



UNIVERSITÀ DEGLI STUDI
DI TRENTO

Dipartimento di Ingegneria Civile,
Ambientale e Meccanica



Mechanics of refractory
materials at high-temperature
for advanced industrial
technologies
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AVVISO DI SEMINARIO

Si comunica che **mercoledì 26 novembre 2014 a partire dalle ore 10.30**
si terrà presso l'aula **T3** (via Mesiano 77) il seguente seminario

Energy Piles: Past, Present & Future

Dr. Fleur Loveridge

University of Southampton

Energy piles offer the opportunity to make dual use of our building foundations. As well as providing essential structural support to the overlying building, energy piles are also equipped with plastic heat transfer pipes to allow connection to a ground source heat pump system. In this way the foundations can also contribute to the renewable heating and cooling of the building.

The first energy piles were constructed in northern Europe in the 1980's. Despite this important innovation uptake of the technology has been slow in many cases. This has related both to energy prices (e.g in the UK) and also to the typical hurdles related to innovation: lack of design codes, lack of experience and lack of long term performance validation. Yet energy piles are well placed to reduce energy bills across Europe, where typically half of all energy use is related to space heating and cooling of buildings. This presentation will take a look at the development of energy piles, including common construction practices. It will consider current barriers to uptake and examine ongoing research which is aiming to enable more efficient design and testing and hence break down those barriers.

Dr Fleur Loveridge is a Royal Academy of Engineering Research Fellow and a Lecturer in Geomechanics at the University of Southampton. She works on the thermal behaviour of ground heat exchangers and the soils and rocks surrounding them, with a particular interest in energy piles and other thermo-active geotechnical structures. Prior to her return to academia Fleur spent nine years working as a consultant in geotechnical engineering, mainly at Mott MacDonald and before then Babbie Group. Her work included investigation, design and construction supervision for a variety of infrastructure schemes and applied research and development projects. Fleur is a Chartered Engineer and a Chartered Geologist. She was a contributing author to the Ground Source Heat Pump Association Thermal Pile Standard.

Tutti gli interessati sono invitati a partecipare.

Il seminario è organizzato da F. Cecinato e A. Gajo