



# Lichfield Science & Engineering Society

LICHFIELD **GARRICK**  
*Theatre & Studio*

CHAIRMAN

Carol Hannam

PATRON

Mr Ian Dudson CBE

HM Lord Lieutenant of Staffordshire

PRESIDENT

Professor Rex Harris

FREng., FIMMM, FInstP.

**8:00 pm on Wednesday 21<sup>st</sup> January 2015**  
**in the Studio Theatre of the Lichfield Garrick, Castle Dyke, Lichfield**

## **3-D PRINTING – UNLOCKING THE POTENTIAL**

**Professor Ian Ashcroft**

Professor of Solid Mechanics

Additive Manufacturing and 3D Printing Research Group

Faculty of Engineering

University of Nottingham

After his undergraduate degree, Ian spent some years in industry before moving to the University of Oxford to study for a D.Phil in materials science. After attaining his doctorate, he took a number of research positions in the UK and Australia, before settling at the Defence Research Laboratories in Farnborough, where his work was principally looking at fatigue in bonded composite structures. His next move was to academia, first at Loughborough University and then to his current position at the University of Nottingham. His current research interests encompass experimental and computational mechanics, with a particular interest in applying these to the rapidly growing field of additive manufacturing.

Additive Manufacturing can be considered as the industrial application of 3D Printing and has been the source of much interest, and possibly hype, in recent years, with Wohlers (2012) stating that “..additive manufacturing is poised to become the most important, the most strategic, and the most used manufacturing technology ever.” This talk will review the technology behind additive manufacturing, assessing the opportunities and challenges ahead. In particular, the synergistic use of additive manufacturing and advanced computational methods to create radically new designs and methods of designing will be explored.

**For further information, please see our website at [www.LSES.org.uk](http://www.LSES.org.uk)**

**Students and Members Free. Visitors £5.00**

**Tickets are not issued in advance: please pay at the door.**

**Students and Members must sign in.**

**This lecture is expected to finish by 10.00 pm.**