

WMG celebrates 30 years of innovation

FOR 30 YEARS WMG HAS BEEN CARRYING OUT WORLD CLASS APPLIED RESEARCH AND EDUCATION. FOUNDED BY PROFESSOR LORD KUMAR BHATTACHARYYA IN 1980 TO REINVIGORATE UK MANUFACTURING, THE GROUP STARTED SMALL: JUST AN OFFICE, THE PROFESSOR AND HIS SECRETARY. TODAY 300 STAFF WORK ACROSS FOUR BUILDINGS AT WARWICK, WITH EDUCATION CENTRES IN SIX COUNTRIES AND AN ANNUAL PROGRAMME WORTH £100M. HERE, WMG LOOKS AT ITS FIRST 30 YEARS AND ITS PLANS FOR THE FUTURE.

At WMG, we work with both global companies and regional SMEs (small and medium-sized enterprises) to improve their competitiveness through the application of value-adding innovation, new technologies and skills deployment, bringing academic rigour to industrial and organisational practice.

Our research capabilities span three themes: digital technologies; materials & manufacturing and operations & business management. We started out working largely with the automotive and aerospace sectors, but now work across a variety of sectors including defence, healthcare, energy & utilities, food & drink, construction and pharmaceutical.

In our 30th year, we continue to work with companies who want to innovate on exciting multi-disciplinary research projects.

In October the University Council approved our status as an academic department and we look forward to working with colleagues across the University to contribute to future success.

The 1980s

Joining the University as Professor in Manufacturing Systems Engineering, Professor Lord Bhattacharyya's aim was to improve relations with industry; he wanted to create a model of how universities and industry should work together on practical problems. The £20m Advanced Technology Centre, now the International Automotive Research Centre, was built to house a team of 50 working on research projects with the global companies in the automotive and aerospace industries. It was opened by the Former Prime Minister Margaret Thatcher.

At this time our professional programmes launched starting with CAD – CAM and production engineering courses. With the help of our industry partners we were able to ensure that the syllabus had commercial relevance. Participants learned management skills to support their manufacturing and engineering skills.

In 1986, these courses won WMG the first prize for training programmes in the Industry Year Awards, presented by the

Department for Trade & Industry. By the late 80s staff numbers stood at 150, 450 people had been on our education programme and we had made the first steps into the digital world, collaborating to explore new ways in which IT could help innovation.

The 1990s

The decade began with the construction of the £10m Engineering Management Building, opened, in 1992, by Michael Heseltine, then Secretary of State for Trade and Industry. We started to engage with companies outside of the automotive and aerospace industries taking what we had learned and applying this to new sectors and in 1995 opened our 3rd building, the International Manufacturing Centre, which became the HQ of the Group. On the education front we were training 5,000 industrialists a year, 1,200 postgraduates and 200 doctoral students.

In the mid 90s Professor Lord Bhattacharyya received a number of honours including a CBE for services to industry and technology, an honorary

fellowship at the Institute of Logistics for work throughout the world and the Mensforth International Gold Medal from the Institution of Electrical Engineers. Our overseas education programme expanded considerably and we opened five centres in China, four in Malaysia and one each in Hong Kong; South Africa; India; Milan; Paris and Munich.

By the late 90s we had become an international centre for excellence in both education and research, with 480 staff including 50 seconded from industry, 14 overseas centres and an annual programme worth £81.5m.

The Noughties

Research highlights include collaboration in a £1m programme to turn house building into a precision engineering operation and the building of two environmentally friendly racing cars Eco1 and Eco3, better known as WorldFirst Racing, to highlight that racing cars made from sustainable materials can be an alternative to the cars currently used.

We led major multi-partner projects such as the £72m PARD (Premium Automotive Research and Development) programme, and currently the £19.5m Low Carbon Vehicle Technology Project.

We saw significant growth on our full-time MSc programmes and in 2009/10 had over 600 students studying with us. We introduced a new masters course, the MSc in e-Business Management, to take advantage of new technology that was developing in e-commerce. This was closely followed by other new courses - Supply Chain & Logistics Management; Programme & Project Management; Digital Manufacturing & Management and Management for Business Excellence. We continued to expand our overseas provision with centres in Singapore and Hong Kong.

We added to our buildings with the International Digital Laboratory, the first digital research centre of its kind. The building was opened by then Prime Minister Gordon Brown in July 2008. A multi-disciplinary centre, it uses the

latest technology to create a platform for new collaboration to solve real world problems, provide knowledge transfer, education and training. Some of the cutting edge research that has come out of the Lab is a virtual reality application to help parents cope with baby feeding problems; a prototype robot developed for hospital wards which would allow nurses to use a hand held device to instruct the robot to collect a drug or clean a spillage; sounds in vehicles research providing driver feedback to help car manufacturers develop new products.

During this time Professor Lord Bhattacharyya received a Padma Bhushan from the President of India in 2002, a Knighthood in 2003 and in 2004 was elevated to the House of Lords.

Today

Thirty years on WMG is still actively engaged with government and industry both in the UK and overseas, forging partnerships and collaborating to develop real world solutions to real world problems. Recently both Dr Vince Cable, Secretary of State for Business, Innovation and Skills and David Willetts, Minister for Universities and Science have praised the work undertaken by the Group.

We continue to be at the forefront of innovative technology, this year has seen the launch of our £5m Premium Vehicle Customer Interface Technology Centre of Excellence and will see the Vehicle Energy Facility open in March next year. Some of the research we are undertaking today is an extension of the research carried out in the last decade, including ELVIN (Electric Vehicle with Interactive Noise) which builds on our sounds in vehicles research.

Our collaborations with industrial partners continue to thrive with the recent announcement that Jaguar Land Rover is to relocate its 170-person advanced research group to WMG and spend more than £100m on research over the next few years, combining academic excellence with industrial relevance.

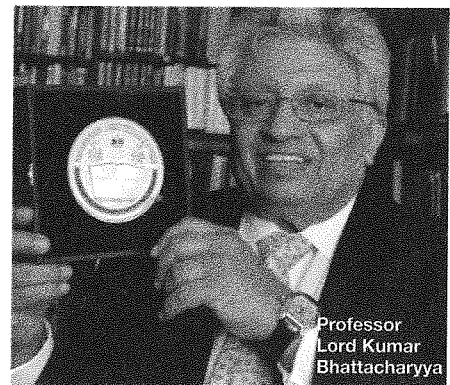
We officially launched the Institute of Digital Healthcare in October; a five-year

£4m programme with NHS West Midlands and Warwick Medical School. The Institute aims to improve people's health and wellbeing through the use of innovative digital technologies.

WMG is still growing. The majority of our growth over the last 30 years has been funded from our own activities, along with support from the West Midlands Regional Development Agency.

Our 5th campus building, the International Institute for Product and Service Innovation (IIPSI), is currently in the development phase and will house some of WMG's newest research teams. We have developed into a leading centre for world-class studies attracting high calibre students with more than 24,000 individuals studying on our education programmes, and over 6,000 Masters degrees awarded.

All this success would not be possible without WMG's excellent and dedicated staff, who continue to work professionally on all our activities, both within and outside the University.



Professor
Lord Kumar
Bhattacharyya

In recognition of our services to education, we were proud to be awarded the Queen's Anniversary Prize for Higher and Further Education earlier this year. To receive this award is a tremendous honour and highlights that our philosophy of providing academic excellence with a clear business focus is a winning formula.

Visit our website for an overview of our research and education programmes at www.wmg.warwick.ac.uk or contact Lisa Barwick (L.Barwick@warwick.ac.uk)