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 building water professionals of tomorrow.

**Governing Structure**
- To be a society
- Director, Professor in-charge or coordinator
- Deputy Director or Coordinator

**Governing Council**
- Following government regulations

**Advisory Board**
- Academicians – National & International
- Stockholm water prize awardees
- Nobel laureates, Industry leaders
- Representatives of Govt., Industry, NGOs, etc.
To be housed at the IIT Madras Research Park which comes with several inherent advantages to access research facilities, collaborative opportunities, and incubation services.

- Total floor space of 21,000 square feet on long-term lease.
- To occupy the entire 2nd floor with dedicated access.
- Phase-I: 10,000 sq.ft. to be launched including a 3,900 sq.ft. incubation facility by July 2018.
- Phase-II: Operational by May 2019, which will house the rest of the research facilities.
- Total project cost: 40 crore INR (approx. US$ 6.5 million).

OBJECTIVES

- Water incubation hub: Development of an integrated water technology business incubator for the benefit of everyone – ready to translate any water technology solution, with IP protection.
- Affordable solutions for fluoride-free drinking water: Creation of affordable technologies for fluoride removal using advanced nanomaterials – a solution that cost only in the range of 5-10 paise per litre of pure water, delivered at homes.
- Sensors for water quality: Development of integrated sensor-arrays for remote monitoring of water quality (and quantity).
- Sustainable atmospheric water capture units: Development of solar power driven high efficiency atmospheric humidity capture devices using nanotechnology for production of clean drinking water.
- Desalination units using new technologies: Water desalination using capacitive desalination (CDI)- low energy desalination units using advanced nanostructures.
- Geo-specific water purifier bottles: Clean water solutions during natural calamities.
- Futuristic sources and uses of clean water.
- Training tomorrow’s water professionals: Ensuring sustainable growth of the centre and the country.
ICCW - Partner Benefits & Models

**PARTNER BENEFITS**

- Early advantage of technologies developed at the centre.
- Involvement in setting the research and technology directions for the centre.
- Partnering to develop tomorrow’s technologies exclusively.
- Measurements and evaluation at the cutting edge, looking into the future.
- Understanding problems beyond quality control.
- Sponsoring MS/PhD students, employees included.
- Forum to engage with government and stakeholders, evolve policy.
- Helping public acceptability of technology.

**CONSORTIUM MODEL**

- Research and technology development at the Industry level.
- Development of research and development at individual corporate level – IP sharing.
- Specific projects with exclusive returns.
- Co-development leading to industrial outcomes.
- Co-development by integrating technologies.
- Customizing for local needs.
- Academic partnerships in training, testing, validation.
- Participation in all national and international meetings, training programs at the centre.
- Partners window into the future.
- Access the large talent pool.
ICCW - Incubation and Start-Ups

ADVANTAGE - INCUBATION

- Access all the resources, as if they are part of IITM
  Incubatees returns as standard
- Test, validate, build and sell using ICCW resources
- Access the IIT resources – Library, computing, services, recreation

RESOURCES AVAILABLE

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 | Matric 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
In 2010, the centre was established with a total investment of Rs. 25.5 crores, of which Rs. 7.5 crores were confirmed. Further funding of Rs. 18 crores is required. Donors can support a range of amounts from Rs. 7.5 to 20 crores. Investment to develop specific technology is estimated at Rs. 5-10 crores, while implementing specific technology solutions costs Rs. 2-20 crores depending on scale. As a consortium partner, investment is Rs. 2 crores per year for 5 years. Co-naming rights, advisory board membership, and consortium membership are also available.
ICCW - Mechanism & Unique benefits

**MECHANISM OF ICCW**
- Run under a CEO with a clear mandate
- Water technology to be guided by senior scientists and engineers with a flair for resource generation
- Implementation arm to be set-up with staff and resources
- Incubated companies to give back to the centre
- Service structure to support industry and academia for co-development
- Mechanisms to identify talent, technologies and needs
- Employ high quality individuals without restrictions
- Reward structure to enhance excellence
- Adequate but hassle-free administration

**UNIQUE BENEFITS**
- ICCW as an implementation arm of IIT technologies
- ICCW to help incubate new companies, enabling multiple technologies from different labs to be combined
- ICCW as a place for our start-ups, which comes with a built-in R&D lab
- ICCW can expand the scope of known technologies, due to the presence of a water-specific incubator
- ICCW can work directly with various arms of IITM and govt. and can attract CSR funds as a force multiplier
- ICCW as a platform to study water technology policy, as diverse aspects of water technologies come under one umbrella
ICCW - Participants

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Also organisations such as International Water Association, American Chemical Society, National Science Foundation, etc. who will bring additional international contacts.
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**Note: ICCW website is under construction**

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