Study ", International Journal of Engineering Research in Mechanical and Civil Engineering , Vol.3, Issue 2, Febraury 2018.

Y.Kamala Raju and Mohd.Hussain(2019), "Field Evaluation of Sprinkler Irrigation to improve crop productivity — A case study , International Journal of Civil Engineering and Technology(IJCIET), Volume 10, Issue 10, October 2019, pp 107-114, ISSN Online 0976-6316

NATIONAL:

S.Bahauddin and Mohd.Hussain(1995), "Optimal surface irrigation under conditions of limited water supply – A case study in Sriram Sagar Project" Journal of India Water Resources Society, Vol. 1, No. 2,3 & 4 June, July & October, 1995.

INTERNATIONAL:

- i. "A simple conjunctive water use model to monitor the groundwater table in waterlogged areas of irrigation project command areas"- Paper presented in the International conference on "Hydrology and watershed Management" December, 18-20, 2002 organised by the Centre for Water resources, IPGSR, JNTU, Hyderabad.
- "Capacity Building of Water Users Associations in Andhra Pradesh in India: Certain Observations" Paper presented in the International conference on "Hydrology and watershed Management" December, 18-20, 2002 organised by the Centre for Water resources, IPGSR, JNTU, Hyderabad. (HRD topic)
- "Impact of Transactional Analysis in my daily life Confession of an Engineer " Paper presented in the International Transactional Analysis Conference at Bangalore from July 28 to August 1,2004 (HRD topic)
- "Capacity Building of water resource managers by developing M.A.A.T.R.U.S.H.R.I. Enlightenment Quotient in the successful implementation of Participatory management of water resources towards sustainable development", Paper presented in the "International Conference on Hydrology and Watershed Management", December 5-8,2006 by Jawaharlal Nehru Technological University, Hyderabad.
- v. "Multidisciplinary Diagnostic Analysis (M.D.A.) Annual Reports , Design Operation Plans (D.O.P), Seasonal Operation Plans (S.O.P) and Actual Implementation of Approved Seasonal Operation Plans (A.O.P) as basic tools for Integrated Water Resources Management for sustainable crop production in irrigation projects: Case Studies in AndhraPradesh of India", Paper presented in the "International Conference on Hydrology and Watershed Management", December 5-8, 2006 by Jawaharlal Nehru Technological University , Hyderabad
- vi. "Universal B.E.S.T. Intuitive Leadership Wisdom model of "Mindfulness attention"-Paper presented in the "International Conference on Hydrology and Watershed Management", February, 3-6,2010 by Jawaharlal Nehru Technological University, Hyderabad
- vii. "Basic tools for integrated water resources management for sustainable crop production: Case studies in Andhra Pradesh state of India" Paper presented in the "International Conference on Hydrology and Watershed Management", February, 3-6,2010 by Jawaharlal Nehru Technological University, Hyderabad.
- viii. "Sustainable Practices of Engineering Management in Irrigation Projects to increase water use efficiency : A case study in India", Paper submitted in the International Conference INDIA WATER WEEK 2013 by Ministry of Water Resources, Government of India from 8-12 April, 2013 at Vigyan Bhavan, New Delhi
- ix. Capacity building of water resource managers and users by developing **D.E.E.P.**-**A.C.C.E.S.S.** implementation Quotient of daily life skills for sustainable participatory irrigation management ",Paper submitted in the International Conference INDIA WATER WEEK 2013 by Ministry of Water Resources, Government of India from 8-12 April,2013 at Vigyan Bhavan,NewDelhi
- "Capacity Building of water resource managers and users by developing S.E.L.F. Renewal Quotient in Participatory Irrigation Management", Paper presented in the International conference on "HYDROLOGY AND WATERSHED MANAGEMENT", organized by Centre for Water Resources of Institute of Science and Technology(IST) of JNTUH from 29 October to I November 2014.

- wi. "Optimal waste water reuse planning for irrigation and studies on the quality of soil and water: A case study in Musi River corridor near Hyderabad", Paper presented as coauthor in the International conference on "HYDROLOGY AND WATERSHED MANAGEMENT" organized by Centre for Water Resources of Institute of Science and Technology(IST) of JNTUH from 29 October to I November 2014.
- wii. "Planning and Implementation of operation plans of Irrigation projects to increase water use efficiency: A case study in India" Paper presented in the International conference on " Modeling Tools for Sustainable Water Resource Management" organized by the Department of Civil Engineering, IIT, Hyderabad from 26-29 December, 2014.
- "Managerial and Technical Capacity Building of Water Resource Managers and Users by developing L.O.V.E.S. Quotient for Sustainable Participatory Irrigation Management (PIM) in Irrigation Project Commands of the world",5th International Conference on "Hydrology and Watershed Management", 12-15 February,2019, Organised by Centre for Water Resources, JNTUH, Hyderabad 500085"
- **xiv.** Multiobjective Optimal Cropping Area Allocation Models in Project Commands using Non-dominated Sorting Genetic Algorithm –II (NSGA –II): A case study in Sriramsagar Project Command Area", 5th International Conference on "Hydrology and Watershed Management", 12-15 February, 2019, Organised by Centre for Water Resources, JNTUH, Hyderabad 500085

Sense of Urgency for Continuous Capacity Building of Civil Engineers to attain Seventeen Sustainable Development Goals of United Nations by 2030 - International Conference on "Recent Advances in Civil Engineering Infrastructure(with a focal theme of Sustainable Development Goals) 16-18 December 2019 .Organized by Dept. of Civil Engineering, Muffakham jah College, Hyd

Optimal Cropping Pattern using Linear Programming to improve the water utilization efficiency: A case Study in Sriramsagar Project

"Comparison of methods of Prediction of compressive strength of concrete using Multiple Linear Regression in Microsoft Excel and Artificial Neural Networks in R Studio"

***** NATIONAL:

- "Developing perceptual skills of Irrigation Scheme Managers in Conflict Resolution in Social and Psycho- biological Perspective", National Seminar on Human Resource Development in Irrigation Management at WALAMTARI, Hyderabad, September 3-4, 1993.(HRD topic)
- "Developing Delegation Skills of Irrigation Scheme Managers", National Seminar on Human Resource Development in Irrigation Management at WALAMTARI, Hyderabad, September 3-4, 1993. (HRD topic)
- * "A review of certain simulation models for effective on-farm water management in the

- waterlogged command areas of India", National Seminar on Waterlogging, Drainage and Salinity in Irrigation Commands at WALAMTARI, Hyderabad, December 28-29, 1994.
- "Management Information Systems (MIS) for drainage in the Irrigation Command Areas of India", National Seminar on Water logging, Drainage and Salinity in Irrigation Commands at WALAMTARI, Hyderabad, December 28-29, 1994.
- "Design Operation Plan (DOP) as a basic management tool for operation of irrigation schemes – A case study of Thandava Medium Irrigation Project in Andhra Pradesh," Second National symposium on Irrigation Management at WALAMTARI, Hyderabad from December 17-18, 1993.
- "Conjunctive Water Use Management in the Command Areas of irrigation Projects in Andhra Pradesh," Young Scientists Convention, organised by Andhra Pradesh Akademi of Sciences, Hyderabad 24th –25th July 1998.
- * "Water Resources and Hydrological Problems in Krishna and Godavari Basins", One day Brain Storming session on Hydrological and Water Resource Problems in Godavari and Krishna Basins, sponsored by Indian National Committee on Hydrology, Roorkee and organised by Andhra Pradesh Engineering Research Laboratories (APERL), Hyderabad April 23, 1999.
- Engineering Management Practices for the sustainability of quality and quantity of water resources in 21st Century – Paper presented in the national seminar on" Sustainable Technologies in Civil and Mechanical Engineering",28-30July 2005,Muffakhamjah College of Engineering and Technology, Hyderabad.
- "Preliminary aspects of universal APT self-facing Environmental Communication and Leadership Wisdom Model ",Paper submitted in one day national seminar on "Sustainable Technologies in Civil Engineering:Perspectives and Strategies(STEPS-2011) on 17th December,2011
- ❖ "Practices for the sustainability of quality and quantity of water resources", Paper submitted in one day national seminar on "Sustainable Technologies in Civil Engineering:Perspectives and Strategies(STEPS- 2011) on 17th December,2011
- ❖ "Sustainable Management Practices in Irrigation Projects", Paper submitted in one day national seminar on "Sustainable Technologies in Civil Engineering:Perspectives and Strategies(STEPS-2012) on 19th December,2012
- "Capacity building of water resource managers in Participatory Irrigation Management", Paper submitted in one day national seminar on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies(STEPS-2012) on 19th December,2012
- "Preliminary aspects of selfless-innerself-centred S.P.R.Y. Living Unlearning and Learning Practice Model in the present new minute for sustainable natural resource management", Paper submitted in one day national seminar on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies(STEPS- 2012) on 19th December,2012

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Xxvi

"Seventeen sustainable development goals of united nations to be achieved by 2030, action planning and implementations for civil engineers" Er, R. L. Raju 2nd endowment lecture on 21st Dec 2016 organized by Institute of Engineers (INDIA), Telangana state centre.

xxvii.

"Codal provisions and specifications to mitigate natural disasters" in All India seminar on "Disaster- Mitigation of floods & Urban drainage issues" held at the Institution of Engineers (INDIA), Telangana state Centre on 6 & 7th Jan 2017. xxviii

"Preparation and implementation of operation plans as sustainable water management practice in irrigation projects to increase water use efficiency: A case study in India", Paper presented in All India seminar on "Sustainable Water Management" held at the Institution of Engineers (INDIA), Telangana state Centre on 15 May 2017.

Xxix

"Role of Engineers in a developing India", Paper presented in All India seminar on "Role of Engineers in a developing India" held at Institution of Engineers on 15 September 2017.

Xxx

"Seventeen Sustainable Development Goals of United Nations to be achieved by 2030:Action planning and implementation for Engineers to improve the World Happiness Index with a particular reference to Civil Engineers", Paper presented in Third Annual General Body Meeting held on 31 October 2017 at held at the Institution of Engineers (INDIA), Telangana state Centre on 15 May 2017.

Xxxi

"Studies on Analysis of Rainfall and Runoff in Telangana Region of India", Paper presented in National Conference on "Recent Innovations in Civil Engineering (RICE 2017), Department of Civil Engineering

, Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad , December 15-16,2017 (First Author).

Xxxii

"Sustainable Irrigation Water Management Practices in the context of National Water Policy 2012 and United Nations Sixth Sustainable Development Goal on Sustainable Management of Water", Paper presented in National Conference on "Sustainable Water and Environmental Management (SWEM-2017)",

Centre for Water Resources, JNTUH, Hyderabad, December 21-23, 2017

Xxxiii

"Seventeen Sustainable Development Goals of United Nations to be achieved by 2030:Action Planning and Implementation for Civil Engineers", Paper presented in 7th Annual Two Day National Workshop on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies (STEPS-2017)", Dept. of Civil Engineering, Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyderabad, 21-22 December 2017.

Xxxiv

"Autoclaved Aerated and Cellular Flyash Concrete Blocks for Building Construction", Paper presented in National Conference on "Recent Innovations in Civil Engineering (RICE 2017), Department of Civil Engineering, Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, December 15- 16,2017 (Second Author)

Xxxv

"Graphene for Sustainable Water", Paper presented in National Conference on "Recent Innovations in Civil Engineering (RICE 2017), Department of Civil Engineering, Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, December 15-16, 2017 (Second Author)

Xxxvi

"Sustainable Irrigation Water Management Practices in the context of National Water Policy 2012 and United Nations Sixth Sustainable Development Goal on Sustainable Management of Water ", Key Note address delivered on December 23,2017 at National Conference on

Sustainable Water and Environmental Management ,organized by Centre for Water Resources , JNTUH, Hyderabad.

Xxxvii

"Waste Water Reuse for Irrigation: A case study in Musi River Basin near Hyderabad", Paper presented as Coauthor in One day seminar on "Water Scarcity - Possible Water Wars in Future" on 21 March, 2018

, organized by The Institution of Engineers (India), Telangana Centre, Hyderabad.

Xxxviii

"Sense of Urgency for Advanced Irrigation Management Practices for high agricultural productivity in the context of water variability due to global climate change , food insecurity due to world population explosion and water conflicts due to the conflicts of interest of stakeholders", Key note address delivered in the National Conference on "Water, Environment and Society (NCWES-18)", organised by Centre for Water Resources, Institute of Science and Technology, JNTUH during 04-06 June 2018 under TEQIP-III

Xxxix

"A high sense of urgency for Participatory Geospatial Information and Decision Support Systems in Sustainable Natural Resources Management using Google Earth Engine"

PhD Supervision

Guiding two Research Scholars under JNTUH for Ph.D degree.

Areas of Research:

- (i) Modelling Waste Water Reuse for Irrigation in Musi River Basin
- (ii) Modelling Groundwater for the movement of Heavy Metal Ions.

Professional Work

B.TECH PROJECTS GUIDED

- i) Optimal Surface Irrigation Practices to improve the water utilization efficiency in Irrigation Projects: A case study in Sriramsagar Project (2003-04)-Osmania University (Got Best B. Tech Project Award of ISTE-NIT Khozikode for 2003-04)
- ii) Synergetic practices of Engineering for sustainable development92005-06) -

Osmania University (Got Best B. Tech Project Award of ISTE-NIT Khozikode for 2005-06)

- iii) Practices in civil Engineering for sustainable Community Development to meet four out of total eight Millennium Development Goals of United Nations by the year 2015(2006-07)
- Osmania University
- iv) Analysis and Design of Residential Building subjected to Seismic forces(2010-11) JNTUH
- v) Quality Control of Pavements and Building Materials (2009-13)- JNTUH
- vi) Use of Recycled Concrete in the field of construction (2009-13)- JNTUH
- vii) Project in Urban Storm Drainage system (2009-13)- JNTUH
- viii) Field Evaluation of Waste Water Irrigation (2009-13)- JNTUH
- ix) Studies on Artificial Recharge of Groundwater in the campus of GRIET (2010-14)-JNTUH
- x) Analysis of Rainfall data based on Point Rainfall of Indian Meteorological Raingauge Station at Hyderabad (2010-14)-JNTUH
- xi) Planning, Design and Estimation of a Residential Building in Rangareddy District (2011-15)-JNTUH
- xii) Experimental Studies on Rainfall-Runoff Relationships on ICRISAT Watershed (2012- 16)-JNTUH (in collaboration with ICRISAT, Hyderabad)
- xiii) Hydrologic Modelling of Watershed using SWAT(Soil and Water Assessment Tool): A case study in Hyderabad(2012-16)-JNTUH(in collaboration with ICRISAT, Hyderabad)
- xiv) Design of Prestressed Concrete Tank: A case study in Hyderabad (2013-17)-JNTUH
- xv) Hydrologic Modelling of Watershed using SWAT: A case study (2013-17)-JNTUH (in collaboration with ICRISAT, Hyderabad)
- **xvi**) Analysis and Design of Three span Prestressed Posttensioned Box Girder Bridge using MIDAS software (2014-18)- JNTUH

MINIPROJECTS IN III YEAR B.TECH

- xvii) Design and Evaluation of Check Basin Irrigation Method in Sangareddy District (2015- 19 Batch)-JNTUH
- xviii) Modelling of Crop Water Requirement using CROPWAT (2014-18 batch)-JNTUH

- xix) Agricultural Drought Case Study of Rice Crop (2014-18 Batch)-JNTUH
- xx) Estimation of Flood using Gumbel Distribution method (2013-17 Batch)-JNTUH
- xxi) Reservoir Operation Plan using National Institute of Hydrology (NIH)-Reservoir system software (2013-17 Batch)- JNTUH
- xxii) Evaluation of Drip Irrigation in the field A case study in the farmers' field of Rangareddy District of Telangana State(2012-16 Batch)-JNTUH
- xxiii) Design of Composite Deck Bridge System (2012-16 Batch)- JNTUH
- xxiv) Layout and Estimation of Water Supply Pipe Line of Hyd. Metro Watersupply and Sewarage Board(HMWSB) Nizampet to GRIET Campus (2011-15 Batch)- JNTUH
- xxv) Flood Estimation in Upper Krishna River Basin using Probability Plotting Method, Gumbell Distribution and Log Pearson Type III distribution(2011-15 Batch)-JNTUH
- xxvi) Seepage through Earthen Dams (2010-14 Batch)- JNTUH
- xxvii) Major Construction Works in Coal fired power plant (2009-13 Batch)- JNTUH xxviii) Quality Analysis of Soil and Bitumen used in ORR (Shamirpet- Keesara) (Km.61.7 -Km.72) (2009-13 Batch)-JNTUH
 - xxix) Internship work done on Construction of Bridges in New Railway Line from Gulbarga to Bider (2009-13 Batch)-JNTUH

TRAINING COURSES ORGANISED

AT WALAMTARI

- i. Three month Induction Training Course for newly recruited Assistant Executive Engineers of Irrigation and Command Area Development department, Andhra Pradesh, India from 9.12.1996 to 8.3.1997.
- ii. Three month Induction Training Course for newly recruited Assistant Executive Engineers of Irrigation and Command Area Development Department, Andhra Pradesh, India from 15.12.1997 to 14.03.1998.
- iii. Nine day training course for Assistant Engineers/Assistant Executive Engineers/Deputy Executive Engineers on "On-Farm Development In Command Areas" from 27.07.1998 to 05.08.1998.
- iv. Three day training course on "Training of Trainers (T.O.T) under World Bank aided Hydrology Project" from 26.08.1998 to 28.08.1998 for Engineers of State Irrigation Department of Andhra Pradesh, India.
- v. Five day training course on "Irrigation Management Information Systems" from 08.06.1998 to 12.06.1998 for Engineers of State Irrigation Department of Andhra Pradesh, India.
- vi. Five day training course on "Water Resources Management" from 07.09.1998 to 11.09.1998

- for Engineers of State Irrigation Department of Andhra Pradesh, India.
- vii. Five day training course for Engineers of State Irrigation Department of Andhra Pradesh, on "Quality Control and Construction management" from 20.10.1998 to 24.10.1998.
- viii. Two day workshop on "Programme Evaluation and Review Technique (PERT) and Critical Path Method (CPM)" for Senior officers of State Irrigation department of Andhra Pradesh from 02.12.1998 to 03.12.1998.
- ix. "Training of Trainers" (T.O.T) for Revenue, Agricultural and Irrigation officers of Srikakulam and Vizianagaram districts on "Participatory Irrigation Management Water Users Associations" from 06.04.1999 to 09.04.1999 under World Bank aided Andhra Pradesh Economic Restructuring Project (APERP).
- x. Three day training course on "Arbitration and Contract Management" for Engineers of State Irrigation department of Andhra Pradesh, from 20.10.1999 to 22.10.1999.
- xi. Eight-day training course on "Basic Hydrometry" for Workinspectors/ Laskars of State Irrigation department of Andhra Pradesh, under World Bank aided Hydrology Project from 18.11.1999 to 25.11.1999.
- xii. Three day training course on "Contract Management" from 18.07.2000 to 20.7.2000 for Engineers of State Irrigation department of Andhra Pradesh, India.
- xiii. Three day training course on "Remote sensing and GIS" from 09.10.2000 to 11.10.2000 for Engineers of State Irrigation Department of Andhra Pradesh, India.
- xiv. Five-day training course on "Human Resource Development" from 21.11.2000 to 25.11.2000 for Engineers of State Irrigation Department of Andhra Pradesh, India.
- xv. One day training course on "Human Resource Development" on 12.12.2000 for Engineers of State Irrigation Department of Andhra Pradesh, India.
- xvi. Organized a National Seminar on "Human Resource Development in Irrigation Management" from September 3-4, 1993 under National Water Management Project at Water and Land Management Training and Research Insitute, Hyderabad.
- xlvii. Organized training courses from 1992 to 1996 under National Water Management Project for Engineers of State Irrigation Department of Andhra Pradesh and farmers.
 - xlviii. Organized and participated as Trainer in many training courses for Farmers from 1989 to 2001.

AT MUFFAKAMJAH COLLEGE OF ENGINEERING AND TECHNOLOGY

xlix. Organised a national seminar on "Sustainable Technologies in civil and mechanical engineering "(STCM-2005) from 28-30, July 2005

AT GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

- Organised a one day national seminar on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies(STEPS-2011)" on 17 December, 2011
- li. Organised a one day national seminar on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies(STEPS-2012)" on 19 December,2012

- lii. Organised a two day national workshop on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies(STEPS-2013)" on 27-28 December,2013
- liii. Organized two day national workshop on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies(STEPS-2014)" on 16-17 December,2014
- liv. Organized three day national workshop on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies (STEPS-2015)" on 28-30 December 2015.
- lv. Organized one day national workshop on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies (STEPS-2016)" on 21st December 2016.
- lvi. Organized Two day national workshop on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies (STEPS-2017)" 21 22 December 2017.
- lvii. Organized one day national workshop on "Sustainable Technologies in Civil Engineering: Perspectives and Strategies (STEPS-2018)" on 18 -19 December 2018 (being organized)
 - lviii. Organized various competitions for students under Engineers' day 2011. lix. Organized various competitions for students under Engineers' day 2012.
- lx. Organized various competitions for students under United Nations International day of Peace 2012 & United Nations International Day of Nonviolence 2012.
 - lxi. Organized various competitions for students under Engineers' day 2013.
- lxii. Organized various competitions for students under United Nations International day of Peace 2013 & United Nations International Day of Nonviolence 2013.
 - lxiii. Organized various competitions for students under Engineers' day 2014.
- lxiv. Organized various competitions for students under United Nations International day of Peace 2014 & United Nations International Day of Nonviolence 2014.
 - lxv. Organized various competitions for students under Engineers' day 2015.
- lxvi. Organized various competitions for students under United Nations International day of Peace 2015 & United Nations International Day of Nonviolence 2015.
 - lxvii. Organized various competitions for students under Engineers' day 2016.
- Ixviii. Organized United Nations International day of Peace on 21st Sep 2016 & United Nations International Day of Nonviolence on 2nd Oct 2016.
 - lxix. Organized various competitions for students under Engineers' day 2017.
- lxx. Organized United Nations International day of Peace on 21st Sep 2017 & United Nations International Day of Nonviolence on 2nd Oct 2017.
 - lxxi. Organized various competitions for students under Engineers' day 2018.
- lxxii. Organized United Nations International day of Peace on 21st Sep 2018 & United Nations International Day of Nonviolence on 2nd Oct 2018
 - lxxiii. Organized United Nations World Water Day on 2013, 2014, 2015, 2016 and 2017.

Visits Abroad

Visited International Irrigation Centre of Utah State University and completed successfully six week training programme on "Applied Microcomputer Use in Irrigation and Drainage" in 1992.