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## Editorial

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**Biographical notes:** Dr. Mark J. Jackson is currently an Associate Professor in the College of Technology at the Purdue University in West Lafayette, Indiana, USA. Dr. Jackson's research interests are in nanomanufacturing and advanced surface coating technologies.

Professor Waqar Ahmed holds the Chair of Nanotechnology at the University of Ulster and is conducting research in the area of thin films and nanotechnology. He is Editor of the *International Journal of Molecular Engineering* and the *International Journal of Nanoparticles*.

Dr. Michael Harris is with the University of Ulster, UK, and is one of the organisers of the *23rd International Manufacturing Conference* held at Ulster. His research interests are in the area of advanced manufacturing.

Professor Robin Clarke is with the University of Ulster, UK, and is one of the organisers of the *23rd International Manufacturing Conference* held at Ulster.

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In the past ten years, significant advancements have been made in the development of materials and product technology. Innovations in materials and product technology in recent years include process development and integration, advanced materials, surface engineering, aerospace technology, to name but a few. Therefore, the goal of this special

issue of the *International Journal of Manufacturing Research* is to publish the current state of the art in 'Innovations in manufacturing' and to provide a forum for innovations in manufacturing. The papers presented in this issue are based on oral presentations made during the *23rd International Manufacturing Conference* held 30 August–1 September 2006 at the University of Ulster, UK. The conference was opened by the Vice Chancellor of the University of Ulster, Professor Richard Barnett, followed by a plenary session with three invited speakers. Professor Sir Bernard Crossland MRIA, FIAE, FEng FRS (Past President I Mech E, Emeritus Professor of Queens University, Belfast) gave a talk on 'Where now in engineering manufacturing in Ireland?'; Professor Enrique Ares Gomez (University of Vigo) spoke about 'Manufacturing education in Spain'; and Professor Waqar Ahmed (University of Ulster) gave a presentation on 'Nanomanufacturing: an emerging new world'.

A wide range of topics were covered during the conference in the form of oral presentations including:

- Micro and nanomanufacturing
- Business strategy and supply chain management
- Environmental engineering and human factors
- Biomedical engineering
- Industrial automation and process control
- Industrial engineering, operations management and education
- Manufacturing processes and technology
- Materials technology
- Product development, concurrent engineering and quality
- Simulation, manufacturing systems.

Although the conference proceedings contain many of the presentations (*Proceedings of the 23rd International Manufacturing Conference*, Editors: D.M.J. Harris, R.B. Clarke, W. Ahmed, M. Morgan and W. McKnight, 2006), a selection of papers included in this special issue are specially extended versions of the conference presentations selected to represent innovations in manufacturing and are expected to enlighten readers of the *International Journal of Manufacturing Research*. We are grateful to authors who contributed to this special issue. The papers presented in this special issue have been refereed by peer reviewers who are experts in their field and have returned their reviews in a timely fashion. We wish to thank them for their reviews. Special thanks to Professor Mohammed Dorgham of Inderscience Publishers for his continued support and guidance and for agreeing to publish this special issue.