

2012 IEEE International Conference on Imaging Systems and Techniques (IST'2012)

Britannia Country House Hotel, Manchester, UK

16-17 July 2012

Final Call for Papers

Abstract due: 15 April 2012

Notification of acceptance: 30 April 2012

Full paper due: 15 June 2012

http://ist2012.ieee-ims.org

Sponsored by IEEE Instrumentation and Measurement Society TC-19 Technical Committee on Imaging Systems

Co-sponsored by

- School of Electrical and Electronic Engineering, University of Manchester
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Following the success of IST'2004 in Stresa (Italy), IST'2005 in Niagara Falls (Canada), IST'2006 in Minori (Italy), IST'2007 in Krakow (Poland), IST'2008 in Chania (Greece), IST'2009 in Shenzhen (China), IST'2010 in Thessaloniki (Greece) and IST'2011 in Penang (Malaysia), IST'2012 will take place in Manchester in the UK, 16-17 July 2012, 10 days before the London Olympic Games.

IST'2012 deals with design, development, evaluation and applications of imaging systems, instrumentation, and measuring techniques, to enhance detection and image quality. Applications for aerospace, medicine and biology, molecular imaging, metrology, ladars and lidars, radars, homeland security, and industrial imaging with emphasis on industrial tomography, corrosion imaging, and nondestructive evaluation (NDE) will be covered. The following areas will be particularly considered:

- Aerospace imaging
- Medical imaging and bio-nano-photonics
- Tomography for industrial and medical applications
- Environmental monitoring, energy resources
- Real-time image and video processing
- Molecular imaging and metabolic imaging
- Remote sensing, passive and active sensing
- Ladars and Lidars
- Multi-spectral polarimetric imaging and Lasers
- Subsurface inspection, corrosion imaging
- Radiation detection, airport security and cargo inspection-standoff detection techniques
- Electromagnetic imaging and inverse scattering

with emphasis on:

- Detector design principles and image formation
- Imaging system design and instrumentation
- Signal and image analysis
- Linear and non-linear processing techniques
- Feature extraction and recognition techniques
- Multi-functional and multi-fusion imaging techniques

All papers presented at this conference will be published by the IEEE. Measurement Science and Technology (IOP), which is SCI and EIindexed, will publish a special issue after the conference.



To submit papers, go to

http://ist2012.ieee-ims.org/ist2012/2012/author-instructions

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Keynote speakers

- Professor Maria Petrou, FIEEE, Imperial College London, UK, "Vector Field Tomography: the simple approach"
- Professor Reza Zoughi, FIEEE, Missouri University of Science & Technology, USA "Microwave and millimetre-wave imaging for NDE – past, present and future"
- Professor Xiaochuan Pan, FIEEE, University of Chicago, USA "Recent advances in x-ray image reconstruction"
- Dr Hujun Yin, SMIEEE, University of Manchester, UK "Adaptive nonlinear manifolds and dimensionality reduction for image processing"
- Professor Konstantina S. Nikita, SMIEEE, NTUA, Greece "Vascular image analysis to support diagnosis and assessment of atherosclerosis"
- Dr George Zentai, FIEEE, Varian Medical Systems, USA "New method for breast tumor tracking"

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About Manchester

Just two hours north of London, Manchester is one of the most vibrant and cosmopolitan cities in the UK, yet it retains its own unique character. Set in a region that offers great value for money, Manchester has a wealth of things to see and do, a thriving nightlife scene and top class events. Manchester is the perfect walking city, stroll along the streets, exploring the mixture of old and new architecture. Soak up the urban vibe, speak to the people of the city and expect a warm welcome, this is a city that embraces all its visitors. Manchester is easy to get to and perfectly positioned to discover all of England's North Country.

About Britannia Country House Hotel

Britannia Country House Hotel is located between Manchester City Centre and the Manchester International Airport. It offers the comfort and efficiency of one of Manchester's leading hotels. The hotel is within a short drive from Trafford Centre (The largest shopping centre in Europe), Manchester United Football Club, and University of Manchester. The Fitness Centre in the hotel offers the heated indoor swimming pool, sauna, steam room or jacuzzi. For more details "How to get there", please read http://ist2012.ieee-ims.org/ist2012/2012/venuehotel



Exhibition

We have made arrangements for exhibition. A number of companies have decided to set up exhibition stands. If your company would like to set up one, please contact the local organiser, Professor Wuqiang Yang. His email is w.yang@manchester.ac.uk

Organsied tour

18 July 2012 (sponsored by Visit Manchester)

- Chatsworth House (Duke of Devonshire's house and garden), http://www.chatsworth.org/ (£10 entrance ticket, which is half of normal price)
- Buxton (all stone buildings and spring water fountain), www.visitbuxton.co.uk

For this tour, you should inform Miss Daisy Ren before 30 April 2012, so that we can make arrangements accordingly, such as coach. Her email is zhen.ren@postgrad.manchester.ac.uk

Local tour

- Museum of Science and Industry (13 galleries, including history of 1st and 2nd industrial revolution), http://www.mosi.org.uk/
- Manchester United Football Club (world's most famous football club), http://www.manutd.com/
- Trafford Centre (largest shopping centre in Europe), http://www.traffordcentre.co.uk/

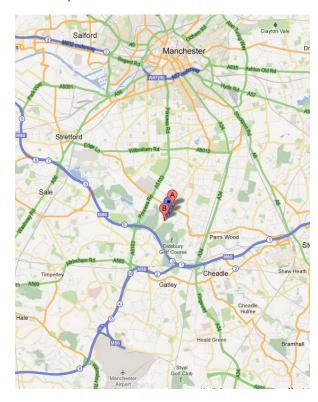
Other attractions around Manchester

- Chester (historical Roman city with Victoria buildings), www.visitchester.com/
- Cheshire Oaks (designer outlet shopping centre with 300 factory outlets),
 www.cheshireoaksdesigneroutlet.com/
- Lake District (beautiful lakes), www.lakedistrict.gov.uk

Additional information

- There will be National Insturments Best Paper awards and Measurement Science and Technology Best Poster award.
- During the conference dinner there will be a music band paying Chinese music

- Please reserve hotel as soon as you have made your plan as there will not be cheaper hotel around. Please call the central reservations on 0871 222 0016 and quote the code 'IEEE1607' so that you can get the cheaper conference rate. The hotel provides free car park, free Internet and free leisure/sport facilities for the conference delegates.
- There will be 4 National Instruments Best Paper prizes and one Measurement Science and Technology Best Poster prize.



Location B is Britannia Country House hotel

Welcome to Manchester