1st Year PhD Conference

On Wednesday 18 May, 19 students from the IfM presented their research topics at the IfM 1st Year PhD conference. The event was organised by the students themselves and coordinated by Bang Ming Yong and Pascal Wichmann. For the first time, the organisers were able to secure external sponsorship from the Qatar Foundation Research and Development, who generously co-sponsored the conference alongside the IfM. Such sponsorship allowed the organisers to demonstrate their creativity and contributed to making the conference a unique event.

The main aim of the conference was to allow students to gain experience in hosting and presenting at official events as well as communicating and defending their research; a must-have competency that PhD students should develop in order to successfully share their research outcomes. During the day, the PhD students presented their research projects to a diverse audience including their academic peers, other research groups and external guests. The research areas stemmed from fields such as nano science, business model innovation, 3D printing, supply chain analytics and many more. Each student had the opportunity to benefit from audience interaction during the Q&A time, where they received constructive feedback on how to further develop their ideas.

As part of the event, the PhD students prepared a video podcast promoting their research projects and the role of the IfM in supporting their scientific curiosity. The video podcast was presented to the audience at the opening ceremony of the conference. During a poster session, three judges from the IfM evaluated the students’ skills in designing effective posters as well as delivering their ideas to the audience in the form of a 30 second pitch. Winners of the poster session were Wen Liu (Best Poster Award), Bang Ming Yong (Second Best Poster Award, and Public Choice Poster Award), Ghanim Al-Sulaiti (Public Choice Poster Award), and Brian Robertson (Best Pitch Award).

The conference was concluded by a dinner with all the PhD students attending along with Maggie Harriss, who had supported the students throughout the planning process and on the day of the event.
On 12 May, the IfM held its annual Briefing Day, attended by more than 150 senior industrialists and policymakers.

In the opening session, IfM researchers considered some of the challenges of competing in an Industry 4.0 world, including:

- The need to have standards, skills, infrastructure, SME capabilities and security measures in place to support digitalisation
- Developing more reconfigurable, intelligent and hence resilient systems within the factory (or across a production network)
- Designing data-enabled supply chains and supporting a ‘digital attitude’ to supply chain development
- Using digitalisation strategies to support business model innovation in order to deliver the outcomes customers want.

During the rest of the all-day event, delegates were also able to hear about the latest research in a range of other areas from across the whole spectrum of manufacturing – from R&D and design to supply, production and service.

Our team of practitioners from ECS described some of our recent collaborations, where research-based tools and techniques have been applied in both industrial contexts and in the public sector.


Jag Srai, Head CIM, took part in The Forum, a recent BBC World Service programme discussing the history of the wheel and its twenty-first century uses in modern logistics and performance art.

The programme was hosted by BBC journalist, Bridget Kendall. She was joined by Jag, award-winning Cyr Wheel dancer, Valerie Inertie, and Richard Bulliet from Columbia University whose book The Wheel challenges assumptions about the origins of the wheel.

Jag talked about designing supply chains and, in particular, the logistics behind the transport of food and goods, often from one continent to another. He explained how timing is vital: from an awareness of the perishability of the produce to understanding the complex web of transport links which are needed to deliver the product in time to consumers who now expect ‘same day delivery’ at the touch of a button.

Listen to the programme here: http://bbc.in/25lg17Q

23rd Annual Research Methodology Workshop

Hosted on the 9 - 10 June, this event is specifically aimed at doctoral researchers. It seeks to equip participants with an appreciation of research design, methods and how to overcome potential challenges on their programmes.

Experienced researchers from the IfM and external institutions will lead sessions that explore various methodology related topics, such as research design foundations, the case study method, qualitative data handling, research ethics, journal publications, working with industry as well as interactive sessions.

We are currently expecting about 40 students mostly working within the manufacturing space. They include IfM’s own PhD students, CDT students working jointly across IfM and the Chemistry department, as well as outside students from Cranfield, and a couple others from outside the UK, such as Geneva and India.

If you need any other information, please feel free to contact either Zhenyu Liu (zl360@cam.ac.uk) or Ola Oguntoy (ooo28@cam.ac.uk).

A cake sale was held on Friday 20 May in place of regular buns to raise funds for Iain McIntosh, a friend of Amanda Bamford’s, who is continuing to struggle for independence in his life following diagnosis with Leukemia in 2009 and the lasting complications of treatment.

A big thank you goes to all the ECS bakers for creating such mouth-watering delights and to all those who bought, donated and ate their way to a fantastic final sugary total of £318. Monies raised will go towards providing vital equipment for Iain to help him around and out of the home.

Further information and Iain’s story can be found: http://bit.ly/1U95qRO
On 24 May over 50 delegates met to explore how firms organise their IP management on the 3rd Strategic IP Forum (abbreviated SIPF), hosted by Frank Tietze from CTM.

Speakers covered the transition towards an integrated IP management system at ThyssenKrupp, the large German multinational engineering firm; a medical device company’s extremely clever and modular approach to developing an IP strategy to help the company reduce its dependency from large pharmaceutical customers; and how China organises its economy and society to import IP capabilities. We look forward to running the fourth SIPF later this year.

Arsalan speaks at Memorial Day event

Arsalan Ghani (CIM) was invited by the TUC to be a speaker at the Gateshead Trade Councils (Newcastle) Workers Memorial Day event and commemorating the lives of workers lost during workplace incidents, held on 28th April 2016. The event was attended by Members of Parliament and the Mayor along with representatives of various organisations and the Church, at the memorial site in Saltwell Park in Newcastle. Arsalan highlighted the challenges in developing countries in the area of workplace health and safety standards implementation. Thousands of lives are lost at workplaces during manufacturing due to poor implementation of health and safety standards. ILO estimates a worker dies every 15 seconds from work-related accident or disease. Arsalan suggested that communities have an important role to play in pushing ethical sourcing by companies in the North and also across the country. Other measures include proactive government policy, active oversight on supply chain processes by buying companies, and pushing for strong workplace representations can ensure better workers health and safety.

Cambridge Win OC&C Case Competition

A group of ISMM students, including Patrick Tan (Team Lead), Alexandre Mourachko, Patid Boonyarungsrit, Sunil Sarferaz, Rahul Pravindra, and Khaled Hammad, travelled to London on 25 April, to participate in the final round of IntoUniversity Case Competition 2016, hosted by OC&C Strategy Consultants. The competition started off with the first round of case video submissions, followed by a second round of presentation slides submissions. A total of 50 submissions were received by the firm and only 4 teams made it to the final round, including ISMM Cambridge, Spectrum (Oxford University), Team 3+1 (London Business School, London School of Economics, Imperial College of London), and Paradigm Shift (University of Manchester). The final round required teams to present the case in front of OC&C partners and clients. A comprehensive presentation was delivered with detailed analysis by ISMM Cambridge Team, and this was finally selected to be the winner of OC&C Case Competition 2016.

Peer-2-peer mentoring training session

The Peer-to-Peer mentoring scheme for postdocs in the Engineering Department was officially launched in March and all postdocs are encouraged to attend a mentoring training. The Engineering Department Postdoc Committee (EDPC) organises two mentoring training sessions each term to help develop the mentoring skills of postdocs.

For this term the following sessions have been arranged.
1. Main Site, Trumpington Street: Lecture Room 6, 8 June, 10am
2. West Cambridge, IfM Seminar Room 2, 27 June, 10am


Manufacturing a better world

Andy Neely gave a keynote speech at the forum for Philosophers, Technologists and Engineers in Nuremberg. He spoke about the Institute for Manufacturing, covering our entire range of research activities and introducing the idea of manufacturing a better world.

RECODE Sandpit

Mohamed Zaki (CSA) participated in the RECODE Sandpit on 2-3 March 2016. The purpose of this event was to develop cross-disciplinary proposals for up to three short term feasibility studies, to test and further define a shared multi-disciplinary vision and research agenda for re-distributed manufacturing.
RECODE Funded Feasibility Study
Doroteya Vladimirova (CIS), Sudhir Rama Murthy (CIS) and Mohamed Zaki (CSA) were awarded fund for a feasibility study from the EPSRC-RECODE network. This 6-month feasibility study seeks to address the key research question: “How can data-driven decisions predict a future RDM business model?” The aim of this research is to develop a Digital RDM Studio that will enable data-driven experimentation with different business models for consumer goods industry. The feasibility study aim will be fulfilled through undertaking the following objectives:

1. Identify current RDM business models
2. Pilot selected future RDM business models
3. Contribute to the RECODE roadmap of research

Watch the video to see their pitch! http://bit.ly/1TLimlf

Confused about digital manufacturing?
Perhaps this cartoon by Eoin O’Sullivan (CSTI) will help.

Supplying Innovation - Unlocking Innovative Behaviours in the Supply Chain

Engaging multiple suppliers to form an alliance to deliver outcome-based agreements is a novel approach to encourage suppliers to innovate and to provide exceptional customer outcomes.

This white paper identifies fundamental themes and success factors to be considered in this approach. The March Paper from the Alliance was a joint White Paper with IBM, on ‘Supplying Innovation - Unlocking Innovative Behaviours in the Supply Chain’, by Jingchen Hou, Jonathan Baker-Brian & Claire Vine.

http://bit.ly/1WhP5kb

Podcast - More Services More Value for Manufacturing Firms
In this podcast Florian Urmetzer (CSA) explains how value is defined in modern manufacturing processes and why more and more firms are providing services alongside traditional product offerings, but that they in turn need to be more in tune with their customer’s needs.

http://bit.ly/1s985EZ

Industry Event - Growing your Services Business in an age of digital disruption

CSA are pleased to announce the programme for this year’s Service Week Industry Conference, which will be held on Tuesday 11 October 2016. The theme this year is ‘Growing your service business in an age of digital disruption’. Join us as we hear from some of the world’s leading firms and organisations who have managed to successfully make the shift to services, and in doing so have successfully grown their service business speakers. We will also present insights and findings from our latest research on scaling up you service business where we are looking at the leadership capabilities required to successfully scale services.

Speakers include
- Brian Holliday, Managing Director for Siemens Digital Factory, Siemens plc
- ’Per Stjernqvist, VP Servitization & Solutions Trackunit A/S
- Fred Jones, General Manager, UK Expansion, Uber


Double Paper Acceptance
Steve Hoath (IRC) has just had a paper accepted for publication by the Journal of Imaging Science & Technology, intended for its NIP32/DF 2016 focussed section.

“Multi-Pulse Train Modelling of Piezo DoD Inkjet Print-Head Response”, by Stephen D Hoath.
Also another paper accepted for presentation at NIP32/DF2016: this time a joint paper by a UROP student working with Steve Hoath and Graham Martin, and 2 engineers from Xaar who sponsored the student.

“Meniscus Motion Inside A Drop-On-Demand Inkjet Print-Head Nozzle,” by Claudio Ravasio (Wolfson), Steve Hoath and Graham Martin (IfM), Marko Dorrestijn and Peter Boltryk (Xaar).

EuBC Research Award 2016: Dr Florian Urmetzer

We are pleased to announced that Florian Urmetzer (CSA) was recently awarded the EuBC Research Award 2016. The annual distinction rewards outstanding academic research on European economic and political issues. Florian was awarded for his research in the area of service business design and the shift to service of classical manufacturing companies.

http://bit.ly/1sPp5kg

Managing the relationship with your supervisor

All IfM PhD students are invited to attend the ‘Managing the Relationship with your Supervisor’ workshop on Wednesday, 8 June from 3.30pm until 5pm in SR2 (IfM). Following the workshop, there will be an ‘End Of Academic Year Dinner and Drinks’. The event, including the dinner and drinks are free of charge.

Event Details
- 3.30pm – 5pm Workshop ‘Managing the Relationship with your Supervisor’ in SR2
- 5pm – 6pm Drinks reception and nibbles in the Common Room
- 6pm onwards End Of Academic Year Dinner and Drinks’ in the Common Room

To attend, please register here: http://goo.gl/forms/sgDfh4Ntvv

i-Teams end-of-term presentations

Come along to our i-Teams end-of-term presentations and see what we have been working on in the evening at the IfM! There are two sets this time:

- Development-Teams, Tuesday June 7th at the IfM, 6.30pm for 7pm, looking at blood transfusions, anaemia detection and gas storage in the developing world - register at https://www.eventbrite.co.uk/e/development-i-teams-presentations-for-easter-2016-tickets-24833686224
- Technology i-Teams, Thursday June 16th at the University Centre, 6.30pm for 7pm, looking at graphene, EEG analysis and flexible liquid crystal displays - register at https://www.eventbrite.co.uk/e/technology-i-teams-presentations-for-easter-term-2016-tickets-2472310748

The next set of i-Teams projects will start in October - for more info, see www.iteamsonline.org

Indonesia looking in particular at:

Theme 1 What technology could be introduced and leveraged to ensure that beverages (e.g. waters, juices and dairy) are reliably distributed and served in rural and city locations by local entrepreneurs? Can the connected world play a role in achieving this? Might it help to achieve more appealing price points?

Theme 2 Nutritional deficiencies are well-understood, including vitamins, minerals and protein – how can beverages (e.g. waters, juices and dairy) be used to address this?

Researchers will gain an insight into these areas of interest to Coca-Cola. The Forum provides an opportunity to identify areas of common interest that could lead to future research collaborations, studentships or secondments.

Registration in advance is essential. All participants are expected to make an active contribution to the discussions during the day.

Registration is via Eventbrite on http://coca-cola-engagement-forum.eventbrite.co.uk

For more details contact Dan.Lucas@enterprise.cam.ac.uk

Engagement Forum with Coca-Cola

Hauser Forum, July 6th 2016

A day of facilitated discussions with Coca-Cola, open to researchers at all stages of their careers, including academics, PostDocs and postgraduate students.

Topics will focus on needs for regions across Africa, India, China and
New People

Rieke Baerenfaenger joined DIAL in April 2016 as a visitor for three months. Rieke is currently a PhD student and research assistant in her third year at the Institute of Information Management at the University of St. Gallen (HSG). She holds a MA degree in Information, Media, and Technology Management from HSG and a BSc Hons in International Business from Maastricht University. Rieke’s research interests include information management, information services, and digital business capabilities.

Thomas Bohné has started as a Senior Research Associate in CTM. A familiar face to many at IfM, Thomas completed his PhD at CTM in 2010. He then held positions at the University of Auckland in New Zealand and RWTH Aachen University in Germany. At CTM Thomas will be working with Tim Minshall on open innovation implementation.

Miriam Benedetti has joined CIS as an academic visitor starting this May. She joins CIS as part of her curriculum of studies for a PhD in Industrial Engineering at the University of Rome Tor Vergata, where she graduated in Energy Engineering. Whilst at IfM her research will be focused on Energy Services business models and Industrial Symbiosis. Her main research interests are Industrial Energy Management, Energy and Resources Efficiency, Industrial Sustainability, Compressed Air Systems’ efficiency, Operations Management, Six Sigma, Product Service Systems.

Josef Greitemann joined the Centre for International Manufacturing in May 2016 as a visitor for three months. Josef is a research assistant and PhD student at the Institute for Machine Tools and Industrial Management (iwb) of the Technical University of Munich (TUM), Germany. Before joining iwb, Josef completed two master degrees in mechanical engineering and economics at TUM.

Alison Martin is Receptionist at the IfM. She was previously employed at PA Consulting Group (Technology) and Cambridge Evening News.

Rob Munro is a technology and innovation management specialist and works with business and innovation leaders within the high-value manufacturing community and government.

Before becoming an innovation and technology-focussed specialist Rob spent twenty-four years within speciality chemical and material companies ICI and Johnson Matthey creating new technologies and building new businesses. He held senior line management positions in manufacturing operations, commercial and R&D with strong track record in developing business and innovation strategies, improving business work processes and delivering complex high-value projects.

As a research practitioner in innovation management Rob is an active chemical engineer with a deep interest in using science and technology to respond to the challenges of climate change, population growth and resource depletion.

Rob holds a Masters’ degree in Chemical and Process Engineering and an MBA from Manchester Business School where innovation theory and management was a particular focus.
Publications

To ensure your publication is listed in future, please make sure they are added to:
www.openaccess.cam.ac.uk


