



Knowledge Network of
Indian Institute of Technology Gandhinagar
TEQIP-III Initiative (MHRD, Govt. of India & NPIU)

Frontiers in the Energy-Water Nexus

Date: 25/02/2021 to 03/03/2021 (6-days, excluding Sunday)

Mode: Online by IITGN

Target group: Faculty members

Energy and water are both critical needs of humanity that are interlinked and under increasing stress. Water is required for energy production, and energy is necessary for both transportation and treatment of water. The goal of this short course is to understand challenges at the intersection of water and energy and critically analyze technology solutions that have been proposed in this area. The course will introduce concepts of chemical and electrochemical thermodynamics, as well as transport phenomena. These will then be applied to various desalination processes (reverse osmosis, electrodialysis, multi-effect distillation etc.) and energy systems (fuel cells, microbial fuel cells, etc.).

Course Coordinator- Prof. Jaichander Swaminathan (IIT Gandhinagar)