

Invitation

IRETHERM Workshop 2016

IRETHERM is an interdisciplinary project connecting academia and industry in order to foster research related to the development of geothermal energy in Ireland. After five years of work on a variety of targets in Ireland, employing and developing tools in many geoscientific scientific disciplines, this project is coming to its end.

This workshop is meant not only to present work done in this project, but also to point out research needs, and collect ideas for the future. We hope to have a lively discussion on these subjects.

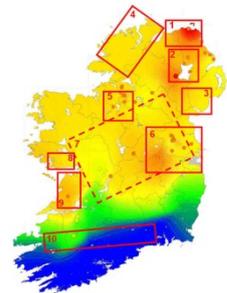
You are cordially invited to take part in this workshop.

Time:

Friday, April 1, 2016, 9:00 – 18:30

Venue:

Lecture Theatre
Geological Survey of Ireland
Beggars Bush
Haddington Road
Dublin



The Geothermal Association of Ireland



Geological Survey of Northern Ireland



Agenda

9:00 **Registration & Coffee**

9:30 – 11:00 **IRETHERM contributions I (Convener N. Willmot Noller)**

V. Rath et al.	<i>Introduction: The Experience of IRETHERM</i>	9:30 – 9:45
R. Delhaye et al.	<i>Accurate Estimation of Sediments Conductivities in the Rathlin Basin using Magnetotellurics</i>	9:45 – 10:00
X. Ogaya et al.	<i>New MT Results from the Clare and NW Carboniferous Basins</i>	10:00 – 10:15
J. Vozar et al.	<i>Joint Inverse Modelling of Geophysical Data from Lough Neagh Basin</i>	10:15 – 10:30
A. Licciardi et al.	<i>Exploring Sedimentary Basins with Receiver Function: the Dublin Basin Case Study</i>	10:30 – 10:45
J. Campanya et al.	<i>Estimating Porosity and Permeability from Electromagnetic Measurements in Basins</i>	10:45 – 11:00

11:00 – 11:30 **Coffee Break & Poster Session**

11:30 – 13:00 **IRETHERM contributions II (Convener R. Delhaye)**

S. Blake et al.	<i>An investigation of Ireland's thermal springs: provenance, pathways and potential</i>	11:30 – 11:45
N. Willmot Noller et al.	<i>Constraining heat production rates in Ireland's continental crust</i>	11:45 – 12:00
T. Farrell et al.	<i>The Geothermal Energy Potential of the Galway Granite</i>	12:00 – 12:15
T. Fritschle et al.	<i>Controls on the geothermal potential of the buried Kentstown and Glenamaddy plutons, Ireland – implications from hydrothermal alteration</i>	12:15 – 12:30
V. Rath et al.	<i>Paleoclimate Correction for Ireland</i>	12:30 – 12:45
J. Fulla et al.	<i>Structure and Properties of the Lithosphere below Ireland</i>	12:45 – 13:00

13:00 – 14:00 Lunch & Poster Session

14:00 – 15:30 Invited contributions (Convener V. Rath)

A. Manzella	<i>The Role of Magnetotellurics in Geothermal Exploration</i>	14:00 – 14:20
E. Huenges	<i>Research demand for geothermal development in Europe</i>	14:20 – 14:40
P. Younger	<i>Next steps in EU Research and Demonstration on Engineered Geothermal Systems</i>	14:40 – 15:00
S. Fuchs	<i>Why Borehole Data Govern Successful Geothermal Exploration</i>	15:00 – 15:20

15:30 – 16:30 Coffee Break & Poster Session**16:30 – 17:15 Panel Discussion (Convener C. Bean)**

The aim of this discussion is to define the areas of research that are important for the future development and use of geothermal energy in Ireland and elsewhere. The work in IRETHERM was focused at the very early stage of exploration for usable geothermal resources, and has produced many valuable results. However, there is still a large need for further research. This surely implies the **improvement of geoscientific tools**, including the development of methods which allow a better estimation of subsurface properties using all available data or constraints, together with the characterization of the uncertainty of the resulting models, including non-uniqueness and spatial resolution. Even more important is the necessity **of generating or accessing adequate data** for these challenging problems. Public affordable access to existing data, as well as **substantial funding** of research aimed at this goal will be necessary in order to allow geothermal energy to play a role in the decarbonisation process of Ireland in the future. Geothermal energy also has a problem concerning the lack of a **legal basis, education, and public perception**. We hope to have a lively discussion with contributions from the audience.

Panelists: TBD

17:15 - The End (wine and cheese)

9:30 – 18:00 Posters

S. Blake et al:

Compositional data analysis of hydrochemical data from Irish thermal springs

S. Blake et al:

Electromagnetic imaging of hydrothermal circulation systems beneath two thermal springs in Ireland

N. Piana Agostinetti et al.

Joint inversion of Receiver Function and Magnetotelluric data via structure decoupling algorithm

D. Kiyani et al.

Results from the Tellus A1 airborne electromagnetic data near Irish warm springs

J. Vozar et al.

Magnetotelluric investigations in the Newcastle area (Dublin Basin)

M. Long et al.

Laboratory measurement of thermal conductivities of Irish Rocks

T. Farrell et al.

Temperature at depth within a granite batholith: a case study from the Galway Granite

Further posters relevant to the themes of the workshop are welcome (contact: Rob Delhaye, rdelhaye@cp.dias.ie). We hope to be able to publish the contributions (presentations/posters) on the IRETHERM website.