

**Report  
on  
3<sup>rd</sup> National Conference on Water, Environment and Society,  
on 06<sup>th</sup> – 08<sup>th</sup> June – 2016  
at Seminar Hall, Ground Floor, New Institute of Science and Technology,  
Jawaharlal Nehru Technological University Hyderabad  
Kukatpally, Hyderabad**

Water is for the only common and global issue that interests all the living bodies of the world including humans, flora and fauna. Without water, survival is not possible. The two components of water are namely quality and quantity. Some countries have abundant water resources, whereas some others suffer from inadequate water, and even face severe water scarcity problems. The waste water arising from the use of water is an even more significant problem when they are discharged into receiving water bodies. At this critical juncture, harmonizing efficient water use and ensuring safe environments with climate resilience have become need of the hour. The present conference offers broad contribution towards achieving goals of diversification & sustainable development. Some of the people will benefit from the opportunity to exchange information on recent research and ongoing research programs in the areas of water and environment such as,

- The rural scale, implying water conservation, nutrient and soil conservation, prevention of over-drainage and the recycling of nutrients and organic waste.
- The urban scale, both in towns and mega-cities, implying the recycling of water, nutrients and waste.
- The river basin scale, implying: soil and water conservation in the upper catchment, prevention of runoff and unnecessary drainage and enhancement of infiltration and recharge, flood retention, pollution control and the wise use of wetlands.



- The global scale, where water, nutrient and basic resource cycles are integrated and closed.

It is in this context and backdrop that the Centre for Water Resources, Institute of Science and Technology, JNTUH felt the need to organize a 3<sup>rd</sup> national conference on Water, Environment and Society (NCWES-2016) to take stock of the current status of applications in water resources development and management and also to identify areas most relevant to ensure sustainable development of water resources and environment to benefit the society at large.

In addition to focal theme we have interesting themes like hydrological parameter estimation and modeling, Climate change & environment, hydropower, biodiversity, catchment treatment & EIA, Groundwater exploration, development, recharge and modeling, Water quality, irrigation management, Rain water Management and modeling, Geospatial Applications in water Resources.

The response to the brochure/circular/emails was overwhelming, 130 abstracts were received and 85 full length paper, out of which 85 full length papers were accepted for presentation spreading over eight technical sessions. All Eighty papers were selected for publication in the proceedings volume with 425 pages, which was released on the inaugural day by the chief guest **Dr. N. Yadaiah**, Professor of Electrical & Electronic engineering and Registrar, JNT University Hyderabad. The souvenir cum abstract is released on the inaugural day by the guest of honour Dr.G.K Viswanadh, Professor of Civil Engineering & Officer on Special Duty to VC, JNT University Hyderabad, Dr. A Jaya Shree,



Professor of Chemistry, CNST and Director, IST, JNT University Hyderabad presided over the function. A souvenir cum abstract volume is also brought out with important messages from officials of the university and a preface note on the conference is given by the Convener Dr. M. V. S. S. Giridhar along with programme schedule.

More than 150 delegates have participated in this three days conference representing most parts of the India including Bhopal, Akola, Calcutta, Kerala, Karnataka, Delhi, Tamil Nadu, Andhra Pradesh, Maharashtra, Himachal Pradesh and West Bengal, Bangalore, Guhwatti. The total list is enclosed in Annexure – I. From the state of Telangana, we have a representation from all most all parts of the state including state government, Researchers, Academicians, private, NGO's and students from various universities.

In the Inaugural Session Shri. Dhanunjay, Joint Secretary, State Ground Water Board, Telangana, as chief guest have addressed the gathering and explain the importance of water for the society and for the sustainable environment and C.L.N. Sastry, B.E.,F.I.E Former Engineer-in-Chief, Commissioner for Projects Formulation & Ex-Officio Secretary-I & CAD Dept, Govt of A.P, Advisor, Environment Management Division, ESCI, Dr. A Jaya Shree, Professor of Chemistry, CNST and Director, IST, JNT University Hyderabad has presided over the function and inaugural keynote is by Dr.W.G. Prassana Kumar, Professor, Dr. MCR HRD Institute, Hyderabad. After inaugural function, the technical sessions was started, There are eight



technical sessions, The details of the technical session are herewith enclosed in Annexure –I.

The 3<sup>rd</sup> National Conference on NCWES is focused on its attention on various themes in the form of technical sessions such as

1. Hydrological parameter Estimation & Modeling
2. Climate Change and Environment
3. Urbanization, Biodiversity and EIA
4. Groundwater Exploration, Development, Recharge, Modeling and Quality
5. Water Quality, Water Treatment, Pollution and Society
6. Water Conservation and Irrigation Management
7. Water Management, Rainfall and Rainwater Harvesting
8. Geospatial Applications in Water Resources

Key notes were delivered by G.K Ramteke, Scientist C, TSRAC, Dr. B Venkateshwara Rao, Professor, Centre For Water Resources, IST, JNTUH, Dr. T. Vijaya Lakshmi, Assist. Professor & Head, Centre for Environment, IST, JNTUH, Dr. P.N. Rao, Scientist-D, CGWB, Hyderabad Dr. Abdul Hakkim, Head, KCAET, Kerala, Dr. P. V. Raju, Head, WRM&AD, WRG/RSAA, National Remote sensing Centre(NRSC).

The final day of the conference witnessed a high profile technical panel discussion on Rain Water Harvesting, its use and Recharge. The panel consisted of eminent professors from various states . This panel was chaired by Prof N Ramana Rao, Hon'ble Rector- JNTU Hyderabad and also has Guest of Honour- Prof Vishwanadh, OSD to VC JNTUH; Prof A Jaya Shree, Director IST JNTUH; Dr M V S S Giridhar, Convener NCWES 2016 and Head CWR IST; Dr. Abdul Hakkim V.M, Professor & Head, KCAET, Kerala; Prof. R. S. Patode, Agricultural Engineer, AICRPDA, Dr. PDKV Akola; Dr. S. R. Patil, Assoc. Prof., College of Horticulture, Dr. PDKV Akola; Prof A Murugappan, Professor, Department of Civil Engineering, Annamalai University, Satyannarayana, Assistant Director, HMWSSB, Telangana Govt; Mr. Madhusudan and Mr Gautham from user groups in Hyderabad, Mr Harsha Pilli, Mrs Kalavathy and Mr Anirudh M.Tech students from Centre for Water Resources, IST, JNTUH.

This panel discussion has been covered by a prominent print and TV media house, E TV, from the Telangana state. The discussion was even published in the news paper



## Annexure – II

**Programme Schedule**

<i>Sl. No</i>	<b>Name of the event</b>	<b>Name of the Expert/Lectures</b>	<b>Date and Time</b>
<b><i>Date : 06<sup>th</sup> June 2016</i></b>			
	<b>Registrations</b>		<b>09:00 am onwards</b>
	<b>Inaugural Function</b>		<b>10:00 am –10:30 am</b>
	<b>Inaugural Key note speech</b>	<b>Dr.W.G.Prassana Kumar</b> Professor, Dr. MCR HRD Institute, Hyderabad	<b>10:30 am –11:00 am</b>
	<b>Tea break</b>		<b>11:00 am –11:15 am</b>
	<b>Technical Session – I</b> <b>Hydrological parameter Estimation &amp; Modeling</b>		<b>11:15 am – 1:30 pm</b>
<b>KEY NOTE: G.K Ramteke, Scientist C, TSRAC.</b>			
<b>CHAIRMAN: Dr. K. Rammohan Reddy</b> , Professor, Centre For Water Resources, IST, JNTUH			
Tillage and Nutrient Management using Energy Estimates for Resource Conservation in Rainfed Condition <i>M. B. Nagdeve, R. S. Patode, V. V. Gabhane and M. M. Ganvir</i>			
Runoff and Nutrient Status Monitoring of a CCT Treated Catchment <i>R. S. Patode, M. B. Nagdeve and K. Ramamohan Reddy</i>			
Ranking of Plotting Position Formulae in Frequency Analysis of Annual and Seasonal Rainfall <i>Murugappan A, Sivaprakasam Subbarayan and Mohan, S</i>			
Optimal Reservoir Operating Policies using Genetic Algorithm <i>K. Leela Krishna, A. Srinivasa Prasad and N.V. Uma Mahesh</i>			
Optimal Steady-State Reservoir Operating Policy by Stochastic Dynamic Programming <i>A. Srinivasa Prasad and K. Leela Krishna</i>			
Reservoir Siltation Studies on Tungabhadra Project in Krishna Basin <i>G. V. Nagalingeswar Rao, H. Mahabaleswara and G. Abbaiah</i>			
An Appraisal Of Hydrogeoloical, Hydrochemical Parameters And Options For Sustainable Management In Adilabad District, Telangana State <i>Pandith Madhnure Allani Damodar Rao and P N Rao</i>			
	<b>Lunch</b>		<b>1:30 pm – 2:30 pm</b>
	<b>Technical Session – II</b> <b>Climate Change and Environment</b>		<b>2:30 pm –3:30 pm</b>
<b>KEY NOTE: Dr. B Venkateshwara Rao</b> , Professor, Centre For Water Resources, IST, JNTUH			
<b>CHAIRMAN: Dr. V.V Gabhane</b> , Soil Physicist, AICRPDA, Dr.PDKV Akola.			
Solid Waste Leachate Recirculation <i>Lakshmi Lavanya Damaraju, Dhavaleswar Rao Bhandaru and A.V. Rami Reddy</i>			
Influences of Ambient Air Quality on Environment and Agriculture Crop Production <i>B. Kumaravel</i>			
Biosorption of Heavy Metals from Aqueous Solutions using Prawn and Egg Shell Wastes <i>M. Padmaja and R. Pamila</i>			
Environmental Pollution by FRP Composites and Plastics - A Study with Image Analysis <i>Akula Komuraiah, N. Shyam Kumar and B. Durga Prasad</i>			
Bi-metal Oxides Composites and their Pollution Scavenging Properties: A Glimpse <i>Kankan Mukhopadhyay, U. C. Ghosh and Supriyo Kumar Das</i>			
Effect of Cow Dung based Fly Ash Composite on Eco-friendly Bricks and Flower Pots <i>K.Parthasarathy, C.Bharanidharan, Deepa George and K. Saravana Raja Mohan</i>			
Water Resources Development under Climate Change Scenario <i>R. S. Patode, M. B. Nagdeve, K. Ramamohan Reddy and M. M. Ganvir</i>			
Effect of Growth Regulators on Flower Regulation in Mango Var. Pairi			



<i>S. R. Patil, M.M.Ganvir, M. B. Nagdeve and R. S. Patode</i>	
Trend and Variability in Evapotranspiration at Akola, Maharashtra <i>A. R. Tupe, V. M. Bhale, S. S. Wanjari, M. M. Ganvir and M. R. Deshmukh</i>	
Climate Change and Water Use <i>C. L. N. Sastry</i>	
<b>Tea break</b>	<b>3:30 pm – 4:00 pm</b>
<b>Technical Session – III</b> <b>Urbanization, Biodiversity and EIA</b>	<b>4:00 pm – 6:00 pm</b>
<b>KEY NOTE: Dr. T. Vijaya Lakshmi</b> , Assist. Professor & Head, Centre for Environment, IST, JNTUH <b>CHAIRMAN: Dr. S. R. Patil</b> , Assoc. Prof., College of Horticulture, Dr. PDKV Akola	
Enhancement of Primary Productivity after the Dust storm <i>S. Lavanya and M. Viswanadham</i>	
The Quantification and Evaluation of Drought Indices: A Case Study on the Ananthapur District <i>C. Mahesh Babu and Nambi Harish</i>	
Design of Four Lane Roads in Urban Areas <i>V. Srilaxmi, V. Aparna, and V. Nageswarrao</i>	
Input Significance Testing of Parameters Governing Bed Load Transport <i>Ashok Kumar Meena, Keshav Verma, Arun Verma, Subham Tayal and Bimlesh Kumar</i>	
Solid Waste Management in India – An Overview <i>K. Syamala Devi, A.V.V.S. Swamy and Shaheda Nilofer</i>	
Effect of Different Mulches on Growth, Yield and Quality of Acid Lime <i>S. R. Patil, M.M.Ganvir, R. S. Patode and M. B. Nagdeve</i>	
Conductance and Solvation Behaviour of L-Lysine Monohydrofluoride in Acetone and Aqueous Dimethyl Sulphoxide <i>Veerati Radhika</i>	
Impact of Urbanisation on Urban Water Bodies in Hyderabad City <i>Anjani. R and Ar. Nand Kumar</i>	
A Review on the Present Status of Osman Sagar, Hyderabad-Causes and Consequences <i>N. S. Srinidhi</i>	
Removal Of Textile Dyes From Aqueous Solution By Using Activated Carbon Prepared From Jackfruit Waste <i>T.V. Nagalakshmi, K.A. Emmanuel</i>	
<b>Date : 07<sup>th</sup> June 2016</b>	
<b>Technical Session – IV</b> <b>Groundwater Exploration, Development, Recharge, Modeling and Quality</b> <b>Water Quality, Water Treatment, Pollution and Society</b>	<b>9:00am-1:30pm</b>
<b>KEY NOTE: Dr. P.N. Rao</b> , Scientist-D, CGWB, Hyderabad. <b>CHAIRMAN Dr. Shilpa Chakra</b> , Asst .prof, &Head, CNST, IST, JNTUH.	
Groundwater Quality and its Suitability for Drinking and Agricultural purpose around Lamapur Area, Nalgonda District, Telangana State, India <i>M. Venkateshwarlu, A. Kiran kumar, M. Narsi Reddy and T. Rohini Reddy</i>	
Source of Heavy Metals in Groundwater of Karaipottanar Sub-Basin, Tamilnadu <i>Sangunathan, U., Sridhar, S. G. D., Balasubramanian, M. and Sakthivel, A. M.</i>	
Groundwater- Level Trends and Forecast in Guam Aquifer, USA <i>Chandrakant Chandan Chintalacheruvu Madhusudana Rao</i>	
Evaluation of Ground Water Quality Assessment and Modelling using Visual Modflow <i>Asma sultana and P. Raja Sekhar</i>	
Transient Analysis to Control Hydraulic Transients in Water Conductor Systems for Lift Irrigation Schemes	



- A Case Study <i>G. V. R. Murthy V. K. Tripathi (Mrs.) and V. V. Bhosekar</i>	
Operation and Maintenance of Water Treatment Plant at Bhimavaram, West Godavari District, A.P., India. <i>G. Sri Bala, Niharika Kondepudi</i>	
Low Cost Adsorbents for Removal of Fluoride from Water - An Overview <i>S. Kalavathy and M.V.S.S. Giridhar</i>	
Electrical Conductance and Ph Change in Defluoridation of Water <i>Veerati Radhika</i>	
Assessment of Arsenic and Chromium in Hussain Sagar Lake and their effects on Human Health <i>S. Kalavathy and M.V.S.S. Giridhar</i>	
Bio-Monitoring of Himayath Sagar Lake Using Benthic Macro Invertebrates <i>A M S Hasan Qadri and T. Vijayalaxmi</i>	
Assessment of the Quality of Drinking Water: Ground Water Vs Surface Water in West Godavari Western Delta, A.P, India <i>G. Suri Babu, E.U.B Reddi, M. Jagapathi Raju, P.A.R.K.Raju, B.Hema Sundar &amp; K.Niharika</i>	
Study the Treatment Process in 20 MLD of S.T.P <i>P. Pallavi, M.V.Raju, SS.Asadi and V.Hanumatha Rao</i>	
A Study on Water Quality Monitoring in Naik Lake, Nagpur City, India <i>Pravin U. Meshram and Manisha D. Giripunje</i>	
Assessment of the Water Quality of Hussain Sagar, Fox Sagar and Kattamysamma Lakes of Hyderabad City, Telangana State, India, using Physico-chemical Parameters <i>Manchala Lingaswamy and Praveen Raj Saxena</i>	
<b>Lunch</b>	<b>1:30 pm – 2:30 pm</b>
<b>Technical Session – V</b> <b>Water Conservation and Irrigation Management</b> <b>and</b> <b>Water Management, Rain fall and Rainwater Harvesting</b>	<b>2:30 pm – 4:30 pm</b>
<b>KEY NOTE: Dr. Abdul Hakkim V.M</b> , Professor & Head, KCAET, Kerala. <b>CHAIRMAN: Prof. R. S. Patode</b> , Agricultural Engineer, AICRPDA, Dr. PDKV Akola.	
Augmentation of Water Supply for Minor Irrigation Tank by Lifting Water from Somasilla Back Water - A Case Study Kadapa District <i>T. Kiran Kumar and V. Sudheer Krupanand</i>	
A Study on the Use of Alum for Turbidity Removal in Synthetic Water <i>S. Kalavathy and M.V.S.S. Giridhar</i>	
A Qualitative Study of Pre-monsoon and Post-monsoon status of Different Chemical Parameters of Water Samples Collected from Various Surface Water Bodies in GHMC <i>Ramaraju Anirudh and M.V.S.S. Giridhar</i>	
Standardization of Irrigation Requirement of Cowpea under Naturally Ventilated Polyhouse <i>Abdul Hakkim, V. M., Arunya S. Kumar, Athulya, T. K. and Sahla, N.</i>	
Effect of Different Levels of Fertigation on Fruit Yield and Quality of Nagpur Mandarin <i>A. R. Pimpale, V. K. Kharche, D. M. Panchbhai and Sudharshan Goud</i>	
Integrated Reservoir Operation and Irrigation Scheduling <i>A. Srinivasa Prasad and K. Leela Krishna</i>	
Review on Impact of Flash Floods in Urban India and its Mitigation <i>Ashok K, Rakesh K, Ch. Nageshwar Rao and K. M. Lakshmana Rao</i>	
Smart Monitoring of Rural Water Supply Schemes <i>S. Aneela, Ebenezer Paul, A. Pavansaikumar, A. Mukesh, Y. Harisaka, A. Ravi Diamond, I. Pavitra Varma and A. Harini</i>	



Rainfall Trend Analysis: A Case Study of Godavari Sub Basin – Kadam Water Shed, Adilabad District, Telangana State <i>G. Sreenivasa Rao, Ramya Uppala and Vikram Singh, MVSS. Giridhar</i>		
A Simple Approach for Economical Design of Water Distribution Network <i>C. Jagan Mohan Reddy and C.R. Suribabu</i>		
<i>In-situ</i> Soil Moisture Conservation Practices for Sustainable Productivity of Rainfed Cotton in Inceptisols under Dryland Conditions of Maharashtra <i>V. V. Gabhane, M. M. Ganvir, M. B. Nagdeve, R. S. Patode and D. M. Dhangar</i>		
Development of Rainfall Intensity-Duration-Frequency Relationship Nomograph for Akola Region (M.S) <i>G. U. Satpute</i>		
Analysis on Probability Distribution of Weekly and Seasonal Rainfall for Lalgudi Region, Tiruchirapalli District, Tamil Nadu <i>A. Aswin, S. Sushma and K. Sasireka</i>		
Trends in Rainfall and Rainy Days of Akola in Vidarbha Region <i>Suhas K. Upadhye, S. M. Taley, A. N. Karunakar and K. A. Jadhav</i>		
Kinetics and Equilibrium Studies for the Removal of Heavy Metals in both Single and Binary Systems using Hydroxyapatite <i>M. Srikanth Kumar and P. V. S. Maruthi Krishna</i>		
Changes in Daily Intensity-Duration – Frequency Relationships for Precipitation under Climate Change Scenario for Warangal <i>Rohith A N and K V Jayakumar</i>		
<b>Tea break</b>		<b>4:30 pm – 5:00 pm</b>
	<b>Technical Session – VI Geospatial Applications in Water Resources</b>	<b>5:00 pm – 6:30 pm</b>
<b>KEY NOTE: P.V.Raju</b> , Head, WRM&AD, WRG/RSAA, NRSC Balanagar, Hyderabad <b>CHAIRMAN: Dr.A.R.Pimpale</b> , Asst. Prof. Dr. PDKV College of Nagpur		
GIS Approach for Selection of Water Conservation Sites in Deccan Trap Provinces of Central India <i>Y.D. Khare, Abhay M. Varade and Ajay Deshpande</i>		
Hyper Spectral Response Pattern of Red Soils under Varying Moisture Conditions <i>M.V.S.S. Giridhar P. Sowmya, Rathod Ravinder</i>		
Identification of Potential Zones/Sites for Artificial Groundwater using Remote Sensing, GIS and Multi Influence Factor Techniques <i>Ravikumar, A. S., Mohan Kumar, K. C. and Punithraj, G</i>		
Groundwater Recharge Assessment using Remote Sensing <i>K. S. Rawat, V. K. Tripathi, P. M. Kala and Mehtab Singh</i>		
Remote Sensing and GIS based Crop Coefficient Approach for Irrigation Management <i>A.R. Pimpale, S.B. Wadatkar and P.B. Rajankar</i>		
<b>Date: 08th June 2016</b>		
	<b>Field Visit to Rain water Harvesting Structures at JNTUH Campus, Hyderabad</b>	<b>10:00am-1:00 pm</b>
	<b>Lunch</b>	<b>1:00 pm – 2:00 pm</b>
	<b>Panel Discussion on Rain water Harvesting, its Use and Artificial Recharge</b>	<b>2:00 pm – 3:00 pm</b>
	<b>Tea break</b>	<b>3:00 pm – 3:30 pm</b>
	<b>Valedictory function and Certificate Distribution</b>	<b>3:30 pm onwards</b>



## Photos of the conference



**Welcome to the conference**



**Registration DISK**



**Lighting of lamp by Director**



**Lighting of lamp by Chief Guest**



**Invocation**



**Releasing of CD**



**Releasing of Souviner**



**Releasing of Proceedings**





**Guest of Honour CLN Shastry**



**IST,JNTUH Director Dr.A. Jaya shree**



**Shri. Dhanunjaya Joint Director SGWB**



**Inaugural Keynote W.G. Prasanna Kumar**



**P.V. Raju,NRSC Scientist**



**Kyenote speaker: Abdul Hakkim**



**Certificate distribution to Chair & Co-Chair of the technical session**



**Certificate distribution to Keynote speaker**





**Participance & Guest**



**Panel Discussion on Rainwater Harvesting**



**Certificate distribution to Participance**



**Certificate distribution to Co-chairman**



**Lecture by Participance **Rajesh Patode****



**Addressing by Chairman**