

# **Pulse Oximetry Accuracy, Patient Safety and Clinical Risk Seminar 12<sup>th</sup> March 2014**

**Venue: Coventry TechnoCentre Conference Centre  
Puma Way  
Coventry  
CV1 2TW**



**Local Organiser: Dr. D.McG.Clarkson,  
Department of Clinical Physics and Bioengineering,  
University Hospital Coventry and Warwickshire NHS Trust  
Coventry**

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**The aim of the day is to:-**

- **Understand pulse oximetry and sources of inaccuracy**
- **Gain an appreciation of expectations of pulse oximetry**
- **Understand the risks posed by inaccurate pulse oximeter sensors.**
- **Review a practical approach to quality assurance of sensors**

**Developing topics forum in poster presentations to include:-**

- **Closed loop ventilator control using Pulse Oximetry**
- **A separate standard for testing of pulse oximeters using spectral analysis techniques**
- **Initial findings of audits of pulse oximeter probes in Critical Care units**
- **Update on general hospital based surveys of pulse oximeter probe accuracy**

## Provisional Programme

### Pulse Oximetry Accuracy, Patient Safety and Clinical Risk Seminar 12th March 2014

Time	Activity
09.00 - 09.30	Registration and Refreshments
09.30 - 10.00	Pulse Oximeter Sensor Accuracy Dr. GR. Mathews, The Electrode Company.
10.00 - 10.25	Clinical Role of Pulse Oximeters Dr. V. Hickson, The Electrode Company.
10.25 - 10.45	Origins of Pulse Oximetry Dr. GR. Mathews, The Electrode Company.
10.45 - 11.05	Refreshments
11.05 - 11.30	Light generation/detection in the context of pulse oximetry function Dr. D.McG.Clarkson, University Hospital, Coventry.
11.30 - 11.55	Validation of Pulse Oximeter Function Dr. V. Hickson, The Electrode Company.
11.55 -12.20	Determining the Accuracy of SpO <sub>2</sub> Values: Simulators, Functional Testers and Calibrators. Dr. D.McG.Clarkson, University Hospital, Coventry.
12.20 -12.35	Discussion
12.35 - 14.00	Lunch
14.00 - 14:25	How accurate are pulse oximeters? Dr. Q. Milner, Consultant, Department of Anaesthesia, Royal Devon & Exeter Foundation Trust.
14.25 -14.50	Evaluation of Pulse Oximeter Sensor Tester Dr I Hodzovic, Senior Lecturer / Consultant, Anaesthesia, Intensive Care and Pain Medicine, Cardiff University.
14.50 -15.15	Role of Pulse Oximetry in New Born Screening for Cardiac Defects:, Speaker to be confirmed.
15.15 -15.40	A History of Pulse Oximeter Probe Testing Paul Jones, Clinical Engineering Department, Lincoln County Hospital.
15.40 -16.00	Risk/Cost benefits of appropriate pulse oximeter probe testing, Ray Emslie, Biomedical Engineering, Colchester General Hospital
16.00 -16.30	Refreshments and Discussion
16.30	Close of Meeting

**PULSE OXIMETRY**  
**Accuracy, Patient Safety and Clinical Risk Seminar**  
**12<sup>th</sup> March 2014 BOOKING FORM**

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<b>EMAIL ADDRESS:</b>		
<b>Registration Fee (including lunch &amp; refreshments)</b>		<b>£85.00</b>
<b>Early Bird - Fee (including lunch &amp; refreshments) payment received by 31/01/14</b>		<b>£64.00</b>

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**Via email:** [angela.howland@uhcw.nhs.uk](mailto:angela.howland@uhcw.nhs.uk)  
**By Post:** Mrs Angie Howland, Support Secretary  
Clinical Physics & Bioengineering Department  
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**For further information about the course please contact :**  
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