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Catalyzing Innovations and Digitization for Safe, Sustainable, Resilient, and Inclusive Water Management

LAUNCH OF E-MARKETPLACE AND PUBLICATIONS

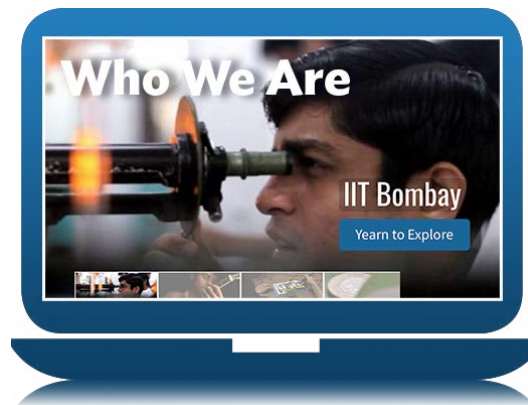
15-19 March 2021



Indian Institute of
Technology Bombay

JalTantra: A Free Tool for Optimal Piped Water Network Design

Name of Organization	Indian Institute of Technology Bombay
Location	Republic of Korea
Year Registered	1959



Technology Profile

Recognizing the need for an open-source platform to enable widespread usage in academic institutions, government offices, and other institutions, the JalTantra system was developed at Indian Institute of Technology Bombay. Now, it has been officially adopted as one of the software systems to be used in the design of water supply schemes by many government departments in India.

The JalTantra system was developed in consideration of the various decision choices across the different disciplines involved in planning and designing water distribution systems, as well as for cost optimization to address the high prices

and complex platforms associated with conventional commercial software products that make such digital platforms prohibitive to use.

The JalTantra optimization framework not only covers the pipe cost but also includes the energy cost of pumping water; and capital costs of pumps and storage tanks. The current system is designed for branch networks only, but it is being expanded to optimize loop-type networks as well. The next version will also have geographical information system-based demand allocation, data management, and result visualization.

To know more about our Smart Water Technology:

[*JalTantra: A Web-Based Free-for-All Platform for Water Network Optimal Design*](#)

[*JalTantra Tutorial*](#)

The recording of interactive session will be uploaded here.

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