

Invitation

Gold is a lustrous metal of great beauty that has inspired great works of art that have lasted unchanged for thousands of years. This immutable, most noble of metals has principally been prized for its stability and many applications have been based on these properties. However, we have recently realised that gold, when divided to form particles at the nanoscale, can take on new properties; these interesting properties have driven a new "goldrush" which is creating new opportunities in nanotechnology and nanoscience research.

At the heart of this renewed interest in gold is catalysis. Gold is now an element of major significance in both heterogeneous and homogeneous catalysis displaying exceptional activity for reactions ranging from redox chemistry to carbon-carbon bond formation. Often this catalysis occurs under much milder reaction conditions than that required by other catalysts. The origin of this enhanced activity is still a matter of great debate and this discussion in turn is leading to new discoveries.

There is much interest in making gold nanoparticles, especially using colloidal routes and these nanoparticles are now finding both medical applications as well as being included in nanoparticles functioning as potential quantum dots. The field of gold applications is rapidly expanding.

This conference presents a forum where scientists and technologists can come together to learn and discuss the latest advances in the science and applications of gold. You are cordially invited to the 7th International Conference, Gold 2015 in Cardiff. Cardiff is the capital of the Principality of Wales and it is Welsh Gold that has been used to make royal wedding rings since 1923. Come and enjoy a golden experience with us in Cardiff in 2015.

Professor Graham Hutchings FRS
Chair, Gold 2015 organizing committee
Director, Cardiff Catalysis Institute



Organisation

Chairman

Graham J. Hutchings (Cardiff University)

Vice-Chairmen

Masatake Haruta (Tokyo Metropolitan University)
Trevor Keel (World Gold Council)

Organising Committee

Peter Bishop (Johnson Matthey), Mathias Brust (University of Liverpool), Peter Corish (BBI Group), Stephen Hashmi (Heidelberg University), Hitoshi Kosai (Tanaka Kikinzoku), Daniel Leznoff (Simon Fraser University), Catherine Louis (CNRS-UPMC), Vince Rotello (University of Massachusetts), Henrique Teles (BASF), Tao Zhang (Dalian Institute of Chemical Physics)

Local Organising Committee

Gary A. Attard, Jonathan K. Bartley, Albert F. Carley, Philip R. Davies, Jennifer K. Edwards, Stanislaw E. Golunski, M. Sankar, Stuart H. Taylor, David J. Willock

Programme

GOLD Conference

Sunday 26th to Wednesday 29th July, 2015
Cardiff City Hall

Conference Introduction & Social Evening

Sunday 26th July, Cardiff City Hall

Social Evening

Monday 27th July, National Museum Cardiff

Conference Dinner

Tuesday 28th July, Cardiff City Hall

Location & Venue

Location

Cardiff is a cosmopolitan city and Europe's youngest capital. Just two hours from London by train, Cardiff sits on an international transport network



that connects to major destinations in the UK, Europe and beyond. The city is within easy reach of both the Brecon Beacons, one of the UK's most beautiful National Parks and the Gower Peninsula, the first area in Britain to be designated an area of outstanding natural beauty. Cardiff offers some of the most varied and extensive shopping facilities outside London including the historic covered market, the glass-canopied Victorian and Edwardian shopping arcades as well as large, contemporary shopping centres.

For more information about Cardiff see:
www.visitcardiff.com

Venue

The conference venue is Cardiff's magnificent Edwardian City Hall which opened in 1904 and stands in what has been acclaimed one of the finest civic centres in Europe.



Host: Cardiff Catalysis Institute (CCI)

The CCI is a centre of excellence for catalysis in the UK with particular expertise in gold catalysis.

For more information about the CCI see:
www.cardiff.ac.uk/ccli

Conference Themes

Catalysis

Covering fundamental understanding, design and preparation, characterisation and performance, in the areas of:

- Homogeneous catalysis
- Heterogeneous catalysis
- Electrocatalysis
- Photocatalysis
- Surface science

Nanotechnology & Materials

Including design, characterisation and properties of gold, in the areas of:

- Nanomaterials
- Colloids
- Supramolecular chemistry
- Alloys

Applications

All uses of gold based technologies including:

- Electrochemistry
- Biochemical and Medical
- Sensors
- Analytical chemistry
- Refining, recycling and mining.

Scientific Programme

Plenary Speakers

Masatake Haruta

Tokyo Metropolitan University

Luis Liz-Marzán

CIC biomaGUNE

Catherine Murphy

University of Illinois

Dean Toste

University of California, Berkeley

Keynote Speakers

Christopher Ackerson, *Colorado State University*

Antonio Echavarren, *ICIQ*

Mostafa El-Sayed, *Georgia Tech*

Stephen Hashmi, *Heidelberg University*

Peter Johnston, *Johnson Matthey*

Malcolm Kadodwala, *Glasgow University*

Chris Kiely, *Lehigh University*

Ewa Kowalska, *Hokkaido University*

Cristina Nevado, *University of Zurich*

Mona Treguer-Delapierre, *University of Bordeaux*

Robert Tshikhudo, *Mintek*

Tatsuya Tsukuda, *University of Tokyo*

Vivian Wing-Wah Yam, *The University of Hong Kong*

Key Dates

Abstract Submission Deadline

1st December 2014

Early Bird Registration

November 2014-April 2015

Registration Closes

June 2015



Gold 2015

7th International Gold Conference
26th-29th July 2015

Gold Science,
Technology and
Applications



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