# COMPRESSORS AND FANS WORKSHOP

Institution of MECHANICAL ENGINEERS

LIMITED TO
15 PLACES
BOOK EARLY
TO AVOID
DISAPPOINTMENT
See over for programme
& booking form

**27 November 2014** 

One Birdcage Walk, London
Presented by **Dr H B Carrick**Consultant and former Chairman of the
Fluid Machinery Group
www.imeche.org/events/W6151

Fluid Machinery Group **Workshop** 

This one-day course is designed to help you analyse and understand the principles associated with gas compressors and fans.

This event will be of particular interest to developing engineers, designers, technicians, first line managers and anyone whose role now includes responsibilities for gas machinery.

The workshop is made up of lectures and group exercises covering:

- An introduction to the range and types of machines and their operating characteristics and applications
- A foundation in the issues of compressor system design
- An introduction to machine specifications and standards
- An outline of safety issues and statutory regulations relevant to the technology

This workshop will be supported by comprehensive notes covering a wide range of rotating equipment and the related technical issues. The approach is informal and the number of delegates is kept low to encourage active discussion during the presentations. Dr Carrick has wide experience in the specification and design of compressor and fan systems together with hands-on expertise in problem solving and maintenance.

For more information please visit www.imeche.org/events/W6151 Alternatively contact our enquiries team on +44 (0)20 7973 1258 or email eventenquiries@imeche.org

# COMPRESSORS AND FANS WORKSHOP

# **PROGRAMME**

### 9:00 Registration

#### MORNING SESSION

#### 9:00-10.45

- Introduction: types of fans and compressors
- Definitions and basic concepts; fluid properties, fluid flow, thermodynamics
- · Group exercise

#### 10:45 Refreshments

- Fans: characteristic curve, dimensional analysis, stability, control
- · Group exercise

#### 12:30 Lunch

# **AFTERNOON SESSION**

#### 13:00-14:45

- Compressor characteristics
- Selection of compressor type
- Group exercise
- Fluid dynamic compressors: characteristics, stability, control

### 14:45 Refreshments

- Positive displacement compressors: characteristics, control
- · Safety considerations
- Assessment questionnaire

## 16:30 Close

### OBJECTIVES

# Book your place and find out how to:

- Describe the properties of gases and the implications for gas compression
- State the main terms used in defining gas and fan systems
- Identify the main types of compressors and fans (their characteristics, features, basic principles, capacity control methods, selection staging, etc)
- Make a preliminary selection of compressor or fan type
- Understand the basic safety issues of compressors and fans including lubricated air compressors, prevention of fires and explosions
- Explain the legal requirements relating to machinery safety

# BOOKING FORM

WORKSHOP CODE: W6151AB

COMPRESSORS AND FANS WORKSHOP 27 NOVEMBER 2014 LONDON

Institution members £319.00+VAT Non-members £391.00+VAT

**REGISTRATION FEE** (Inc. refreshments and lunch)

REGISTRATION & PAYMENT DETAILS Please con	<u>-</u>
Family Name	Title (Mr, Mrs, Miss)
First Name	Job Title
Membership No	Institution_
Name of Organisation (for name badge)	
Address for correspondence	
Town/City	Postcode
Phone	Email
Do you have any special requirements?	
Please indicate method of payment:  ☐ Cheque Please make payable to "The Institution	of Mechanical Engineers"
☐ Credit Card ☐ Visa ☐ MasterCard (Please note	we cannot accept American Express, Diners Club or Maestro)
Card No	Valid From / Expiry Date /
Name of Cardholder	
Billing Address of Cardholder (if different from al	oove)
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Amount to be Deducted	Signature
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Please note international delegates may pay only by credit card, BACS or banker's draft. A copy of the draft must accompany this form. It is the delegate's responsibility to pay any bank charges. **Payment must accompany this registration form. Registration will be confirmed only on receipt of full payment.** 

Please complete and return with payment to:

Events Team Institution of Mechanical Engineers 1 Birdcage Walk, London SW1H 9JJ Phone: +44 (0)20 7973 1258 Email: eventenquiries@imeche.org