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The University of
Nottingham



1st FIG International Symposium on Engineering Surveys for Construction Works and Structural Engineering

Workshop on Measurements and Analysis of Cyclic Deformations and Structural Vibrations

**The University of Nottingham, UK
28 June – 1 July 2004**

Second announcement and call for papers

Sponsored by





FIG International Symposium on
Engineering Surveys for Construction
Works and Structural Engineering



The University of
Nottingham

28 June to 1 July 2004, The University of Nottingham, UK

You are cordially invited to the 1st International Symposium on Engineering Surveys for Construction Works and Structural Engineering organised by Commission 6 of the International Federation of Surveyors (FIG) to be held in Nottingham (UK), 28 June – 1 July 2004.

The Symposium will be hosted by the Institute of Engineering Surveying and Space Geodesy, University of Nottingham.

In addition, there will be a workshop held as part of the Special Task Force 6.1.1 established under Working Group 6.1, "Measurements and Analysis of Cyclic Deformations and Structural Vibrations". Some of this work carried out at The University of Nottingham and Cranfield University is sponsored by the UK's Engineering and Physical Sciences Research Council (EPSRC). The Symposium brings together WG6.4 and Task force 6.1.1 of the FIG with the International Association of Geodesy's (IAG) Sub-Commission 4.2 "Applications of Geodesy in Engineering".

Scope

The aim of this series of symposia is to promote an interdisciplinary approach to Engineering Surveying in the construction field.

Proceedings

Proceedings of the symposia supply a wealth of information on the newest developments and techniques for engineering surveys. These will be available on CDROM as well as the FIG's web page after the symposium has taken place.

Policy Issues

- Promoting the use of adapted survey techniques in industry and Engineering
- Promoting a multidisciplinary collaboration between survey engineers, civil engineers, structural and mechanical engineers
- Promoting the understanding of fibre optic sensors, e.g. interferometric sensors, Brillouin and Raman scattering and Bragg gratings
- Study the use of embedded sensor arrays and the role of advanced surveying techniques for structural monitoring
- Creating an awareness of surveyors through a task force 'Fibre optic sensors' of the rapidly emerging technology of fibre optic sensors as

"non-geodetic" sensors to measure deformations (strain) and temperatures in civil engineering structures

Specific Topics

- Precise methods and equipment for staking out during construction and structural works
- QC and documentation for 'as build' compared to 'as designed'
- Precise methods and equipment for Engineering surveys for visualisation and photo match
- Precise methods and equipment for remote surveys (terrestrial laser scanners etc.)
- Dynamic Monitoring of Buildings and Structures
- Offshore construction surveys
- Task force "fibre optic sensors"
- Monitoring using fibre optic sensors
- Health monitoring of structures, including real-time and "non-geodetic" sensors in Engineering
- Measurements and Analysis of Cyclic Deformations and Structural Vibrations
- The use of novel equipment and techniques for engineering surveys for building and construction works eg GPS, laser scanners, pseudolites

Beneficiaries

- Surveying profession becoming involved in this developing technology which will partly replace current geodetic techniques
- Surveyors wanting to acquire information about fibre optic sensors as used in "smart civil Engineering structures"
- Engineers who have to decide on the best techniques to monitor civil Engineering structures
- Universities teaching advanced sensor technology
- Engineering Surveyors and Engineers involved with construction and setting out will benefit, as well as structural engineers, current buildings and future building designs

Conference Calendar

15 January 2004	Deadline for abstract submission
6 February 2004	Notification to authors
19 March 2004	Deadline for early (discounted) registration
28 May 2004	Deadline for full registration payment
30 June 2003	Submission of full papers for publishing

Exhibition

An exhibition of instruments and technologies for Engineering Surveys is planned. This will include up to date displays from manufacturers with their

current range of instruments and software. Any company or organisation requiring further information about the possibility of having a display should contact the FIG at FIG@FIG.net

Accommodation

Nottingham boasts a range of standards of accommodation and prices, including hotels and 'bed and breakfast'. In addition, The University of Nottingham has Halls of Residence, where some of the undergraduate students reside during the term time. A number of these single study rooms are available if required.

Delegates wishing to stay in local hotels should contact the University of Nottingham's Conference Centre Hotel Reservation Service at HRS@Nottingham.ac.uk

Delegates wishing to stay at the University's Halls of Residence should contact the FIG directly on FIG@FIG.net. These study rooms cost £26.90 per person per night or £39.90 per person per night with en-suite facilities.

Conference Registration

Full registration includes admission to all technical sessions and exhibits, a CD copy of the proceedings, coffee breaks with refreshments and lunch at the University, as well as a conference dinner on the night of the 29 June.

Accompanying person registration includes lunches, coffee breaks and the symposium dinner on the 29th June.

The recommended form of registration is on-line on the web site (www.fig.net/figtree/nottingham). Alternatively the form can be sent electronically to the FIG Office (email: fig@fig.net), or by fax (+ 45 3886 0252).

Payments can be made either by

- Faxing or emailing the credit card information to the FIG Office. This can be done by filling out the form that is shown at the end of the online registration. Simply print out the form and fax it to +45 38 86 02 52, or
- Bank transfer to the following bank account:

BG Bank

Lyngby Hovedgade 25,1
2800 Lyngby
DENMARK
Swift BIC: DABADKKK
Account number: IBAN DK8230004768013918

NOTE: There will be a bank charge of EUR 10 for each registration form.

Costs

Full registration, before 19 March 2004	£230
Full registration, after 19 March 2004	£280
Accompanying person registration	£130
Accompanying person Symposium Dinner only	£50
Student registration, before 19 March 2004	£160

Sponsorship

There are a limited number of sponsorships for people from developing countries or for young scientists. This includes an \$800 award to a young scientist or a scientist from a developing country donated by the IAG. Further details will be made available on the web page.

Technical Committee

- Dr Gethin Wyn Roberts, The University of Nottingham, UK (Chair of the FIG's Working Group 6.4 and Task Force 6.1.1)
- Dr. Jin Fengxiang, Shandong University of Science and Technology, China (Co-chair of the FIG's Working Group 6.4)
- Univ Prof Fritz K Brunner, Graz University of Technology (Chair of the FIG's Task Force 6.4.1)
- Prof Alan Dodson, The University of Nottingham, UK
- Prof Paul Cross, UCL, London, UK
- Prof Chris Rizos, UNSW, Sydney, Australia (President of the IAG's Commission 4 "Positioning & Applications")
- Dr Maria Tsakiri, National Technical University of Athens, Greece (Chair of the FIG's Task Force 6.1.5.
- Dr Xiaolin Meng, The University of Nottingham, UK
- Miss Emily Cosser, The University of Nottingham, UK

Further details

The FIG has a web page specifically for this event, held at www.fig.net/figtree/nottingham . This page will become live on 15 November 2003. Further information about the conference, Nottingham and the UK will be placed on the web page.

The Venue

The symposium will be held at The University of Nottingham, which lies within one of the UK's liveliest cities. Nottingham is unbeatable for its shopping; it ranks among the best in the UK for sports facilities; and the entertainment opportunities are endless, whatever your interest. All this plus excellent links to the rest of the country - London is less than two hours away by train or car.

Nottingham is the regional capital of the East Midlands and a city with a distinct 'buzz' about it. A Department of the Environment survey described it

as 'the most vibrant and vital in the UK' and it is officially rated as one of the best shopping locations outside London.

Looking back

Nottingham has a rich history - the Castle, Lace Market area, 15th century church of St Mary, Georgian town houses and impressive architecture are just part of what you can explore. Enjoy a pint in one of the city's picturesque pubs, (one that is reputedly the oldest in England); size up the market square (Britain's biggest!).

Today's attractions

Nottingham is a city very much in touch with today's lifestyle. It is renowned for its clubs and music venues, including the well-known Rock City and Royal Concert Hall. Nottingham appears on most major bands' UK tour itineraries and many of the City's pubs feature live music on most nights, with a broad spectrum of musical genres to choose from. It has plenty of cinemas, (including The Broadway, the first regional branch of the National Film Theatre), theatres (the largest being Nottingham Playhouse and the Theatre Royal), museums, and some of the best bars, restaurants and clubs in the UK.

Sport for all

Nottingham is a major sporting city, famous for its football, cricket and ice hockey teams. But alongside being a spectator there are opportunities to try all kinds of sports yourself. Go pot-holing or rambling in the surrounding countryside, try rowing and canoeing at the National Water Sports Centre or get your skates on at the National Ice Centre.

See the sights

The Peak District National Park is a short drive away. The legendary Sherwood Forest is nearby, and there are many stately homes.

Transport

Getting about is easy. Public Bus transport in Nottingham is one of the most comprehensive in the UK; there are 37 miles of cycle routes, local train services and regular rail links to London too. East Midlands airport (12 miles from the City centre) is expanding fast, with scheduled and charter flights to popular destinations.

The University of Nottingham is one of the leading universities in the United Kingdom for teaching quality and is a world-class centre of research excellence. In a recent Research Assessment Exercise, Nottingham achieved more top scores than any other provincial university. There is a student population of almost 24,000 including a thriving postgraduate community of some 4,900, of which about 1,400 are international students from more than 100 nations.

The University campus extends over an area of 330 acres of park land and is situated about four kilometres west of the centre of Nottingham. This pleasant setting and easy access to the exceptional cultural, sporting and shopping amenities of a modern and progressive city have made the University of Nottingham one of the most popular provincial universities. The University has 13 undergraduate Halls of Residence located around the perimeter of the campus, with centrally located administrative, teaching, research and library facilities. At the western end of the campus is a very well equipped Sports Centre, including a swimming pool. Close to the Main Campus is the new Jubilee Campus, opened in 1999 following an investment of £50 million. This provides new and extensive teaching and research facilities as well as accommodation for postgraduate and undergraduate students.

Social Events

A selection of local tours will be organised for delegates, as well as spouses. Further details will be made available on the web page.

Call for Abstracts

We invite you to submit an abstract for the FIG Symposium. Abstracts should be 250 to 500 words in length describing the objectives, results, conclusions and significance of your work. Abstracts should also include the names and affiliations of all authors. Please feel free to submit an abstract on any topic related to the policy issues and specific topics of the symposium. All abstracts should be submitted via email to fig@fig.net no later than 15 January 2004 as a Microsoft Word document. Please include at the end of your abstract all your contact details, including name, address, phone and fax numbers and email. Please also include on your abstract whether you have a preference for a poster or an oral presentation. Receipt of your abstract will be acknowledged electronically.

The number of abstracts will be limited to up to three per author.



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Affiliation		
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Special Requirements ie dietary or disability		
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Conference Fees (please tick ☐)

Full Conference		
Registered before 19 March 2004	£230 excl VAT	<input type="checkbox"/>
Registered after 19 March 2004	£280 excl VAT	<input type="checkbox"/>
Student registered before 19 March	£170 excl VAT	<input type="checkbox"/>
Accompanying person	£130 excl VAT	<input type="checkbox"/>
Accompanying person meal only	£50 excl VAT	<input type="checkbox"/>

Payment Details

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