



NEWS

INTERNATIONAL CENTRE FOR CLEAN WATER

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INTERNATIONAL CENTRE FOR CLEAN WATER - A VISION FOR THE FUTURE

The International Centre for Clean Water (ICCW) aims to be one of the best ecosystems of its kind in the world to ideate, nurture and translate disruptive technologies for sustainable clean water, with collective participation of the global community, delivering first rate science, leading to wealth and social good simultaneously, in the process of building water professionals of tomorrow. ICCW is an IIT Madras initiative aiming to conduct research and develop technology to ensure clean water for each individual on the planet.

International Centre for Clean Water (ICCW) will start functioning in early 2019 at IIT Madras Research Park.

FACILITY

The ICCW facility is under construction at IIT Madras Research Park. This is going to be a state of the art facility in the world for research and incubation of technologies for clean water.



IIT Madras Research Park

The facility is being set up with a carpet area of 17,000 sqft. It will house a world class Research facility, laboratories, incubation centre and a pilot production facility. Phase-1 of ICCW facility is expected to be launched early in 2019. A fully equipped lab for water quality tests will be catering the public as well.



ICCW Team meets Organo

ICCW MAY JOIN HANDS WITH ORGANO, JAPAN

Organo is a Japanese company with expertise in water treatment, in Asia. The company has an experience of over 70 years in the areasustainable water treatment field.

Both ICCW and Organo have expressed their interest to work together towards their common goal - "clean water for all". Discussions are still underway and hopes are high. This partnership can bring a revolution in the field of water treatment.

BRAINSTORMING SESSION



Participants of ICCW brainstorming session

A brainstorming session was conducted at Indian Institute of Technology - Madras to envisage the idea of the "International Centre for Clean Water". People from various fields attended the session to plan and debate on the possibilities and structure of the ICCW. The initial plan of action was finalised in the session. Design concept, funding possibilities, extend of responsibilities, possibilities for collaborations were the key points discussed in the meeting.

Important points discussed in the meeting were:-
Involvement of students and research scholars in developing technologies for ICCW | Extend of water related issues to be addressed by ICCW | Use of

interdisciplinary potentials of ICCW team to overcome the limitations of current systems in the field | Ways to attract and manage funds | Possibilities of collaborating with private companies and MNCs to reach out to society faster | Possibilities and constraints for maintaining a pilot production facility within ICCW | Participation and role of IIT in various projects of ICCW. The session was followed by a visit to the existing water lab in the IIT campus.

KEY PEOPLE

The following people are the participants of ICCW Society



● Prof. Bhaskar Ramamurthi
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● Prof. T Pradeep
Dept. of Chemistry, IITM



● Prof. Tiju Thomas
Dept. of MME, IITM



● Prof. Rajnish Kumar
Dept. of Chemical Engg., IITM



● Prof. Ashoh Jhunjunwala
Dept. of Electrical Engg., IITM



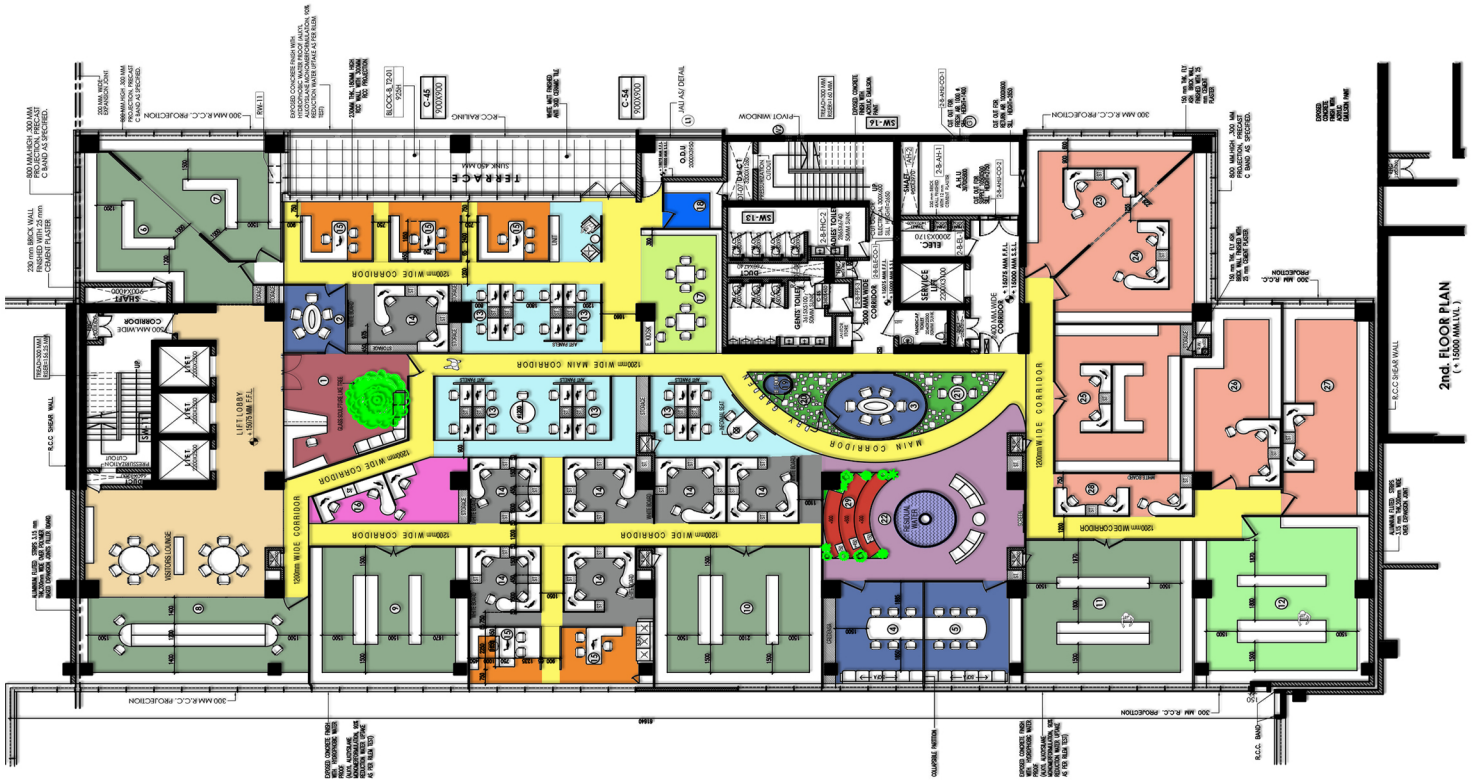
● Prof. Ligy Philip
Dept. of Civil Engg., IITM



● Prof. Ravindra Gettu
Dept. of Civil Engg., IITM



DESIGN



Layout plan of ICCW

International Centre for Clean Water (ICCW) is being set up at the research park facility of IIT-Madras. An entire floor with a carpet area of 17,000 sqft has been allocated for this. The design has been developed with the idea of making it a world class facility. The layout has been designed to accommodate all the requirements, without compromising on spatial quality and user comfort. The user flow pattern ensures easy accessibility and security to the facility. The office space is planned as an open office and focuses on human comfort. Several aesthetic elements and interactive spaces have been planned for the interior of the facility focused on water. Visitors may have a tour of the entire facility without disturbing the functioning of any of the laboratories. Interior layout is designed with minimum partitions and lots of transparency to ensure maximum natural light is getting inside. Safety standards inside the laboratories stand at par with other world-class facilities. Overall the design is compact and environment friendly.

PROPOSED INSTRUMENTAL FACILITIES / SERVICES

High resolution transmission electron microscopy | High resolution scanning electron microscopy | Scanning electron microscopy | Atomic force microscopy | Confocal Raman microscopy | Inductively coupled plasma mass spectrometry | High performance liquid chromatography | X-ray photoelectron spectroscopy | Ion chromatography | GC and GC-MS | Dynamic light scattering | Isothermal calorimetry | Electrospray ionization mass spectrometry | Matrix assisted laser desorption ionization mass spectrometry | Mass spectrometry imaging | Fluorescence spectroscopy | Test skid for membrane filtration | Pilot scale production | Prototyping | Field testing and validation | Consultancy



ICCW - PARTICIPATING INVESTIGATORS



Prof. C. Vijayan
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Prof. Sarit Kumar Das
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Prof. Prasad Edamana
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Prof. Manu Santhanam
Dept. of Civil Engg.
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ICCW - WORLDWIDE COLLABORATORS



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Prof. Marc Anderson
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Prof. Thomas Thundat
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Prof. Alok Dhawan
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