

Wearable Smart Sensors and Technologies

Conference with Posters and Exhibition

Programme

**Organised by the Automation and Analytical Management Group
Royal Society of Chemistry**

**A one day meeting on
Tuesday 21st June 2016**

**At The Royal Society of Chemistry,
Burlington House,
Piccadilly, London W1J 0BA**

**Email: conference@aamg-rsc.org
Website: <http://www.aamg-rsc.org>**

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Introduction

This is the eighth annual AAMG Conference concerning monitoring and analysis using sensor technologies. The conference will examine the design and application of materials and development of wearable smart sensors and technologies for monitoring medical, biological and other related processes. Sessions will feature presentations by invited speakers supplemented by presentations selected from submitted abstracts on a variety of topics in the following areas:

- Key enabling technologies and monitoring systems for wearable sensors.
- Electrochemical and optical (colour changing) sensors for smart dressings.
- Sensors and materials for medical and biochemical health monitoring.
- Informatics in sensing applications – communication and data analysis.

The conference will be supplemented with poster presentations and exhibition.

Programme

09:00 - 09:30 Registration and coffee

Session 1 Technologies and Applications

Chair: **To be Confirmed**

09:30 Novel Wearable Sensor Technologies - An Overview
Daniel Roggen
Sussex University, UK

10:00 Photonic Textiles for Healthcare
Stephen Morgan
University of Nottingham, UK

10:30 Carbon-based Electroanalytical Sensors for *in-situ* Wound Analysis
Duncan Sharp
Leeds Beckett University, UK

11:00 - 11:20 Tea and Coffee

11:20 Soft and Stretchable Electronics for Unobtrusive Wearable and Implantable Sensor Systems
Niko Münzenrieder
University of Sussex, UK

- 11:40 Electric Potential Sensors:
Novel Biosensors for Cardio-Electrophysiology in Embryos
Elizabeth Rendon-Morales
University of Sussex, UK
- 12:00 Human Skin Volatile Profiling for Point-of-Care Applications
Emer Duffy
Dublin City University, UK
- 12:20 Application of Tetrapolar Microelectrode Impedance Sensors for the
Detection of Dementia Biomarkers
Desiree Acha
Middlesex University, UK

12:40 - 13:30 Lunch - Exhibition & Poster Session

Session 2 Applications

Chair: **To be Confirmed**

- 13:30 Wearable Smart Sensors for Management of Parkinson's Disease using
Evolutionary Algorithms
Stephen Smith
University of York, UK
- 14:00 Infection Reporting Wound Dressings and Urinary Catheter
Toby Jenkins
University of Bath, UK
- 14:30 Smart Body Interface Sensor Systems for Prosthetics
Liudi Jiang
Southampton University, UK
- 15:00 Wearable Biomonitoring Systems
Ahmad Al-Shamma'a
Liverpool John Moores University, UK

15:30 - 15:50 Tea / Coffee

- 15:50 A Portable Biosensor System for Real-Time Monitoring of Transplant Kidneys
between Donor and Recipient Sites
Sally Gowers
Imperial College London, UK
- 16:10 Smart Tattoo for Monitoring Skin Hydration Using AC Impedance
Aoife Morrin
Dublin City University, UK
- 16:30 Exhibitors Presentations
- 16:50 Concluding Remarks and End of Conference**

How To Register

Please visit our website at: www.aamg-rsc.org for easy on-line registration. Early registration is requested due to limited number of delegate places and catering requirements.

| | | |
|---------------------------|--------------------------|------|
| Registration Fees: | Non Members | £140 |
| | RSC & Affiliated Members | £ 95 |
| | Students Researchers | £ 60 |

The registration fee includes attendance at the meeting together with coffee, lunch and afternoon tea/coffee.

Payment of registration fees:

- On-line via Eventbrite by Debit/Credit card when you make your on-line registration
- Offline payment via Eventbrite by BACS/Invoice (international payments will incur extra banking charges via this method)

Venue

The Royal Society of Chemistry
Burlington House,
Piccadilly
London W1J 0BA

Maps and details will be provided upon registration

Registration Contact

Conference Secretary Email: conference@aamg-rsc.org

AAMG Treasurer

Dr R Narayanaswamy
Tel +44 (0) 7974 515265

Notes

- 1) Fees are not normally refundable but are transferable. If for any reason the organisers should cancel the conference then fees will be refunded.
- 2) The registration fee includes attendance at the meeting together with coffee, lunch and afternoon tea/coffee, as appropriate.
- 3) The organisers reserve the right to alter the programme.

Data Protection Act. The information on this form will be retained (1) for the purpose of administering this meeting, in particular for producing a list of participants for distribution at the meeting, and (2) in order that information on future meetings can be sent to you. Please write to the meeting contact if you object.