

# Call for Abstracts

## The 17<sup>th</sup> International Symposium on District Heating and Cooling

Take part in the latest research

Exchange ideas and results

Build networks with researchers and industry leaders

**September 6<sup>th</sup>-9<sup>th</sup>, 2021**

**At Nottingham Trent University, Nottingham, UK**

District heating and cooling are proven urban infrastructures for capturing, moving and using heat and cold efficiently. They hold great potential to be key factors for a more resilient and sustainable energy system. Ensuring the future success of District Heating and Cooling calls for a multi-disciplinary approach to research and development since the use and integration of heating and cooling networks are interconnected in society through economic, environmental and energy considerations. This multi-disciplinary approach as well as digitalization, flexibility and sector coupling/ hybrid energy network are reflected in the framework of the next International Symposium on District Heating and Cooling.

During the Symposium researchers will present and discuss their findings. There will be a peer review process by the scientific committee to ensure high quality of the presentations.

### **The International Symposium on District Heating and Cooling**

The 17<sup>th</sup> International Symposium on District Heating and Cooling will take place in Nottingham on September 6<sup>th</sup>-9<sup>th</sup>, 2021. The Symposium aims at gathering the international research community around issues important for District Energy development. It is one of the most significant venues for testing research findings and learning about District Heating and Cooling. This symposium will be the 17<sup>th</sup> in the row, and expects participants from all over the world, especially from European, East Asian, and North American countries. The 17<sup>th</sup> Symposium was delayed by one year due to the Covid-19 pandemic. Now IEA DHC made the decision to organize the DHC2021 Symposium online if a face-to-face meeting is still not feasible by Mid-April 2021. There will be no further delays.

## Important Dates

1	Call for Abstracts	November 6 <sup>th</sup> 2020
2	Deadline for Abstracts	January 31 <sup>st</sup> 2021
3	Deadline for Notification on Acceptance Call for papers	February 22 <sup>nd</sup> 2021
4	Deadline for Papers	March 31 <sup>st</sup> 2021
5	DECISION ON TYPE OF SYMPOSIUM ONLINE / FACE-TO-FACE	April 16 <sup>th</sup> 2021
6	Finish of the paper review	May 24 <sup>th</sup> 2021

### We invite researchers to submit abstracts in the following areas:

- **Urban energy systems, planning and development**

Exploring the systems of District Heating and District Cooling as a driving force for city planning and development: How does city planning influence the development of the District Heating and Cooling Systems?

- **Efficiency and environmental performance**

Exploring the future energy supply issues in District Heating and Cooling, including the integration of renewables, primary energy savings, CO<sub>2</sub> emissions and the use of thermal storage, Development of large or regional heat networks, Combined heat and power and District Heating

- **Hybrid Energy Systems and Smart Grids**

Integrating the different energy domains and thus creating “hybrid energy networks” is considered to be one of the key steps for decarbonisation of the energy systems and the basis of the future energy systems. Developing the hybrid systems of today and the key elements in the technology: for example the flexibility and resilience, the coupling points between different energy systems, the storage systems, large scale heat pumps, integrated planning, new business models, smart controls and metering techniques.

- **Modelling and Simulation of DHC Systems**

Application of modelling and simulation of DHC as way to improve overall DHC systems performance, to achieve better control and better utilisation of individual system components. Application of various tools, methods and workflows.

- **Digitalisation of DHC systems**

By wider implementation of information and communication technologies there is opportunity of integration of digital processes into DHC systems. Digital technologies make the whole energy system smarter, more efficient and reliable and boost the integration of more renewables with new challenges such as data security, privacy and data ownership.

- **4GDH concepts, Future DH Systems**

In line with the broad and multi-disciplinary approach needed to overcome the sector's challenges, we offer the opportunity to submit abstracts with importance to ensure the future of District Heating and Cooling.

- **GIS for Energy Systems, Heat Planning and DH**

Use of GIS based tools for DHC network planning, pipe routing, resource management, mapping of urban heat demand, etc. Exploring the role of the District Energy Company, the role of the customer and how these roles interact.

- **RES and Waste Heat Sources for DH**

Areas of potential waste and renewable heat recovery as a source for DH. Methods to identify and quantify potential waste heat supply. Examples of use of waste and heat recovery in DH system and particularly for 4GDH.

## **Instructions for the Abstracts**

Abstracts can be submitted for symposium or poster presentation. It should be original work and submitted by the presenting author. The Abstracts are to be written in English and using MS Word format only. All abbreviations must be spelled out on first use. Abstracts should be no more than 300 words. All submission must be done through the symposium website: [www.dhc2021.uk](http://www.dhc2021.uk)

**The following elements should be included in the abstract:**

- The title of the Abstract (keep it short for communication purposes)
- The research focus (problem description, short background)
- The research methods used
- The key results/findings of the research
- The main conclusions and recommendations

**For relevant consecutive information on The Symposium please see the website;**

[www.dhc2021.uk](http://www.dhc2021.uk)