

# SET FOR BRITAIN 2015

## Parliament Showcases Britain's Future

Scientists Engineers Technologists Mathematicians

On Monday 9th March 210 early-career researchers from Universities and research institutions throughout the country converged on Westminster to take part in SET for Britain 2015, the annual poster competition and exhibition, held this year in the Attlee Suite in Portcullis House. They were welcomed to Westminster by Andrew Miller MP, Chairman of the Parliamentary and Scientific Committee, and, during the course of the day, had the opportunity to show their posters and explain their research to some 70 Parliamentarians from both Houses.

Gold, Silver and Bronze winners in each category received certificates and cash prizes, with medals going to the Gold prize winners. The prizes were presented by representatives of the organisations which had generously supported the event: INEOS Group, BP, Essar Oil UK, Clay Mathematics Institute, WMG, Institute of Biomedical Science, Wiley and the Bank of England.

The competition was divided into five specialist sections: Biological and Biomedical Sciences, Chemistry, Engineering, Mathematical Sciences and Physics. Judging panels for each category were formed of distinguished scientists and engineers from the Society of Biology, The Physiological Society, the Royal Society of Chemistry, the Royal Academy of Engineering, the Council for the Mathematical Sciences and the Institute of Physics.

The judges' initial task had been to select the 210 posters for the exhibition and final of the competition from the 475 original high quality entries.

At the end of the day the winners of the five Gold medals competed for the Westminster Medal, donated by the SCI in memory of Dr Eric Wharton, founder of SET for Britain. Lord Oxburgh and Andrew Miller MP faced the challenge of deciding which of the five posters best demonstrated the presenter's skill in communicating the scientific concept. Julian Perfect, Hon Secretary, SCI London Group, and Mrs Sue Wharton presented the Westminster Medal to Robert Woodward, Department of Physics, Imperial College London, winner of the Gold Award in the Physics section.



**Westminster Medal Winner**

L-R: Lord Oxburgh, President, Parliamentary and Scientific Committee; Dr Stephen Benn, Society of Biology and a Vice-President of the Parliamentary and Scientific Committee, Master of Ceremonies on the day; Andrew Miller MP, Chairman, Parliamentary and Scientific Committee; Robert Woodward (Winner of the Gold Award for Physics and of the Westminster Medal); Julian Perfect, SCI; and Mrs Sue Wharton (widow of Dr Eric Wharton).

## PRIZE WINNERS

### BIOLOGICAL AND BIOMEDICAL SCIENCES

#### Gold Award and GW Mendel Medal

Mr Dean Lomax, University of Manchester  
A NEW SPECIES OF ICHTHYOSAURUS FROM THE LOWER JURASSIC OF WEST DORSET, ENGLAND

#### Silver Award

Miss Kinda Al-Hourani, University of Oxford  
ACTIVINS AND ANTIVIRAL IMMUNITY

#### Bronze Award

Ms Sana Suri, University of Oxford  
POOR BRAIN HEALTH IN YOUNG PEOPLE AT A GENETIC RISK FOR ALZHEIMER'S DISEASE

### PHYSICAL SCIENCES (CHEMISTRY)

#### Gold Award and Roscoe Medal

Dr Yuval Elani, Imperial College London  
ARTIFICIAL CELLS AS MICROMACHINES: THE NEXT GENERATION OF DRUG DELIVERY VEHICLES

#### Silver Award

Miss Natalie Theodoulou, GlaxoSmithKline Research & Development  
THE DEVELOPMENT OF I-BRD9: A SELECTIVE, CELL ACTIVE CHEMICAL PROBE FOR BROMODOMAIN CONTAINING PROTEIN 9

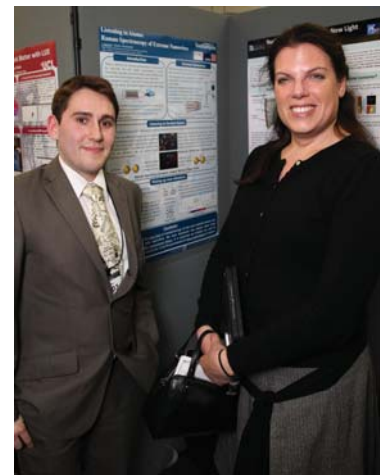
#### Bronze Award

Mr Ryan Gorman, University of York  
COPPER-CATALYSED C-H ACTIVATION: A SUSTAINABLE, EFFICIENT AND INEXPENSIVE WAY TO PREPARE MEDICINALLY IMPORTANT STRUCTURES



**Bioscience Prize Winners**

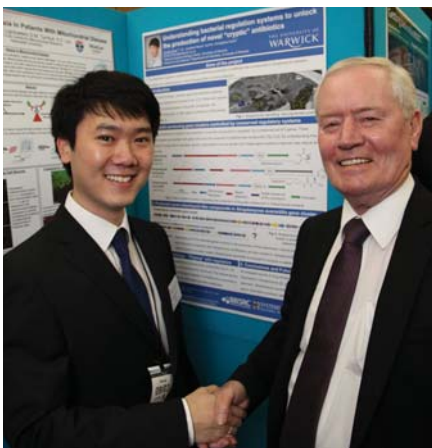
Back row: James Perham-Marchant, Wiley (Bronze sponsor); Nick Kirk IBMS (Silver sponsor); Tom Crotty, INEOS (Gold sponsor); Professor Mary Morrell, Chair, Policy Committee, The Physiological Society; Dr Laura Bellingan, Director of Science Policy, Society of Biology; Dr Stephen Benn, Director of Parliamentary Affairs, Society of Biology; Front row: Dean Lomax (Gold winner); Sana Suri (Bronze winner); Kinda Al-Hourani (Silver winner); Andrew Miller MP



Joe Spencer and Caroline Nokes MP



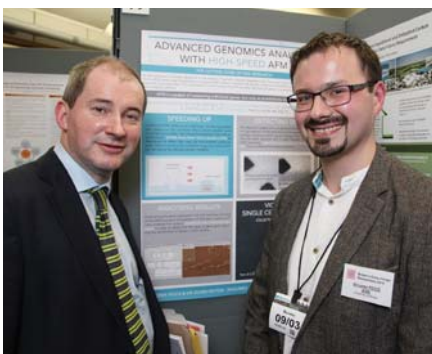
Dr Thomas Woolley and Nicola Blackwood MP



Vincent Poon and Jim Cunningham MP



Nicky Morgan MP and Paul Brack



Stephen Williams MP and Dr Loren Picco



**Engineering Prize Winners**

L-R: Jon Mason, Essar Oil UK (Gold Sponsor); Dr Nasrin Al Nasiri (Gold); Mr Davide Zilli (Silver); Dr Stephen Benn; Miss Agnieszka Dzielendziak (Bronze); Andrew Miller MP

## PHYSICAL SCIENCES (PHYSICS)

### Gold Award and Cavendish Medal

Mr Robert Woodward, Imperial College London  
EXPLOITING NANOMATERIALS FOR ULTRAFAST PHOTONICS

### Silver Award

Dr Elena Andra Muntean, Queens University Belfast  
DUST AND ICE: THE BIRTHPLACE OF NEW MOLECULES IN INTERSTELLAR SPACE

### Bronze Award

Mr Jason Hunt, Mullard Space Science Laboratory, UCL  
A PRIMAL VIEW OF OUR GALAXY, MADE POSSIBLE BY GAIA AND M2M MODELLING

## ENGINEERING

### Gold Award and Engineering Medal

Dr Nasrin Al Nasiri, Imperial College London  
ENVIRONMENTAL BARRIER COATING FOR Si-BASED CERAMIC COMPOSITES

### Silver Award

Mr Davide Zilli, University of Southampton  
SEE WHAT YOU CANNOT HEAR: SEARCHING FOR THE VANISHING NEW FOREST CICADA

### Bronze Award

Miss Agnieszka Dzielendziak, University of Southampton  
DURABILITY OF SUSTAINABLE COMPOSITES IN SHIP DESIGN FOR ENHANCED ENVIRONMENTAL PERFORMANCE: A MULTISCALE APPROACH



### Mathematical Sciences Prize Winners

L-R: Professor Nick Woodhouse, Clay Mathematics Institute (Gold Sponsor); Andrew Miller MP; Professor Dame Celia Hoyles, Institute of Mathematics and Its Applications; Dr Miho Janvier (Bronze); Dr Lorna Ayton (Silver); Dr Peter Buchak (Gold).

## MATHEMATICAL SCIENCES

### Gold Award and Mathematical Sciences Medal

Dr Peter Buchak, Imperial College London  
LIGHTING THE PATH: THE MATHEMATICS OF IMAGINARY NUMBERS IN VERY REAL PROBLEMS OF HOLEY OPTICAL FIBRE FABRICATION

### Silver Award

Dr Lorna Ayton, University of Cambridge  
REDUCING THE SOUND GENERATED BY AEROENGINES

### Bronze Award

Dr Miho Janvier, University of Dundee  
STATISTICAL STUDIES OF SOLAR STORM GEOMETRY FOR BETTER SPACE WEATHER PREDICTIONS

## WESTMINSTER MEDAL

### Winner of the Gold Award for Physics

Mr Robert Woodward, Imperial College London



### Chemistry Prize Winners

Back row l-r: Dr Stephen Benn, Society of Biology; Andrew Miller MP; Professor Helen Fielding, UCL (Chemistry Judge); Angela Strank BP (Gold sponsor); Front: Ryan Goman (Bronze); Dr Yuval Elani (Gold); Miss Natalie Theodoulou (Silver).

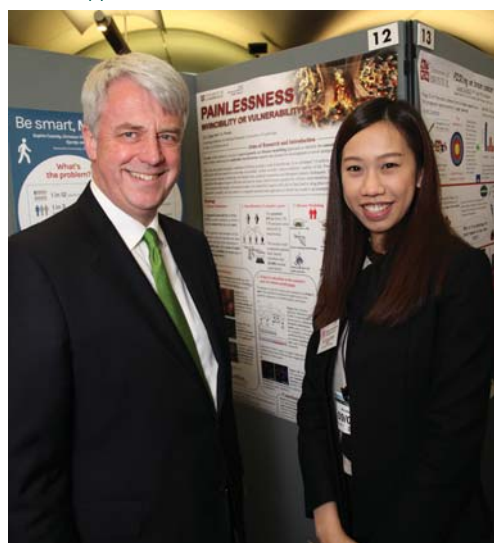


Nick Brown MP, Dr Paola Crippa and Chi Onwurah MP



### Physics Prize Winners

Back row l-r: Anne Milton MP; Dr Stephen Benn; Dr Elena Andra Muntean (Silver); Andrew Miller MP; Angela Strank, BP (Gold Sponsor); Professor Helen Fielding, UCL; James Perham-Marchant, Wiley (Bronze Sponsor); Front row: Jason Hunt (Bronze) and Robert Woodward (Gold)



Andrew Lansley MP and Dr Ya-Chun Chen

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