

# EAGE

EUROPEAN  
ASSOCIATION OF  
GEOSCIENTISTS &  
ENGINEERS

## *Second Announcement*

### *Near Surface*

### 2009

**15<sup>th</sup>**  
European Meeting  
of  
Environmental  
and  
Engineering Geophysics



## Local Advisory Committee

Peter O'Connor ( <i>Chairman</i> )	APEX Geoservices Ltd
Tom Davitt	Scantech Geoscience Ltd
Shane Donohue	University College Dublin
Paul Gibson	NUI Maynooth
Betty Higgs	University College Cork
James Hodgson	Minerex Geophysics Ltd
Stephen Jones	Trinity College
Hartmut Krahn	Minerex Geophysics Ltd
Brice Le Comte	BMA Geoservices Ltd
Yvonne O'Connell	APEX Geoservices Ltd
Xavier Pellicer	Geological Survey of Ireland
Graham Reid	BRG Ltd
Ruth Staunton	RPS Ireland
Mike Young	Geological Survey of Northern Ireland

## Scientific Committee

John Arthur	Top-Hole Site Studies Ltd
Colin Brown	University College Galway
Shane Donohue	University College Dublin
Paul Gibson	NUI Maynooth
Betty Higgs	University College Cork
Stephen Jones	Trinity College
Hartmut Krahn	Minerex Geophysics Ltd
Mike Long	University College Dublin
Koen Verbruggen	Geological Survey of Ireland (Infomar Project)
Ugur Yaramanci	Leibniz Institute for Applied Geosciences (GGA) / Berlin University of Technology
Mike Young	Geological Survey of Northern Ireland

## General Information

### Venue

Trinity College Dublin  
College Green  
Dublin 2  
Ireland



## About Dublin

Dublin is both the largest city and the capital of Ireland. It is located near the midpoint of Ireland's east coast, at the mouth of the River Liffey and at the centre of the Dublin Region. Founded as a Viking settlement, the city has been Ireland's primary city for most of the island's history since medieval times. Today, Dublin is an economic, administrative and cultural centre for the island of Ireland.

## Conference Overview

### Sunday 6 September

10.00 - 18.00 hrs Workshop: Methodologies in Archaeological Geophysics

### Monday 7 September

09.00 - 10.00 hrs Opening session  
10.00 - 10.40 hrs Best of SAGEEP 2009 presentations  
10.40 - 11.30 hrs Exhibition opens  
11.30 - 12.10 hrs Best of SAGEEP 2009 presentations  
12.10 - 12.50 hrs **Keynote** Near-surface Geophysical Mapping of Northern Ireland from the Air  
*M.E. Young (Geological Survey of Northern Ireland)*  
14.00 hrs Start of the technical programme  
17.10 - 19.00 hrs Icebreaker reception

### Tuesday 8 September

09.00 - 09.40 hrs **Keynote** Field and Laboratory Seismic Measurements in Civil Engineering Applications  
*K.H. Stokoe (University of Texas at Austin)*  
12.50 - 15.00 hrs Field demonstrations  
20.00 - 00.00 hrs Conference evening with a unique Irish flavour

### Wednesday 9 September

09.00 - 09.40 hrs **Keynote** Ireland's Largest Geophysical Project? The Irish National Seabed Survey/INFOMAR  
*K. Verbruggen (Geological Survey of Ireland)*  
12.30 - 12.50 hrs **GAI** Geophysical Guideline Proposals  
*Geophysical Association of Ireland*  
17.10 hrs Closing remarks and introduction to next year's conference

### Thursday 10 September

06.45 - 16.00 hrs Field trip 1: New Boliden Tara Mine  
08.30 - 18.00 hrs Field trip 2: Newgrange/Hill of Tara

## Technical Programme

### Workshop

#### Sunday 6 September

##### Methodologies in Archaeological Geophysics

Archaeological Geophysics and the Ghost Ridges of County Galway – A Case Study from National Road Schemes in the West of Ireland  
*Jerry O'Sullivan (National Roads Authority Galway)*

Archaeo-Geophysical Prospection on NRA Road Schemes – A Review of the Past Five Years  
*Ronan Swan (National Roads Authority Ireland)*

Investigations at Newgrange, Tara and Rathcroghan  
*Joe Fenwick (National University of Ireland Galway)*

Mapping Irish 'Royal' Sites – Geophysical Survey as Part of an Interdisciplinary Investigation of Multi-period Earthwork Monuments  
*Brian Shanahan (The Discovery Programme)*

Marine Archaeological Geophysics – Methodologies to Assess Shipwreck Sites and Submerged Landscapes  
*Dr Rory Quinn (University of Ulster)*

Ground Penetrating Radar - Efficient High-resolution Archaeological Prospection Using Ground Penetrating Radar Arrays  
*Jesper Emilsson (Mala Geoscience AB)*

Magnetometry, Adapted for Archaeological Research  
*Dr Joerg Fassbinder (Bavarian State Dept. of Monuments and Sites)*

Why is there Resistance to Electrical Prospecting of the Near Surface?  
*Dr Chris Gaffney (University of Bradford)*

The workshop will be co-hosted by the Institute of Archaeologists of Ireland.



### Sessions

#### Monday 7 September

	MacNeill Theatre	Maxwell Theatre	Poster area
14.00 - 15.20 hrs	Archeo and Forensic Geophysics	Airborne and Remote Sensing	ERT and Other Methods for Spatial Investigation
15.50 - 17.10 hrs		Geology and Rock Physics	Electrical, Electromagnetic and GPR Studies

#### Tuesday 8 September

	MacNeill Theatre	Maxwell Theatre	Joly Theatre	Poster area
09.40 - 12.50 hrs	Surface and S-wave Seismics	Inversion and Modelling		Groundwater and Hydrogeophysics
15.00 - 18.10 hrs	Geotechnical Engineering and Shallow Seismic Studies	New Geophysical Techniques and Research	Geohazards and Contamination	

## Wednesday 9 September

	MacNeill Theatre	Maxwell Theatre	Poster area
09.40 - 11.00 hrs	Groundwater and Hydrogeophysics	Karst and Cavity Investigation	New or Novel Geophysical Techniques and Research
11.30 - 12.50 hrs		Marine Geophysics + Panel GAI	Geohazard and Contamination
14.00 - 14.40 hrs	Electrical, Electromagnetic and GPR Studies	Peat and Glacial Environment	Archeo-geophysics
14.40 - 15.10 hrs			Airborne Geophysics
15.50 - 17.10 hrs			Inversion and Ground Properties

The full technical programme is available online at [www.eage.org](http://www.eage.org)

## Field Trips

### Field trip 1 - Thursday 10 September

#### New Boliden Tara Mine

06.45 hrs	Meet at Trinity College
07.00 hrs	Departure field trip
08.00 hrs	Arrive at Tara Mine in Navan, Co. Meath Presentation, underground tour <i>The Tara Mine in Ireland is Europe's largest zinc mine producing 2.7 million tonnes of ore annually. Geophysical surveys have played a role in the discovery of the mine and are used for ongoing exploration and development. The mine visit will begin with a presentation by New Boliden. Afterwards visitors will be equipped with full PPE for the underground mine visit. Experienced guides from New Boliden will lead the group through the mine. The visit is a spectacular experience of the Navan Ore Body and of a modern working mine.</i>
12.30 hrs	Lunch
13.30 hrs	Visit to the ore concentrator
14.30 hrs	Return to Dublin
15.30 hrs	Drop off at Dublin Airport (upon request)
16.00 hrs	Arrival at Trinity College

### Field trip 2 - Thursday 10 September

#### Newgrange/Hill of Tara

08.30 hrs	Meet at Trinity College
08.45 hrs	Departure field trip
10.00 hrs	Arrive at Brú na Bóinne - Visitor Centre for Knowth and Newgrange Visitor Centre, Museum, Exhibition <i>Brú na Bóinne Visitor Centre interprets the Neolithic monuments of Newgrange, Knowth and Dowth. The extensive exhibition includes a full scale replica of the chamber at Newgrange as well as a full model of one of the smaller tombs at Knowth.</i>

## Field trip 2 Continued

11.00 hrs	Knowth <i>Knowth is a megalithic passage tomb with two passages and a cruciform chamber. The main mound is surrounded by 18 smaller satellite mounds.</i>
12.30 hrs	Newgrange <i>Newgrange is a passage tomb where the sun at the winter solstice sunrise falls through a roof box at the entrance and lights up the chamber at the end of the passage tomb. Newgrange was constructed over 5,000 years ago (about 3,200 B.C.), making it older than Stonehenge in England and the Great Pyramid of Giza in Egypt. Newgrange was built during the Neolithic or New Stone Age by a farming community that prospered on the rich lands of the Boyne Valley. Knowth and Dowth are similar mounds that together with Newgrange have been designated a World Heritage Site by UNESCO.</i>
13.30 hrs	Lunch
14.30 hrs	Hill of Tara <i>Though best known as the seat of the High Kings of Ireland, the Hill of Tara has been an important site since the late Stone Age when a passage-tomb was constructed there. Tara was at the height of its power as a political and religious centre in the early centuries after Christ. Extensive geophysical surveys were done at the Hill of Tara and the tour guides will explain the connection between the visible landscape and the geophysical findings.</i>
16.30 hrs	Return to Dublin
17.30 hrs	Drop off at Dublin Airport (upon request)
18.00 hrs	Arrival at Trinity College

## Social Programme

To complement the conference and exhibition, EAGE is organizing an icebreaker reception (at the exhibition area) as well as a conference dinner with a unique Irish flavour. The beautiful city of Dublin and the EAGE will make sure that the programme will be an unforgettable experience.

## Exhibitors List (18 May 2009)

3d-Radar AS

Aarhus Geophysics

ABEM Instrument AB

Allied Associates Geophysical

ALT s.a. (Advanced Logic Technology)

APEX Geoservices Ltd

DECO Geophysical Co. Ltd

DMT GmbH & Co. KG

EEGS

European Geophysical Services Ltd

Fugro-Aperio Limited

Geological Survey of Ireland

Geological Survey of Northern Ireland

Geomatrix Earth Sciences Ltd

Geometrics Europe

Geonics Limited

Geophysical Survey Systems, Inc.

Geotomographie GmbH

Geovista

GF Instruments, s.r.o.

IDS - Ingegneria dei Sistemi S.p.A.

IRIS Instruments

LIM s.a.

Mala Geoscience

Marac Enterprises Inc.

Mount Sopris Instrument Co., Inc.

Parallel Geoscience Corp.

Robertson Geologging Ltd

Scintrex

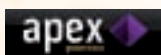
Skytem

Zonge Engineering and Research Organization, Inc.

## Supported and/or sponsored by



Geological Survey of Northern Ireland



Near Surface 2009  
7 – 9 September 2009, Dublin, Ireland

[www.eage.org](http://www.eage.org)

[www.eage.org](http://www.eage.org)

7 – 9 September 2009, Dublin, Ireland

## Registration

Registered and paid	until 15/7/2009	16/7/2009-1/9/2009	2/9/2009-on site
<b>Conference &amp; Exhibition</b>			
EAGE member	€ 385	€ 425	€ 485
EAGE student member <sup>1</sup>	€ 125	€ 175	€ 205
Non-member <sup>2</sup>	€ 485	€ 525	€ 585
Full-time student non-member <sup>1,2</sup>	€ 150	€ 200	€ 230
<b>Exhibition only</b>			
Exhibition only 3-days	€ 105	€ 110	€ 125
<b>Family member</b>			
Family member	€ 95	€ 115	€ 135
<b>Workshop<sup>3</sup></b>			
EAGE member	€ 100	€ 120	€ 160
EAGE student member <sup>1</sup>	€ 35	€ 50	€ 65
Non-member	€ 135	€ 155	€ 195
Full-time student non-member <sup>1</sup>	€ 45	€ 60	€ 75
<b>Field trips<sup>3</sup></b>			
<b>Registered and paid before 15/8/2009</b>	<b>Field trip 1</b>	<b>Field trip 2</b>	
EAGE member	€ 120	€ 120	
EAGE student member <sup>1</sup>	€ 60	€ 60	
Non-member	€ 140	€ 140	
Full-time student non-member <sup>1</sup>	€ 70	€ 70	

All members' rates are only applicable if the membership dues for 2009 have been paid (before 15 March 2009).

<sup>1</sup> To qualify for the reduced registration fee, a copy of your student identification card for a geoscience institute must be submitted together with the registration form.

<sup>2</sup> The non-member fee includes EAGE membership for the remainder of 2009.

<sup>3</sup> Please note that the EAGE reserves the right to cancel the workshop or fieldtrip(s) due to low participation. In this case, payment will be refunded in full.

### What is included in the registration fee?

	Admission to exhibition	Admission to technical sessions	Icebreaker reception	Coffee break	Conference evening	Near Surface 2009 CD-ROM	Delegate bag
Full delegate (conference & exhibition)	X	X	X	X	X	X	X
Exhibition only delegate	X		X	X			
Family member	X		X	X	X		

#### The workshop registration fee includes the following:

- Admission to workshop + workshop material
- Coffee + lunch break (Sunday 6 September)

#### The field trip registration fee includes the following:

- Admission to (selected) field trip + field trip material
- Transportation and refreshments during the (selected) field trip

Online registration is available at [www.eage.org](http://www.eage.org), here you will also find a downloadable registration form.

For updated information, please refer to the EAGE website.