INCONTINENCE: THE ENGINEERING CHALLENGE XI



Institution of MECHANICAL ENGINEERS

Biomedical Engineering Association **Conference**

28–29 November 2017One Birdcage Walk, London

KEY SPEAKERS INCLUDE:

Doug Tincello, Professor of Urogynaecology University of Leicester

Mandy Fader, Professor of Continence Technology University of Southampton

Peter Curran, Chief Technology Officer Simavita

Christophe Bauduin, Head of Product Development Europe **BASF SE**

Andrew Gammie, Clinical Engineer **Bristol Urological Institute**

Jennifer Southgate, Director, Jack Birch Unit, Department of Biology University of York



SUPPORTING ORGANISATION:

EVENT PARTNERS:





Enteric Healthcare Technology Co-operative



INCONTINENCE: THE ENGINEERING CHALLENGE XI

28-29 November 2017, One Birdcage Walk in London

THE 11_{TH} EDITION OF THE INSTITUTION OF MECHANICAL ENGINEERS' CONFERENCE, INCONTINENCE: THE ENGINEERING CHALLENGE, TAKES PLACE ON 28–29 NOVEMBER 2017 AT ONE BIRDCAGE WALK IN LONDON.

This two-day conference features a unique mix of sessions on the latest engineering challenges, solutions, technologies and research managing the problem of incontinence. Delegates can also take advantage of nine interactive sessions aimed at stimulating discussion and sharing ideas, including roundtable and O&A sessions.

Both newcomers and returning attendees will appreciate the great combination of learning opportunities and networking offered at this event. This conference programme has been carefully designed to provide delegates with the richest and most informative experience possible.

KEY PROGRAMME HIGHLIGHTS:

- Find out more about how incontinence affects other countries, from authors including Queen's University Belfast, The Bristol Urological Institute and Innoventions Ltd
- Gain insights into capturing and passing on product user experience, from authors including University of Southampton and University College London
- Learn about the challenge of urinary catheters, from authors including University of Brighton, King's College London and CliniMed Ltd
- Hear the challenges associated with measuring and analysis of the condition, from authors including Simavita, London South Bank University and the University of the West of England
- Understand how bowel concerns come into play, from authors including Enteric, Cornwall Foundation Trust and the University of Leeds

ATTEND THIS EVENT TO:

- Find out about the latest engineering research, developments and technologies in incontinence from key players including University of Leicester, University of Southampton, BASF SE, University College London and Parkinson's UK
- Gain key insights on incontinence challenges across the globe and how they are being managed
- Learn about the users' experience and how to incorporate it into your solutions
- Share your ideas during interactive sessions including roundtables and panel discussions
- Network and discuss with academics, health professionals, patients and solutions providers

NAME OF COMMITTEE:

Biomedical Engineering Association

Institution of Mechanical Engineers

MEMBER CREDITS:

Alan Cottenden, Professor of Incontinence Technology

University College London

Doug Tincello, Professor of Urogynaecology **University of Leicester**

Mandy Fader, Professor of Continence Technology

University of Southampton

Nicola Heron, Programme Director Devices for Dignity (D4D) Healthcare Technology Cooperative

Peter Culmer, Associate Professor, Incontinence Management and Prevention through Engineering and Sciences (IMPRESS) Network University of Leeds

Nicola Irwin, Lecturer in Pharmaceutical Materials Science

Queen's University Belfast

Lesley Orme, New Product Development Manager

CliniMed Ltd

Margaret Macaulay, Research Nurse **University College London**

PROGRAMME

DAY 1	TUESDAY, 28 NOVEMBER 2017		
08:45	REGISTRATION AND REFRESHMENTS		
09:15	WELCOME AND INTRODUCTION CHAIR: Alan Cottenden, Professor of Incontinence Technology, University College London		
	KEYNOTES I		
09:30	THE CAUSES OF INCONTINENCE: HOW DOES THE LOWER URINARY TRACT WORK AND WHAT CAN GO WRONG? Doug Tincello, Professor of Urogynaecology, University of Leicester		
09:55	MY BLADDER AND BOWEL OWN MY LIFE: A CROSS-CHARITY COLLABORATION ADDRESSING UNMET NEEDS IN CONTINENCE RESEARCH Anna-Louise Smith, Research Support Network Coordinator, Parkinson's UK		
10:20	THE ACOUSTIC BUBBLE: INFECTION PREVENTION Tim Leighton, Professor of Ultrasonics and Underwater Acoustics, University of Southampton		
10:45	RESEARCH POSTER FLASH-PRESENTATIONS I CHAIRS: Nicola Irwin, Lecturer in Pharmaceutical Materials Science, Queen's University Belfast Peter Culmer, Associate Professor, Incontinence Management and Prevention through Engineering and Sciences (IMPRESS) Network, University of Leeds		
	Delegates have the chance to listen to short, three-minute presentations from poster authors in order to get a taste of their research and know who to talk to during the networking breaks.		
11:15	NETWORKING REFRESHMENT BREAK		
11:45 PANEL	PERSONAL LIFE EXPERIENCE OF PRODUCT USERS CHAIR: Margaret Macaulay, Research Nurse, University College London		
DISCUSSION	A panel of men and women who live with incontinence will share their experiences and describe their unmet needs in order to provide attendees with the patient's perspective and inspire future research and technological developments.		
12:45	NETWORKING LUNCH		
	INCONTINENCE CHALLENGES ACROSS THE GLOBE CHAIR: Doug Tincello, Professor of Urogynaecology, University of Leicester		
13:45	ACCESS TO URINARY CONTINENCE MANAGEMENT PRODUCTS IN DEVELOPING COUNTRIES: WHAT ARE THE BARRIERS? David Constantine, Founder Director, Motivation		
14:05	DESIGNING FOR URODYNAMIC MEASUREMENTS IN LOW RESOURCE SETTINGS Authors: A. Gammie, Bristol Urological Institute; M. Drinnan, Freeman Hospital; D. Small, NHS Greater Glasgow and Clyde		
14:15	INVESTIGATING THE BURDEN OF URINARY INFECTIONS IN LOW AND MIDDLE-INCOME COUNTRIES: LESSONS LEARNED Authors: N.J. Irwin, Queen's University Belfast; C.P. McCoy, Queen's University Belfast; C. Olympiou, Queen's University Belfast; Y. Liu, Fourth Affiliated Hospital of China Medical University; N. Li, Fourth Affiliated Hospital of China Medical University; X. Zhang, Fourth Affiliated Hospital of China Medical University		
14:25	OBSTETRIC FISTULAE IN DEVELOPING COUNTRIES: IF YOU CANNOT TREAT ALL, PALLIATE THEM Daniel Yachia, Chief Medical Officer, Innoventions Ltd		
14:35	QUESTION AND ANSWER SESSION FOR "INCONTINENCE CHALLENGES ACROSS THE GLOBE" PROGRAMME SECTION		
14:45	RESEARCH POSTER FLASH-PRESENTATIONS II CHAIRS: Nicola Irwin, Lecturer in Pharmaceutical Materials Science, Queen's University Belfast Peter Culmer, Associate Professor, Incontinence Management and Prevention through Engineering and Sciences (IMPRESS) Network, University of Leeds		
	Delegates have the chance to listen to short, three-minute presentations from poster authors in order to get a taste of their research and know who to talk to during the networking breaks.		
15:15	NETWORKING REFRESHMENT BREAK		
	CAPTURING AND PASSING ON PRODUCT USER EXPERIENCE CHAIR: Mandy Fader, Professor of Continence Technology, University of Southampton		
15:45	EVALUATION OF A NEW WEBSITE FOR MEN MANAGING INCONTINENCE ASSOCIATED WITH PROSTATE CANCER TREATMENT Margaret Macaulay, Research Nurse, University College London		
15:55	UNDERSTANDING MEN'S EXPERIENCE OF URINARY INCONTINENCE POST-PROSTATECTOMY Authors: K. H. Lennie, University of Southampton; B. Clancy, University of Southampton; I. Okamoto, University of Southampton; J. Westbury, University of Southampton; M. Fader, University of Southampton		
16:05	DEVELOPMENT AND EVALUATION OF A CONTINENCE PRODUCT DECISION AID FOR PATIENTS, CARERS AND CLINICIANS Authors: C. Murphy, University of Southampton; C. de Laine, University of Southampton; L. Collings-Wells, University of Southampton; M. Macaulay, University College London; M. Fader, University of Southampton		
16:15	QUESTION AND ANSWER SESSION FOR "CAPTURING AND PASSING ON PRODUCT USER EXPERIENCE" PROGRAMME SECTION		

PROGRAMME

	CONTINENCE PRODUCTS ROUNDTABLES: SEARCHING FOR THE HOLY GRAIL	
16:25 ROUNDTABLES	INTRODUCTION TO ROUNDTABLES SESSION Katherine Jeays-Ward, Project Manager, Devices for Dignity (D4D), Sheffield Teaching Hospitals NHS Foundation Trust Avril McCarthy, MedTech Lead, NIHR Devices for Dignity (D4D)	
16:35 ROUNDTABLES	BREAKING INTO GROUPS AND ROUNDTABLE DISCUSSIONS CHAIRS: Katherine Jeays-Ward, Project Manager, Devices for Dignity (D4D), Sheffield Teaching Hospitals NHS Foundation Trust Avril McCarthy, MedTech Lead, NIHR Devices for Dignity (D4D) Nicola Heron, Programme Director, Devices for Dignity (D4D) Healthcare Technology Cooperative	
	This session offers a unique opportunity to engage in the conversation by participating in group discussions with other delegates.	
17:45	DRINKS RECEPTION AND RESEARCH POSTERS CHAIRS: Nicola Irwin, Lecturer in Pharmaceutical Materials Science, Queen's University Belfast Peter Culmer, Associate Professor, Incontinence Management and Prevention through Engineering and Sciences (IMPRESS) Network, University of Leeds	
19:15	END OF DAY ONE	

DAY 2	WEDNESDAY, 29 NOVEMBER 2017		
08:30	REGISTRATION AND REFRESHMENTS		
09:00	WELCOME AND INTRODUCTION CHAIR: Alan Cottenden, Professor of Incontinence Technology, University College London		
	KEYNOTES II		
09:05	THE 6TH INTERNATIONAL CONSULTATION ON INCONTINENCE: WHAT'S THE LATEST EVIDENCE ON CONTINENCE PRODUCTS? Mandy Fader, Professor of Continence Technology, University of Southampton		
09:30	ARE REGULATIONS STOPPING THE FLOW? REGULATORY CHALLENGES TO INNOVATION Andrew Pacey, Director, Advotek Medical Devices Ltd		
09:55	MESHING TOGETHER A SOLUTION: THE ROLE OF FIBRE ENGINEERING IN INCONTINENCE Holly Morris, Clinical Teaching Fellow and Postgraduate Masters Student in Materials Engineering, Centre for Materials Science and Technology, University of Otago and Centre for Medicine, University of Leicester		
10:20	CONTINENCE PRODUCTS ROUNDTABLES: SEARCHING FOR THE HOLY GRAIL: FEEDBACK Nicola Heron, Programme Director, Devices for Dignity (D4D) Healthcare Technology Cooperative		
10:30	PRIZE GIVING FOR RESEARCH POSTERS CHAIRS: Nicola Irwin, Lecturer in Pharmaceutical Materials Science, Queen's University Belfast Peter Culmer, Associate Professor, Incontinence Management and Prevention through Engineering and Sciences (IMPRESS) Network, University of Leeds		
10:40	NETWORKING REFRESHMENT BREAK		
	THE CHALLENGE OF URINARY CATHETERS CHAIR: Lesley Orme, New Product Development Manager, CliniMed Ltd		
11:05	CONTROL OF CATHETER ASSOCIATED BIOFILMS THROUGH EFFLUX INHIBITION Authors: B.V. Jones, University of Brighton; J.N. Nzakizwanayo, University of Brighton; B.A. Patel, University of Brighton; L. Barnes, University of Brighton; M.R. Khondaker, King's College London; M. Wand, Public Health England; M. Sutton, Public Health England		
11:15	AN ANTIMICROBIAL URINARY CATHETER WITH LONG-TERM PROTECTIVE ACTIVITY Authors: R. Bayston, University of Nottingham; K. Belfield, University of Nottingham; L. Fisher, Cardiff Metropolitan University; R. Parkinson, Urology Centre, Nottingham University Hospitals NHS Trust		
11:25	A BREAKTHROUGH IN CATHETER CARE: FROM UNIVERSITY RESEARCH TO MARKET IN JUST 46 YEARS: A NEED FOR EARLY COLLABORATION Jane Graham, New Product Development Specialist, CliniMed Ltd		
11:35	ELIMINATING CATHETER ASSOCIATED URINARY TRACT INFECTIONS (CAUTI'S) Authors: D. Seaward, 3P Innovation Ltd; W. Skinner, 3P Innovation Ltd		

For the most up-to-date and detailed programme for the event, please visit: www.imeche.org/incontinence

[•] This programme is subject to change.

[•] The Institution is not responsible for the views or opinions expressed by individual speakers

11:45	QUESTION AND ANSWER SESSION FOR "THE CHALLENGE OF URINARY CATHETERS" PROGRAMME SECTION		
	BASIC SCIENCE WITH CLINICAL PROMISE CHAIR: Doug Tincello, Professor of Urogynaecology, University of Leicester		
11:55	A NEW REGENERATIVE MEDICINE APPROACH FOR URINARY		
	INCONTINENCE? Authors: J. Pearson, University of York; A. Radford, University of York; A. Ali, Pinderfields Hospital, Mid Yorkshire NHS Trust; S. Baker, University of York; J. Southgate, University of York		
12:20	NEUROMODULATION APPROACHES TO CONTROLLING URINARY		
	CONTINENCE Authors: T. Lovick, University of Bristol; J. Crook, University of Bristol; C. Brouillard, University of Bristol		
12:45	NETWORKING LUNCH		
	MEASUREMENT AND ANALYSIS OF THE CONDITION CHAIR: Peter Culmer, Associate Professor, Incontinence Management and Prevention through Engineering and Sciences (IMPRESS) Network, University of Leeds		
13:35	NON-INVASIVE PARAMETER FOR ASSESSING URINE FLOW RATE IN FREQUENCY DOMAIN TO DIFFERENTIATE DETRUSOR UNDERACTIVITY WITH BLADDER OUTLET OBSTRUCTION IN MALES Authors: R. Li, University of the West of England; A. Gammie, The Bristol Urological Institute; Q. Zhu, University of the West of England; M. Nibouche, University of the West of England		
13:45	CAPACITIVE CONTACT IMAGING FOR IN-VIVO SKIN CHARACTERISATION Authors: X. Zhang, London South Bank University; C. Bontozoglou, London South Bank University; P. Xiao, London South Bank University		
13:55	EVERYDAY MONITORING OF INCONTINENCE PRODUCTS: A NEW, DISRUPTIVE TECHNOLOGY Peter Curran, Chief Technology Officer, Simavita		
14:05	WOMEN-UP: INNOVATIVE HEALTH TECHNOLOGY FOR URINARY		
	INCONTINENCE Authors: J. F. Alonso, Technical University of Catalunya (UPC); S. Angles, Hospital Clínic Barcelona; J. Ramos, Technical University of Catalunya (UPC); M. A. Mañanas, Technical University of Catalunya (UPC); M. Espuña, Hospital Clínic Barcelona On Behalf of The WOMEN-UP Consortium		
14:15	QUESTION AND ANSWER SESSION FOR "MEASUREMENT AND ANALYSIS OF THE CONDITION" PROGRAMME SECTION		
	INSIGHTS INTO ABSORBENT PRODUCTS CHAIR: Mandy Fader, Professor of Continence Technology, University of Southampton		
14:25	BUILDING A BETTER BOXER Bridget Clancy, Senior Research Nurse, University of Southampton		
14:35	BASF'S HYSORB® SUPERABSORBENTS (SAP) PROVIDE A NEW QUALITY OF LIFE FOR PEOPLE WITH INCONTINENCE Christophe Bauduin, Head of Product Development Europe, BASF SE		
14:45	PROGRESS FOR INCONTINENCE PRODUCT TESTING Edgar Herrmann, Technical Management, Hy-Tec Hygiene Technologie GmbH		
14:55	QUESTION AND ANSWER SESSION FOR "INSIGHTS INTO ABSORBENT PRODUCTS" PROGRAMME SECTION		
	BOWEL CONCERNS CHAIR: Lesley Orme, New Product Development Manager, CliniMed Ltd		
15:05	THE CLINICAL CHALLENGES OF FAECAL INCONTINENCE Russell Pearson, Project Manager, Enteric		
15:15	DOES A PERSON-CENTRED DEVICE MAKE A POSITIVE DIFFERENCE TO WOMEN'S EXPERIENCES OF MANAGING DIGITATION? Sharon Eustice, Nurse Consultant, Bladder and Bowel Specialist Service, Cornwall Foundation Trust		
15:25	A PHYSICAL SIMULATION TO INVESTIGATE THE EFFECT OF ANORECTAL ANGLE AND SPHINCTER PRESSURE ON CONTINENCE Authors: W. Stokes, University of Leeds; D.G. Jayne, NHS Leeds Teaching Hospitals; A. Alazmani, University of Leeds; P. R. Culmer, University of Leeds		
15:35	QUESTION AND ANSWER SESSION FOR "BOWEL CONCERNS" PROGRAMME SECTION		
15:45	NETWORKING REFRESHMENT BREAK		
16:15 PANEL DISCUSSION	WHAT'S THE FUTURE OF INCONTINENCE TECHNOLOGY? CHAIR: Alan Cottenden: Professor of Incontinence Technology, University College London		
16:45	CHAIR'S CLOSING REMARKS Alan Cottenden, Professor of Incontinence Technology, University College London		
16:50	END OF CONFERENCE		

HOW TO BOOK YOUR PLACE

FEES AND CHARGES

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

Fees and charges	Early Bird Rates until 13 October 2017	Standard Rates
Member, Institution of Mechanical Engineers / Supporting Organisation	£320 + VAT = £384	£380 + VAT = £456
Non-member	£445 + VAT = £534	£525 + VAT = £630
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CONFERENCE VENUE

Institution of Mechanical Engineers One Birdcage Walk Westminster London SW1H 9JJ

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