

07.30-08.55	Registration					
08.55-09.00	Introduction – Prof. Agba D. Salman					Old Banqueting Hall
09.00-10.00	Plenary Lecture: Prof. Jim Litster, The University of Sheffield, UK <i>Introduced by Prof Paul Mort</i>					Old Banqueting Hall
10.00-10.30	Coffee Break / Poster presentations					
	Session 1: High Shear Mixer Chair: Dr Heather Emady	Old Banqueting Hall	Session 2: Coating 1 Chair: Prof Enrique Sanchez Vilches	Drawing Room	Session 3: Tableting 1 Chair: Dr Abderrahim Michrafy	Reception Room
10.30-10.55	1. MIXER TORQUE RHEOMETER - A CORRELATION BETWEEN THE MULTIPLE ADDITION AND VARIABLE MIX TIME METHODS Bruna R. Belem , Gustavo V. Carapeto, Bruna F. do Rosário, Michele G. Issa & Humberto G. Ferraz <i>Department of Pharmacy, University of São Paulo, Brazil</i>		4. MICROPELLET COATING FOR TASTE IMPROVEMENT OF PAEDIATRIC FIXED DOSE COMBINATION ANTIMALARIAL THERAPIES Dina Shokry ¹ , Alan Reader ¹ , Sangeetha Marri ¹ , Daniel Baker ¹ , Kavil Patel ² & Fang Liu ^{1,2} <i>1. University of Hertfordshire, UK; 2. Fluid Pharma Ltd., UK</i>		7. THE EFFECT OF TEMPERATURE ON PHARMACEUTICAL POWDER ADHESION TO COMPACTION TOOLING Vishal V. Shinde , Ahmad D.A. Ramahi & I. Csaba Sinka <i>University of Leicester, United Kingdom</i>	
10.55-11.20	2. EVALUATION OF EFFECT OF PROCESS AND FORMULATION VARIABLES ON THE SIZE ENLARGEMENT MECHANISMS IN HIGH SHEAR MIXERS – AN EIRICH MIXER STUDY Charlotte Sloan & Chirangano Mangwandi <i>School of Chemistry & Chemical Engineering, Queen's University Belfast, UK</i>		5. PROCESS FOR SPRAY FOAMING OF A POLYMER - SURFACTANT SOLUTION BY USE OF A TWO-FLUID NOZZLE TO CREATE A CONTINUOUS COATING Björn Düsenberg ¹ , Heike Kreuder ² , Lothar Seidemann ² , Frank Kleine Jäger ² & Andreas Bück ¹ <i>1. Friedrich-Alexander-Universität Erlangen-Nürnberg, Institute of Particle Technology, Germany; 2. BASF SE, Germany</i>		8. IDENTIFICATION OF LETHAL MECHANISMS AND CONTROL STRATEGIES IN DEVELOPING PROBIOTIC TABLETS Bide Wang ¹ , Andrew Middleton ² , Rachael Gibson ² , Jayant Khanolkar ² , Oleksiy Klymenko ¹ & Charley Wu ¹ <i>1. School of Chemistry and Chemical Engineering, University of Surrey, UK; 2. P&G Innovation Centre, UK</i>	
11.20-11.45	3. MIXER TORQUE RHEOMETER - EVALUATION OF THE PHYSICAL QUALITY OF FURAZOLIDONE GRANULES PRODUCED WITH DIFFERENT LIQUID/SOLID RATIOS Gustavo V. Carapeto , Bruna R. Belem, Bruna F. do Rosário, Michele G. Issa & Humberto G. Ferraz <i>Department of Pharmacy, University of São Paulo, Brazil</i>		6. A REGIME MAP FOR DRY POWDER COATING Marv Khala ¹ , Colin Hare ¹ , Vikram Karde ² & Jerry Heng ^{2,3} <i>1. School of Engineering, Newcastle University, UK; 2. Department of Chemical Engineering, Imperial College London, UK; 3. Institute for Molecular Science and Engineering, Imperial College London, UK</i>		9. CONTINUOUS IN FEED FRAME LUBRICATION FOR TABLETS DURING DIRECT COMPRESSION René Brands , Christopher Mathias, Jens Bartsch & Markus Thommes <i>Laboratory of Solids Process Engineering, TU Dortmund University, Germany</i>	
11.45-12.45	Lunch/ Poster presentations					

Session presentations last 25 minutes in total (20 min presentation + 5 min discussion)

12.45-13.45	Plenary Lecture: Prof. Stefan Palzer, Nestlé SA, Switzerland <i>Introduced by Prof Stefan Heinrich</i>					<i>Old Banqueting Hall</i>
13.45-14.15	Coffee Break / Poster presentations					
	Session 4: Wet Granulation Chair: Dr Nejat Rahmanian	<i>Old Banqueting Hall</i>	Session 5: Spray Drying 1 Chair: Prof Nikolakakis Ioannis	<i>Drawing Room</i>	Session 6: Tableting 2 Chair: Prof Csaba Sinka	<i>Reception Room</i>
14.15-14.40	10. PRE-NUCLEATION IN HIGH-SHEAR WET GRANULATION Diana S. Kumar ¹ , Sarang Oka ² & Heather N. Emady ¹ <i>1. School for Eng. of Matter, Transp., and Energy, Arizona State Univ.; 2. Hovione, Drug Product Continuous Manufacturing, USA</i>		13. COMPARING DIFFERENT SINGLE MILK DROPLET DRYING PROCESS WITH SPRAY DRYING PROCESS Xuqian Li ¹ , Riyadh B Al-Asady ¹ , Constantijn Sanders ² , Agba.D.Salman ¹ <i>1. Department of Chemical and Biological Engineering, University of Sheffield, UK; 2. Nestec Ltd., Nestlé Product Technology Centre, Switzerland</i>		16. EVALUATION AND DIFFERENTIATION OF DAMAGING INFLUENCES ON COATED PELLETS IN TABLETING MACHINES Lara Stein ^{1,2,3} , Luisa Enders ^{1,2} , Gernot Warnke ³ & Jan H. Finke ^{1,2} <i>1. Institute for Particle Technology, TU Braunschweig, Germany; 2. Center of Pharmaceutical Engineering – PVZ, TU Braunschweig, Germany; 3. JRS PHARMA GmbH & Co. KG, Germany</i>	
14.40-15.05	11. QUANTITATIVE ANALYSIS OF THE EFFECTS OF MULTICOMPONENT FORMULATION VARIATIONS ON GRANULE QUALITY ATTRIBUTES Ashley Dan ¹ , Haresh Vaswani ¹ , Aleksandra Grzabka-Zasadzińska ³ , Jingzhe Li ² , Koyel Sen ² , Shubhajit Paul ² , Yin-Chao Tseng ² , Rohit Ramachandran ¹ <i>1. Dept. of Chem. and Biochem. Eng., The State Univ. of New Jersey, USA; 2. Boehringer Ingelheim Pharmaceuticals Inc, USA; 3. Inst. of Chem. Technol. and Eng., Poznan Univ. of Technol., Poland</i>		14. TOWARDS BETTER SUSTAINABILITY: SPRAY-DRYING OF HIGHLY VISCOUS CONCENTRATES Riyadh B Al-Asady ¹ , Vincent Meunier ² , Gerhard Niederreiter ² & Agba D. Salman ¹ <i>1. Department of Chemical and Biological Engineering, University of Sheffield, UK; 2 Nestlé Research, Switzerland</i>		17. EFFECT OF HYDROPHOBIC POWDERS ON THE TENSILE STRENGTH OF THE TABLET Zoe Chu ^{1,2} , Christopher Windows-Yule ¹ , Ian Gabbott ² , Gavin Reynolds ² , Rachael Shinebaum ² and Andy Ingram ¹ <i>1. School of Chemical Engineering, University of Birmingham, UK; 2. Oral Product Development, Pharmaceutical Technology & Development, AstraZeneca, UK</i>	
15.05-15.30	12. ADVANCED 3D AND 4D MICROSTRUCTURE STUDY OF SINGLE GRANULE FORMATION USING SYNCHROTRON IN-SITU X-RAY IMAGING Sima Zeinali Danalou ¹ , Carter Blocka ¹ , Jingsi Yang ¹ , Xiao Fan Ding ² , Ning Zhu ^{1,2,3} , Heather N. Emady ⁴ , Ellen Wasan ⁵ & Lifeng Zhang ¹ <i>1. Dept. of Chem. and Biol. Eng., Univ. of Saskatchewan; 2. Dept. of Biomedical Eng., Univ. of Saskatchewan, Canada; 3. Canadian Light Source Inc., Canada; 4. School for Eng. of Matter, Transport and Energy, Arizona State Univ., USA; 5. College of Pharmacy and Nutrition, Univ. of Saskatchewan, Canada</i>		15. ELECTROSTATIC SPRAY DRYING: ADVANTAGES FOR THERMOSENSITIVE ACTIVES Elodie Beaupeux ¹ , Audrey Maudhuit ¹ , Akaber Dokmak ^{1,2} , Preethi Jayaprakash ^{1,3} Thomas Deleau ² & Claire Gaiani ³ <i>1. Fluid Air Europe, Division of Spraying Systems CO., France; 2. Toulouse University, RAPSODEE, France; 3. Université de Lorraine, LIBio, France</i>		18. WATER SOLUBLE TABLET FORMULATION FOR FAST INTRA TABLET COATING VARIABILITY DETERMINATION TESTS Rok Šibanc ¹ , Branko Vukosavljević ¹ , Anja Ehrig ² , Blaž Grilec ³ , Ilija G. Ilić ³ & Rakulan Sivanesapillai ² <i>1. Bayer AG, Chemical and Pharmaceutical Development, Germany; 2. Bayer AG, Engineering and Technology, Germany; 3. Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Ljubljana, Slovenia</i>	
15.30-16.00	Coffee Break / Poster presentations					

Session presentations last 25 minutes in total (20 min presentation + 5 min discussion)

	Session 7: Scale-up Chair: Dr Jens Bartsch	<i>Old Banqueting Hall</i>	Session 8: Mixing Chair: Prof Gavin Reynolds	<i>Drawing Room</i>	Session 9: Modelling 1 Chair: Prof Rohit Ramachandran	<i>Reception Room</i>
16.00-16.25	19. INDUSTRIAL CASE STUDY ON SCALE UP AND SYSTEM DYNAMICS CHARACTERIZATION OF PHARMACEUTICAL CONTINUOUS PRODUCTION LINE Ahmad Mohamad , Yves Roggo, Markus Krumme <i>Novartis Pharma AG, CH</i>		21. HOMO AND HETERO AGGLOMERATE FORMATION OF NANOPARTICLES IN A SPOUTED Subash R. Kolan , Rui Wang, Dr.-Ing. Torsten Hoffmann and Prof. Dr.-Ing. habil. Evangelos Tsotsas <i>Thermal Process Engineering Department, Otto von Guericke University, Germany</i>		23. NON-DIMENSIONALIZATION OF QUADRATURE METHOD OF MOMENTS FOR WET GRANULATION Timo Plath , Stefan Luding, Thomas Weinhart <i>Thermal and Fluid Engineering (ET), University of Twente, The Netherlands</i>	
16.25-16.50	20. THERMAL DESIGN AND SCALE-UP OF FLUID BED GRANULATION Ian C. Kemp <i>Independent Consultant, Ware, UK</i>		22. DEM ANALYSIS OF MIXING PERFORMANCE OF COHESIVE POWDERS IN A HIGH SHEAR MIXER Abul Hassan Syed ^{1,2} , Hasan S. Elmsahli ¹ , I. Csaba Sinka ¹ <i>1. School of Engineering, University of Leicester, UK; 2. Department of Chemical and Process Engineering, University of Surrey, UK</i>		24. A MODELLING FRAMEWORK BASED ON SERIAL ARTIFICIAL NEURAL NETWORKS FOR THE MODELLING OF A CONTINUOUS TABLETTING LINE Wafa' H. AlAlaween¹ , Mahdi Mahfouf ² , Chalak Omar ³ , Riyadh B Al-Asady ³ , Daniele Monaco ³ and Agba D. Salman ³ <i>1. Department of Industrial Engineering, The University of Jordan, Jordan; 2. Department of Automatic Control and Systems Engineering, The University of Sheffield, UK; 3. Department of Chemical and Biological Engineering, The University of Sheffield, UK</i>	

Session presentations last 25 minutes in total (20 min presentation + 5 min discussion)

09.00-10.00	Plenary Lecture: Prof. Peter Kleinebudde, Heinrich-Heine-University Duesseldorf, Germany <i>Introduced by Prof Markus Thommes</i>					<i>Old Banqueting Hall</i>
10.00-10.30	Coffee Break / Poster presentations					
	Session 1: Granulation Chair: Prof Lifeng Zhang	<i>Old Banqueting Hall</i>	Session 2: Fluidised Bed Chair: Prof Stefan Heinrich	<i>Drawing Room</i>	Session 3: Sustainability Chair: Prof Ming-Chun Lu	<i>Reception Room</i>
10.30-10.55	25. CONTINUOUS MELT GRANULATION WITH PLANETARY ROLLER GRANULATORS Tom Lang ¹ , Thomas Birr ² , Markus Thommes ¹ & Jens Bartsch¹ <i>1. Laboratories of Solids Process Engineering, TU Dortmund Univ., Emil-Figge-Str.68, 44227 Dortmund, Germany; 2. Entex Rust & Mitschke GmbH, Heinrichstr. 67a, 44805 Bochum, Germany</i>		28. FLUID BED PROCESSING OF NANOCRYSTAL FORMULATIONS WITH PERSONALISED DISSOLUTION PROFILES Ondřej Navrátil ^{1,2} , Elizaveta Mutylo ^{1,2} , Filip Hládek^{1,2} & František Štěpánek ¹ <i>1. Department of Chemical Engineering, University of Chemistry and Technology Prague, Czech Republic; 2. Zentiva k.s., Czech Republic</i>		31. DEVELOPING AFFORDABLE GRANULATION METHODS Yashodh H Karunanayake¹ , Linda Brüttsch ² , Vincent Meunier ² & Agba D Salman ¹ <i>1. Department of Chemical and Biological Engineering, University of Sheffield, Mappin Street, Sheffield, S1 3JD, UK 2. Nestle Research Lausanne, 1010 Lausanne, Switzerland</i>	
10.55-11.20	26. PARTICLE AGGLOMERATION VIA RESONANT ACOUSTIC MIXER FOR DRY POWDER INHALATION Qingzhen Zhang¹ , Zheng Wang ^{1,2} , Philip Hall ^{1,3} <i>1. Dept. of Chem. and Environm. Eng.; 2. Key Laboratory for Carbonaceous Wastes Processing and Process Intensification Research of Zhejiang Province; 3. Nottingham Ningbo China Beacons of Excellence Research and Innovation Institute, PR China</i>		29. NOVEL STRATEGIES FOR RECOVERY OF ZINC AS ZINC- SULFIDE BY FLUIDIZATION BED HOMOGENEOUS CRYSTALLIZATION Kai-Yang Chang , Po-Lin Liao, Nicolaus Nezhha Nunez Mahasti & Yao-Hui Huang <i>Department of Chemical Engineering, National Cheng Kung University, Taiwan</i>		32. DEVELOPMENT OF GRANULAR NEUTRAL AMINO ACIDS WITH CALCIUM HYDROXIDE COMPOSITION Min Kyung Kwon¹ , Jun-Woo Kim ¹ & DongHyun Lee ² <i>1. CJ BIO Institute, Republic of Korea; 2. School of Chemical Engineering, Sungkyunkwan University (SKKU), Republic of Korea</i>	
11.20-11.45	27. FORMULATION IN A DROP - TEMPLATED GRANULATION AND COMPACTION ANALYSIS Paola Medina Martinez ¹ , Line Koleilat ¹ , Joshua Hanson ² , Jonathan Wade ² & Paul Mort¹ <i>1. Purdue University, West Lafayette, USA; 2. Eli Lilly & Company, Indianapolis, USA</i>		30. DEVELOPMENT OF AN ACOUSTIC EMISSION TECHNIQUE IN COMBINATION WITH MACHINE LEARNING TO CHARACTERIZE THE PARTICLE SIZE DISTRIBUTION IN SOLID-GAS FLUIDIZED BEDS Fria Hossein¹ , Matteo Errigo ¹ , Sibó Cheng ² , Panagiota Angeli ¹ , Massimiliano Materazzi Matteredazzi ¹ , Paola Lettieri ¹ , Rossella Arcucci ² <i>1. Department of Chemical Engineering, University College London, UK; 2. Data Science Institute, Department of Computing, Imperial College London, UK</i>		33. MULTIVARIATE ANALYSIS AND PROCESS OPTIMIZATION OF MECHANOCHEMICAL SYNTHESIS USING TWIN SCREW EXTRUSION: PRODUCTION 4,4 BI-PYRIDINE BASED MOF Ahmed Metawe¹ , Rodrigo Soto, ^{1,2} Majeda Khraisheh ³ , Gavin Walker ¹ , Ahmad B. Albadarin ⁴ <i>1. Dept. of Chem. Sci., Bernal Institute, Univ. of Limerick, Ireland; 2. Dept. of Chem. Eng. and Analytical Chemistry, Univ. of Barcelona, Spain; 3. Dept. of Chem. Eng., College of Eng., Qatar Univ., Qatar; 4. B&WB Dept. of Chem. Eng. & Architecture, American Univ. of Beirut, Beirut</i>	
11.45-12.45	Lunch / Poster presentations					

Session presentations last 25 minutes in total (20 min presentation + 5 min discussion)

12.45-13.45	Plenary Lecture: Prof Gabriel Meesters, Delft University of Technology, Netherlands <i>Introduced by Prof Frantisek Stepanek</i>			<i>Old Banqueting Hall</i>
13.45-14.15	Coffee Break / Poster presentations			
	Session 4: Continuous Manufacturing Chair: Prof Markus Thommes	<i>Old Banqueting Hall</i>	Session 5: Food Powders Chair: Prof Lilia Ahrne	<i>Drawing Room</i>
			Session 6: Simulation Chair: Dr Colin Hare	<i>Reception Room</i>
14.15-14.40	34. INFLUENCE OF REFILLING ON DOSING ACCURACY OF LOSS-IN-WEIGHT POWDERS FEEDER IN CONTINUOUS MANUFACTURING Fabiola N. Santamaría Alvarez¹ , Peter Kleinebudde ² & Jochen Thies ¹ <i>1. New Technologies Innovation Center, Glatt GmbH, Germany; 2. Institut for Pharmaceutical Technology & Biopharmacy, Heinrich-Heine-University Düsseldorf, Germany</i>	37. POWDER GRANULATION TO REDUCE LUMP FORMATION DURING RECONSTITUTION OF SWELLING FOOD POWDERS: CASE STUDY AND RESEARCH GAPS Klara Haas , P. Bhargav, J. Kammerhofer, M. Kindlein & V. Meunier <i>Nestlé Research, Switzerland</i>	40. SCALE AND BOUNDARY EFFECTS ON DRUCKER-PRAGER CAP MODEL PARAMETERS IN DIE COMPACTION Gweni Alonso Aruffo ¹ , Driss Oulahna ² , Olivier Lecoq ² & Abderrahim Michrafy² <i>1. Université de Toulouse, Mines Albi, Centre ICA, France; 2. Université de Toulouse, Mines Albi, CNRS, Centre RAPSODEE, France</i>	
14.40-15.05	35. MECHANISTIC REDUCED ORDER MODELS FOR INTEGRATING DRY GRANULATION AND TABLETING PROCESSES Sunidhi Bachawala¹ , Rexonni Lagare ² , Yan-Shu Huang ² , Katherine Young ² , Phoebe X. Bailey ² , David J. Sixon ² , Zoltan K. Nagy ² , Gintaras V. Reklaitis ² & Marcial Gonzalez ^{1,3} <i>1. School of Mechanical Engineering, Purdue University, USA; 2. Davidson School of Chemical Engineering, Purdue University, USA; 3. Ray W. Herrick Laboratories, Purdue University, USA</i>	38. THE EFFECT OF PROCESSING CONDITIONS ON DRY SOLIDS RECOVERY AND MOISTURE ABSORPTION CAPACITY OF SPRAY DRIED FISH PROTEIN HYDROLYSATES Kudzai Chiodza & Neill J. Goosen <i>Department of Chemical Engineering, University of Stellenbosch University, South Africa</i>	41. MODEL-DRIVEN AND DATA-DRIVEN SOFT SENSING OF SOLID MOISTURE CONTENT IN FLUIDIZED BED DRYERS Robert Kräuter , Xiye Zhou & Stefan Heinrich <i>Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany</i>	
15.05-15.30	36. ADVANCED ON-LINE MEASUREMENT TECHNIQUES TO CONTROL MILK POWDER CHARACTERISTICS DURING CONTINUOUS FLUIDIZED BED SPRAY AGGLOMERATION Tobias V. Raiber , Jennifer Frank, Laura Grotenhoff & Reinhard Kohlus <i>Department of Process Engineering and Food Powders, University of Hohenheim, Germany</i>	39. ENSURING PRODUCT STABILITY, QUALITY, AND SAFETY WHILE INTRODUCING NOVEL SUSTAINABLE PACKAGING SOLUTIONS Linda Brütsch & Vincent Meunier <i>Nestlé Research, Switzerland</i>	42. DEM SIMULATION OF A SINGLE SCREW GRANULATION: THE EFFECT OF LIQUID BINDER ON GRANULE PROPERTIES Tony B. Arthur , Nana K.G Sekyi & Nejat Rahmanian <i>Department of Chemical Engineering, University of Bradford, UK</i>	
15.30-16.00	Coffee Break / Poster presentations			

Session presentations last 25 minutes in total (20 min presentation + 5 min discussion)

	Session 7: PAT & On-Line Chair: Dr Tamas Sovany	<i>Old Banqueting Hall</i>	Session 8: Coating 2 Chair: Prof Gabriel Meesters	<i>Drawing Room</i>	Session 9: Size Reduction Chair: Prof Frantisek Stepanek	<i>Reception Room</i>
16.00-16.25	43. PAT MONITORING OF COATING PAN BY NIR: PLS METHOD CALIBRATION APPROACH Andrea Gelain , Giuseppe Buratti, Gabriele Inverni <i>Freund-Vector European Laboratory, Italy</i>		45. INVESTIGATION OF ISLAND GROWTH ON PARTICLES COATED BY MEANS OF AEROSOL Serap Akbas , Torsten Hoffmann, Kaicheng Chen & Evangelos Tsotsas <i>Thermal Process Engineering, Otto-von-Guericke-University, Germany</i>		47. AN INNOVATIVE SETUP TO STUDY THE INFLUENCE OF SHEAR STRESS ON THE BREAKAGE OF AGGLOMERATES Hanin Atwi ¹ , Guillaume Dumazer ¹ , Sylvain Martin ¹ , Guilhem Kauric ² , Thierry Gervais ³ & Olivier Bonnefoy ¹ <i>1. Mines Saint-Etienne, Univ Lyon, CNRS, France; 2. Orano Support, Direction R&D, France; 3. Orano Etablissement MELOX, France</i>	
16.25-16.50	44. IN-LINE PARTICLE SIZE MEASUREMENT IN DRY GRANULATION: DEVELOPMENT AND APPLICATION OF A NOVEL SAMPLING FUNNEL FOR CONTINUOUS SAMPLING Marcus Weidemann ¹ , Manfred Felder ² & Eberhard Schmidt ¹ <i>1. University of Wuppertal, Institute of Particle Technology, Germany; 2. Alexanderwerk GmbH, Germany</i>		46. DRUM COATING OF NON-SPHERICAL TABLETS: SIMULATIONS AND EXPERIMENTAL STUDIES OF INTRA- AND INTER-PARTICLE LAYER THICKNESS DISTRIBUTION Abhinandan K. Singh ¹ , Vanessa Götz ¹ , Pradeep Muramulla ² & Andreas Bück ¹ <i>1. Institute of Particle Technology (LFG), Friedrich-Alexander University Erlangen-Nuremberg, Germany; 2. Pharmaceutical Development, Daiichi-Sankyo Europe GmbH, Germany</i>		48. TRANSFORMATIONAL CONICAL MILL SCREEN DESIGN: A PARADIGM SHIFT IN SCALABLE ORAL SOLID DOSAGE POWDER SIZE REDUCTION Wilf Sanguesa ¹ & Yang Su ² <i>1. Quadro Engineering, Canada; 2. Microfluidics, USA</i>	

09.00-10.00	Plenary Lecture: Prof Gavin Reynolds, AstraZeneca, UK <i>Introduced by Prof Csaba Sinka</i>					<i>Old Banqueting Hall</i>
10.00-10.30	Coffee Break					
	Session 1: Roller Compaction Chair: Prof Peter Kleinebudde	<i>Old Banqueting Hall</i>	Session 2: Drying and Heat Transfer Chair: Ian Kemp	<i>Drawing Room</i>	Session 3: DEM Chair: Dr Kimiaki Washino	<i>Reception Room</i>
10.30-10.55	49. SYSTEMATIC STUDY TO IMPROVE THE POWDER FLOWABILITY AND REDUCING THE PERCENTAGE OF FINES IN ROLLER COMPACTOR Yang S. Mohamad ¹ , Riyadh Al-Asady ¹ , Mingzhe Yu ¹ , Manfred Felder ² , Vincent Meunier ³ , James Litster ¹ & Agba D. Salman ¹ <i>1. Department of Chemical and Biological Engineering, University of Sheffield, UK; 2. Alexanderwerk GmbH, Germany; 3. Nestlé Research, Switzerland</i>		52. EFFECT OF THE DRYING TYPE ON THE PROPERTIES OF GRANULE AND TABLETS PRODUCED BY HIGH SHEAR WET GRANULATION Erica Franceschinis ¹ , Valentina Bressan ¹ , Simone Bernardotto ¹ , Margherita Morpurgo ¹ , Marco Luperini ² & Andrea C. Santomaso ³ <i>1. Department of Pharmaceutical and Pharmacological Sciences, University of Padova, Italy; 2. Luperini Production S.p.A., Italy; 3. APTLab-Advanced Particle Technology Laboratory Department of Industrial Engineering, University of Padova, Italy</i>		55. MECHANISMS OF RIBBON SPLIT IN ROLLER COMPACTION Christian Eichler ¹ , Vasyl Skorych ^{1,2} & Stefan Heinrich ¹ <i>1. Hamburg University of Technology, Institute of Solids Process Engineering and Particle Technology, Germany; 2. DyssolTEC GmbH, Germany</i>	
10.55-11.20	50. SOLID DISPLACEMENT METHOD TO DETERMINE ENVELOPE DENSITY OF ROLLER COMPACTED RIBBONS AND ITS APPLICATION IN MATHEMATICAL MODELLING IN TECHNOLOGY TRANSFER OF THE DRY GRANULATION PROCESS Nikita Marinko ¹ , Petr Zámotný ¹ & Michaela Gajdošová ² <i>1. University of Chemistry and Technology Prague, Department of Organic Technology, Czech Republic; 2. Zentiva k.s., Czech Republic</i>		53. HEAT TRANSFER STUDIES IN A ROTATING DRUM CONTAINING NON-SPHERICAL PARTICLES Satchit Nagpal ¹ , Sourabh Jogee ¹ , Pradeep Muramulla ² , Partha S. Goswami ¹ , Srikanth Gopireddy ² <i>1. Department of Chemical Engineering, IIT Bombay, India; 2. Daiichi Sankyo Europe GmbH, Germany</i>		56. DEM SIMULATION OF LOW SHEAR AGGLOMERATION William K. Walls , James A. Thompson & Stephen G.R. Brown <i>Faculty of science and engineering, Swansea University, United Kingdom</i>	
11.20-11.45	51. COMPACTION PROCESS DESIGN AND TECH TRANSFER AT DIFFERENT STAGES OF DEVELOPMENT Stefan Bellinghausen ¹ , Jianfeng Li ² & Dana Barrasso ² <i>1. Siemens Process Systems Engineering, UK; 2. Siemens Process Systems Engineering, USA</i>		54. INVESTIGATION OF HEAT TRANSFER ON MOIST SPRAY-DRIED PORCELAIN PARTICLES Carine. L. Alves ¹ , Agenor de Noni Jr. ² , Sergio Y. Gómez González ² , Irina. Smirnova ³ & Stefan Heinrich ¹ <i>1. Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology (TUHH), Germany; 2. Department of Chemical Engineering (EQA), Federal University of Santa Catarina (UFSC), Brazil; 3. Institute of Thermal Separation Processes, Hamburg University of Technology (TUHH), Germany</i>		57. VOLUME-INTERACTING LEVEL SET DISCRETE ELEMENT METHOD: THE ANGLE OF REPOSE OF ANGULAR AND CONCAVE PARTICLES Dingeman L.H. van der Haven ¹ , Ioannis S. Fragkopoulos ² & James A. Elliott ¹ <i>1. Department of Materials Science & Metallurgy, University of Cambridge, UK; 2. Future Manufacturing & Digital Innovation, Novo Nordisk A/S, Denmark</i>	
11.45-12.45	Lunch					

Session presentations last 25 minutes in total (20 min presentation + 5 min discussion)

12.45-13.45	Plenary Lecture: Prof Charley Wu, University of Surrey, UK <i>Introduced by Prof Gavin Reynolds</i>					
13.45-14.15	Coffee Break / Poster presentations					
	Session 4: Spray Drying 2 Chair: Dr Chirangano Mangwandi	<i>Old Banqueting Hall</i>	Session 5: Pharmaceuticals Chair: Dr Kendal Pitt	<i>Drawing Room</i>	Session 6: Modelling 2 Chair: Prof Charley Wu	<i>Reception Room</i>
14.15-14.40	58. A NOVEL METHOD FOR RAPID SCREENING OF SPRAY-DRIED FORMULATIONS Vojtěch Klimša^{1,2} , Gabriela Ruphuy Chan ^{1,2} , František Štěpánek ¹ <i>1. University of Chemistry and Technology Prague, Czech Republic; 2. Lezare s.r.o., Czech Republic</i>		61. DESIGN AND EVALUATION OF STERCULIA TRAGACANTHA AS A RELEASE MODIFIER IN THEOPHYLINE SUSTAINED RELEASE TABLET FORMULATION Timma O. Uwah , Ekaete I. Akpabio, Daniel E. Effiong & Godwin E. Jacob <i>Department of Pharmaceutics & Pharmaceutical Technology, Faculty of Pharmacy, University of Uyo, Nigeria</i>		64. VALIDATION OF SCALED-UP PARTICLE MODEL IN DEM FOR COHESIVE PARTICLES Kimiaki Washino , Yuze Hu, Ei L. Chan, Takuya Tsuji & Toshitsugu Tanaka <i>Department of Mechanical Engineering, Osaka University, Japan</i>	
14.40-15.05	59. EMULSION STABILITY OF SPRAY-DRIED INFANT FORMULA Mariana Rodríguez Arzuaga^{1,2} , Analía G. Abraham ² , Lilia Ahrné ³ & María C. Añón ² <i>1. Latitud, LATU Foundation, Uruguay; 2. Centro de Investigación y Desarrollo en Criotecnología de Alimentos, Argentina; 3. University of Copenhagen, Denmark</i>		62. A SIMPLIFIED JOHANSON MODEL TO PREDICT ROLL FORCERIBBON DENSITY RELATIONSHIP IN PHARMACEUTICAL ROLLER COMPACTION Chen Mao , Chi So, Lap Yin Leung, & Ariel R. Muliadi <i>Small Molecule Pharmaceutical Sciences, Genentech, Inc., USA</i>		65. DEVELOPING A COMMERCIAL SCALE SEMI-CONTINUOUS FLUID BED WET GRANULATION PROCESS VIA DESIGN OF EXPERIMENTS BASED ON A MULTIVARIATE MODEL AND STATISTICAL ANALYSIS Maitraye Sen , Sydney Butikofer, Chad N. Wolfe, Shashwat Gupta & Adam S. Butterbaugh <i>Lilly Research Laboratories, Eli Lilly & Company, USA</i>	
15.05-15.30	60. SPRAY DRYING AND TABLETING OF LIVING MICROORGANISMS Karl Vorländer^{1,2} , Arno Kwade ^{1,2} , Jan H. Finke ^{1,2} & Ingo Kampen ^{1,2} <i>1. Technische Universität Braunschweig, Institute for Particle Technology (iPAT), Germany; 2. Technische Universität Braunschweig, Center of Pharmaceutical Engineering (PVZ), Germany</i>		63. LACTOBACILLUS LOADED POROUS HYDROXYAPATITE (HAP) PELLETS USING DIFFERENT HAP GRADES AND PORE FORMERS Theodora Papanikolaou ¹ , Ioannis Partheniadis ¹ , Dimitrios Fatouros ¹ , Antonia Sipaki ¹ , Ioannis Nikolakakis¹ , Suzan Vergkizi ² <i>1. Laboratory of Pharmaceutical Technology, School of Pharmacy, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece; 2. Laboratory of Microbiology, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece</i>		66. FOOD VS PACKAGING: DYNAMICS OF OIL-MIGRATION FROM PARTICLE SYSTEMS INTO FIBROUS MATERIAL Luc Dewulf¹ , Michael K. Hausmann ² , Annabel Bozon ³ , Gerhard Niederreiter ² & Agba D. Salman ¹ <i>1. Department of Chemical and Biological Engineering, University of Sheffield, UK; 2. Nestlé Research, Switzerland; 3. Nestlé Product Technology Centre, Germany</i>	

Session presentations last 25 minutes in total (20 min presentation + 5 min discussion)