

3 March 2010 | Institute of Mechanical Engineers, London

## Learn about the new technology set to transform the acr industry

Join fellow industry professionals at the IMechE for an unmissable practical insight into the new cutting edge technologies set to transform the future of the refrigeration and air conditioning industry.

Hear expert speakers on:

### ■ Nanotechnology

Can micro additives transform plant performance?

### ■ Magnetic bearing compressors

The new generation of virtually friction-free compressors that could replace conventional technologies.

### ■ Revolutionary fault diagnosis

How a 15-minute check can pinpoint performance problems and future failure – while plant is still running.

### ■ Transforming plant efficiency

More than half of all acr systems underperform. How to easily spot it and stop it – and save thousands of pounds.

### ■ The chiller revolution

Insight into a new type of ultra-efficient chiller that can halve energy costs.

### ■ New heat exchange technology

A leader in micro-channel heat exchangers reveals the latest advances

### ■ HFOs – the new refrigerants

Will HFOs become the new mainstream refrigerants of choice?

### ■ New hydrocarbon blends

With pressure on HFCs, could a new range of high-tech HC blends step in?

### ■ Scroll compressors for heating

A new market is opening up as compressors are harnessed for heating.

## Who should attend?

- ACR consultants
- End users
- Wholesalers / distributors
- Designers
- Manufacturers
- Government advisors
- Contractors
- Installers
- Energy consultants

## Why attend?

- **Get ahead of the game** in understanding the new technology, how it works and how it will transform the industry
- **Apply new approaches to your business** ahead of competitors
- **Know which traditional** technologies could be superseded
- **Offer your customers the latest solutions** to improve performance and cut their costs
- **Give yourself and your business** a decisive competitive advantage
- **Network with the experts** developing and applying new approaches

## Venue

The Transforming Technologies Conference takes place at the **Institute of Mechanical Engineers**.

The Institute is located conveniently between St James Park and Westminster Underground stations.

Lunch is provided.



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## Programme

### Welcome and introduction

Graham Fox, immediate past chairman of HVCA, RAC Group and Director of AREA

### Performance inspections for optimising rac plant

Klas Berglof, ClimaCheck, Sweden



- How the award-winning ClimaCheck works
- How to quickly diagnose faults and underperformance in working systems
- Latest results from the field
- Latest version of the technology and enhancements

### Practical field performance analysis of air conditioning and refrigeration systems

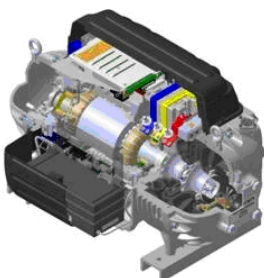
Mike Creamer, Business Edge

- How to use ClimaCheck in the field
- The astonishing results it can achieve
- Examples of recent case studies
- Saving stricken plant and cutting energy costs
- The future of diagnosis and performance



### An overview of Turbocor oil-free turbine technology

Georg Schoeninger, Turbocor, Danfoss



- How the revolutionary Turbocor works
  - The benefits of "frictionless" magnetic bearings
  - Benefits of built-in inverter control
  - Low start-up requirements explained
  - How it performs in practice
  - Why it is challenging traditional compressor technologies
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## Practical applications of new turbine compressor technology

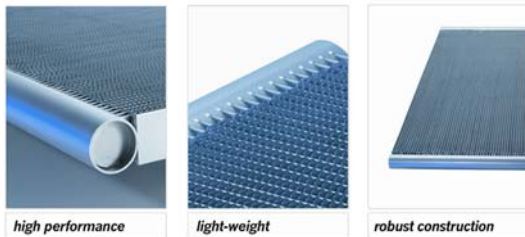
Ken Strong, Cool-Therm, in partnership with Klima-Therm and Geoclima

- Combining technologies to create a new ultra-efficient chiller
- Why application knowledge is key
- What it can achieve
- Results from latest field trials
- Response of end users
- The next generation – a look ahead



## The heat exchange revolution: microox micro-channel technology

Justin Schofield and Joseph Ria, H Guntner UK Limited



high performance

light-weight

robust construction

- The new approach to heat exchange
- How minute tubular channels work
- Results from practical field tests
- The impact on system performance
- Implications for system design
- The future of the technology

## Improving performance with chemically engineered additives

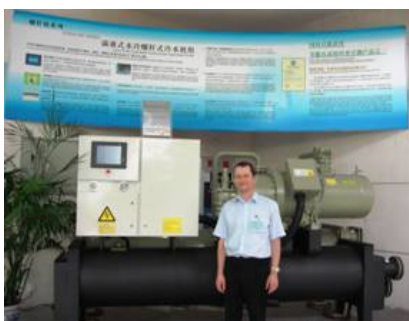
Tony Sgarbi, Permafrost

- What are special additives?
- How do they work in a system?
- What is their impact on performance?
- Results of trials in working systems
- Response of contractors and end users
- The future contribution of special additives to the industry



## Opportunities for harnessing new HC refrigerant blends

Nicholas Cox, Earthcare Products Ltd

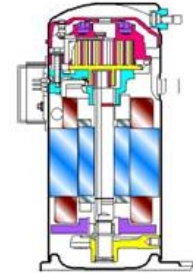


- Why HCs are attractive
- The new blends and their properties
- Test results from research and development
- Practical field tests
- Issues for system designers, contractors and end users
- The future of the HC refrigerants

## Scroll compressor development for heating applications

Dr Guy Hundy, Emerson Climate Technologies

- How and why the Scroll is evolving
- Developments in technology and application
- Why heating?
- Results from the lab and the real world
- Next steps in application
- The future of Scroll compression



## New developments in compressor design

Michael Henchoz, Bitzer UK



- What's driving compressor technology?
- The energy, reliability, cost equation
- Latest Bitzer thinking on design
- Insight into upcoming developments
- Benefits for designers and end users

## From HCFCs to HFOs – new solutions for the future

Dr Frank Rinne, DuPont Refrigerants

- Legislation and climate change
- Impact on refrigerant choice
- Trends in usage
- New developments – the HFOs
- Properties and performance of HFOs
- The future of refrigerants



### The venue

The Conference will be held at the impressive Institute of Mechanical Engineers in Birdcage Walk, London.



### How to secure your place

**Conference tickets** are available at the early bird rate of £349 until 31 January. The standard delegate rate is £399 + VAT .

**Call** 020 8651 7100  
**Email** carolyn.blakely@fav-house.com  
**Web** [www.acr-news.com/conference/tickets](http://www.acr-news.com/conference/tickets)