Applied Catalysis for the Circular Economy II

4 March 2024, Burlington House (RSC), Piccadilly, London, W1J 0BA, UK

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Introduction

Novel processes utilising renewable and sustainable feedstocks, process byproduct re-use/valorisation and polymer recycling are crucial to achieve a truly circular economy. These processes have created the need for new active and stable catalytic technologies that allow transformation of new substrates, also in the presence of impurities. The need for critical metals in catalyst formulations is another aspect that needs to be considered – in particular platinum group metals (PGM) for energy transition technologies.

This 1-day RSC Applied Catalysis Group symposium will bring together academic and industrial speakers to share exciting developments and examples on the relevant role that catalysis plays to achieve sustainability and carbon neutrality in the real world as well as their perspectives on the future of this stimulating field.

Invited Speakers:

Precious Metal Catalysts – closing the loop before it was cool
Dr Detlef Gaiser (Heraeus Precious Metals)

Highly selective electrocatalytic reduction of substituted nitrobenzenes to their aniline derivatives using a polyoxymetalate redox mediator
Prof. Mark Symes (University of Glasgow)

A new mesoporous catalyst carrier for fixed bed applications
Dr Michelle Lynch (Exacer Catalyst)

The catalytic chemical recycling of waste oxygenated plastics
Dr Thom McGuire (University of Oxford)

Hydrogen-free catalytic conversion of waste cooking oils to fuel-range liquid hydrocarbons
Dr Jude Onwudili (University of Aston)

Carbon dioxide reduction with post transition-metal substituted Keggin-type polyoxometalates
Prof Elizabeth Gibson (University of Newcastle Upon Tyne)

Highly active and magnetically recoverable heterogeneous catalyst for hydrothermal liquefaction of biomass into high quality bio-oil
Dr Swathi Mukundan (University of Loughborough)

Biosensors & Biocatalysis for Biorefinery
Prof Neil Dixon, MIB, (University of Manchester)

A biocompatible Roskamp reaction of metabolic aldehydes
Dr Jonathan A. Dennis and Prof. Stephen Wallace (University of Edinburgh)

Programme

The event will include perspective talks from a mix of industrial and academic invited speakers, as well as the opportunity to network and for students/younger members to present posters:

09:30	Poster Setup
10:00	Registration, coffee & poster session
10:45	Presentation session 1
12:15	Buffet lunch, networking & poster session
13:30	Presentation session 2
15:30	Afternoon tea, networking & poster session
16:15	Presentation session 3
17:50	Wine reception

Call for posters

The deadline for poster submissions is 18:00, 28th February 2024. Students are encouraged to submit *via* email a short poster abstract (250 words maximum using the template on the website below to the committee: keith.whiston@kes.global. There are a limited number of poster spaces available.

Registration and Website

Applied Catalysis for the Circular Economy II (rsc.org)

	£ Early bird (until 14th Jan)	£ Standard (after 14th Jan)
RSC member	110	140
Non-member	135	155
Students (RSC member)	35	60
Students (non-member)	45	80

Cancellation Deadline: 21st January 2024

Bursaries

We are pleased to offer free registration for the first 5 students who are accepted to present a poster (first-come, first-served).

Exhibition Opportunities and Sponsorship

We rely on the generosity of our sponsors in order to keep registration costs as low as possible! There will also be a small exhibition of relevant trade stands. Please contact us (michelle.lynch@enabledfuture.com; keith.whiston@googlemail.com) for details of further sponsorship / exhibition opportunities.

About the ACG

This event is organized by the RSC Applied Catalysis Group (ACG). The Applied Catalysis Group aims to promote all fields of catalysis through a range of activities including seminars, conferences and other professional activities related to chemical catalysis.

Organizing Committee Keith Whiston *(KTS));* Michelle Lynch (Enabled Future); James Paterson (BP); Sam Williamson (Astra Zeneca)