

**International Conference on  
Technologies for Renewable Energy and Water (TREW), NIOT, Chennai  
INDACON-2019**

**07 - 09 March, 2019**

**PROGRAMME SCHEDULE**

**07<sup>th</sup> March, Day 1**

**Venue: Panikkar Hall**

09:00-09:30	Registration
09:30-11:30	Inaugural Function
11:30-11:50	High Tea

***PLENARY SESSION (PS)***

11:50-12:10	<i>“Technology developments for blue economic growth in India”</i> , Dr. M. A. Atmanand, Director – NIOT, Chennai
12:10-12:30	<i>“Membrane research overview at CSIR-CSMCRI”</i> , Dr. Amitava Das, Director – CSMCRI, Bhavnagar
12:30-12:50	MNRE Representative
12:50-13:10	<i>“Circular Economy for Sustainable Water Management- A Case study for Tamil Nadu”</i> , Mr. K Ashok Natarajan, CEO, TWIC
13:10-13:30	<i>“Wind Power Development in India - An Overview”</i> , Dr. K. Balaraman, Director General-NIWE, Chennai
13:30-14:15	Lunch

***SESSION I***

**Invited Talks**

14:15-14:30	<i>“Optimization of a wave energy device for multipurpose applications”</i> , Dr. S.A.Sannasiraj, HOD, Dept. of Ocean Engineering, IIT Chennai
14:30-14:45	Dr. Karthikeyan, Ex.Chairman, TNPCB & Adjunct Professor SRMIST
14:45-15:00	<i>“Water wars, NGO power and science capital: Study cases”</i> , Dr. A.P. Jayaraman, IDF Mumbai
15:00-15:15	<i>“Water Technology Initiative of DST”</i> , Dr. G V R Reddy, DST Representative
15:15-15:30	<i>“Combined production of methane gas and fresh water from KG basin gas hydrate reservoir”</i> , Dr. N Vedachalam, NIOT, IEEE-OES
15:30-15:45	<i>“Phthalic acid esters and bisphenol A in Ganges: Implications for Estrogenicity and Ecotoxicological Risk Assessment”</i> , Ms. Paromita Chakrovarty, SRMIST

15:45-16:00	<i>“Nanocomposite membranes for water purification: Case studies with challenges and opportunities”</i> , Dr. Soumitra Kar, BARC
16:00-16:10	Industry talk- <i>“SANGIR Plastics”</i> , Mr. Yogesh Kumar, Sangir Plastics Pvt. Ltd
16:10-16:25	Tea Break

## **SESSION II**

### **Invited Talks**

16:25-16:35	Industry talk – <i>“The science of butt fusion results in leak-free joints for today’s updated thermoplastic piping systems”</i> – Bharath Rao, McElroy India
16:35-16:45	Industry talk- <i>“Large diameter HDPE Sea intake / outfall pipelines - Challenges and success stories”</i> , Prashant Nikhade, M/s Borouge (India) Pvt Ltd,
16:45-17:00	<i>“Microalgae as potential agents for CO2 sequestration, bioremediation of wastewaters and biofuel Applications”</i> - Dr. V Shashirekha, Murugappa Chettiar Research Centre (MCRC)
17:00-17:15	<i>“A study on desalination plants using energy from waste heat and ocean thermal gradient”</i> , Dr. G. Venkatesan, NIOT
17:15-17:30	<i>“Development of ZLD based nuclear desalination system”</i> , Dr. Abhijit Raha, BARC
17:30-17:45	<i>“Polymer nanofilm membranes for desalination and molecular separation applications”</i> , Dr. Santanu Karan, CSMCRI
17:45-18:00	Industry talk - Mr. Rajneesh Chopra, VA Tech WABAG
19:30	Dinner

## **08<sup>th</sup> March, Day 2**

### **Venue: Panikkar Hall**

## **SESSION III**

### **Invited Talks**

09:30-09:45	<i>“Advances in Osmosis based Membrane Developments – Challenges in Indigenization, Recent Developments and Future Directions”</i> , Dr. A.K. Ghosh, BARC (Awardee)
09:45-10:00	<i>“Applying Gandhian Principles for Energy Sustainability and Mitigating Climate Change”</i> , Swati Kalwar, IIT Bombay
10:00-10:15	<i>“Bioethanol production in MBR system: A promising technology for water and energy saving”</i> , Prof. S.P. Chourasia, MNIT Jaipur
10:15-10:30	<i>“Wind Turbine Technology and its Grid Integration”</i> - Dr. Zakir Hussain Rather, Dept. of Energy Science & Engineering, IIT Bombay
10:30-10:45	<i>“Membrane research and opportunities in Indian context”</i> , Mr. S.V. Davey, Davey Products

10:45-11:00	<i>"The Indian membrane revolution"</i> , Mr. S.P. Mayor, Permionics Membrane Pvt. Ltd.
11:00-11:15	<i>"Recent developments in the use of solar energy to power the water desalination plants"</i> , Mr. A.M. Kamalakannan, Aqua Plus Tech
11:20-11:35	Tea Break

#### **SESSION IV**

##### **Invited Talks**

11:35-11:50	<i>"Tidal stream energy resource characterization for the gulf of Khambhat, India"</i> , Dr. Manasa Ranjan Behera, Dept. of Civil Engineering, IIT Bombay
11:50-12:05	<i>"Solar PV on water mass: A unique nexus for low cost energy, water &amp; land conservation"</i> , Dr. Sagar Kumar Agravat, L&T Solar Business Unit
12:05-12:20	<i>"Sono-photocatalysis for energy and environmental remediation"</i> , Dr. Neppolian, SRMIST
12:20-12:35	<i>"Internet of things for water management implications &amp; challenges of IoT in desalination &amp; water treatment systems"</i> , Dr. Bandaru Ramakrishna, SRMIST
12:35-12:50	<i>"Membrane separation for chemical process industries for process streams as well as for water and waste water treatment"</i> , Dr. B. Chakravorty, Genesis Membrane Sep. Pvt. Ltd.
12:50-13:05	<i>"Modification of polymer membranes by biomaterials for waste and waste water treatment"</i> , Prof. G. Arthanareeswaran, NIT Trichy
13:05-13:20	<i>"Environmental and operational issues related to RO plants in rural areas of Rajasthan for treating brackish water"</i> , Dr. A.B. Gupta, MNIT Jaipur
13:20-14:00	Lunch

#### **SESSION V**

##### **Venue-Rajendra Chola Hall**

14:00-14:10	<i>"Enzyme-mediated Biotreat System for Textile Effluent Treatment"</i> , Murugappa Chettiar Research Centre (MCRC)
14:10-14:25	<i>"Demonstration of wave powered navigational buoy for usage in ports"</i> , Mr. Ashwani Vishwanath, NIOT
14:25-14:35	<i>"Recent developments in desalination technology"</i> , Amir Basha, VA Tech WABAG
14:35-16:45	Technical Presentations-

##### **Oral Presentations- (10 min each)**

1. *"Numerical Analysis on a Direct Mechanical Drive Wave Energy Converter to Improve Performance on Longer Wave Periods"*, Vishnu Vijay Shankar, IIT Madras
2. *"A tip leakage alteration technique to get high performing Wells turbine"*, P.Madan Kumar, IIT Madras
3. *"Comparative Study Between Monopile and Bottom Supported Tension Leg Tower for Offshore Wind Turbine at Shallow Water Depths"*, Arihant Jain, IIT Kharagpur

4. *“Enhancing deaeration in Low Temperature Thermal Desalination plant: An experimental study”*, D.Balaji, NIOT
5. *“An innovation in the production of clean energy from seawater”*, Dr. Satyendra Singh (Chemistry Assist. Professor)
6. *“Development of control and data acquisition code for OTEC-LTTD cycle using LabVIEW”*, Abhishek M, SASTRA
7. *“Assessment of wave energy potential along the erosion prone coast at Ullal, Karnataka”*, Amit Dhawade, VIT, Pune
8. *“Optimisation of the efficiency of a typical wave energy converter with proper alignment at the Bhagwati Bandar, Ratnagiri, Maharashtra”*, Shruti Mane, BVP, Pune
9. *“Renewables based Hybrid Power System with Desalination Plant as Energy Storage option”*, Nagaraj BARCF Kalpakkam
10. *“Separation of Strontium using CMCh by Complexation Ultrafiltration and Optimization of Process Conditions”*, E.Kavitha, SRMIST
11. *“Performance enhancement of thin-film composite sea water reverse osmosis membranes by incorporation of graphene oxide in support layer”*, Rutuja S. Bhoje and Parag R. Nemade ICT, Mumbai
12. *“Technological Frontiers for Efficient Desalination of Brackish & Sea Water for use in Industry, Agriculture and Domestic Consumption”*, Dr. S. Ramachandran, Dr. E. Nakkeeran
13. *“Perchlorate remediation from water using bio-polymeric derivative”*- Anindita Dey, SRMIST

#### Poster Presentations-

1. *“Micro fluidic paper-based colorimetric sensors for heavy metal detection in water”*- Ashish SRMIST
2. *“Development of Code for Power Module Performance Assessment of Wave Energy Converter”*- Akshaya H, SASTRA
3. *“Offshore Windmill Equipped with Tension Leg Platform and its Comparison with Spar-Buoy”*- Shubha Sharmini, SRMIST
4. *“Dairy Wastewater treatment using Electrochemical method”*- Abhishek S SRMIST
5. *“Development of visible active photocatalytic integrated submerged membrane bioreactor for textile wastewater treatment”*- Sathya U, Anna University
6. *“Study of nitrate removal on chitosan based beads in comparison with INDION NSSR”*- B Muthamizh, SRMIST
7. *“Treatment of phenol containing aqueous solutions by membrane – based solvent extraction”*, E Poonghuzhali
8. *“Removal of Bisphenol-A using Biochar”*, Deepshika Arvind SRMIST
9. *“Piezoelectricity”*, Harish R
10. *“Modified Biosorbents for Defluoridation of Synthetic Water”* – Sudhanya Das, Vinayak V K, Delvin Mathews, G Keerthiga, SRMIST
11. *“Design of a Low-cost Microbial Fuel Cell”* - S. Sam David, Souvik Sen, Saptarchita Datta, Khyati Parikh, K. Deepa, SRMIST
12. *“Liquid-Solid Inverse Fluidized bed Coagulator”* - V. Aswini, R.Balaji, R.Vigneshwar, S. Sam David, SRMIST
13. *“Phenol Removal Using Activated Carbon Counter-Current Liquid-Solid Fluidized Bed Adsorber”* - Rajkumar R, Rohan Karthik Raman, Sarves S, S. Sam David, SRMIST

14. *“Removal Of Toxic Heavy Metals From Aqueous Solution Using Black Cumin Seed (Nigella Sativa) As A Low Cost Adsorbent”* - E. Kavitha, Annapoorani.V , Harshinee P, SRMIST
15. *“Effect of Casting solution Pressure on performance of Polyvinylidene difluoride Capillary Ultrafiltration membranes”* - Vijay Mamtani, BARC

16:45-17:00	Tea Break
17:00	Valedictory (Pannikar Hall)
19.30	Dinner

**09<sup>th</sup> March, Day 3**

**Venue-Rajendra Chola Hall**

**Workshop on Renewable energy & Desalination**

9.30-9.40	Introductory remarks
9.40 -11.40	Workshop-1 Lecture-1-Membrane preparation – Dr.A.K. Gosh Lecture-2 –Membrane Application – Dr. B. Chakravarthy
11.40-11.55	Tea Break
11.55-13.55	Workshop-2 Lecture-3 – Thermal desalination by NIOT Lecture-4 - Desalination & Concluding remarks - Dr. S Prabhakar
13.55 – 14.45	Lunch