

ERGOSHIP 2016

Shaping shipping for people

CONFERENCE PROGRAM

Maritime Human Factors Conference

6-7 April 2016, Melbourne Australia





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ERGOSHIP 2016

The Australian Maritime Safety Authority (AMSA) and the Australian Maritime College (Institute of the University of Tasmania) are jointly hosting Ergoship 2016, a maritime human factors conference with the theme 'Shaping shipping for people'.

Ergoship 2016 will be held in Melbourne, Australia 6-7 April 2016, with a cocktail reception on the evening of 6 April.

Ergoship 2016 aims to provide a national and international forum for the dissemination and exchange of applied scientific knowledge in the field of human factors within a maritime context. Ergoship 2016 will bring together ship owners, operators, seafarers, researchers, maritime regulators, classification societies and other maritime stakeholders with a particular interest in maritime human factors to promote our collective understanding in this very important area.

The program includes a wide range of topics covering maritime human factors applied research, with leading national and international speakers, presentations and panel discussions which will capture the attention of anyone with an interest in applying maritime human factors principles in ship and equipment design, shipping operations or research.

www.ergoship2016.com.au





WELCOME FROM THE ERGOSHIP 2016 ORGANISING COMMITTEE CHAIR

On behalf of the Ergoship 2016 Organising Committee, I would like to extend a warm welcome to the human factors conference Ergoship 2016 'Shaping shipping for people'.

Human factors is a wide-ranging topic and involves the understanding of human behaviour and performance in various operational contexts. From an operational perspective, we can apply human factors knowledge to optimise the fit between people and the systems in which they work. By doing so, we should improve safety and performance outcomes.

Ergoship 2016 is the first conference of its kind to be held outside Europe and it aims to provide a national and international forum for the dissemination and exchange of applied scientific knowledge. This is an unprecedented opportunity to learn more about human factors in the maritime context.



The conference includes an impressive program of leading local and international speakers who will provide us with two days of contemporary and thought provoking discussion.

I hope you can take the time to join us in this unique opportunity to learn more about what current research is telling us about human factors.

Stephen Curry Manager Ship Operations, AMSA



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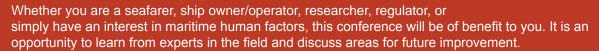
WELCOME FROM AMSA CHIEF EXECUTIVE OFFICER

On behalf of the Australian Maritime Safety Authority and the Australian Maritime College, I invite you to join us at Ergoship 2016: Shaping shipping for people.

Ergoship 2016 is the first maritime-focussed human factors conference to be held in Australia and aims to provide a national and international forum for the dissemination and exchange of applied scientific knowledge in this field.

We are fortunate to have a variety of high-calibre national and international speakers who will present on a range of human factors topics including:

- · safety culture
- · fatigue risk management
- · seafarer health and wellbeing, and
- designing maritime systems for user needs.



I look forward to your participation and the exchange of ideas that I know will make Ergoship 2016 a success.

Mick Kinley Chief Executive Officer, AMSA





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KEYNOTE SPEAKERS

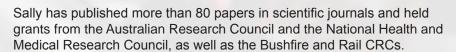
PROFESSOR ANDREW NEAL

Andrew Neal obtained his PhD from The University of New South Wales in 1996. He works at the intersection of organisational psychology and human factors. Andrew leads basic and applied research into human performance and safety that has received more than \$10 million in funding from the Australian Research Council, Federal and State Governments, and industry. His research examines the factors that enhance the performance, safety and effectiveness of people at work, and the mechanisms by which people manage competing demands in complex, dynamic environments.



PROFESSOR SALLY FERGUSON

Sally Ferguson is a Research Professor with the Appleton Institute, CQUniversity in Adelaide with a background in circadian biology. Our body clocks help keep us synchronized to the world around us but working against our clocks has implications for sleep and waking health and well-being. In the last ten years this key research interest has led to Sally asking questions about the relationship between sleep, wake and work patterns, particularly for those working shiftwork. Research partners in mining, rail, healthcare, marine pilotage and aviation sectors have helped answer some of these questions.



Sally does a lot of work in the area of fatigue risk management and sleeps very well herself.





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KEYNOTE SPEAKERS

DR ERIK STYHR PETERSEN

Petersen graduated as a Naval Architect (B. Sc.) in 1983, and worked as a consulting naval architect until 1996, being involved primarily in structural design and ship stability on both new-buildings and conversions. Leading an extensive series of EC-sponsored R&D projects (ATOMOS I-IV; DISC I-II, Thames), and gradually changing his focus to research, Petersen joined the Danish Maritime Institute in 1996, where he became Head of Development in 1999.

Concentrating on the functionality, design and usability of marine electronics, Petersen joined Lyngsø Marine in 2002, and in 2007 he became Deputy Director of Technology in the mother company, SAM Electronics. After a spell (2012-2013) as Director of Product Management, SAM Electronics, Petersen is now Director, Business Development in Wärtsilä SAM Electronics.

Pursuing his interest in maritime human factors, usability and human-centered design, Petersen enrolled in Chalmers Technical University (CTH), Sweden, in 2007, where he received his Licentiate of Engineering degree in 2010, and his Doctorate in 2012, the latter in the subject of 'Engineering Usability'. Today, Petersen holds the positions of Adjunct Associate Professor at the University of Tasmania and Visiting Professor at the World Maritime University in Malmø, Sweden, as well as being a member of the Lloyds Register Technical Committee (Ships) and an Associate Editor of the Journal of Navigation.



DR JONATHAN EARTHY

Dr Jonathan Earthy is Principal Human Factors Specialist for Lloyd's Register Marine. He co-ordinates Lloyd's Register Marine's treatment of the Human Element and its development of technical capability and products in this area. He has worked for Lloyd's Register for 23 years. His technical speciality is the assurance of the quality of Human Factors work. He previously worked for British Petroleum.



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VENUE & LOCATION

Ergoship 2016 will be held at:

InterContinental Melbourne The Rialto 495 Collins Street, Melbourne VIC 3000 +61 (0)3 8627 1400 www.melbourne.intercontinental.com

MELBOURNE

Located in the south-eastern corner of Australia, Melbourne is the capital city of Victoria. Set on the Victorian coast, Melbourne has a rich culture and history.

The boom style architecture, particularly evident on Collins Street, clearly demonstrates the enormous wealth of a bygone era. A time when Melbourne was the richest city in the world is still evident as you wander the Melbourne CBD and gaze at the towering and ornate monuments to another time. The efforts to maintain and restore these striking buildings and protect Melbourne's vast character and heritage, must be applauded and respected.

Melbourne is a wonderful location for shopping and dining. The city's multicultural nature ensures that you can experience a wide variety of options for both Melbourne shopping and Melbourne bars and restaurants. The inner suburbs are easily accessible by the tram network, which means that it's convenient to venture out of the Melbourne CBD and broaden your city experience.

TRANSPORT

Getting to and from the airport - SkyBus runs an express service between Melbourne Airport and Melbourne's city centre, 24 hours a day, seven days a week. The service takes approximately 20 minutes to get from the airport to the city centre. Buses run every 10 minutes from 6am to 11pm and every 15 to 30 minutes at other times. For more information and to purchase tickets, visit skybus.com.au.

Taxi fares between the city and the airport are about \$50. There are no train or tram links to the airport.

For more information about getting around the city, visit the <u>Public Transport Victoria</u> website.

INSURANCE

Ergoship 2016 registration fees do not include insurance of any kind. It is strongly recommended that delegates take out their own travel and medical insurance prior to attending the conference. The Ergoship Event Team does not take any responsibility for any delegate failing to insure.

CHECK- IN & NAME BADGE COLLECTION

The Ergoship 2016 information desk will be located on the lower ground floor in the Conference Pre-function area of InterContinental Melbourne The Rialto.

The information desk will be open for check-in from 0830 – 0925 on Wednesday 6 April and from 0845 – 0900 on Thursday 7 April.

All delegates, speakers and accompanying persons will receive a name badge upon checkin. This name badge is an official pass and must be worn to obtain entry to the conference sessions, catered events and evening cocktail reception.

PROGRAM

DAY 1

Start	Finish	Title		
830	920	Registration		
920	925	Welcome Stephen Curry, Australian Maritime Safety Authority		
925	935	Opening address Mick Kinley, Chief Executive Officer, Australian Maritime Safety Authority		
Sessions 1: Culture and Teams Session Chair: Dr Michelle Grech, Australian Maritime Safety Authority				
935	1015	Keynote 1: Safety Culture: Why it matters and what you can do about it. Professor Andrew Neal, University of Queensland, Australia		
1015	1040	Safety Culture where you work and live: investigation findings from a man overboard event. Nicole Gray, Australian Transport Safety Bureau, Australia		
1040	1110	Morning tea		
1110	1135	Designing Interfaces to Improve Teamwork during Ship Movements & The MANaging Vessels In Port Waters (MAN V.I.P) Project. Ben Brooks, Australian Maritime College, Australia		
1135	1200	Using a design approach to re-analyse the Costa Concordia Incident. Andrew Clarke & Archimede Mulas, University of Southampton, UK		
1200	1225	Technology Support for Maritime Crew Resource Management. Gerd Berner, Australian Maritime College, Australia		
1225	1330	Lunch		
Session 2: Human Performance at Sea Session Chair: Dr Ben Brooks, Australian Maritime College, Australia				
1330	1410	Keynote 2: Fatigue management in the maritime sector: It's about time. Professor Sally Ferguson, Central Queensland University, Australia		
1410	1435	Health and well-being in maritime pilotage: Exploring the factors that matter. Timothy P Chambers, Australian College of Applied Psychology, Australia		
1435	1500	Wellness at Sea: A New Conceptual Framework for Seafarer Training. Johan Smith, Sailors Society, UK		
1500	1530	Afternoon tea		
1530	1555	Sizing up Royal Australian Navy Sailors. Kate Ponton, Defence Science and Technology Group, Australian Defence Force		
1555	1640	Panel discussion 1: Fatigue Risk Management Success Stories. Industry Panel: Stuart Michael (TT-Line Company, Australia), Peter Dann (Woodside Energy, Australia), Matthew Thomas (CQUniversity, Australia). Moderator: Wayne Cooper, Australian Maritime Safety Authority		
1640		Close of Day 1		
1700	1900	Cocktail reception Gold Sponsor Address Mike Utsler, Chief Operating Officer, Woodside		

Start Finish Title Registratio 9/15 900

DAY 2

845	900	Registration	
900	905	Welcome Stephen Curry, Australian Maritime Safety Authority	
905	915	Opening address Professor Athanasios Karlis, Director, National Centre for Ports & Shipping, Australian Maritime College, Australia	
Sessions 3: Designing Maritime Systems for User Needs Session Chair: Gordon Gore, Australian Transport Safety Bureau			
915	955	Keynote 3: 'but the elf moves along' Dr Erik Styhr Petersen, Wärtsilä Lyngsø Marine A/S, Denmark	
955	1020	Mariner Feedback during the Design and Operation of Ships and Systems. *David Patraiko, The Nautical Institute, UK**	
1020	1045	Human Centred Design of Equipment: Lessons from the Mining Industry. Tim Horberry, Monash University, Australia	
1045	1115	Morning tea	
1115	1140	Incorporate good practice into ship design process: Future ship designers meet end users. Apsara Abeysiriwardhane, Australian Maritime College, Australia	
1140	1205	Optimizing the transportation of heavy parts inside the Engine Room in the context of Crew Centred Design. Nikolaos Ventikos, National Technical University of Athens, Greece	
1205	1230	The use of Bridge Simulation for Marine Incident Investigation. Richard Dunham, AMC Search, Australia	
1230	1330	Lunch	
Session 4: Research Meets Reality Session Chair: Professor Margareta Lutzhoft, Australian Maritime College			
1330	1410	Keynote 4: Maritime Research Meets Reality: Research, Assurance and Dissemination. Dr Jonathan Earthy, Lloyds Register	
1410	1435	Balancing on the Boundary: Vessel Traffic Services in the Maritime Traffic System. Joakim Trygg Mansson, Australian Maritime College, Australia	
1435	1500	Development of usability checklist for ECDIS. Hongtae Kim, Korea Research Institute of Ships & Ocean Engineering, Korea	
1500	1530	Afternoon tea	
1530	1625	Panel discussion 2: Shipping of the future: where is the human element? Research/Industry Panel: Erik Styhr Petersen (Wärtsilä Lyngsø Marine A/S, Denmark), Nick Lemon (Australian Maritime Safety Authority), David Patraiko (The Nautical Institute) Moderator: Jonathan Earthy, Lloyds Register	
1625	1635	Closing address - Stephen Curry, Australian Maritime Safety Authority	

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