

Ergonomics & Human Factors 2026

27-29 April, Nottingham, UK

A stylized silhouette of a city skyline in various colors (yellow, orange, teal, pink) against a purple and blue background with stars. The skyline includes a domed building, a Ferris wheel, and a figure with a bow.

Programme



Chartered Institute
of Ergonomics
& Human Factors

Hello!

Welcome to EHF2026! We're delighted that you can join us at the East Midlands Conference Centre, a great venue for our theme of 'Adapting to the Future'. As the co-Chairs of the Programme Committee, we've very much enjoyed reading all the paper submissions and we look forward to a packed programme.

The accepted papers have been generated by 344 authors representing 12 countries as far apart as India, Australia, Canada and China!

We have a mixed format with Masterclasses featuring throughout the conference. On Monday evening, we're hugely grateful to the Human Factors Research Group at the University of Nottingham who are providing access to their VR suite and driving simulator. There's also plenty of opportunity for seeking out friends and making new connections during our drinks reception and Annual Dinner on Tuesday.

We'd love to hear what you think about it all and look forward to catching up with you during the event.



Dave Golightly



Becky Charles



Fay Dixon



THANKS

to our sponsors.



Using strategic and applied human sciences research and human-centred design to help perfect the user experience.



Championing human factors in bringing safe, effective and commercially successful medical devices to market.



An industrial technology group, engineering safety, digital and sensor solutions for critical environments.



Finding your way around

Free wifi
Network: Nottingham Venues
No password

Coffee station
Water refill station



Barriered entrance/exit
(automatic lift) from
Beeston Lane



Free parking
(with number plate check-in)

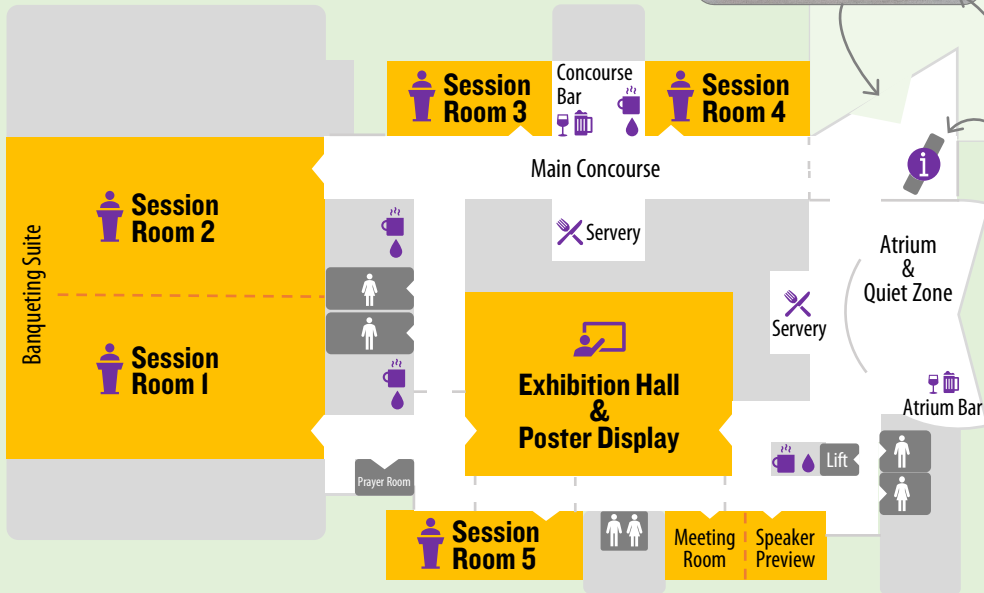


East Midlands
Conference Centre
main entrance

Conference
registration
& help desk



Orchard Hotel
main entrance



Additional
parking

Campus
grounds

HELP

is at hand from the team.

Got a question or need help? Come and see us at the registration desk. Or ask any member of the CIEHF team (below) or Secretariat wearing these distinctive polo shirts!

We're here to answer your questions about the conference, to help with any membership queries and more generally, to enable you to make the most of your time here!



LOOK

for the topics that interest you by checking the sector or domain indicators for each presentation. All talks are 15 mins with 5 mins Q&A and 5 mins turnaround time.

Sector key

Aviation	Manufacturing
Construction	Maritime
Defence	Medical devices
Emergency Services	Nuclear
Forestry	Rail
Healthcare	Services & Sport
High Hazard	Transport
	Cross-sector

Domain key

Design	Wellness & Inclusion
HF methods & tools	Human-AI Teaming
HF Integration	Safe Systems
	Technology



Session Room I



09:20 Opening statement by Chief Executive, **Ben Peachey** followed by Welcome Address by the President of the CIEHF, **Fran Ives**, Knowledge Mobilisation Fellow at Keele University

	Sector	Domain	Session 1 Chair: Kevin Hayes	Sector	Domain	Session 2 Chair: Fiona Bird	Sector	Domain	Session 3	Sector	Domain	Session 4	Sector	Domain	Session 5 Chair: Ian Culverhouse
09:50			Understanding real-world aviation maintenance performance through scenario interviews Saleh Al Wohaibi , University of Nottingham [22]			Monitoring train driver fatigue through operational performance data Rebecca Kearnes , University of Southampton [8]			Masterclass 1: Work Domain Analysis			Masterclass 2: Workspace Design Chris Vincent , BAE Systems Submarines			Integrating early user insights in complex drug-device combination product development Sophie Edmonds-Allen , Teva Pharmaceuticals [68]
10:15 (ends 10:40)			Beyond the lab: ten-day eye-tracking and cardiovascular monitoring in live air traffic control Jediah Clark , NATS [129]			Auditory announcements and warnings at UK train stations: do they work? Patrick Waterson , Loughborough University [11]								Development of guiding principles for human performance for the WHO pharmacovigilance strategy Brian Edwards , Husoteria Ltd [48]	
													R		



	Sector	Domain	Session 1 Chair: Mike Bromfield	Sector	Domain	Session 2 Chair: Becky Charles	Sector	Domain	Session 3	Sector	Domain	Session 4	Sector	Domain	Session 5
11:10			Drone swarms: unlocking the potential of human swarm teams Siddharth Shyamsundar , BAE Systems Operations Ltd [5]			Neurodiversity in safety-critical roles: examining the lived experiences of train drivers Alice Monk , RSSB [51]			Masterclass 1: Work Domain Analysis			Masterclass 2: Workspace Design			IEC/TR 62366-2:2016 Medical devices: guidance on the application of usability engineering to medical devices. International panel discussion on upcoming changes Natalie Shortt , Ensera Design; Marcella Makowski , Fresenius Medical Care; Wayne Ho , Healthcare HF; Torsten Gruchmann , Use-Lab GmbH
11:35			The Identical Error paradox in aviation maintenance - more errors for safer outcomes Kevin Hayes , Airbus [38]			Using the COM-B model to improve safety reporting by railway track workers Jana Mihulkova & Sam Waters , Risktec Solutions Ltd [56]									
12:00 (ends 12:25)			Assessing system safety risks in LH2-powered aircraft ground operations Samarth Burande , Cranfield University [134]			Asleep on the job: transforming fatigue risk management in UK rail Anna Vereker , RSSB [127]									Open discussion: ensuring representation of medical devices at IEA2027
													R.		

Monday afternoon

Session Room 1

Chair: Fran Ives

13:30

(ends
14:30)



Institute Lecture: The Future of Flight [Russell Porter, Head of Future Flight Engagement at NATS.](#)

The aviation industry is changing fast - increasing demand, competing pressures, new technologies and changing roles for us humans. With a focus on electric aviation and uncrewed flight, we'll hear about what it might mean for us as passengers, as designers and as human factors experts.

Monday evening unmissables

Made available by



The University of
Nottingham

Driving simulator



Fool your senses in a realistic full-size car! Drop in 17:15-19:15.

VR suite



Experience new worlds through cutting-edge technology. Bookable sessions 17:30-18:30 and 19:00-20:00.



Outdoor trails

Whenever suits you, take a walk through the lovely landscaped campus, with a map as your guide.





















Scan me



				Session Room I	
	No	Sector	Domain		
14:30 Just-a-minute poster session	1			Multi-sensory inclusive design: designing for every body	Kath Buck & James Hoare, Crux Product Design [95]
	2			Optimising human factors in three-person resuscitation teams	Chun Kit Jacky Chan, Hong Kong Metropolitan University [82]
	3			Guidelines for the development of care robotics: a human factors perspective	Dylan Cooper, University of Nottingham [4]
	4			Learning reviews: a temporal handling of the open-ended challenge of safety	Paul Davison, PPWD Consulting Ltd [79]
	5			The digital future of human systems integration	Trevor Dobbins, STRResearch Ltd [128]
	6			Exploring feedback using ambient lighting to improve driver attention	Catherine Harvey, University of Nottingham [54]
	7			Lessons in adversity: adapting methods for assessments of colour perception	Nicola Hill, BAE Systems [41]
	8			Vacuum lift pilot to reduce physical workload in cargo break-down operations	Gonny Hoekstra, Technical University Delft [74]
	9			Get a grip – scientific communication of human factors to the next generation	Ella-Mae Hubbard, Loughborough University [104]
	10			“Think twice, cut once”: interview study examining non-technical skills in forestry operations	Sofia Johansson, University of Aberdeen [122]
	11			Task screening methodology – a consistent approach to proportionate human factors assessment	Hannah Lewis-Smith, AtkinsRealis [45]
	12			The human component of safety in defence	Georgina Mason, Dstl [67]
	13			Sociotechnical factors influencing a digital early warning system: a qualitative interview study	Maeve Moran, Trinity College Dublin [136]
	14			The risk of moving – using risk analysis to develop simulation centre policy	Sally Scott, NHS Lanarkshire Medical Education Centre [80]
	15			Trust in avatars for financial transactions	Andrew Smith, NCR Atleos [52]
	16			Predicting workload in railway signalling	Megan Thurgood, Iarnród Éireann Irish Rail [110]
	17			Understanding the future electromagnetic environment through a futures thinking approach	Matthew Webster, Loughborough University [138]
	18			Using Walk-Through Talk-Through to understand work-as-done in ambulance care	Ross Wyatt, NHS Surrey Heartlands Integrated Care Board [16]
	19			Human-centred evaluation approaches for autonomous agents: from review to practice	Benjamin Bowers, University of Nottingham [29]

Monday afternoon

	Sector Domain	Session 1 Chair: Lucy Kirkland	Sector Domain	Session 2 Chair: Mike Carey	Sector Domain	Session 3 Chair: Mary Marshall	Sector Domain	Session 4 Chair: Stirling Tyler	Sector Domain	Session 5 Chair: Martin Thody
15:30	 	Mapping an ideal sociotechnical safety management system for RPAS Samantha Jackson, University of the Sunshine Coast [32]	 	Monitoring train driver alertness in GB railway: insights from live industry trial Kirsten Huysamen, Rail Safety and Standards Board [55]	 	Exploring the critical decision method for usability evaluation Yiyao Li, University of Nottingham [63]	 	Human factors trade-offs: a case study in high-hazard environments Fay Dixon, Tetra Tech [61]	 	Developing a human factors integration guideline for road transport systems Zohre Abedi, University of the Sunshine Coast [143]
16:00		Factors shaping the passenger experience in advanced air mobility: insights from literature Lamyea Ahmed, Uni of Birmingham [83]		Mitigating MSD risks faced by frontline rail-staff using wearable technology Simon Carpenter, Transport For Wales [81]		A European framework for measuring children's anthropometry and guidelines for their effective use Enda Fallon, Uni of Galway [113]		Designing for constructability Clare Pollard, AWE - Nuclear Security Technologies [89]		Secure-by-design through integrated security, safety and human factors Eylem Thron, Mima Group [85]
16:25		Enhancing pilot performance with modern glass cockpits Samarth Burande, Kingston Uni [120]		Human factors for rail traffic management David Golightly, Newcastle University [141]		Applying human factors to the manufacture of pyrotechnics Anita Weltz, Risktec Solutions [139]		Thresholds of care: ergonomic bedroom design in secure environments Jaide Mead, W Lon NHS T [35]		Adversarial design thinking for organisational architecture Richard Farry, QinetiQ [33]
16:50 (ends 17:15)		Evaluation of VR & motion for upset prevention & recovery training Mike Bromfield, Uni of Birmingham [121]		Beyond the cab: embedding HOF in depot design, operation and maintenance Fiona Bird, Pendyne Ltd [93]						



Session Room I

Chair: Ben Peachey

09:00

Keynote: Human performance in British bobsleigh & skeleton competition. A fireside chat with **Natalie Dunman**, Performance Director at the British Bobsleigh & Skeleton Association and **Amelia Coltman**, elite skeleton athlete, led by **Paul Davison**, PPWD Consulting.

Discussion will include:

- The human fit with equipment, cold constraints, training load and injury management.
- Dynamics of relationships with coaches, teammates, competitors and performance leaders.
- Psychology of cognitive load, pressure, stress, confidence and identity.

(ends
09:40)



ESSENTIAL

bits & bobs



Orchard Hotel check in

Check in after 15:00 at the hotel reception

Check out by 11:00



Quiet zones

In the Orchard hotel lobby and in the EMCC Atrium
Outside on the walking trails



Breakfast

In the hotel restaurant

Every day 07:00 - 09:00

Lunch

Buffets served in the Main Concourse and
Atrium, where there is seating available

Dinner

Sunday: 3-course in the hotel restaurant, 18:30 - 20:30

Monday: BBQ on the hotel mezzanine, 18:00 - 20:30

Tuesday: Drinks Reception in the EMCC Atrium at
18:30 followed by a formal 3-course celebratory
dinner in the Banqueting Suite at 19:30



	Session 1 Chair: Jayne Wheway		Session 2		Session 3 Chair: Nora Balfe		Session 4 Chair: Barry Kirby		Session 5 Chair: Fiona Cayzer	
	Sector	Topic	Sector	Domain	Sector	Domain	Sector	Domain	Sector	Domain
09:55		Creating design personas to support a National Medicines Safety Improvement Programme Gill Gookey, Health Innovation East Mids [13]		Human-AI interaction on roads. Exploration and discussion of rapid technological change in the road sector Claire Williams & Annabel Moore, WSP; Barbro Arnes & Owen McCulloch, RSSB		Hierarchical task analysis to understand impacts of new technologies on level crossing systems Gemma Read, University of the Sunshine Coast [25]		The 2017 Manchester Arena bombing: A sociotechnical systems analysis Patrick Waterson, Loughborough University [19]		Towards empathic machines: introducing the empathy evaluation questionnaire (EEQ) Ben Baldwin-Anyasodo, Univ of Nottingham [28]
10:20		Predicting nursing staff requirements: how can we improve decision support tools? Rich McLroy, University of Southampton [72]				Human-centred rail freight preparation for decarbonisation and climate resilience David Golightly, Newcastle University [142]		A data-driven fatigue management system dashboard for paramedic services Marcus Yung, Canadian Inst for Safety Wellness & Perf'mance [75]		Distractibility of in-vehicle infotainment systems: an end-user toolkit Rachael Wynne, University of Newcastle, Australia [101]
10:45		The Out-of-Hours review: from work systems analysis to recommendations and beyond Eva-Maria Carman, Nottingham University Hospitals Trust [103]				Utilisation of multi-actor human-in-the-loop rail simulation to examine the impact of AT0-GoA2 Sarah Kusumastuti, University of Twente [59]		Influence of information source and environmental cues on decision-making during flood evacuation Razan Aldahlawi, Univ of Nottingham [34]		Two case studies demonstrating the 'psychological imperative' for safety critical task analysis Nick Taylor, Hu-Tech [36]
11:10 (ends 11:35)		Quality versus safety in healthcare – a national debate for patient care Nick Woodier, Health Services Safety Investigations Body [9]				Passenger flow analysis & peak congestion manag't in metro stations: risks, strategies & system-based modelling Yusra Mustafa, Newcastle University [140]		The first empirical test of human factors integration in frontline policing Adam Pace, University of Derby [118]		Beyond SHELL: integrating self-consciousness into human factors systems (the SSHELL framework) Astha Gill, ISE [64]



Session Room I

Chair: Fran Ives

12:00 **Keynote:** *Lucy Easthope, Professor in Mass Fatalities and Pandemics at the University of Bath*, in a fireside chat with *Professor Mark Young of the University of Southampton*.

Lucy is a leading UK expert on emergency planning and disaster recovery. Since 2001, she has served as a tactical adviser to UK disaster responders, working on major crises such as the 2004 tsunami, 9/11, the Salisbury poisonings, Grenfell, the Covid pandemic and the war in Ukraine. Her research and practice focuses on mass fatalities planning, legal aspects of emergencies, lessons learned after major incidents, public inquiry effectiveness, interoperability and community resilience. She challenges traditional thinking about how we recover from tragedy and how best to prepare for what comes next.

(ends
13:00)



Tuesday evening unmissables

Tuesday @ 18:30

Smart dress (black tie optional)



Drinks Reception

In the EMCC Atrium



Annual Dinner

Fine dining and wine in the Banqueting Suite
If you've got a ticket, sign up on the board in the Main Concourse by 15:45 on Tuesday.



Awards Ceremony

Recognising excellence in the community



VISIT

our exhibitors.



IC.IDO is cutting-edge XR software that pushes the boundaries of early product validation, giving engineers an unprecedented first- and third-person view of their designs in a real lifecycle context. It enables teams to explore human-machine interaction at the earliest digital stages, shortening development cycles without sacrificing quality or relying on last-minute fixes. Human factors experts gain an intuitive, experience-driven way to demonstrate the real-world consequences of insufficient validation, whether in manufacturing, service or operation of large and complex products. With full-body tracking, task recording, vision and reach analysis, RULA scoring and integrated RAMSIS, IC.IDO delivers insights that capture senior stakeholders' attention. Come and experience the Human Workflow powered by IC.IDO, XR industry leaders for more than 20 years.



UNIVERSITY OF
DERBY

The University of Derby is a modern University with a modern outlook. Everything we do is driven by delivering excellence and opportunities for our students, our staff and our region. Our contemporary online Ergonomics and Human Factors Masters course (with Healthcare or Behaviour Change pathways) is suited to practitioners from around the world and from a wide range of professions and industries. Studied part-time online, the course is a CIEHF Qualifying Course for Graduate Membership. Come and visit our stand where you can meet Programme Leader, Dr. Victoria Filingeri, to learn about our CIEHF Qualifying Course including pathways, modules and course content, intakes, student successes, our research and more.



RCSI

Founded as the national training body for surgery in Ireland, today we are an innovative, world-leading international health sciences university.



TÜVRheinland®
Risktec

Risktec helps clients to manage health, safety, security, environmental and business risks in sectors where the impact of loss is high. Our Human Factors team is led by Chartered specialists who provide global support to organisations across high hazard sectors including the oil, gas and chemical, transportation, civil nuclear, clean energy and defence sectors.



Humanetics Digital empowers organisations to design with people at the centre. Our solutions combine digital human modeling with extensive body data, anthropometric databases and global size surveys to evaluate human performance long before physical prototypes exist. Engineers can assess posture, reach, vision, fatigue and injury risk early, reducing development time, costs and workplace injuries. We showcase how data-driven ergonomics accelerates innovation while improving safety and user experience. From automotive, defence and aerospace to manufacturing, fashion and healthcare, we help create products and workplaces that truly fit the human body. Discover how our technologies enable smarter decisions, better designs and measurable impact: it's where human insight meets engineering excellence.



The University of
Nottingham

The Human Factors MSc program at the University of Nottingham is designed to be more than a qualification; it's a launchpad for your global career. Students on the program receive a world-class education, studying at a top 100 in the world QS World Rankings 2026 university and a Top 20 UK university (The Times and Sunday Times Good University Guide 2024). Ranked 7th in the UK for research power (REF 2021), this exceptional environment ensures you will be challenged, inspired and working on ideas that have real-world impact. Our CIEHF-accredited programme will give you a unique intellectual advantage, moving beyond theory by applying your skills in our flagship simulation and VR facilities and tackling real-world problems. This is where you will translate learning into practice, developing key employability skills that are fit for the future. Come and talk to us about taking your next step.



Tobii is the global leader in eye tracking and a pioneer of attention computing. We help human factors professionals add an objective measure of visual attention to their work - showing what people notice, what they miss and how they interact with products, interfaces and environments in real-world tasks. Tobii's solutions are widely used in behavioural studies and research across academia and industry to support human-centred design, usability evaluation, training and performance, and safety-focused decision-making.



The Health & Safety Executive have one of the biggest and most experienced teams of Human Factors Specialists in the country, but we want to get bigger to help ensure employers across GB work safely, protecting people and places. As an HF Specialist in HSE, you use your technical knowledge and experience to influence not only individual employers but whole industry sectors; the reward is making a difference and doing work that saves lives. Our HF roles are unique and suit those who appreciate variety and a challenge, whilst enjoying flexibility. Members of the HF team from all Divisions within HSE will be at the conference, providing an opportunity to learn more about what we do.



	Sector Domain	Session 1 Chair: Marie Ward	Sector Domain	Session 2 Chair: Wei Zhang	Sector Domain	Session 3	Sector Domain	Session 4	Sector Domain	Session 5 Chair: Fay Dixon
14:00		Applying a resilient lens to healthcare investigation Rebecca Doyle, Health Services Safety Investigations Body [46]		Cognitive work analysis and allocation of responsibility in AI systems Chris Baber, University of Birmingham [20]		Masterclass 3: Human Reliability Analysis Ned Hickling		Masterclass 4: Physical Ergonomics Matt Birtles, HSE		Beyond perpetrators and victims: a systems ergonomics perspective on technology-facilitated abuse Nicole Liddell, University of the Sunshine Coast [40]
14:25		Exploring the application of systems-based tools in mental health safety investigations Lauren Mosley, NHS Eng [18]		Using AI-generated videos and storyboards as elicitation prompts in human factors research Catherine Harvey, Uni of Nottingham [26]						Maritime teams' safety performance during hazardous operations, and possible mitigation Mike Tainsh, BAE Systems, Maritime [1]
14:50 (ends 15:15)		Human factors in the development of a National Medicines Safety Improvement Programme Gill Gookey, Health Innovation East Midlands [14]		In the moment: trustworthiness and delegation to AI agents Suzy Broadbent, Dstl [30]						Designing human-centred interventions for inclusive cyber security in a medium-sized UK organisation Andrew Burd, University of Warwick [23]



	Sector	Domain	Session 1 Chair: Melanie Ottewill	Sector	Domain	Session 2 Chair: Clare Pollard	Sector	Domain	Session 3	Sector	Domain	Session 4	Sector	Domain	Session 5
09:00			Safety procedures in invasive procedures: a case study in endoscopy Eleanor Cox, University of Nottingham [100]			Electronic procedures - will they work for you? Adrian Wheatley, Wheatley Consulting Ltd [7]			Masterclass 5: Supervisory Control Ron McLeod			Masterclass 6: Effective Communication Shelley Stiles, Gateway Consultants (HSW) Ltd			Panel discussion: Employee health, wellbeing and inclusion – a pivotal moment for the future of workplace ergonomics Jim Tylour; Nichola Adams; Katharine Metters; Laurence Jones; Kevin Bampton, BOHS
09:25			Building human factors capacity in healthcare Camilla Rowland, University Hospitals Bristol and Weston NHS Trust [57]			Advanced reactor technologies – do we need to still worry about the human? Farah Fenoughty, Amentum [115]									
09:50 (ends 10:15)			Human factors integration in healthcare Laura Pickup, University Hospitals Bristol and Weston NHS Trust [58]			Future energy scenarios: managing human factors risks in control room operations Ailsa Peron, Frazer-Nash Consultancy Ltd [99]									



#ciehf



#ehf2026



#ehfcareers

Let's generate some noise on social media!

Post your photos and thoughts. Like and comment on our posts, tag us and we'll do the same for you.



	Sector	Domain	Session 1 Chair: Ross Wyatt	Sector	Domain	Session 2 Chair: Aaron McGuiness	Sector	Domain	Session 3	Sector	Domain	Session 4	Sector	Domain	Session 5 Chair: Jim Taylour
10:45			Understanding the impact of respiratory function monitoring in neonatal monitoring Alexandra Lang , University of Nottingham [102]			Information chunk similarity in nuclear power monitoring: a cognitive bias effect paradigm Xiaoli Wu , Nanjing Uni of Science & Technology [50]			Masterclass 5: Supervisory Control			Masterclass 6: Effective Communication			DOSE (Database of Occupation-Specific Exposures): development and case example Marcus Yung , Canadian Institute for Safety, Wellness & Performance [73]
11:10			Enhancing radiology safety through bias awareness and human factors learning Rachel Magennis , SMS [133]			Visual engineering to support HF assessments in the nuclear industry Samantha Hilton , Amentum [66]									Ergonomics in the hair & beauty industry Janie Tongue , Ergonomics United [124]

Session Room 1

Chair: Fran Ives

11:35

Broadbent Lecture: Managing fatigue in the energy sector: A multi-level challenge by [Fiona Earle](#), [Professor of Psychology at the University of Hull](#). We'll explore how fatigue in the energy sector emerges from interconnected pressures at the frontline, organisation and industry level, highlighting the challenges of effective fatigue management and reflecting on cultural and operational barriers. Fiona has over 25 years' experience of human factors and occupational psychology, and her interests are in the areas of workplace stress and fatigue.



12:25
(ends 12:35)

IEA2027

Launch: [Professor Andrew Thatcher](#), [President of the International Ergonomics Association](#)



Wednesday afternoon special sessions

Session Room I

15:05 Future Strategy for Human Factors - a panel session led by **Professor Andrew Thatcher, IEA President**

Discussion will focus on six areas:

- Defining our discipline: what human factors presents, what constitutes high quality work.
- Building our capability: provision of and access to high quality education and training.
- Demonstrating our value: robust cost-benefit analyses, valid evidence of impact, clear value proposition.
- Optimising our tools: provision of a proven set of fit-for-purpose methods, bridging research-practice gap.
- Bridging our boundaries: enhancement of engagement and integration with other disciplines.
- Enhancing our visibility: evidence-based marketing and communication of success stories.



16:20 Closing address by **Ben Peachey, Chief Executive, CIEHF**




16:30 End of conference. Thanks so much for coming along.



Join us at

IEA2027

23-25 August **excel**
LONDON

 Bookings open: 29 April 2026

 Call for papers opens: 1 July 2026

Organiser & host



In collaboration with



iea2027.com

