



Advanced Metrology for Ultrasound in Medicine

27-28 April 2004 | Teddington, UK

AMUM 2004 will be a unique opportunity for the world's ultrasound experts from medicine, industry and academia to explore the substantial measurement challenges presented by new and future clinical ultrasound equipment. This conference will provide a framework for the development of measurement methods to meet these challenges over the next decade.

The metrological demands made by the rapid advances in medical ultrasonic applications present a significant challenge for the scientific community. However, successfully meeting these demands will allow these new applications to reach their full potential and will make future developments easier. Reliable and accurate measurement methods are also essential for ensuring that ultrasound's reputation for clinical safety can be maintained in the face of all these new advances.

Topics will include:

- Measurement challenges arising from advances in diagnostic and imaging applications (eg coded/chirp excitation, 3-D ultrasound, intravascular, high frequency...)
- Measurement challenges arising from advances in therapeutic and surgical applications (eg HIFUS, lithotripsy, contrast agents...)
- Improved field characterisation in water (including correcting for measurement system limitations)
- Field characterisation in media other than water
- Exposure and biological interaction with tissue
- Measurement of acoustic properties of materials
- Modelling of the acoustic field
- Emerging technologies for generating ultrasound
- Alternative technologies for sensing ultrasound
- Calibration and measurement traceability
- Standards, compliance testing and quality assurance
- Ultrasound safety and biophysical endpoints

The meeting will be held close to London at the National Physical Laboratory (www.npl.co.uk) in Teddington, UK. There will be a range of invited keynote speakers, proffered papers and less formal presentations. There will be ample time for open discussion of the shortcomings of current measurement methods when applied to modern ultrasound equipment and how these might be addressed. In addition there will be a poster exhibition, an opportunity for researchers to display new equipment or methods, a commercial exhibition and a chance to visit the new Ultrasonics Laboratories of the NPL.

This conference will be held in association with Precision Acoustics Limited (Dorchester, UK). The conference website can be found at www.amum2004.npl.co.uk where you can register your interest. To discuss the scientific content, contact Adam Shaw (adam.shaw@npl.co.uk); for more general information about the conference and venue, contact the AMUM secretariat (amum2004@npl.co.uk). Further details and a call for abstracts will be issued in July 2003.





AMUM 2004 FAXBACK

+44 20 8943 6735

To: AMUM Secretariat

Conferencing Department | National Physical Laboratory | Teddington Middlesex | TW11 0LW | UK Tel: +44 20 8943 6447

I am interested in attending Advanced Metrology for Ultrasound in Medicine 2004, please send me more information

Communication, registration and abstract submission for this conference will be primarily through e-mail and the internet. If you do not have access to these facilities, please inform the AMUM Secretariat.

l have e-mail ar	nd internet	access
------------------	-------------	--------

My email address is:

My other contact details are:

Alternatively, please copy with your business card before faxing: