



THE BRIDGE

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Material Science in the News

July 15, 2013. Craig Hawker, professor of materials and of chemistry and biochemistry at UC Santa Barbara, has accepted the position of scientific director of the campusbased <u>California NanoSystems Institute</u> (CNSI).

July 12, 2013. Groundbreaking new electron microscopy technology developed at the York JEOL Nanocentre at the University of York is allowing researchers to observe and analyze single atoms, small clusters and nanoparticles in dynamic in-situ experiments for the first time.

July 10, 2013. Professor Haick Hossam, of the Department of Chemical Engineering at the Israel Institute of Technology (Technion), has designed, developed, and will deliver a massive open online course (MOOC) on Nanotechnology and Nanosensors. The MOOC course is available at no cost to anybody who is interested. Registration for the January, 2014 course: https://www.coursera.org/technion.

July 9, 2013. Scientists from the University of Vienna and their co-workers from research institutes in Germany and Russia have succeeded in fabricating a novel structure of high-quality metal silicides all nicely covered and protected underneath a graphene layer. These two-dimensional sheets are as thin as single atoms.

July 8, 2013. Ramamoorthy Ramesh, an authority in the physics of functional materials, has been named the twelfth <u>University of Tennessee–Oak Ridge National Laboratory Governor's Chair.</u> He has also been appointed as deputy director for science and technology at ORNL.

July 6, 2013. Pollution control with nanotechnology is being investigated by scientists from the Research Facility for Subsurface Remediation (VEGAS) at the University of Stuttgart. Together with 27 partners from 13 countries, this <u>European Union project "NanoRem"</u> is planned to last four years. For this project, the EU is providing around 10.5 million Euros from the 7th research framework program.

July 3, 2013. Korean researchers from Ulsan National Institute of Science and Technology (UNIST) have developed an inexpensive and scalable <u>bio-inspired</u> <u>composite electrocatalyst</u>, iron phthalocyanine with an axial ligand anchored on single-walled carbon nanotubes, demonstrating a higher electrocatalytic activity for oxygen reduction than the state-of-the-art Pt/C catalysts as well as an exceptional durability during cycling in an alkaline media.

July 1, 2013. A new publication, by the European Commission, outlines recent <u>nanoscience and</u> <u>nanotechnology expenditure in Europe.</u> An overview is given of the main sectors where nanotechnology is enabling significant progress.

June 4, 2013. A reference guide to the composition and use of various coating additives and their generic examples has been published. It includes, abrasion-resistance improvers, absorbents, accelerators, acid catalysts, acid scavengers, adhesion promoters, algaecides, anti-blocking agent, anti-crawling agent, anti-float agent, anti-microbial agent, anti oxidant and anti rust agents. The 2013 Additives Reference Guide also describes new additives classified under nanotechnology and bio-based formulations.