



Special Report - ESOF 2016

Europe's biggest general science conference concludes successfully in Manchester, UK

Theme: Science as Revolution

- Veena Patwardhan

From 23rd to 27th July, 2016, Manchester flaunted its City of Science status as the host city of the seventh edition of EuroScience Open Forum (ESOF 2016). A biennial event held in a different European city every two years, this time it was Manchester's turn to host this globally reputed science conference.

Around 4500 delegates – scientists, innovators, academics, young researchers, journalists, policy makers, industry representatives and others – converged on the world's first industrial city to discover and have discussions about the latest advancements in scientific and technological research across Europe and beyond. The main theme this year was 'Science as Revolution', indicating that the focus of the conference would be on how science and technology could transform life on the planet, revolutionise economies, and help in overcoming challenges faced by global communities.

Manchester with its rich legacy of scientific achievements was the perfect setting for ESOF 2016. As Professor Dame Nancy Rothwell, Chair of the ESOF 2016 Steering Committee and the President and Vice Chancellor of the University of Manchester put it, "With its theme of 'science as revolution' what better place to hold ESOF 2016 than Manchester – the birthplace of the world's first industrial revolution."

Impressive Opening Ceremony

At the Opening Ceremony on 24th July, it was a great feeling knowing I was sitting in the company of Nobel



Manchester Central, venue of ESOF 2016

Laureates and distinguished scientists in the packed Exchange Hall of Manchester Central, the venue of the conference.

The proceedings began with a string quartet rendering a piece of specially composed music. Simultaneously, a slide show was played in the background celebrating Manchester's long and remarkable association with science as the city where: John Dalton had developed his pioneering atomic theory; Ernest Rutherford had split the atom; James Prescott Joule had discovered the first law in thermodynamics; Sir Andre Geim and Sir Konstantin Novoselov had discovered the wonder 2D material – graphene; the first stored program computer was built; and where J. J. Thomson - the discoverer of the electron, and Alan Turing - the founder of Computer Science were born.

Professor Brian Cox - the well-known Manchester physicist and author, Dame Nancy Rothwell, Professor

Sir Mark Walport – Chief Scientific Advisor for the UK Government, and Professor Sheila Jasanoff (formerly Sheila Sen) of Harvard University were some of the distinguished speakers who addressed the audience. A notable feature of the Opening Ceremony was the discussion on the Square Kilometre Array (SKA) Project - a global initiative for building the world's largest radio telescope - between Brian Cox and the SKA personnel at the organisation's headquarters at Jodrell Bank near Manchester, and also personnel at the SKA sites in South Africa and Australia via a live video link. Once completed by 2020, the SKA will study remote galaxies in the Universe.

The Exhibition Hall was thrown open to delegates immediately after the Opening Ceremony. CAMS (Copernicus Atmosphere Monitoring Services), EIROforum (a network of eight European Intergovernmental Research Organisations), Unilever, Siemens, JST (Japan Science and Technology Agency), Johnson & Johnson, GSK (GlaxoSmithKline), Europlanet, European Patent Office, European Commission, Elsevier, Alpha-Galileo, Max Planck Society, Nanyang Technological University - Singapore, Naturejobs, Research in Estonia, Science Forum South Africa, and Wakelet, were some of the scores of exhibitors that showcased their work, products, and services at ESOF 2016.

Stimulating sessions, diverse topics

The days that followed featured diverse and engrossing sessions covering areas ranging from medicine, global pandemics, doping in elite sports, and climate change, to women in science, the responsible use of nanotechnology, the new bio-industrial revolution, and how big data and big science could benefit society at large.

At a session titled 'Europe's voyage towards an

open global research area', Carlos Moedas, European Commissioner for Research and Innovation, stressed the scientific and political need to share data in today's times. He pointed out that while the 20th century was about individual nations engaging in research, the 21st century will need a more global approach to scientific research. "We are entering a new era for open science and it will no longer be about a single nation's sprint to the finish line," he said.



Sir Venkatraman Ramakrishnan at ESOF2016.
Photo credit: Matt Wilkinson Photography

Dr. Sheila Jasanoff spoke at a session titled 'CRISPR, democracy and global citizenship' on the bioethics of gene editing and the need for democratising the global governance of the techniques involved. Another eminent Indian scientist, Nobel Laureate and President of the Royal Society, Sir Venkatraman Ramakrishnan spoke at a keynote session on 'Seeing is believing: Revealing the cell's protein factory and how antibiotics block it'.

Sir Andre Geim who was awarded the 2010 Nobel Prize in Physics along with Sir Konstantin Novoselov for discovering and working on graphene spoke about his latest research that involves the layering of graphene-based composite materials. Sir Konstantin Novoselov spoke at another session on graphene titled 'Graphene and beyond: A revolution in two dimensions'.

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One of the memorable highlights of ESOF2016 was a visit to the National Graphene Institute (NGI) located in the University of Manchester, where researchers engage in advanced research on different commercial applications of graphene.

All in all, it was an inspiring week of science in Manchester. The next ESOF conference will be held in 2018 at Toulouse in France.



(Veena Patwardhan, our special correspondent attended this event on invitation)