

# ROBOTICS AND AUTOMATION IN MANUFACTURING

Institution of  
**MECHANICAL  
ENGINEERS**

**SAVE 10%**  
OFFER ENDS  
12 OCTOBER 2018

Food and Drink Engineering Committee,  
Process Industries Division  
Mechatronics, Informatics and Control Group  
Manufacturing Industries Division  
**Seminar**

**20 November 2018**  
DoubleTree by Hilton Hotel, Coventry

## KEY SPEAKERS INCLUDE:

Andrew Selim, Projects Manager  
**Ocado Engineering**

Nick Hall, HM Principal Specialist Inspector (Machinery  
Control)  
**Health and Safety Executive**

Colin Mitchell, Head of Manufacturing Research  
**Airbus**

Jeremy Hadall, Chief Engineer, Intelligent Automation  
**The Manufacturing Technology Centre**



BOOK YOUR PLACE TODAY [www.imeche.org/roboticsautomation](http://www.imeche.org/roboticsautomation)

## SUPPORTING ORGANISATIONS:



## EVENT PARTNERS:



# ROBOTICS AND AUTOMATION IN MANUFACTURING

20 November 2018, DoubleTree by Hilton Hotel, Coventry

## A RECENT BARCLAYS STUDY FOUND THAT AN INCREASE IN AUTOMATION COULD RAISE THE VALUE ADDED BY THE MANUFACTURING SECTOR TO THE UK ECONOMY BY £60.5 BILLION OVER A DECADE.

This seminar will help you to make the most of developments in robotics to improve efficiency in your production lines. Hear lessons learnt in robotic adoption from pioneering organisations in the aerospace, food and drink and fast-moving consumer goods sectors. Gain insight into state-of-the-art robotic technologies including cobots and tools to manufacture a high number of variable stock-keeping units.

Discuss the UK's journey with robotics with plant and site engineering managers, robotics specialists, designers and manufacturers.

### KEY PROGRAMME HIGHLIGHTS:

- **Health and Safety Executive** discuss standards development in human/robot collaboration
- **Ocado Engineering** share their journey to fully-automated warehouses
- **British Automation and Robot Association** explore the benefits and challenges of using cobots
- **Airbus** highlights the urgency for automation in aerospace in their current practices
- **AMRC** discuss their work on pushing productivity boundaries through reconfigurable manufacturing

### ATTEND THIS SEMINAR TO:

- Hear insights from leading organisations in robotics use including **Ocado Engineering, Airbus, The Manufacturing Technology Centre, OAL, BARA and Siemens**
- Learn about the **latest developments in collaborative and reconfigurable robotic technology** to take back to your organisation
- **Hear best practice in delivering ROI and efficiency** through the use of robotics on your production lines
- Ensure you **adhere to current standards regarding human and robot collaboration**
- **Meet and discuss with robotics and automation experts** from academia, aerospace, food and drink and fast-moving consumer goods sectors

### ORGANISING COMMITTEE:

Food and Drink Engineering Committee,  
Process Industries Division  
Mechatronics, Informatics and Control Group  
Manufacturing Industries Division  
**Institution of Mechanical Engineers**

### MEMBERS CREDITS:

Keith Thornhill, Head of Food and Beverage  
**Siemens**

Jian S Dai, Chair of Mechanisms and Robotics,  
Centre for Robotics Research  
**King's College London**

Yan Jin, Reader, Robotics and Intelligent  
Manufacturing, School of Mechanical & Aerospace  
Engineering  
**Queen's University Belfast**

Sam Turner, Chief Technology Officer  
**HVM Catapult**

Duc Truong Pham,  
Department of Mechanical Engineering  
**University of Birmingham**

**BOOK YOUR PLACE TODAY**

[WWW.IMECHE.ORG/ROBOTICSAUTOMATION](http://WWW.IMECHE.ORG/ROBOTICSAUTOMATION)

**TERMS AND  
CONDITIONS  
APPLY**

# PROGRAMME

TUESDAY, 20 NOVEMBER 2018	
08:30	REGISTRATION AND REFRESHMENTS
09:00	<b>MORNING CHAIR'S OPENING REMARKS</b> Keith Thornhill, Head of Food and Beverage, Siemens plc
	<b>STATUS AND STANDARDS OF ROBOTICS AND AUTOMATION</b>
09:10 Keynote	<b>FUTURE OF MANUFACTURING: INTELLIGENT AUTOMATION</b> Jeremy Hadall, Chief Engineer, Intelligent Automation, The Manufacturing Technology Centre
09:40	<b>HUMAN/ROBOT COLLABORATION: STANDARDS DEVELOPMENT AND REGULATORY PERSPECTIVE</b> Nick Hall, HM Principal Specialist Inspector (Machinery Control), Health and Safety Executive
	<b>DELIVERING ROI AND EFFICIENCY THROUGH ROBOT USE</b>
10:05	<b>THE IMPORTANCE AND URGENCY FOR AUTOMATION IN AEROSPACE</b> Colin Mitchell, Head of Manufacturing Research, Airbus Mark Howard, Head of R&T Business Development and Partnerships UK, Airbus Group
10:30	<b>QUESTION AND ANSWER SESSION</b>
10:45	SPEED NETWORKING AND REFRESHMENT BREAK
11:25	<b>THE CHALLENGES OF BIG AUTOMATION</b> Andrew Selim, Projects Manager, Ocado Engineering
11:50	<b>FIXING MANUAL INGREDIENT PREPARATION WITH ROBOTICS</b> Jake Norman, Innovation and Marketing Manager, OAL
	<b>COBOTS: DEVELOPMENTS AND CHALLENGES</b>
12:15	<b>COLLABORATIVE ROBOTS: DRIVING EFFICIENCY IN MANUFACTURING</b> Simon Jarvis, Head of Operations, Active8 Robots
12:40	<b>QUESTION AND ANSWER SESSION</b>
12:55	NETWORKING LUNCH
	<b>AFTERNOON CHAIR'S OPENING REMARKS</b> Jeremy Hadall, Chief Engineer, Intelligent Automation, The Manufacturing Technology Centre
13:55	<b>COBOTS: THE ANSWER TO THE UK'S PRODUCTIVITY PUZZLE</b> Mike Wilson, Chairman, British Automation and Robot Association
	<b>DEVELOPMENTS IN ROBOTICS AND RECONFIGURABLE ROBOTICS</b>
14:20	<b>RECONFIGURABLE MANUFACTURING FOR AEROSPACE APPLICATIONS</b> Ben Morgan, Head of the Integrated Manufacturing Group/Factory 2050, AMRC
14:45	<b>GETTING AUTOMATED SOLUTIONS DESIGNED AND INTEGRATED RIGHT FIRST TIME - LINKING THE REAL TO THE VIRTUAL</b> Dan Smalley, Product Manager SCADA, Siemens
15:10	<b>QUESTION AND ANSWER SESSION</b>
15:25	NETWORKING REFRESHMENT BREAK
15:55	<b>ERROR PROPAGATION MANAGEMENT FOR NEXT GENERATION MANUFACTURING SYSTEMS</b> Jian S Dai, Chair of Mechanisms and Robotics, Centre for Robotics Research, King's College London Yan Jin, Reader, Robotics and Intelligent Manufacturing, School of Mechanical and Aerospace Engineering, Queen's University Belfast
16:20	<b>QUESTION AND ANSWER SESSION</b>
16:25 Panel Discussion	<b>MANUFACTURING FOR THE FUTURE</b> Mike Wilson, Chairman, British Automation and Robot Association Yan Jin, Reader, Robotics and Intelligent Manufacturing, School of Mechanical and Aerospace Engineering, Queen's University Belfast Ben Morgan, Head of the Integrated Manufacturing Group/Factory 2050, AMRC <ul style="list-style-type: none"> <li>• How do you decide where to start on the path towards fully-automated production?</li> <li>• How can we ensure robotics are fast enough to meet manufacturing needs and still be safe for humans to work alongside them?</li> <li>• How can we ensure that the programming of reconfigurable robots is synchronised across different departments?</li> </ul>
17:10	<b>CHAIR'S CLOSING REMARKS</b>
17:15	END OF SEMINAR

For the most up-to-date and detailed programme for the event, please visit [www.imeche.org/roboticsautomation](http://www.imeche.org/roboticsautomation)

- This programme is subject to change.
- The Institution is not responsible for the views or opinions expressed by individual speakers.



## HOW TO BOOK YOUR PLACE

### FEES AND CHARGES

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

Seminar	Early Bird Rate Until 12 October 2018	Standard Rate
Member, Institution of Mechanical Engineers / Supporting Organisation	£250 + VAT = £300	£280 + VAT = £336
Non-member	£315 + VAT = £378	£350 + VAT = £420
Student/Retired	£100 + VAT = £120	£120 + VAT = £144

Group booking discounts are available. Contact us for more information.

### THREE WAYS TO BOOK

- 1 Online:  
**[www.imeche.org/roboticsautomation](http://www.imeche.org/roboticsautomation)**
- 2 Email:  
**[eventenquiries@imeche.org](mailto:eventenquiries@imeche.org)**
- 3 Phone:  
**+44 (0)20 7973 1251**

Please read the information listed below as each booking is subject to the Institution's standard terms and conditions.

#### CONDITIONS OF BOOKING

Completed application forms should be returned to the address above, along with the correct payment. Attendance at the event will be confirmed on receipt of the full balance. All participants are advised to bring a copy of their confirmation with them on the day, to ensure the fastest possible entry.

#### SPECIAL REQUIREMENTS

Please inform us of any special requirements, ie dietary or access, on the relevant section of this form.

#### CANCELLATION

For a refund (minus £25+VAT admin charge), cancellations must be received at least 30 days prior to the event. Replacement delegates are welcome at any time. The Institution reserves the right to cancel any event. In this case, the full fee will be refunded unless a mutually convenient transfer can be arranged. In the event that the Institution postpones an event for any reason and the delegate is unable or unwilling to attend on the rescheduled date, they will receive a full refund of the fee paid. The Institution is not

responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. The Institution shall assume no liability whatsoever if this event is cancelled, rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrence or any other event that renders performance of this conference impracticable, illegal or impossible. For the purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency.

Please note that while speakers and topics were confirmed at the time of publishing, circumstances beyond the control of the organisers may necessitate substitutions, alterations or cancellations of the speakers and/or topics. The Institution reserves the right to alter or modify the advertised speakers and/or topics if necessary without any liability to you whatsoever. Any substitutions or alterations will be updated on the event's webpage as soon as possible.

#### LIABILITY

The organisers do not accept liability for any injuries or losses of any nature incurred by delegates and/or accompanying persons, nor for loss or damage to their luggage and/or personal belongings.

#### CONFERENCE VENUE

DoubleTree by Hilton Hotel  
Paradise Way  
Walsgrave Triangle  
Coventry  
CV2 2ST

## SPONSORSHIP & EXHIBITION OPPORTUNITIES

### GET INVOLVED

Attending this event as either an exhibitor or sponsor will give you the opportunity to display your solutions, services and products to the right people at the right time.

### BENEFITS OF SPONSORING

- **Showcase** new products
- **Raise** awareness of your operation
- **Improve** perception of your brand
- **Influence** other organisations' spending plans

This is an excellent way to enhance your company profile and communicate effectively with your target audience.

For more information please call  
**+44 (0)20 7304 6853**  
or email **[d\\_anglin@imeche.org](mailto:d_anglin@imeche.org)**

**PE**  
DOWNLOAD  
THE PE APP

Access  
the latest  
engineering  
news

**[www.imeche.org/peapp](http://www.imeche.org/peapp)**



**Institution of  
MECHANICAL  
ENGINEERS**

The Institution of Mechanical Engineers  
is a registered charity (no 206882)  
VAT No GB299930493.

1 Birdcage Walk  
Westminster  
London  
SW1H 9JJ

T +44 (0)20 7222 7899  
**[www.imeche.org](http://www.imeche.org)**

# FORWARD THINKING

We are the market leader among professional engineering bodies. We've been supporting engineers since 1847 and have 120,000 members in over 140 countries, working in the world's most dynamic and important industries. Our comprehensive events programme brings you the latest research and best practice from industry and academia.

### OTHER EVENTS TO LOOK FOR



### INTERNATIONAL EV BATTERIES 2018: COST-EFFECTIVE ENGINEERING FOR HYBRID AND ELECTRIC VEHICLES

**6-7 November 2018, London**

Benefit from this unique opportunity to hear from mechanical engineers on how they are cost-effectively increasing vehicle range, enhancing performance and improving battery durability.

**[www.imeche.org/evbatteries](http://www.imeche.org/evbatteries)**



### ROBOTICS FOR HAZARDOUS ENVIRONMENTS

**20 November 2018, Coventry**

Gain insight into designing for locomotion, innovations in grasping, sensing and manipulating objects, and the role of AI and autonomy in a robotic future.

**[www.imeche.org/robotics](http://www.imeche.org/robotics)**

The Institution of Mechanical Engineers organises over 120 events a year, including free-to-attend lectures as well as conferences, seminars, annual luncheons and dinners. Please visit [www.imeche.org/events](http://www.imeche.org/events) for the complete list of events.

**Follow us on Twitter**

 **[twitter.com/imecheevents](https://twitter.com/imecheevents)**