

Special Issue

Advances in Ground Heat Exchangers and Ground-Coupled Heat Pumps

Message from the Guest Editors

Ground-source heat pumps, and in particular ground-coupled heat pumps (GCHPs), are becoming a rather widely used technology for building climatization and domestic hot water production. Relevant contributions to improve the design and simulation of GCHP systems can be given by the evaluation of accurate thermal response factors of GHE fields, by developing new analytical and numerical models of GHEs, by the experimental validation of GHE mathematical models, by performing innovative thermal response tests for a more precise evaluation of the ground thermal properties, by the dynamic simulation and monitoring of GCHP systems, and by the economic and the exergy analysis of these systems. Papers addressing but not limited to the following topics are recommended:

- Thermal response factors of borehole heat exchangers (BHEs) and BHE fields;
- Thermal response factors of horizontal ground heat exchangers;
- Analytical and numerical models of ground heat exchangers;
- Experimental analysis and laboratory models of ground heat exchangers;
- Thermal response tests (TRTs);

Guest Editors

Prof. Dr. Enzo Zanchini

Department of Industrial Engineering, University of Bologna, Bologna, Italy

Dr. Claudia Naldi

Department of Industrial Engineering, Alma Mater Studiorum-University of Bologna, 40136 Bologna, Italy

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

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