



**8th International Conference on
Barkhausen Noise and Micromagnetic
Testing (ICBM8)
Kalpakkam, India, February 11-12, 2010
and**



***Pre-Conference Workshop on
Materials Characterization using NDE Techniques
Kalpakkam, India, February 10, 2010***

**Organized by
Indira Gandhi Centre for Atomic Research, Kalpakkam, India**

ICBM8

8th International Conference on Barkhausen Noise and Micromagnetic Testing (ICBM8) will be held at Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, India during February 11-12, 2010. The previous conferences were held in 1998 at Hannover (Germany), 1999 at Newcastle upon Tyne (UK), 2001 at Tampere (Finland), 2003 at Brescia (Italy), 2005 at Petten (The Netherlands) and 2007 at Valenciennes (France). The seventh ICBM will be held in July 15-16, 2009 in Aachen, Germany.

Scope

Assessment of microstructures both during manufacturing and during service life is important for ensuring reliable and safe performance of engineering components. Non Destructive Evaluation (NDE) parameters derived from B-H loops, magnetic and acoustic Barkhausen noise techniques are sensitive to changes in microstructures and stress distributions and can provide information almost obtainable by microscopy. These techniques are nowadays becoming inevitable tools for materials scientists for characterisation of microstructures and residual stresses. Magnetic Barkhausen Noise (MBN) and micromagnetic testing find extensive applications in aerospace, nuclear, defence, marine, transport and power industries as a quality control tool and also for remnant life assessment and life extension. MBN and micromagnetic techniques are gaining acceptability in industries and several advances are taking place in this fascinating field. The objective of ICBM8 is to bring together scientists and engineers working in MBN and micromagnetic NDE area to exchange technical knowledge & experience, to forge collaborations and to interact with peers.

Participation from research organisations, engineering industry and academic institutes is invited. The conference language is English. It is planned to organize several technical sessions in which contributed papers as well as invited talks by leading international experts from various countries will be presented. The scope of ICBM8 includes all topics in MBN and micromagnetic NDE including

- ❖ Microstructural characterization
- ❖ Residual stress measurements
- ❖ Damage assessment
- ❖ Industrial applications including quality control and inservice performance assessment
- ❖ Instrumentation and sensor development
- ❖ Theoretical modelling and data processing

Call for Papers

Abstracts are invited on various aspects related to research and applications of MBN and micromagnetic testing. Abstract of about 250 words containing the title, author's name (s) and their affiliation including the mailing address and e-mail of the corresponding author should be sent to the Convener, ICBM8 by e-mail before August 30, 2009. It is important to note that abstracts are accepted based on the understanding that one of the authors will attend the conference. Full text of accepted papers is required to be submitted and the guidelines for submission will be communicated upon the acceptance of the abstract.

Pre-Conference Workshop on 'Materials Characterisation using NDE Techniques (MCNT-2010)'

As part of the conference programme, a one-day pre-conference workshop on 'Materials Characterization using NDE Techniques (MCNT-2010)' is organized on February 10, 2010. Through a series of lectures by international experts, the participants will be introduced to the principles, capabilities, applications and advances of various NDE techniques viz. micromagnetic, ultrasonic, eddy current, acoustic emission, positron annihilation, X-ray diffraction, infrared thermography etc. for characterization of microstructures,

residual stresses, deformation and fracture. Participants to the workshop should send the registration details to the Convener, ICBM8 before August 30, 2009.

Venue

ICBM8 and the pre-conference workshop MCNT-2010 will be held at Indira Gandhi Centre for Atomic Research, Kalpakkam, India (www.igcar.gov.in). IGCAR is located about 70 km South of Chennai City, and is about 10 km South of Mamallapuram, a heritage town. Chennai is well connected nationally and internationally through a well established air network and is connected to all major Indian cities by excellent rail and road network. Mamallapuram, Kancheepuram and Pondicherry are the three important destinations of cultural heritage near Kalpakkam. Sight seeing tours to these places as well as tourist attractions around Chennai will be arranged for participants on request.

A valid passport and visa are required for entry into India. Participants are requested to obtain the visa from the Indian Embassies / Consulates in their respective countries. The organising committee of ICBM8 will send letter of invitation on request to all the participants for applying for visa.

Registration Fee

	ICBM8	MCNT-2010	ICBM+MCNT
Overseas participants and students	US \$300	\$150	\$ 400
Indian participants	Rs. 6000/-	Rs. 3000/-	Rs. 8000/-
Indian student	Rs. 2500/-	Rs. 1500/-	Rs. 3000/-

The registration fee includes delegate kit, conference dinner, proceedings, and lunch and tea on conference days. The registration fee should be paid in the form of a crossed demand draft drawn in favour of "NDE Events", payable at State Bank of India, Kalpakkam, TN, India. The money can also be electronically transferred to the Account No. '10912013363', Account Name: NDE Events, Swift Code: SBININBB298, Branch Code 2219, with intimation to the Convener, ICBM8.

Souvenir

A souvenir carrying technical articles by eminent experts on contemporary topics of MBN and Micro-magnetic Testing, information related to the conference, sponsors, exhibitors, etc. will be brought out. This will be widely circulated among the professionals and industries world over. Advertisements are solicited for the souvenir. The matter for advertisement may be sent to the Convener, ICBM8, by December 15, 2009. Charges are given below and the payment should be made to "NDE Events" as detailed earlier:

	<i>Indian (Rs.)</i>	<i>Overseas (US\$)</i>
Outside Back Cover	25,000	2000
Inside Cover Pages	20,000	1500
Full Page (B & W)	10,000	750
Half Page (B & W)	5,000	375

Important Dates

Submission of abstracts	August 30, 2009
Intimation of acceptance of abstracts	September 15, 2009
Submission of full-text of papers	November 30, 2009
Deadline for registration	December 15, 2009
Advertisements in Souvenir	December 15, 2009

Address for Correspondence

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