Special session on Digitalization of district heating and cooling

Overview

District heating and cooling (DHC) systems have traditionally been operated with limited controls, such as supply temperature regulation and network pressure management. This approach does not provide detailed information on supply and utilization structures, hindering optimal heat generation and network operation. Digitalization offers new opportunities for more efficient and sustainable management of DHC systems, enabling better integration of renewable sources, improved network operation, and enhanced end-user experience. This special session will explore the impact of digitalization on the district heating and cooling industry, highlight current state-of-the-art technology, and discuss challenges and opportunities for integrating digital processes into DHC systems.

The session will be held in Unicamp, São Paulo (Brazil) as part of the Energy Informatics.Academy Conference 2023 (EI.A 2023).

Organized by: IEA DHC Annex TS4: Digitalisation of District Heating and Cooling

Topics

- Strategies and best practices for implementing digitalization in DHC systems
- Innovative technological solutions driving digital transformation in DHC systems
- Emerging business models, opportunities, and challenges arising from digitalization in DHC systems
- Legal aspects, standards, and policy instruments enabling the integration of digital processes in DHC systems
- Case studies highlighting successful digitalization efforts in existing R&D projects, studies, and demonstration plants
- The role of digitalization in enhancing system integration across the production, distribution, and consumption levels
- Addressing data security, privacy, and ownership challenges to fully unlock the potential of digitalization in DHC systems

Organizing Committee

Dietrich Schmidt (Fraunhofer Institute for Energy Economics and Energy System Technology IEE, Germany)
Xiaochen Yang (Tianjin University, China)
Natasa Nord (Norwegian University of Science and Technology, Norway)
Hamid Reza Shaker (University of Southern Denmark, Denmark)
Etienne Saloux (Natural Resources Canada, Canada)
Martin Brüssau (SAMSON Aktiengesellschaft, Germany)
Mathieu Vallee (Grenoble / National Institute for Solar Energy, France)
Zheng Grace Ma (University of Southern Denmark, Denmark)

Important Dates

• Paper submission deadline: **July 16, 2023** • Notification of acceptance: August 21, 2023	• Camera-ready paper due: September 15, 2023 • Registration deadline: October 6, 2023
• Conference dates: December 6-8, 2023	

Please check the conference webpage for the details: https://www.energyinformatics.academy/eia-2023-conference