

A workshop organised by the Composites Division of the  
Institute of Materials, Minerals & Mining



## Living with Composites:

### NDT Methods for Large-Scale Composite Structures



Composites NDT Validation Centre, Port Talbot, Wales  
Tuesday 3<sup>rd</sup> July 2007



## Brief

The increasing use of fibre reinforced polymer composites in large-scale structures presents unique challenges at both the manufacturing and in-service lifecycle phases. Detection of unseen defects within the composite laminate is a particular concern. Non Destructive Testing (NDT) techniques provide a means of detecting damage within polymer composites without disturbing the underlying integrity of the structure. Speed, accuracy and repeatability of the NDT methods are crucial for quality assurance in both high volume applications and for assessing large, as well as thick, composite components. This workshop addresses NDT issues for composite structures evolving from current manufacturing demands and the practicalities of in-service testing programmes.

## Aims

- Identify best practice in the use of NDT techniques for large-scale composite structures.
- Relate the latest automation and data handling techniques for NDT methods.
- Consider the implications of NDT methods for multi-material composites using the latest fabric architectures.
- Highlight the importance of standardisation of NDT methods across industries.
- Present insight into the future of NDT for composite structures.

## Structure

Presentation	Speaker
<b>9.30 Registration</b>	
<i>Chair : Professor Chris Scruby (RCNDE)</i>	
<b>10.00 Introduction</b>	
<b>10.15 Large Component Inspection</b>	<b>Dr Gary Holloway (FUBACOMP Project)</b>
<b>10.45 In-Service Inspection</b>	<b>Dr Martin Wall (ESR)</b>
<b>11.15 Coffee</b>	
<b>11.45 Defect Detection Using Thermographic Techniques</b>	<b>Professor Darryl Almond (Materials Research Centre University of Bath)</b>
<b>12.15 Data Manipulation/Visualisation</b>	<b>Dr Philippe Young (Simpleware Ltd)</b>
<b>12.45 Buffet Lunch</b>	<b>Sponsored by NCN and Faraday Advance</b>
<i>Chair : Mr Roger Lyon (BINDT)</i>	
<b>13.45 Standardisation/Best Practice</b>	<b>Dr Bill Broughton (NPL)</b>
<b>14.15 Future Issues</b>	<b>Mr Robert Smith (QinetiQ)</b>
<b>14.45 Tour of NDT Validation Centre</b>	<b>Dr Philip Wallace (NDT Validation Centre)</b>
<b>15.45 Close</b>	

# Conference Registration Form C0716

This form can be reproduced for use by other registrants.

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## NDT Methods for Large-Scale Composite Structures Composites NDT Validation Centre, Port Talbot, Wales Tuesday 3<sup>rd</sup> July 2007

**BLOCK CAPITALS THROUGHOUT PLEASE**

<b>Surname</b>		<b>Sex: Male/Female</b> (please delete)
<b>Title: (Prof/Dr/Mr/Ms/Mrs/Miss)</b>	<b>First Name(s)</b>	
<b>Business Position</b>		
<b>Organisation</b>		
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<b>Postcode</b>	<b>Country</b>	
<b>Telephone</b>	<b>Fax</b>	
<b>Email</b>		

### SPECIAL DIETARY REQUIREMENTS:

I have no special dietary requirements

I have special dietary requirements as follows:  Vegetarian  Other:

\_\_\_\_\_

### REGISTRATION FEES

Fees include attendance at all technical sessions, light refreshments, lunches, reception, buffet supper, administration and VAT at 17.5%. Accommodation is not included.

DESCRIPTION	FEES	TOTAL PAYABLE
Registration Fee	£50.00 plus £8.75 VAT	£58.75

## PAYMENT

Please complete this section indicating the method of payment you will be using. All fees must be paid by the time of the conference otherwise admittance may not be granted.

- Cheque enclosed for \_\_\_\_\_ made payable to "IOM Communications Ltd"
- Payment by \*bank transfer (please enclose a copy of the transfer request with your form)
- Please tick if you wish to be invoiced prior to payment

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Declaration: I have read and understood the conditions of registration and cancellation detailed below.

Signature \_\_\_\_\_ Date \_\_\_\_\_

## CANCELLATION AND GENERAL CONDITIONS OF REGISTRATION

A receipt will be issued when full payment has been received. **It is regretted that full refunds cannot be given on cancellations received after 31 May 2007.** The following scale will then apply: 1 – 20 June 2007 (50% refund), from 21 June 2007 (Nil refund). Substitutions can be accepted at any time. Receipt of a registration is regarded as a firm booking and acceptance of the conditions stated above. If, for any reason, a delegate is unable to attend, payment of fees must still be honoured.

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