



Human factors in health and safety

A professional development programme for the process industries 2012 – 2013

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Background and introduction

There is an increasing emphasis on the importance of managing "human factors" to achieve improved safety and business performance in the chemical process industries. Major accidents, including those at Texas City and Buncefield have once again highlighted the importance of addressing this aspect of performance. However, many of the safety and operational professionals charged with managing human factors have no formal qualifications or training in the behavioral sciences. To help address this gap, The Keil Centre and IChemE have organised this 1-year development programme. It builds upon the needs identified in the process industries, namely:-

- Content covering human factors in process safety, health and safety generally, with links to other aspects of business performance
- A modular course design, with short residential events spread over time, also providing networking opportunities with like-minded professionals.
- Consultancy skills development to help implement human factors solutions.

Who should attend?

This event is specifically designed for and will be of interest to

- Internal human factors advisors / focal points
- Operations managers
- HSE advisors and specialists
- Industry regulators

who want a thorough grounding in the subject matter, access to practical research-based tools and approaches, and discussion in small groups with acknowledged industry experts.

In partnership with:



Accredited by:



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What is involved?

A one-year programme, comprising four intensive two-day events supported by course reading, which together form a broad human factors educational programme. The two-day events will alternate between Schiphol, Netherlands and Edinburgh, UK.

2012

Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Pre-reading		Module 1 Amsterdam Wednesday 23 and Thursday 24 May 2012	Pre-reading			Module 2 Edinburgh Wednesday 19 and Thursday 20 September 2012	Pre-reading		

2013

Jan	Feb	Mar	Apr	May
Module 3 Amsterdam Wednesday 16 and Thursday 17 January 2013	Pre-reading			Module 4 Edinburgh Wednesday 22 and Thursday 23 May 2013

This basic structure above caters for two audiences, specifically:

- Those who want to complete the whole programme, who would complete the initial consultancy skills pre-reading, and all four two day events, leading to an IChemE and Institute of Ergonomics and Human Factors Certificate of Course Completion
- Those who wish to attend single events (subject to availability)

Reduced rates and priority booking are available for those who commit to the whole programme.

Each 2-day event will be strictly limited to 50 delegates and cover 4 key human factors topics. At each event, the total group will be split into two sub-groups (A and B), with each sub-group further split into syndicates of 6.

Each event will have the same basic structure:-

- Each session delivered by a recognized human factors professional, with significant process industry experience
- A mix of theory, case study, discussion and practical exercises in small syndicates
- Identification of key success factors in implementation, and associated consulting skills.

Course prize

Delegates who complete all four modules are eligible to enter for a course prize for best application of human factors knowledge.

Previous winners of this award include:



2008/10

Dirk Roosendans
Health and Industrial Safety Manager
Total Petrochemicals, Belgium



2010/11

David Herd
Living Safety Advisor
GlaxoSmithKline, UK

About the organisers

This programme has been developed by IChemE in association with The Keil Centre. IChemE is the hub for chemical, biochemical and process engineering professionals worldwide. We are the heart of the process community, promoting competence and a commitment to sustainable development, advancing the discipline for the benefit of society and supporting the professional development of members. IChemE has a range of products and services to help members to maintain awareness of developments in their field and support their CPD. These include:

- promotion and lobbying
- professional qualification support
- specialist subject groups
- training solutions
- publications
- conferences and seminars

The Keil Centre is a private firm of Chartered Psychologists based in Edinburgh, UK. The Keil Centre has long-established links with the process industries through their involvement in IChemE safety conferences, seminars and symposia, the European Process Safety Centre, and their international commercial consulting activities. For more details see www.keilcentre.co.uk

Detailed course content

The content of the consultancy skills pre-reading and the four modules is described below. The topics are organized to cover the UK Health and Safety Executive's top human factors issues in major hazard sites, and other current issues, e.g. process safety culture & leadership. The content has been developed in consultation with IChemE's safety and loss prevention specialists.

Internal consultancy skills pre-reading

Recommended core text, supplemented by

- Learning log
- Consultation with internal customers

Module 1 Schipol, The Netherlands		An introduction to human factors	
Wednesday 23 May 2012		Group A	Group B
Morning	Different approaches to understanding and developing safety culture <i>Johnny Mitchell</i>	Programme overview –an introduction to human factors and consultancy skills <i>Rob Miles & Ronny Lardner</i>	
Afternoon	Programme overview –an introduction to human factors and consultancy skills <i>Rob Miles & Ronny Lardner</i>	Different approaches to understanding and developing safety culture <i>Johnny Mitchell</i>	
Evening	Course meal and networking		
Thursday 24 May 2012		Group A	Group B
Morning	Personal experience as a human factors regulator <i>John Wilkinson</i>	Process safety culture & leadership <i>Ronny Lardner</i>	
Afternoon	Process safety culture & leadership <i>Ronny Lardner</i>	Personal experience as a human factors regulator <i>John Wilkinson</i>	
Module 2 Edinburgh, UK		Human reliability and failure	
Wednesday 19 September 2012		Group A	Group B
Morning	Reducing human error <i>Richard Scaife</i>	Managing violations <i>Charles Shoesmith</i>	
Afternoon	Managing violations <i>Charles Shoesmith</i>	Reducing human error <i>Richard Scaife</i>	
Evening	Course meal and networking		
Thursday 20 September 2012		Group A	Group B
Morning	Human factors in incident investigation <i>Ronny Lardner</i>	Managing fatigue <i>Bill Gall</i>	
Afternoon	Managing fatigue <i>Bill Gall</i>	Human factors in incident investigation <i>Ronny Lardner</i>	

Module 3 Schipol, The Netherlands		Organisational issues	
Wednesday 16 January 2013		Group A	Group B
Morning	Organisational change <i>Martin Anderson</i>	Staffing and workload <i>Andy Brazier</i>	
Afternoon	Staffing and workload <i>Andy Brazier</i>	Organisational change <i>Martin Anderson</i>	
Evening	Course meal and networking		
Thursday 17 May 2013		Group A	Group B
Morning	Effective supervision <i>Ronny Lardner</i>	Training and competence <i>Paul Leach</i>	
Afternoon	Training and competence <i>Paul Leach</i>	Effective supervision <i>Ronny Lardner</i>	

Module 4 Edinburgh, UK		Human reliability and failure	
Wednesday 22 May 2013		Group A	Group B
Morning	Human Factors integration and workspace design <i>Janette Edmonds</i>	Safety-critical communications <i>Ronny Lardner</i>	
Afternoon	Safety-critical communications <i>Ronny Lardner</i>	Human Factors integration and workspace design <i>Janette Edmonds</i>	
Evening	Course meal and networking Presentation of course prize for best application of human factors knowledge		
Thursday 23 May 2013		Group A	Group B
Morning	Developing useable procedures <i>Ian Hamilton</i>	Design of the human/machine interface <i>Janette Edmonds</i>	
Afternoon	Design of the human/machine interface <i>Janette Edmonds</i>	Developing useable procedures <i>Ian Hamilton</i>	

Industry course recognition

The suitability of the course content has been ratified by senior members of IChemE's Loss Prevention and Safety subject groups, and the course is recognised by the Institute of Ergonomics and Human Factors. Participants who attend and complete all four modules will be issued with an IChemE and Institute of Ergonomics and Human Factors Certificate of Course Completion.

Venues

Modules 1 and 3 will be held at the:

Hilton Amsterdam Airport Schiphol Hotel

Schiphol Boulevard 701

Schiphol

The Netherlands 1118 BN

Tel: +31 (0) 20 710 40 00

www.amsterdamairport.hilton.com

Modules 2 and 4 will be held at:

Norton House Hotel

Ingliston

Edinburgh

EH28 8LX

Tel: 0845 072 7468

www.handpicked.co.uk

Accommodation

Accommodation is not included in the delegate fee. To book accommodation, please contact the hotels directly, quoting IChemE.

Fees

Single Module £1,150.00 + VAT

A discount price of £1,000.00 + VAT per module is offered to delegates who commit to attend the full programme of 4 modules £4,000.00. This fee will be invoiced in two parts 50% payable before commencement of Module 1 and 50% payable before commencement of Module 3.

Workshop leaders

Martin Anderson is a Fellow of the Institute of Ergonomics & Human Factors, with a Masters degree in Process Safety & Loss Prevention. He has specialised in the area of human factors and safety management, particularly in relation to major hazards and complex systems, for over 17 years. Since 2001 he has been a Specialist Inspector (in Human and Organisational Factors) at the UK Health and Safety Executive and is currently employed in the Offshore Division. He led HSE's response to the safety management, human factors and culture aspects of lessons from the Texas City incident and was involved in the follow-up to the Buncefield incident. Martin is currently taking forward lessons from Deepwater Horizon, and piloting a leadership intervention with senior leaders in industry. Martin is also a Chartered Member of the Institution of Occupational Safety & Health and a Registered European Ergonomist.

Andy Brazier is a chemical engineer who has worked as a human factors consultant for 15 years, predominantly in the oil, gas and chemical industries. His experience and engineering background means he has a very good understanding of the risks that impact on business working in major hazard organisations; and he has a reputation for providing practical and effective advice. He has a wide experience of assessing staffing and supervision arrangements at major hazard sites, often using the method described in HSE document CRR348/2001. Many of his studies have been required as the result of organisational change.

Janette Edmonds is a Director of The Keil Centre Ltd, Fellow of the Institute of Ergonomics and Human Factors and a Chartered Member of the Institution of Occupational Safety and Health. She has 15 years' of practical ergonomics experience within various industries including the emergency services, defence, oil & gas, rail, telecoms and other applications. Janette was awarded the William F Floyd award in 1999 for her outstanding contribution to ergonomics.

Bill Gall is a Chartered Psychologist and Fellow of the Institute of Ergonomics and Human Factors. He has 33 years' experience of working in industry, commercial consulting and as an HSE Inspector: first as a Nuclear Installations Inspector then as a Senior Offshore Inspector. Currently an independent consultant Bill has developed guidance and tools for industry, including EI's fatigue guide, and is a founder member of the Energy Institute's Human and Organisational Factors Committee.

Ian Hamilton is a partner at ERM and is responsible for the human factors global practice. He began his career in human factors in the defence sector in 1984 and then moved to air traffic management. For the past 15 years he has worked in consultancy and has expanded his areas of interest to include most aspects of human factors practice, although he maintains a particular interest in workload modelling, human performance prediction, and Human Factors Integration. Previously Ian was a founding partner in Human Engineering where he led the growth of the professional team, managing work in the defence, air, rail, utilities and oil & gas sectors. He has a BSc in Psychology, an MSc in Ergonomics, is a Chartered Psychologist and a Fellow of the Institute of Ergonomics & Human Factors.

Ronny Lardner is an Associate Fellow of IChemE, a Chartered Occupational Psychologist and founder of The Keil Centre Ltd. With 20 years process industry experience, Ronny specialises in the human and organisational factors which affect health and safety. He was a lead contractor for safety culture in the European PRISM human factors project, and is retained as a human factors expert by several process industry clients to advise on safety and work-related stress. Ronny is an Associate Fellow of the British Psychological Society, and regular contributor to the UK Institute of Chemical Engineers' safety symposia.

Paul Leach is a Chartered Occupational Psychologist and lead trainer for Greenstreet Berman Ltd. Paul has significant experience of designing and delivering training interventions within a variety of high hazard industries and organisations of different size and resource. Recent examples include developing and delivering an event for improving risk based decision making in gas escapes; and a program for the maritime and Coastguard Agency on risk management and accident investigation. Paul also has detailed knowledge of competence management, workforce involvement, safety culture, risk management and human reliability assessment.

Rob Miles BSc, MA, MSc, MIMech E, CEng is a Principal Specialist Inspector: Human Factors with the UK Health and Safety Executive. He leads on the topic of Human and Organisational Factors for the HSE's Offshore Division. With his team of Specialist H&OF Inspectors he provides inspection, enforcement and advice to the UK offshore industry on topics from organisational and behavioural change to user interfaces. Particular interests include safety management systems, shiftwork, competence, behaviour modification, and drug abuse in the workplace.

Johnny Mitchell is a Chartered Occupational Psychologist who has worked at The Keil Centre Ltd for six years. He has considerable experience of safety culture assessment and improvement projects in the process industries using a range of methods. He has previously conducted an innovative research project in the UK rail industry, which examined the role of trust in ensuring a strong safety culture. Johnny also specialises in analysing human factors in incident investigations and developing individual, team and organisational resilience.

Richard Scaife is a Chartered Occupational Psychologist, European Registered Ergonomist and Director of The Keil Centre Ltd. He has 23 years' experience gained initially in defence and air traffic control, and latterly in the process industries. Richard was joint winner of The British Psychological Society's 2006 Practitioner of the Year Award, with his colleague Ronny Lardner, for developing a practical set of human factors analysis tools for the process industries.

Charles Shoesmith is a Chartered Psychologist who has many years' international experience consulting in the area of individual and organisational behaviour, cultural development and learning, often with an emphasis on health and safety. He has particular expertise in the design and development of innovative and effective solutions to complex organisational and people performance issues. He is an extremely effective presenter and trainer, applying his background in learning and educational theory to tailor courses to meet specific needs.

John Wilkinson is a Principal Human Factors Consultant at The Keil Centre Ltd. He previously worked for the UK Health and Safety Executive's Hazardous Installations Directorate as a Human & Organisational Factors Team Leader. The team's aim was to drive and promote awareness of, and continuous improvement in, priority human factor topics in the onshore COMAH - major hazard - industries. John managed the human factors team and strategy, coordinated and produced guidance, managed research, provided training for HID inspectors on human factors, ran workshops and seminars with the industry and intermediaries, wrote articles, and presents regularly at other conferences and seminars.

Registration form

Human factors in health and safety

Conferences department, IChemE, Davis Building, Railway Terrace, Rugby, CV21 3HQ, UK
Tel: +44 (0)1788 578214 Fax: +44 (0)1788 560833

Organisation name:

Last name:

First names:

Title: (Dr/Mr/Mrs/Miss/Ms/Prof/Eur Ing): Gender: Male Female

Company:

Job title: Department:

Country: Post/zip code:

Preferred address for pre-conference correspondence: Work Home

Country: Company/house number:

Post/zip code:

Address:

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Town/city: County/state:

Telephone: Fax:

Email:

Special dietary requirements:

Please tick relevant box for payment

I wish to attend (please tick the relevant box)

- Module 1** 23–24 May 2012, Hilton Amsterdam Airport Schipol Hotel, Amsterdam
- Module 2** 19–20 September 2012, Norton House Hotel, Edinburgh, UK
- Module 3** 16–17 January 2013, Hilton Amsterdam Airport Schipol Hotel, Amsterdam
- Module 4** 22–23 May 2013, Norton House Hotel, Edinburgh, UK

Registration

- £1150 + *VAT per module
- £1000 + *VAT series of 4 modules. Payment to be received before each module

These fees include attendance at the sessions, all conference documentation, lunch and interval refreshments for both days and group dinner.

* For modules 1 & 3 VAT will be charged at the Netherlands rate of 19%. If you are an established trader in the Netherlands, please provide your registration number as VAT will not be chargeable. For modules 2 & 4 will be charged at the UK rate of 20 %

A VAT invoice will be issued upon receipt of payment.



Registration form

Method of payment

(Payment must be received in full before the event date otherwise admission cannot be guaranteed).

Your booking will be confirmed by IChemE on receipt of one of the following:

- official purchase order
- cleared funds

Please debit my credit/debit card: (Payment in Sterling only):

Cardholder name (as it appears on the card):

Billing address (if different from overleaf)

.....

Post/zip code:

Mastercard Visa Visa Debit/Delta Maestro AMEX Debit Mastercard

Card number:

Valid from date: / Expiry date: / Issue number: Security code:
(debit card only)

Card holder's signature:

Card holder's telephone number

Cheque enclosed (made payable to Institution of Chemical Engineers)

Please send to IChemE, Conferences department, Davis Building, Railway Terrace, Rugby, CV21 3HQ, UK

Please invoice my company quoting purchase order number please note that registration cannot be processed unless a copy of your purchase order is received with your registration form. If your company does not use purchase order numbers, please attach a formal request to invoice on your company's letterhead.

Cancellation policy

Cancellations received in writing 28 days prior to the event will be subject to administration charge of 10% of the fees + VAT. No refunds will be given for non attendance or cancellations received less than 28 days prior to the event. Substitutions will be welcome at any time. We reserve the right to cancel or alter the programme.

Data protection

In accordance with the Data Protection Act, IChemE (and companies processing data on its behalf) will hold and use the data contained on this form for administration purposes, to keep you informed of its activities, and offer goods and services provided by the Institution.

If you would prefer not to receive IChemE product and service literature please mark the box

If you would prefer not to receive emails on IChemE product and service literature please mark the box

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