

CV of James Rohan
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James Rohan leads the Electrochemical Materials & Energy activity at Tyndall National Institute, University College Cork. He received his B.Sc. (1988) and M.Sc. (1990) in fuel cell catalyst materials from UCC under the direction of Prof. Declan Burke. He completed his Ph.D. in 1994 in the group of Prof. Derek Pletcher in Southampton University, UK. He then spent 2 years in the United States as a Senior Scientist with EIC Laboratories in Norwood Massachusetts as part of the USABC (United State Advanced Battery Consortium) developing polymer gel based lithium ion rechargeable batteries with Dr. K.M. Abraham.

James joined the National Microelectronics Research Centre (now Tyndall National Institute) in 1996 as a post doctoral researcher. His research is focussed on electrochemical micro and nanoscale materials processing and device fabrication. This includes materials development for battery, fuel cell and micro/nanoelectronics applications. He is currently lead principal investigator on an Irish Government funded Collaborative Centre for Applied Nanotechnology project (www.CCAN.ie) investigating nanoscale Cu interconnect for future electronic devices (≤ 11 nm node). His research with EIC Laboratories, Harris Semiconductor, Intel, Pfizer and HP has resulted in 4 patents and a license. In 2006 he was the recipient of the Enterprise Ireland Industrial Technologies Commercialisation Award.

He has co-organised the 3rd and 4th International Symposia on the Electrodeposition of Nanoengineered Materials and Devices at the Electrochemical Society meetings in Vienna (2009) and Boston (2011) He is lead organiser for the 5th International Symposium in that series to be held in San Francisco, in October 2013. James was general chair for the European Materials Research Society workshop held in Warsaw, Poland, Sept 14th–19th 2008, “Current trends in nanostructured polymer and sol-gel thin films” and Guest Editor for a special issue of Applied Surface Science, Volume 256 Issue 3 (2009) S1-S100 based on contributions to that workshop.

He has published more than 60 technical publications in international journals, conferences, patents and 2 book chapters. His research has been highlighted in a Frost & Sullivan Nanotech Alert in their Technical Insights bulletin for the novelty of a Pt-CNT nanostructured electrocatalyst for methanol oxidation. (January 2009). The analysis of DMAB electro-oxidation was selected by the Electrochemical Society as a Technical Highlight in the Fall (2005) issue of Interface magazine. He is a member of the International Society for Electrochemistry (Division 3, Electrochemical Energy Conversion & Storage, Division 4, Electrochemical Materials Science and Division 6, Molecular electrochemistry), the Electrochemical Society and the American Chemical Society.

As the Ireland Regional Representative for ISE James aims to increase the ISE membership in Ireland for established researchers, post doctoral researchers and postgraduates through the established network that both he and his team have established over 15 years of active electrochemical research in Ireland. He will also utilise the outreach expertise of Tyndall National Institute, CCAN and other research and teaching programmes to promote the ISE and member benefits. Ireland has a thriving electrochemistry community which is growing through the increased focus nationally on nanotechnology and biomaterials research and increased participation in national and international electrochemistry based workshops and conferences.