This unique MasterClass programme will be directed by University of Cambridge, academic Adrian C Fisher who is working in the recently established CREATE Campus as part of the Cambridge CARES programme.

The course will be presented by colleagues from leading UK and Singapore academic institutions.

Delegates will receive lectures on fundamental and advanced electrochemical theory.

Participation will be restricted to a maximum of 20 delegates to provide a small group training environment.

Participants will also benefit from the ‘Cambridge Phenomena’ experience. This phrase is used to describe the immense growth of high technology companies that have been formed in the Cambridge area since the 1960s. Over 1,000 companies are sited in the many business and science parks located around the city. Companies range from large multinationals like Microsoft to small spin out companies from the University.

A course fee of $450 will be payable for each delegate in advance. This will cover costs of the academic programme. Delegates will be responsible for arranging their own accommodation, travel and Lunch/Dinner.
Advanced Electrochemical Analysis

Expert Training and Hands on Experience The objective of the course is to provide advanced lectures, seminars and hands on experiments for scientists who use or wish to use electrochemical methods for their research or industrial applications. A strong emphasis of the course will be on using small group teaching methods, supported by Cambridge University academics, to train participants in the use of ‘state-of-the-art’ electrochemical techniques.

Key Advanced Skills Training

The Masterclass will cover the key principles and governing processes that can control analysis and sensing electrochemically.

The programme will structured with 3 keynote lectures in the morning session:

- Introduction to the fundamentals of electrochemistry and the key concepts around analysis
- Advanced electrochemical analysis, including ISEs and voltammetric techniques
- Advanced fabrication for electrochemical reactor and sensor design

The afternoon session will allow delegates to gain first hand experience in operating the latest electrochemical analysis equipment and software. Working in small groups, the delegates with the help of an experienced demonstrator, will carry out experimental measurements to support and enhance the material covered within the morning lectures.

Once the practical components are complete an optional evening lecture will be offered to delegates focused on the influence of biological films on electrode processes.

‘The Advanced Electrochemical Analysis course using University of Cambridge teaching methods, offers a unique opportunity to explore and take control of your own professional development’
MasterClass Programme

Date: Thursday 7th July
Location: CREATE Tower
Time: 09:30 – 17:30

Registration & Welcome

LECTURE 1
Introduction to Electrochemistry

Discussion Break

LECTURE 2
Advanced Electrochemical Analysis Techniques

Discussion Break

LECTURE 3
Hydrodynamic Methods in Electrochemistry

Discussion Break

LUNCH

ADVANCED LABORATORY 1
Getting to know the Software and Hardware

Discussion Break

ADVANCED LABORATORY 2
Introduction to Voltammetry

Summary & Discussion

CREATE Tower
18:00 – 19:30

OPTIONAL LECTURE
Electrochemical Measurements in Biofilm Environments

Summary & Discussion