

IT Mandi conducts NMHS workshop on Water Filtration Techniques Based on Solar Energy from 11th to 13th February 2019.

It is a part of the National Mission on Himalayan Studies (NMHS) to build efficient Water Purification Systems with added minerals from locally sourced materials for Off-Grid Applications

It addressed the high-level issues relating to water purification, investigation of practical strategies and integration of renewable energy practitioners, project developers and industries. The workshop also covered drinking water status, waste water treatment systems, water borne diseases, water purification systems and their market for the Indian Scenario.



The 3-day workshop was attended by the students of IIT Mandi and other institutes. The aim of the workshop was to discuss the possible solutions and strategies to achieve the goal of developing a simple, cost-effective, easy to operate and maintain and socially acceptable Water Purification System by using Solar Thermal Energy (STE) and traditional knowledge of the Himalayan region. The workshop also introduced and demonstrated the 'Conventional Solar Stills' and 'Hydropanel', a device which converts air (moister) into the water.'

Speaking about the impact of the workshop, Dr. Bharat S Rajpurohit, Associate Professor, School of Computing and Electrical Engineering, IIT Mandi and Workshop Coordinator, said, "*Our institute is striving since its inception to address challenges faced by society with very low cost and simple technological solutions, which can be afforded by all. Access to safe drinking water is right of every citizen as well as shared responsibility to contribute to achieve this goal. Deliberations in workshop were helpful for participants in understanding available and possible solutions*".

The workshop also provided a platform for an in-depth discussion on the various challenges like lack of awareness, low output per day, high cost and limited benefits which result in lack of public interest of a Solar Thermal Energy System (STE) and their possible remedies which will benefit participants from academic/ R&D institutions, engineers and policymakers. In addition, the potential issues looking beyond the existing research frontiers and independent of disciplinary boundaries were also discussed

in the workshop.

Highlighting the unique aspects of this workshop, Dr Jaspreet Kaur Randhawa, Assistant Professor, School of Engineering, IIT Mandi, and Workshop Coordinator said, *“This is an interdisciplinary project where electric engineers will develop the accelerated evaporation/water purification system whereas material scientists will solve the issues of remineralisation. We will combine traditional knowledge with modern technologies to provide affordable water purification systems”*.

About National Mission on Himalayan Studies (NMHS) project

NMHS (National Mission on Himalayan Studies) is a venture of Ministry of Environment, Forest & Climate Change (MoEF&CC). NMHS supports innovative studies and related knowledge interventions (that do not tread on the beaten path) towards the sustenance and enhancement of the ecological, natural, cultural, and socio-economic assets and values of the Indian Himalayan Region.