

# NATIONAL CONFERENCE on WATER CRISIS, PUBLIC HEALTH & SUSTAINABLE SOLUTIONS (WCPHS), 2019

*Organized By*



**SAVE THE ENVIRONMENT**

(A SOCIETY FOR RESEARCH, AWARENESS & SOCIAL DEVELOPMENT)  
KOLKATA, WEST BENGAL

**October 21–22, 2019**

**Indian National Science Academy (INSA)  
Bahadur Shah Zafar Marg, New Delhi**

**&**

**First Annual Conference of STE**

## REPORT



## Executive Summary

A National conference on “Water Crisis, Public Health and Sustainable solutions (WCPHS-2019)” was organized by Save the Environment, --“A Society for Research, Awareness and Social Development located at Kolkata, West Bengal during October 21<sup>st</sup> –22<sup>nd</sup>, 2019 at Indian National Science Academy (INSA), Bahadur Shah Zafar Marg, New Delhi.

The thematic thrust of the conference was to enlighten about the technological and sustainable solutions to overcome the existing water crisis by bringing together researchers, industry personnel, government authorities and policy makers from all over India who are actively engaged in water conservation and related research.

Honourable Dr. Mahendra Singh-Cabinet Minister of Ministry of Jal Shakti of the Government of Uttar Pradesh graced this event as the Chief Guest and inaugurated this conference. He greatly appreciated the efforts directed by the organizing committee members especially Dr. Kshipra Misra (Convener, WCPHS) for organizing a conference of such a stature. He said that WCPHS will certainly trigger a spark in the minds of young researchers towards some innovative insights and ideas in this area. He also expressed deep concern for the serious environmental problems that our country is currently facing and requested all those present in this conference to collectively work for the problem. Dr. Mahendra Singh especially highlighted that such initiatives should be embarked upon in near future also. It was indeed a very precious moment for all to have such a big dignitary with us.

Honourable Dr. Rajendra Singh (Water conservationist & Environmentalist, Tarun Bharat Sangh, Alwar, Rajasthan and recipient of the highly acclaimed Magsaysay award also popularly known as ‘The Waterman’ or ‘Jalpurush of India’) also graced the event as the chief guest. About 250 delegates from different academic as well as industrial organizations participated and present their papers in the conference on various aspects of research in the allied fields of sciences.

WCPHS 2019 witnessed an amalgamation of stalwarts in the fields of environment and science and delivered extremely valuable talks that inspired the young researchers among the audience to hold the baton for environment protection with utmost sincerity. WCPHS 2019 was successful in providing a forum for all the experts and stakeholders to share their aspiration towards environmental sustainability. Through conjoint efforts, sustainable solutions towards reducing human exposure to chemicals, developing cost-effective methodologies for water conservation and management was proposed. This was great initiative taken towards rendering our planet earth greener.

The organizing committee of WCPHS 2019 and entire STE family extends its sincerest thanks to **Water Technology Initiative, Department of Science and Technology (WTI, DST), Government of India** for providing wholehearted financial support to meet the technical necessities of the event.

The financial assistance received from **Research and Development Fund of National Bank for Agriculture and Rural Development (NABARD)** towards publication of journal/ printing of proceedings of the Conference is gratefully acknowledged.

We also wish to thank **Agilent Technologies** for financial support.





## INTRODUCTION

A “National conference on Water Crisis, Public Health and Sustainable solutions (WCPHS-2019)” was organized by Save the Environment, --“A Society for Research, Awareness and Social Development located at Kolkata, West Bengal during October 21<sup>st</sup> –22<sup>nd</sup>, 2019 at Indian National Science Academy (INSA), Bahadur Shah Zafar Marg, New Delhi.



**Dr. Kshipra Mishra -Convener WCPHS 2019 extending her welcome address to the gathering**

### INAUGURATION:

The conference began by welcoming of Chief Guest of the inaugural ceremony- Honourable Dr. Mahendra Singh-Cabinet Minister of Ministry of Jal Shakti of the Government of Uttar Pradesh. He was invited to grace the dais. Dr. Kshipra Misra (Convener) and Dr. Anuja Bhardwaj (Organizing secretary, WCPHS 2019) escorted him to the dais. Thereafter, guest of honour- Dr. Rajendra Singh (Water conservationist & Environmentalist, Tarun Bharat Sangh, Alwar, Rajasthan popularly known as ‘The Waterman’ or ‘Jalpurush of India’), Dr. Sanjay Bajpai, Head, Technology Missions Division (Energy, Water & all Other), Department of Science and Technology, Government of India, Dr. A. K. Datta (Former CCR&D, DRDO, New Delhi), Prof. K. J. Nath (Chairman, Arsenic Task Force and Advisor (SISSO) and Prof. Arunabha Majumdar (our patron and Chairman, Indian Water Works Association (IWWA) and Ex-Director-Professor & Head, Department of Sanitary Engineering, AIHH&PH, Kolkata and Guest Professor, School of Water Resources Engg., J.U.) were also invited to occupy their distinguished chairs on the dais.



**Prof. Arunabha Majumdar welcoming Honourable Jal Shakti Minister of Government of UP and chief guest of the conference, Dr. Mahendra Singh**



**Prof. Arunabha Majumdar honouring Dr. Rajendra Singh and Dr. Sanjay Bajpai**

## LAMP LIGHTING CEREMONY

To start the event on an auspicious note, as the very famous Buddha had once quoted –“If you light a lamp for someone else, it will brighten your path also”- For seeking the choicest blessings, for the same, chief guest (Dr.Rajendra Singh), Guest of Honour (Dr. Sanjay Bajpai) and other dignitaries on dais were invited to come forward and conduct the lamp lighting ceremony. Immediately after the dignitaries graced the dais with their presence; chief guest Honourable Dr. Rajendra Singh, Dr. Sanjay Bajpai and others were felicitated and honoured with mementos, shawls and saplings.



**Honourable Dignitaries- Dr. Rajendra Singh and Prof. K. J. Nath lighting the lamp**

## Welcome Address & STE Highlights by Dr. Kshipra Misra (Convener, WCPHS)

This was followed by a very warm welcome of guests and participants. Accompanying this, a concise yet inclusive and conceptual framework of the “Highlights of STE activities” was projected by Dr. Kshipra Misra (President of Save The Environment, Vice-President of NESAI and Former Additional Director, DIPAS, DRDO) to address the gathering.



**Dr. Kshipra Misra extending her welcome address**

Dr. Kshipra introduced about the aims and objectives of STE as well as the conference in brief. She also highlighted the top challenges world is facing today especially in context to water and public health and how STE has come up with some effective solutions for these burning problems.



## ADDRESS BY HONOURABLE MINISTER:



**Dr. Mahendra Singh, Honourable Cabinet Minister of Jal Shakti Ministry, Govt. of UP addressing the gathering**

It was the time to hear a few words from Dr. Mahendra Singh and he made every possible effort to highlight the current water crisis situation in India and the initiatives Govt. of India is taking towards improving water quality and associated health issues. He accredited the efforts of the organizers for coming up with a conference of such a stature.

## **RELEASE OF FIRST ISSUE OF JOURNAL OF STE AND ABSTRACT BOOKLET OF WCPHS 2019 BY CHIEF GUEST AND GUESTS OF HONOUR**



**Dignitaries releasing the first issue of International Journal of Environment and Health Sciences**

Therafter, the first issue of the journal by Save the Environment, International Journal of Environment and Health Sciences was released whose editor in chief is Dr. Kshipra Mishra. This was followed by the release of the abstract booklet of the conference “WCPHS 2019.”



**Dignitaries releasing the abstract booklet of the conference WCPHS 2019.**

### **STE AWARD CEREMONY**

Few awards constituted by Save the Environment in order to honour personages who have contributed to society in fields of environment protection, water conservation and allied aspects were conferred. The two coveted honours, i.e. STE Dr. APJ Abdul Kalam award and STE Dr. Praloy O. Basu lifetime achievement award aim to recognize exemplary contribution to science and environment. STE, being devoted to environmental protection has defined the Green Excellence awards to endorse distinguished work in arenas of environmental science. STE believes that women researchers have great conviction in bringing about solutions and changes to societal problems and achieves to fortify this by presenting STE Women Excellence Awards. These and few more recognitions were bestowed upon the awardees by Dr. Mahendra Singh. Some upcoming and dedicated researchers were accredited for their efforts by Dr. Rajendra Singh who presented the STE Young Researcher Awards.





**STE Dr. APJ Abdul Kalam Award being conferred on Dr. A. K. Datta, Former CCR&D, DRDO**



**STE Green Excellence Award being conferred on Dr. Alok Adholeya, Senior Director, Sustainable Agriculture Division, TEPL, New Delhi**



**Sh. Praloy O. Basu lifetime Achievement award being conferred on Prof. K. J. Nath, Chairman, Arsenic Task**



**Woman Excellence Award being conferred on Dr. Anju Srivastava, Principal, Hindu College, D.U**





STE Young Researcher Awards being conferred to Dr. Divya Sharma, Dr. Anuja Bhardwaj, Dr. Manavi Yadav and Dr. Sriparna Dutta.

## ADDRESS BY GUEST OF HONOURS DR. SANJAY BAJPAI AND DR. RAJENDRA SINGH:



From left to right: Dr. Sanjay Bajpai, Head, Technology Missions Division (Energy, Water & all other), Department of Science and Technology, India and Dr. Rajendra Singh (Jalpurush/Waterman of India).

## OPENING OF SCIENCE EXHIBITION

Thereafter, the science exhibition was declared open by our esteemed guest Dr. Rajendra Singh. The bright minds of ITL Public school guided by their teachers Dr. Vaishali Mishra and Ms. Shikha Sikka displayed innovative models for water conservation. Dr. Singh uttered: "We are proud of the school children who have directed immense efforts and prepared some innovative science models and they definitely are appreciated for the same."







**Students displaying various water conservation models during the conference.**



**Dignitaries and participants enjoying their networking lunch.**

## **KEYNOTE ADDRESSES**

**Chairpersons:** Dr. Rajiv Sharma, Director General, Amity Foundation for Science, Technology and Innovation Alliances and Former Advisor, DST, Govt. of India and Dr. Laxman Prasad, Group Director, RKG Group, Ghaziabad and Former Advisor, DST, Govt. of India.





## GLIMPSES OF SESSION: KEYNOTE ADDRESSES



Honourable Dr. Rajendra Singh ji delivered his keynote address on “The Indigenous Knowledge Systems of Water Management in India.” Over the past few years, he has been playing a pivotal role in addressing issues of climate change and global warming by providing local solutions- by empowering the community through water conservation and recharging of water banks - perhaps the maiden example in the world. During his talk, he especially highlighted that *“Today's water problems cannot be solved by science or technology alone. They are instead human problems of governance, policy, leadership, and social resilience.”*

Subsequently, other keynote speakers also delivered their talk. Dr. Sanjay Bajpai delivered an informative talk on “Enabling Research led Smart Water Innovations and Solutions.” The talk focussed upon application of new technique on Internet of Things (IoT) and Artificial Intelligence (AI) that can enable and empower the traditional systems with more sophistication and introduce smartness to bring greater effectiveness and efficiency in water supply treatment, distribution and reuse.

### SESSION DETAILS:

11:30 AM- 12:00 PM	Keynote Address 1 by Shri Rajendra Singh <i>Water conservationist &amp; Environmentalist, Tarun Bharat Sangh, Alwar, Rajasthan</i>
12:00 PM- 12:30 PM	Keynote Address 2 by Dr. Sanjay Bajpai <i>Advisor and Head, Missions Division Energy, Water &amp; all Other, Department of Science and Technology (DST), New Delhi</i>
12:30 PM- 1:00 PM	Keynote Address 3 by Prof. K. J. Nath <i>Chairman, Arsenic Task Force, West Bengal &amp; President, Institution of Public Health Engineers, India, Kolkata</i>

1:00 PM- 1:30 PM	Keynote Address 4 by Dr. Alok Adholeya <i>Senior Director, Sustainable Agriculture Division, IHC, TERI, New Delhi &amp; Director, TERI Deakin Nanobiotechnology Centre, TERI Gram, Gurugram</i>
1:30 PM- 2:30 PM	Lunch and Poster Session  Chairpersons: Dr. S. K. Singh, Scientist 'F', SSPL, DRDO, Delhi and and Dr. Kalpana Bhargava, Scientist 'F', HEMRL, DRDO, Pune

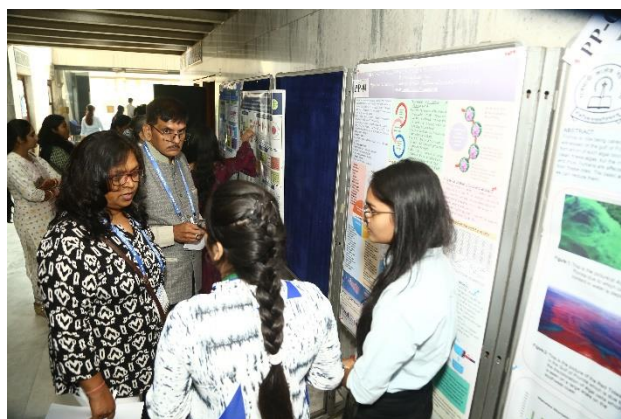
## NATIONAL ANTHEM



## GROUP PHOTOGRAPH:



## GLIMPSES OF POSTER SESSION:



## TECHNICAL SESSION-1: Designing Chemistry for Environment & Health

Chairpersons: Prof. R. K. Mahajan, Former Vice Chancellor, DAV University, Jalandhar and Professor, Guru Nanak Dev University, Amritsar and Prof. S. K. Mehta, Professor, Panjab University, Chandigarh and Director, SAIF, Panjab University, Chandigarh

**Dr. Rakeshwar Bandichhor**, Head, Chemistry-API-PR&D, Vice Chair, ACS-India Chapter (South) Innovation Plaza, IPDO Bachupally, Dr. Reddy's Laboratories Ltd. Hyderabad, India delivered an invited talk.



**Title: Chemistry Connect  
between Flow and Green: An  
Industrial Perspective**

**Prof. R. K. Sharma**, Co-ordinator, Green Chemistry Network Centre, University of Delhi and Honorary Secretary, Royal Society of Chemistry, London (North India Section) also delivered and talk and enlightened people about Green Chemistry and how it helps in improving the environment.





**Title: Green chemistry: Key to reducing waste and improving environment**

## DETAILS OF TECHNICAL SESSION 1

## Designing Chemistry for Environment & Health

Chairpersons: Prof. R. K. Mahajan, Former Vice Chancellor, DAV University, Jalandhar and Professor, Guru Nanak Dev University, Amritsar and Prof. S. K. Mehta, Professor, Panjab University, Chandigarh and Director, SAIF, Panjab University, Chandigarh

2:30 PM- 3:00 PM	Plenary Lecture 1 by Dr. Rakeshwar Bandichhor <i>Head, Chemistry-API-PR&amp;D, Vice Chair, ACS-India Chapter (South) Innovation Plaza, IPDO Bachupally, Dr. Reddy's Laboratories Ltd. Hyderabad, India</i>
3:00 PM- 3:30 PM	Plenary Lecture 2 by Prof. R. K. Sharma <i>Co-ordinator, Green Chemistry Network Centre, University of Delhi and Honorary Secretary, Royal Society of Chemistry London North India Section</i>
3:30 PM- 4:00 PM	Oral Presentations (OP-1, OP-2)
4:00 PM- 4:15 PM	Tea Break

## TECHNICAL SESSION-2: Water Quality Assessment

Chairpersons: and Dr. Ravinder Kaur, Principal Scientist, Water Technology Centre, IARI, PUSA and Prof. R. K. Sharma, Co-ordinator, Green Chemistry Network Centre, University of Delhi and Honorary Secretary, Royal Society of Chemistry London North India Section



#### **GLIMPSES OF INVITED TALKS:**

Prof. Arunabha Majumdar, Professor, Emeritus, School of Water Resources, Jadavpur University and Former Director, Professor, All India Institute of Hygiene and Public Health delivered a talk on “Water Safety Plan: Application in Arsenic Removal Units.”



**Title: Water Safety Plan:  
Application in Arsenic Removal  
Units**



## Dr. Prashant Singh

*Associate Professor Chemistry, DAV (PG) College, Dehradun (Uttarakhand) and District Co-ordinator, Uttarakhand State Council for Science and Technology (UCOST), Dehradun*





Dr. B. K. Shrinidhi, Brahman Representative enlightened the people about the activities it is involved in especially in the area of water quality.



Dr. Ranjit highlighted about the issues of quality and quantity of drinking water in India and also argued that there is a need of evolving technically and appropriately feasible, economically viable, environmentally and ecologically sound and socially acceptable solutions in water management in India and also aim to evolve sustainable, equitable and efficient management of India's water resources.

### **Dr. Ranjit Kumar**

Technology Manager, Global Business Inroads (GBI) and Member of US Department of State's Bureau of Educational and Cultural affairs (ECA), Bangalore delivered a talk.



**Session Chairs being presented memento for bringing live into sessions.**

<b>TECHNICAL SESSION-2</b>	<b>Water Quality Assessment</b>
4:15 PM- 4:45 PM	Plenary Lecture 3 by Prof. Arunabha Majumdar <i>Professor, Emeritus, School of Water Resources, Jadavpur University. Former Director, Professor, All India Institute of Hygiene and Public Health</i>
4:45 PM- 5:05 PM	Invited Talk 1 by Mr. B. K. Shrinidhi <i>**Representative, Brahma Kumaris Deputy Manager - Training &amp; Development, Global Hospital &amp; Research Center, Mount Abu</i>
5:05 PM- 5:25 PM	Invited Talk 2 by Dr. Prashant Singh <i>Associate Professor Chemistry, DAV (PG) College, Dehradun (Uttarakhand) and District Co-ordinator, Uttarakhand State Council for Science and Technology (UCOST), Dehradun</i>
5:25 PM- 5:45 PM	Invited Talk 3 by Dr. Bhavtosh Sharma <i>Scientist, Uttarakhand Science Education and Research Centre (USERC), Dehradun, Uttarakhand, India</i>
5:45 PM- 6:05 PM	Invited Talk 4 by Dr. Ranjit Kumar <i>Technology Manager, Global Business Inroads (GBI) Member of US Department of State's Bureau of Educational and Cultural affairs (ECA), Bangalore</i>
6:05 PM- 6:25 PM	Invited Talk 5 by Dr. Vijay Bharati <i>Scientist 'E', DIHAR, DRDO, Leh</i>
6:25 PM– 6:45 PM	Oral Presentations (OP-3, OP-4)

### **TECHNICAL SESSION-3: Interdisciplinary Science and Technology**

**Chairpersons: Dr. Dhurjati Majumdar, Former Associate Director, INMAS, DRDO, Delhi and Dr. Ajay Kumar Gupta,**



### Glimpses of Talks:



**Title: Enabling research led smart water innovation and solutions**

Keynote Address 2 by Dr. Neelima Alam, *Scientist 'E', Technology Missions Division (Energy, Water & All Other), DST, Govt. of India*



**Title: Role of Inter disciplinary Science research for Environmental Sustainability**

**Dr. B. Rupini**

*Former Director and Associate Professor, School of Interdisciplinary and Transdisciplinary Sciences, IGNOU, New Delhi, India*





## GLIMPSES OF POSTER SESSION DAY 2



## GLIMPSES OF DELEGATES HAVING LUNCH





## **PARALLEL TECHNICAL SESSION-3**

**Sustainable Solutions and Innovations**



## Dr. Susan Titus

**Scientist 'G', Head, Marine Biotechnology Dept, Naval Materials Research Laboratory, DRDO, Ambarnath**



## Dr. Saurabh Jyoti Sarma

*Assistant Professor, School of Engineering and Applied Sciences, Department of Biotechnology, Bennett University, Greater Noida*





**Dr. Nupur Bahadur**

Fellow, Water Research, TERI-Deakin Nano Biotechnology Centre, TERI Gram,  
Gurugram



**Dr. Vaishali Mishra**

Head, Department of Chemistry, ITL Public School, Dwarka

**TECHNICAL SESSION-4 & PARALLEL TECHNICAL SESSION-4**

# Risk Factors, Public Health and Solutions Water Resource Management

## Chairpersons



## INVITED TALKS:



## **Prof. Abhijeet Mukherji**

Associate Professor (Hydrogeology), Dept. of Geology and Geophysics, School  
of Environmental Science and Engineering, IIT Kharagpur



**Dr. K. Vijayalakshmi**

*Vice President of Development Alternatives, Tara Crescent, Qutub Institutional Area, New Delhi*



**Dr. Jitendra K. Nagar**

*Assistant Professor, Department of Environmental Studies, Dr Bhim Rao Ambedkar College, University of Delhi, Yamuna Vihar, Delhi*





## **Prof. Bishakh Bhattacharya**

*Professor & Head, Mechanical Engineering, IIT Kanpur*

### **PANEL DISCUSSION**

The last technical session was the panel discussion which was one of the most important sessions of this conference as there were many fruitful discussions and we had eminent personalities with us as panellists who highlighted about some of the key issues related to water management and the plausible ways of combatting the challenges we are facing today!

#### **Panelists:**

1. **Dr. Rajiv Chhibber** -Vice president of External Affairs- Sahajanand Medical Technology Pvt Ltd.
2. **Prof. Prosun Bhattacharya**-Professor of Ground Water Chemistry currently working at KTH Royal Institute of

Technology, Stockholm and Coordinator of the KTH-International Groundwater Arsenic Research Group, at the Department of Sustainable Development, Environmental Science and Engineering at KTH Royal Institute of Technology, Stockholm, Sweden.

3. **Sh. Saurab Singh** - Chief Functionary, Inner Voice Foundation Community Arsenic Mitigation and Research Org. (CAMRO).
4. **Dr. Malti Goyal**- President & Chief Executive. Climate Change Research Institute. Former Adviser, DST, Govt. of India

***The key topics were:***

- ***Water Quality and Toxic metal contamination including arsenic in groundwater***
- ***Water Management for agricultural and industrial applications***
- ***Wastewater Treatment and Disposal***





## VALEDICTORY

Finally, we had reached the end of the two day conference and Dr. Sanjeev K. Varshney, Head of International Cooperation (Bilateral), Department of Science and Technology, Govt. of India kindly graced the valedictory as the chief guest.





Names of the oral and poster awardees were announced.



**Best Oral Award presented to Dr. Sriparna Dutta, Assistant Professor, Department of Chemistry, University of Delhi**



**Best Oral Award presented to Ms. Namrata Kamle, SRF, NMRL, Ambarnath.**

**BEST POSTER AWARD**





**Best Poster Award presented to Dr. Kanika Solanki, Department of Chemistry, DU.**



**STE Members with members of Green Chemistry Network Centre, Department of Chemistry University of Delhi**



## Organizing Committee

### *Patron*

**Prof. Arunabha Majumder**

Emeritus Professor  
Jadavpur University, Kolkata and  
Former Director, All India Institute of Hygiene and Public Health

### *Convener*

**Dr. Kshipra Misra**

Former Additional Director  
DIPAS, DRDO  
President, STE

### *Co-Convener*

**Dr. Jayashree Bhattacharjee**

EX-Additional Director General of Health  
Services, Department of Biochemistry, Lady  
Hardinge Medical College, New Delhi

### *Organizing Secretary*

**Dr. Anuja Bhardwaj**

Member, STE

### *Co-Organizing Secretary*

**Mrs. Chhanda Basu**

General Secretary  
STE, Kolkata

### *Co-Organizing Secretary*

**Dr. Sripama Dutta**

Green Chemistry Network Centre,  
Department of Chemistry,  
University of Delhi,  
Delhi-110007



### *Co-Organizing Secretary*




**Miss Jigni Mishra**

SRF  
DIPAS, DRDO, Delhi

**National Conference on Water Crisis, Public Health &  
Sustainable Solutions (WCPHS) & First Annual Conference of STE**  
**Date: October 21<sup>st</sup>-22<sup>nd</sup> 2019** & **Venue: Indian National Science Academy (INSA)**  
**Organized by: Save the Environment, Kolkata**

**Keynote speakers**




Sl.No	Name	Designation and Affiliation	Contact Details	Signature
1.	Dr. Alok Adholeya 	Senior Director, Sustainable Agriculture Division, IHC, TERI, New Delhi  Director, TERI Deakin Nanobiotechnology Centre, TERI Gram, Gurugram	Email: <a href="mailto:aloka@teri.res.in">aloka@teri.res.in</a>  Phone: 011-2468 2100	
2.	Prof. K. J. Nath 	Chairman, Arsenic Task Force, West Bengal &  President, Institution of Public Health Engineers, India, Kolkata	<a href="mailto:nathkj2016@gmail.com">nathkj2016@gmail.com</a>  Tel. No. 033 40077613(O), 23374612(R), Mob. 9831275668	
3.	Shri Rajendra Singh	Chairman, Tarun Bharat Sangh, Alwar, Rajasthan	<a href="mailto:jalpurushtbs@gmail.com">jalpurushtbs@gmail.com</a>	


				
4.	<b>Dr. Sanjay Bajpai</b> 	<p>Advisor and Head, Missions Division Energy, Water &amp; all Other,</p> <p>Department of Science and Technology (DST), New Delhi.</p>	<p>Email: <a href="mailto:sbajpai@nic.in">sbajpai@nic.in</a></p> <p>Phone: 011-26565337</p>	
5.	<b>Dr. S.K. Sarin</b> 	<p>Senior Professor and Head, Department of Hepatology Director, Institute of Liver and Biliary Science (ILBS)</p> <p>Adjunct Prof. Molecular Medicine, Jawahar Lal Nehru University, New Delhi.</p>	<p>Phone: 011-26706700-02</p>	

#### Plenary Speakers:

Sl.No	Name	Designation and Affiliation	Contact Details	Signature
1.	Prof. Arunabha Majumdar	Chairman, Indian Water Works Association (IWWA) and Ex-Director-Professor & Head, Department of Sanitary Engineering, AIHH&PH, Kolkata and Guest Lecturer, School of Water Resources Engg., J.U.	<a href="mailto:arunabhamajumder@hotmail.com">arunabhamajumder@hotmail.com</a>	



				
2.	Dr. Ashok Ghosh 	Professor & HOD, Research Mahavir Cancer Institute and Research Center, Patna	<a href="mailto:ghosh51@hotmail.com">ghosh51@hotmail.com</a>  Tel:91 612 2280120 Cell:9334205809	
3.	Prof. R. K. Sharma 	Professor, Department of Chemistry, University of Delhi  Co-ordinator, Green Chemistry Network Centre, University of Delhi  Honorary Secretary, Royal Society of Chemistry London North India Section  Faculty Advisor, ACS International Student Chapter	<a href="mailto:rksharmagreenchem@hotmail.com">rksharmagreenchem@hotmail.com</a>	
4.	Dr. Rakeshwar Bandichhor	Head, Chemistry-API-PR&D  Vice Chair, ACS-India Chapter (South) Innovation Plaza,	<a href="mailto:rakeshwarb@drreddys.com">rakeshwarb@drreddys.com</a>	




		IPDO Bachupally, Dr. Reddy's Laboratories Ltd.  Hyderabad, India.		
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### Invited Speakers:





Sl.No	Name	Designation and Affiliation	Contact Details	Signature
1.	Prof. Abhijeet Mukherji 	<i>Associate Professor (Hydrogeology)</i>  Dept. of Geology and Geophysics  School of Environmental Science and Engineering Indian Institute of Technology (IIT) - Kharagpur	Email: <a href="mailto:amukh2@gmail.com">amukh2@gmail.com</a>  Web: <a href="http://www.abhijitmukherjee.info/">http://www.abhijitmukherjee.info/</a>  <a href="https://orcid.org/0000-0002-0555-0875">https://orcid.org/0000-0002-0555-0875</a>	
2.	Prof. Amlan Chakrabarti 	Professor, A. K. Choudhury School of Information Technology, Rajabazar Science College Campus, University of Calcutta.	<a href="mailto:acakcs@caluniv.ac.in">acakcs@caluniv.ac.in</a>	

3.	<p>Dr. B. Rupini</p> 	<p>Former Director and Associate Professor, School of Interdisciplinary and Transdisciplinary Sciences, IGNOU, New Delhi, India</p>	<p><a href="mailto:brupini@ignou.ac.in">brupini@ignou.ac.in</a></p>	
4.	<p>BK Shrinidhi</p> 	<p>Deputy Manager - Training &amp; Development, Global Hospital &amp; Research Center, Mount Abu.</p> <p><b>**Representative, Brahma Kumaris</b></p>	<p><a href="mailto:sky.2112@gmail.com">sky.2112@gmail.com</a></p> <p>+91 9414152125</p>	
5.	<p>Prof. Bishakh Bhattacharya</p> 	<p>Professor, Mechanical Engineering Department</p> <p>Head, Cognitive Science Programme</p>	<p><a href="mailto:bishakh@iitk.ac.in">bishakh@iitk.ac.in</a></p>	
6.	<p>Dr. Bhavtosh Sharma</p> 	<p>Scientist, Uttarakhand Science Education and Research Center (USERC), Dehradun, Uttarakhand, India.</p>	<p><a href="mailto:bhavtoshchem@gmail.com">bhavtoshchem@gmail.com</a></p>	







7.	<p>Prof. Dinesh Rangappa</p> 	<p>Professor &amp; Chairman Department of Nanotechnology Visvesvaraya Technological University Center for Postgraduate Studies, Bengaluru Region Muddenahalli, Chikkaballapur – 562 101, INDIA</p>	<p>Email: <a href="mailto:dineshrangappa@gmail.com">dineshrangappa@gmail.com</a>, <a href="mailto:dinus74@yahoo.com">dinus74@yahoo.com</a>  Phone: +91-9632764659</p>	
8.	<p>Dr. Imteyaz Qamar</p> 	<p>Assistant Professor &amp; Brain Korea-21 Fellow School of Biotechnology, Gautam Buddha University, Gautam Budh Nagar, Greater Noida Uttar Pradesh (INDIA)-201312</p>	<p>Email: <a href="mailto:imteyazqamar@gbu.ac.in">imteyazqamar@gbu.ac.in</a> &amp; <a href="mailto:imteyazqamar@gmail.com">imteyazqamar@gmail.com</a>  Phone: +91-120-234-4280 (off), +91-9711761564 (mob)</p>	
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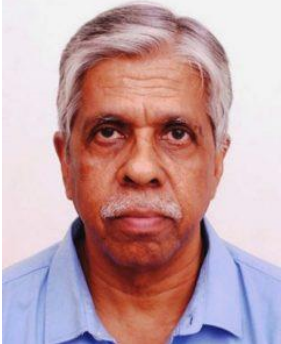



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