



CEA November Lectures



THE UNIVERSITY OF
MELBOURNE

FRIDAY 23 NOVEMBER 2018

8.30 am to 4.00 pm

Chemistry Building

University of Melbourne

The **Chemistry Education Association**, in conjunction with the **University of Melbourne's School of Chemistry** presents a professional development day for Chemistry teachers. The morning lectures highlight some exciting recent developments and applications of Chemistry. The afternoon workshops are hands-on activities that you can take into your classroom. It is a great day to network with teaching colleagues and to enhance your chemistry knowledge.

Cost: \$160 full or \$100 students/retirees (no GST) includes notes, morning tea and lunch.

Details: www.cea.asn.au

Morning sessions – attended by all

Lecture 1: The versatility of non-metals in materials of the future

Amanda Ellis

Department of Chemical Engineering

University of Melbourne

Lecture 2: Iron and oxygen: a love-hate relationship

Guy Jameson

School of Chemistry and Bio21 Institute

University of Melbourne

Lecture 3:

To be confirmed

Afternoon program - Choose from one of the following hands-on workshops

Workshop 1: Living and Breathing Chemistry:

Terry Mulhern

Department of Biochemistry and Molecular Biology, University of Melbourne

In this workshop I will describe some unifying concepts and approaches that I developed over many years of engaging students and teaching biochemistry to 2nd year undergraduates in both the Bachelor of Science and Bachelor of Biomedicine at the University of Melbourne. The workshop will be interactive (warning: wear comfortable clothing and be prepared to get up and move around). There will be an emphasis of simple (and cheap) practical demonstrations, linking ideas to everyday experience, targeting misconceptions, creating surprise and confusion, 'thinking' with your body; and importantly, having FUN. Maximum 40 participants

Workshop 2: Investigating enzymes and catalysts

Andrew Mariotti and Patricia Jackson

School of Chemistry University of Melbourne

Biodiesel is a cleaner burning alternative to regular (petroleum) Diesel fuel, that can be made from vegetable oils or animal fats and burned without other modifications in Diesel engines. It is easy to make in classrooms and an excellent centrepiece for a discussion of renewable fuels in Unit 3. This session will go through the synthesis and analysis of Biodiesel and provide support materials so that the program can easily form part of a Unit 3 Practical Investigation

Maximum 40 participants

Workshop 3: Creating short tutorial videos to support your teaching

Jason Goudie

Catholic College Sale

This workshop will guide you through the process of creating your own online material that can accompany and support your own current teaching practices. From the complete novice to the technophile sometimes this session will aim highlight some of the tools can help your students get more time to review, practice and consolidate their knowledge through the use of online videos and quizzes.

To get the most out of this practical workshop participants are asked to bring along the computer (Windows or Macintosh) and phone (with charging cable), along with a powerpoint or keynote presentation they use or some example questions they use in regular chalk and talk teaching.

Maximum 40 participants

Workshop 4: Making and manipulating your own molecular animations

Chris Thomson

School of Chemistry, Monash University

Details to be confirmed.

To register, follow [this link](#) to the online [registration form](#)

You will receive an invoice by email once the registration is complete.

Payment may be made by direct deposit or cheque.

For Direct Deposit:

Account name: Chemistry Education Association

BSB: 083230 Account Number: 515611011

Description: Your School Name_Your initials

or post a cheque payable to Chemistry Education Association Inc to:

Mick Moylan, Chemistry Education Association, PO Box 4142, University of Melbourne 3052

For inquiries: mmoylan@unimelb.edu.au or (03) 8344 6465