

Course Presenter Biographies

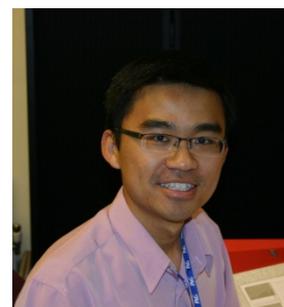
Dr Bindhu Gururajan

Dr Bindhu Gururajan did his Master degree in Chemical Engineering from Indian Institute of Technology Delhi and PhD in Formulation and Process Engineering from University of Birmingham, U.K. In his PhD research he worked on modelling roller compaction process. Later he pursued Post-Doctoral research at Pfizer Research Centre, U.K. on scaling up roller compaction process. Currently working in AstraZeneca, U.K. as Senior Scientist (Process Engineering) and involved in formulation and process development, Scale up and Technology Transfer for key products for Respiratory and inflammation, Oncology and Cardiovascular therapeutic area. He is an active committee member of Particle Technology Subject Group, Institute of Chemical Engineers (IChemE), U.K. and Associate Member of Academy of Pharmaceutical Sciences (APS), U.K.



Dr Hong Sin Tan

Dr Hong Sing Tan works as a senior process engineer at Procter and Gamble in Newcastle, United Kingdom. His responsibility is in the development of modelling and simulation tools to support the dry laundry business in the area of agglomeration and powder flow processes. He graduated from the University of Sheffield in mechanical engineering and at the same university; he obtained his PhD in 2004 on the subject of the kinetics of fluidised bed granulation. After his PhD, he also worked as a Postdoctoral research associate at the same department, working on consultation project for companies in the areas of particle technology.



Dr. Laurent Forny

Laurent Forny is a chemical engineer with Diploma, Master and PhD degrees from the University of Technology of Compiègne. His Master thesis investigated the role of surface chemistry in caking of model powders. His PhD, started in 2005, focused on water-rich powder also called "dry water". This convenient carrier system is produced by blending water and hydrophobic silica nanoparticles. Surprisingly, the final product maintains the same flow properties as a dry powder. During his PhD, Laurent developed scientific skills in wetting phenomena and interfacial properties.

In 2008, Laurent joined the Nestle Research Centre in Lausanne. From that time, he is managing project dealing with phase transitions in food powders.



Dr. Csaba Sinka

Dr. Csaba Sinka was appointed in 2006 to a Lectureship in Mechanics of Materials in the Department of Engineering at the University of Leicester. His research interests are the mechanics of granular and porous materials and biomaterials. He has developed experimental techniques for characterization of powder flow and compaction and an integrated approach for modelling pharmaceutical powder processes. He authored 3 book chapters, 30 refereed journal and conference papers, and gave 40 presentations.

Prior to this appointment he worked for MSD for 6 years in pharmaceutical R&D in the UK and US. He is a Fellow of the Institute of Materials, Minerals and Mining and member of its Particulate Engineering Committee. He also serves on the Academic Standards Panel of the Institution of Mechanical Engineers. He is a member of the EPSRC College.



Dr Karen Hapgood,

Monash University, Australia

Dr. Hapgood is currently a Senior Lecturer at Dept. Chemical Engineering, Monash University. Previously, she spent five years in the pharmaceutical industry with Merck &Co.

Dr Hapgood received her Ph.D. in Chemical Engineering in 2000 from the University of Queensland for her thesis entitled “Nucleation and Binder Dispersion in Wet Granulation” which was supervised by Professor Jim Litster. After completing her Ph.D. work, Dr. Hapgood joined Merck & Co in the Pharmaceutical Research and Development



division, where she worked on designing and scaling up manufacturing processes for solid oral dosage forms. In 2003, she joined the Pharmaceutical Manufacturing Laboratory where she was involved in troubleshooting and detailed characterization of inline manufactured products and new products under development. In 2004/05, she was technical lead in a team responsible for transferring the manufacturing process for STOCRIN, a critical HIV drug, to the Sydney manufacturing site. She spent 12 months supporting the project and daily manufacture.

In 2006 she began her current position as a Senior Lecturer in Dept. Chemical Engineering, Monash University, where she continues to investigate granulation and particle processing. In 2006 she was awarded the AAPS New Investigator Award in Pharmaceutics and the Pharmaceutical Sciences. She has published several journal papers and two book chapters to date, as well as numerous conference presentations. She is on the International Steering Committee for the Handbook of Pharmaceutical Excipients, and is a member of the Therapeutic Goods Committee in Australia

Dr. Tibor Attila Nagy

Tibor is currently the Manager of Pilot Plant, Formulation Development, at Gedeon Richter Plc., the biggest pharmaceutical company in Hungary. He is a chemical engineer with BSC, MSC and PhD from Budapest University of Technology.

From 1988 - 1998 he was R&D scientist at Egis Pharmaceuticals Lacta

In 1998 he moved to Gedeon Richter Plc., Formulation Development. From 1999 he is the Manager of Pilot Plant.

He is an expert on standard pharmaceutical formulation unit operations; different equipment designs, automation and operation; process data evaluation of pharmaceutical processes.

Expert on Product and Process Design and Process Analytical Technology.

Tibor is author or co-worker of more than 20 scientific publications and the co-owner of 1 patent. He is invited speaker on pharmaceutical process development, process scale-up at Budapest University of Technology, University of Szeged and University of Pecs, at "Fluid bed drying, granulating and coating" TTC course (Binzen), and was a speaker at "2nd Single Pot Processing Workshop" in 2002, Collette N.V. (Wommelgem).

He is a board member of the "European Working Party on Agglomeration of EFCE" (European Federation of Chemical Engineering) since 1997.



Dr. Jinsheng Fu

Jinsheng obtained his PhD degree from the University of Sheffield; the PhD research project was titled "*Production of High Quality Granules in High Shear Mixers and Impact Deformation, Rebounding and Breakage Behaviour of Wet Granules*". The most important achievements in this project included: (1) developed a unique operating protocol used to produce high quality granule in high shear mixer, and (2) achieved to correlate the dynamic behaviour, i.e. deformation, rebounding and breakage with granule attributes. The first achievement was awarded first prize in poster competition in 5th UK particle Technology Forum, July 2003, Sheffield and applied a patent in UK. The second achievement was recognised as national leading by the panel experts of EPSRC in 2005.



After his PhD, he completed two industrial based research projects. One was the consultant project to HEN Ltd. (Chesterfield), which was aimed at optimising the granulation and drying processes in manufacturing site. The second one was a post-doctoral research project to Unilever, UK, aiming at achieving high quality detergent powder in a high shear mixer (2006-2007). In this project he successfully developed a new process which can be used to produce high quality detergent granules in

high shear mixer. Based on this achievement, his work was assessed as “Excellent Level” in the years 2006 “Staff Review and Development Scheme (SRDS)” in the University of Sheffield.

In 2007, Jinsheng was employed by Kelly services and worked for GSK UK to review and update GSK First Intent Formulation Granulation Technical Documents, including process understanding, equipment maintenance, and operation strategies and scaling up. Immediate after that, Jinsheng was employed by the University of Sheffield and conducts his second post-doctoral research project sponsored by GSK. This project is aimed at understanding, characterising and scaling up of the GSK First Intent Formulation Granulation Processes.

Dr Markus Hartmann

Nestlé Product Technology Centre, Germany

Markus is Product Manager at Nestlé. He is a process engineer with Diploma, Masters and PhD degrees from the Technical University of Munich in Germany.

In 2006 he started with Nestlé as a project manager in the Technology Group at Nestlé's Product Technology Centre Singen in Germany where he is responsible for agglomeration, granulation and powder handling of culinary powders.

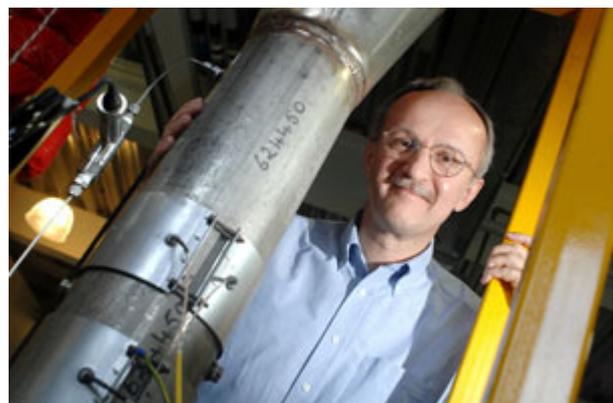
Markus is a committee member of the "European Federation of Chemical Engineering (EFCE), Section on Food".



Professor Jonathan Seville

University of Warwick

Professor Jonathan Seville began his engineering career in Coventry almost 30 years ago in 1979 when he joined Courtaulds Ltd's research division in Coventry as a Chemical Engineer working on design and development for cellulose-based chemicals. He holds degrees in Chemical Engineering from the Universities of Cambridge and Surrey and has held visiting appointments at



the University of British Columbia and the Technical University of Denmark. He is a Chartered Engineer, a Fellow of the Institution of Chemical Engineers and a Fellow of the Royal Academy of Engineering.

He is currently the Dean of the School of Engineering at the University of Warwick. Before joining Warwick, he was at University of Birmingham where he was Head of the Department of Chemical Engineering for a period of 10 years and latterly Deputy Head of the School of Engineering.

He has pioneered the application of chemical engineering to the design and manufacture of products for the pharmaceutical, home care and mass consumer industries. Professor Seville founded the Centre for Formulation Engineering at Birmingham in 1999, the first such centre in the UK. Industrial supporters of the Centre have included Unilever, Procter & Gamble, GSK, Pfizer, Merck Sharp & Dohme, BP and Johnson Matthey. His research interests include the use of positron emission to visualise motion in manufacturing processes.

Nigel Roberts

Protector & Gamble, UK

Nigel has worked in the field of powder processing for 18 years. He is a chemical engineer with a MEng from Cambridge. His work has included a wide range of powder processes including agglomeration, coating, roller compaction, extrusion, spray-drying, fluid bed drying, elutriation and powder handling, blending and mixing. He acts as a company trainer for powder handling/processing and intellectual property for non-lawyers. He has also worked on the processing of polyvinyl alcohol films, encapsulation via microreactors and plasma deposition of fluorocarbons onto fabrics. He has a particular interest in intellectual property with multiple patents and patent applications. He currently works at P&G's Newcastle Technical Centre in the upstream Process Breakthrough group as a Principal Engineer.

