# COMPRESSORS AND FANS WORKSHOP

Institution of MECHANICAL ENGINEERS



7 May 2015 One Birdcage Walk, London Presented by **Dr H B Carrick** Consultant and former Chairman of the Fluid Machinery Group www.imeche.org/events/W6214

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/W6214** 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

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#### 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
- Introduction to specifications and to rotordynamics

#### 16:30 Close

#### **DBJECTIVES**

## 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

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#### **BOOKING FORM**

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#### WORKSHOP CODE: W6214AB COMPRESSORS AND FANS WORKSHOP 7 MAY 2015 LONDON

 REGISTRATION FEE
 (Inc. refreshments and lunch)

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

<b>REGISTRATION &amp; PAYMEN</b>	<b>T DETAILS</b> Please comp	lete in capitals.	
Family Name		Title (Mr, Mrs, Miss)	
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Please complete and return with payment to:	Events Team Institution of Mechanica	Engineers Email:	+44 (0)20 7973 1258 eventenquiries@imeche.org

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