

08.00-08.50	Registration							
08.50-08.55	Introduction– Prof. Gerhard Niederreiter							Richemond
08.55-09.00	Welcome- Prof Stefan Palzer							
09.00-10.00	Plenary Lecture: Powders and droplets: some reflections on quantifying nucleation Prof. Mike Hounslow, The University of Sheffield, UK							Richemond
10.00-10.30	Coffee Break / Poster presentations							
	Session 1 : Twin Screw I Chair: Markus Thommes	Richemond	Session 2: Fluidised Bed I Chair: Bertram Wolf	Balthazar	Session 3: Reconstitution I Chair: Laurent Forny	Imperiale	Session 4: Compression I Chair: Constantijn Sanders	Marie-Jeanne
10.30-10.55	1. COMPARISON BETWEEN TWIN-SCREW AND HIGH-SHEAR GRANULATION - THE EFFECT OF FILLER AND ACTIVE PHARMACEUTICAL INGREDIENT ON THE GRANULE AND TABLET PROPERTIES Kaisa M. Kytä ¹ , Satu Lakio ² , Håkan Wikström ² , Anisa Sulemanji ² , Magnus Fransson ² , Jarkko Ketolainen ¹ & Pirjo Tajarobi ³ <i>1 University of Eastern Finland, Finland 2 Pharmaceutical Technology and Development, AstraZeneca, Sweden 3 Drug Product Manufacture, AstraZeneca, Sweden</i>		4. EXPERIMENTAL INVESTIGATION OF PROCESS BEHAVIOR OF CONTINUOUS FLUIDIZED BED SPRAY AGGLOMERATION WITH INTERNAL CLASSIFICATION Gerd Strenzke ¹ , Jiajie Du ¹ , Andreas Bück ² & Evangelos Tsotsas ¹ <i>1 Chair of Thermal Process Engineering, Otto von Guericke University, Germany 2 Institute of Particle Technology, Friedrich-Alexander University, Germany</i>		7. IMPACT OF FORMULATION ON THE RECONSTITUTION PROPERTIES OF SPRAY-DRIED DAIRY POWDERS Tristan Fournaise , Jennifer Burgain, Carole Perroud, Joël Scher, Claire Gaiani & Jeremy Petit. <i>Université de Lorraine, France.</i>		10. AERODYNAMIC GRANULATION SYSTEM - A CONTINUOUS, CLOSED, DRY GRANULATION PROCESS FOR PHARMA, FOOD & CHEMICAL SUBSTANCES Giovanni Politi ¹ , Tuomas Saarinen ¹ , Carlo Vanoli ² & Ivan Veronese ² <i>1 AGS Finland Oy Finland 2 Medeor Associates, Italy</i>	
10.55-11.20	2. GRANULE CHARACTERISATION AFTER TWIN SCREW GRANULATION Rachael Shinebaum ¹ , Hannah K. Batchelor ² , Ian Gabbott ³ , Gavin K. Reynolds ³ , Elaine H. Stone ⁴ , Catherine J. Howe ¹ , Natasha Mudhar ¹ & Andrew Ingram ¹ <i>1 School of Chemical Engineering, University of Birmingham, UK. 2 School of Pharmacy, University of Birmingham, UK. 3 Astra Zeneca, UK</i>		5. MODELING OF UNDESIRE AGGLOMERATION IN FLUIDIZED BED COATING Christian Rieck ¹ , Daniel Müller ¹ , Andreas Bück ² & Evangelos Tsotsas ¹ <i>1 Thermal Process Engineering, Otto von Guericke University, Germany 2 Institute of Particle Technology, Germany</i>		8. RECONSTITUTION OF MALTODEXTRINS: INTERPLAY OF MOLECULAR WEIGHT AND POWDER ADDITION RATE Xin Yi Ong ¹ , Spencer E. Taylor ² & Marco Ramaioli ¹ <i>1 Department of Chemical and Process Engineering, University of Surrey, UK 2 Department of Chemistry, University of Surrey, UK</i>		11. COMPARISON OF TENSILE STRENGTH OBTAINED FROM DIFFERENT ASPECTS Haifeng Lu , Jiakun Cao, Xiaolei Guo, Cong Luo & Xin Gong <i>East China University of Science and Technology, PR China</i>	
11.20-11.45	3. TWIN SCREW GRANULATION OF HORMONAL DRUG FORMULATION Anh N. Phan ¹ , Kamelia Boodhoo ¹ , Ahmad Mustafar ¹ & Laura Monington ² <i>1. Newcastle University, UK 2. FreemanTech, UK</i>		6. STRATEGY FOR COATING OF AEROGELS IN A SPOUTED BED Monika Goslinska ¹ , Irina Smirnova ² & Stefan Heinrich ¹ <i>1 Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany 2 Institute of Thermal Separation Processes, Hamburg University of Technology, Germany</i>		9. DRYING OF NANOSUSPENSION USING ELECTROSPRAYING TECHNIQUE: EFFECT ON POWDER RECONSTITUTION Manju Misra , Shreya Thakkar, Abhijeet Pawar & Anu Nair <i>Drug discovery lab, NIPER, Ahmedabad, Palaj, Opp Air force station Headquarter, India</i>		12. ROLLER COMPACTION: MONITORING THE POWDER TEMPERATURE FROM FEEDING TO COMPACTION ZONE. Mingzhe Yu ¹ , Marcus Becker Hardt ² , Chalak S. Omar ¹ , Alexander Schmidt ² , James D. Litster ¹ & Agba D. Salman ¹ <i>1 University of Sheffield, UK 2 Alexanderwerk AG, Germany</i>	

11.45-13.00	Lunch/ Poster presentations			
13.00-14.00	Plenary Lecture: General Granulation: Mathematical Modelling Prof. Frantisek Stepanek, University of Chemistry and Technology, Prague <i>Introduced by Prof. Mike Adams</i>			<i>Richmond</i>
14.00-14.30	Coffee Break / Poster presentations			
	Session 5: High Shear Granulation Chair: Jerome Castro	Richmond	Session 6: Spheronisation Chair: Dave Doughty	Balthazar
			Session 7: Wetting Chair: Xianfeng Fan	Imperiale
				Session 8: Roller Compaction Chair: Edgar Chavez Montes
				Marie-Jeanne
14.30-14.55	13. EXPLORING THE GROWTH REGIME MAP - VALIDATING THE BOUNDARY BETWEEN NUCLEATION AND INDUCTION Jonathan B. Wade , James E. Miesle, Sonia L. Avilés, Maitraye Sen, Matthew J. Walworth <i>Eli Lilly & Company, USA</i>	16. DEVELOPMENT OF AGE APPROPRIATE FIXED DOSE COMBINATION MEDICINES AS SPHERONISED GRANULES TO TREAT CHILDHOOD TUBERCULOSIS Hannah Batchelor & Alyaa S. Alsalthi <i>University of Birmingham, UK</i>	19. POWDER BED PACKING AND API CONTENT HOMOGENEITY OF GRANULES IN SINGLE DROP GRANULE FORMATION Tianxiang Gao ¹ , Arun S.S. Singaravelu ¹ , Sarang Oka ² , Rohit Ramachandran ² , František Štěpánek ³ , Nikhilesh Chawla ¹ & Heather N. Emady ¹ <i>1 Arizona State University, United States 2 The State University of New Jersey, United States 3 University of Chemistry and Technology, Prague, Czech Republic</i>	22. CONTINUOUS DETERMINATION OF GRANULE SIZE DISTRIBUTION USING DYNAMIC IMAGE ANALYSIS Annika Wilms ^{1,2} , Klaus Knop ¹ & Peter Kleinebudde ¹ <i>1 Inst. of Pharmaceutics and Biopharm., University of Düsseldorf, Germany 2 INVITE GmbH, Chempark, Building W32, 51368 Leverkusen, Germany</i>
14.55-15.20	14. PREDICTION OF THE GROWTH KINETICS AND AGGLOMERATION MECHANISMS USING A MIXER TORQUE RHEOMETER Erica Franceschinis ¹ , Francesca Schmid ¹ , Roberto Baggio ¹ , Nicola Realdon ¹ , & Andrea C. Santomaso ² <i>1 University of Padua, Italy 2 APTLab-Advanced Particle Technology Laboratory, University of Padova, Italy</i>	17. IMPLEMENTATION OF ROUNDING MECHANISMS IN DEM SIMULATION OF THE SPHERONIZATION PROCESS Dominik Weis ¹ , Maria Evers ² , Markus Thommes ² , Edwin Garcia ³ & Sergiy Antonyuk ¹ <i>1 Technische Universität Kaiserslautern, Germany. 2 Technische Universität Dortmund, Germany. 3 Purdue University, USA</i>	20. MODELLING THE CAPILLARY FORCE BETWEEN PARTICLES WITH UNEQUAL CONTACT ANGLE Dongling Wu ^{1,2} , Ping Zhou ¹ , Baojun Zhao ² , Tony Howes ² & Geoff Wang ² <i>1 Central South University, China 2 The University of Queensland, Australia</i>	23. ROLLING PROCESS MODELLING & RELATED CHALLENGES Alon Mazor & Abderrahim Michrafy <i>Université de Toulouse, Mines Albi, CNRS, Centre RAPSODEE, Albi, France</i>
15.20-15.45	15. MECHANISTIC UNDERSTANDING OF HYDROPHOBICITY ON BI-COMPONENT HIGH SHEAR WET GRANULATION GROWTH KINETICS Indu Muthancheri & Rohit Ramachandran <i>The State University of New Jersey, USA</i>	18. GRANULATION APPROACHES TO DEVELOP SOLID DOSAGE FORMULATIONS OF POORLY SOLUBLE COMPOUNDS CONTAINING A LOW MELTING SURFACTANT Aditya S Tatavarti , Fillippos Kesisoglou & Feiyan Jin <i>Pharmaceutical Sciences, Merck Research Laboratories, Merck Sharp and Dohme Inc. WP, USA.</i>	21. MODELLING THE PENDULAR, FUNICULAR AND CAPILLARY STATES BETWEEN SPHERICAL PARTICLES James Andrews & Mike Adams <i>University of Birmingham, UK</i>	24. NUMERICAL INVESTIGATION OF OPTIMUM HOPPER DESIGN FOR ROLLER COMPACTION PROCESS Kumari S. Awasthi ¹ , Srikanth R. Gopireddy ² , Regina Scherliess ¹ & Nora A. Urbanetz ² <i>1 Department of Pharmaceutics and Biopharmaceutics, Kiel University, Germany; 2 Pharmaceutical Development, Daiichi-Sankyo Europe GmbH, Germany.</i>
15.45-16.15	Coffee Break / Poster presentations			

	Session 9: Tableting Chair: Abder Michrafy	Richemond	Session 10: Reconstitution II Chair: Marco Ramaioli	Balthazar	Session 11: Fluidised bed II Chair: Mike Adams	Imperiale	Session 12: Flowability Chair: Rohit Ramachandran	Marie-Jeanne
16.15-16.40	25. INVESTIGATION OF THE MIXING CAPACITY OF A ROTARY TABLET PRESS FEED FRAME Maren Zimmermann & Markus Thommes <i>Laboratory of Solids Process Engineering, Department of Biochemical and Chemical Engineering, TU Dortmund, Germany</i>		28. EFFECT OF TPGS ON DISSOLUTION SENSITIVITY OF A POORLY-WATER SOLUBLE DRUG USING HIGH-SHEAR WET GRANULATION May Sotthivirat ¹ , Rishi Ramesh ² , Walter Wasylaschuk ³ , Cory Bottone ³ , Binfeng Xia ⁴ , Joyce Stellabott ⁵ , Michael McNevin ⁵ , Dan Skomski ⁵ & Chad Brown ¹ <i>1 Department of Oral Formulation Sciences and Technology, Merck & Co., USA 2 Department of Pharmaceutical Commercialization Technology, Merck & Co., USA 3 Department of Analytical Sciences, Merck & Co., USA. 4 Department of Biopharmaceutics, Merck & Co., Inc., USA 5 Department of Preformulation, Merck & Co., Inc., USA</i>		31. OPTIMIZING THE OPERATING PARAMETERS FOR PHARMACEUTICAL FLUIDIZED BED DRYER BY PROCESS TOMOGRAPHY AND CFD MODELING Haigang Wang ^{1,2} , Mohammad J. Hosseini ^{1,2} & Wuqiang Yang ³ <i>1, Chinese Academy of Sciences, China 2 University of Chinese Academy of Sciences, China 3 University of Manchester, UK</i>		34. STUDY ON POWDER DISCHARGE FROM HOPPER WITH AN INSERT Haifeng Lu, Jiakun Cao, Dong Sun, Xiaolei Guo, Xueli Chen & Xin Gong <i>University of Science and Technology, PR China</i>	
16.40-17.05	26. SCALING FROM COMPACTION SIMULATOR TO PRODUCTION ROTARY PRESSES - INTERPLAY OF MATERIAL PROPERTIES Jan H. Finke ^{1,2} , Isabell Wünsch ^{1,2} , Irene Friesen ^{1,2,3} , Thomas Schlegel ³ & Arno Kwade ^{1,2} <i>1 Institute for Particle Technology, Germany 2 Center of Pharmaceutical Engineering – PVZ, Germany 3 KORSCH AG, Germany</i>		29. SPRAY-DRYING ENCAPSULATION OF LACTIC ACID BACTERIA IN POWDERS WITH TEMPERATURE-DEPENDENT SOLUBILITY BY CONTROL OF ENZYMIC MILK CLOTTING Justine Guérin ¹ , Jeremy Petit ¹ , Jennifer Burgain ¹ , Frédéric Borges ¹ , Bhesh Bandari ² , Stéphane Desobry ¹ , Joël Scher ¹ & Claire Gaiani ^{1,2} <i>1 Université de Lorraine, France 2 University of Queensland, Australia</i>		32. PARTICLE SIZE MEASUREMENT IN ROTARY FLUIDIZED BED WITH STATISTICAL DESIGN Marcel Langner , Ivonne Kitzmann, Anna-Lena Rupert, Inken Wittich & Bertram Wolf <i>Anhalt University of Applied Sciences, Germany</i>		35. RELATING PHYSICAL CHARACTERISTICS OF FOOD PARTICLES TO DYNAMIC FLOW BEHAVIOUR Sophie Samain ¹ , W. Robert Mitchell ² , Alessandro Gianfrancesco ³ & Constantijn Sanders ¹ <i>1 Nestec Ltd., Nestlé Product Technology Centre, Switzerland, 2 Nestlé Research Centre, Switzerland 3 Nestec Ltd., System Technology Centre, Switzerland</i>	
17.05-17.30	27. DEVELOPMENT OF FINITE ELEMENT MODEL TO PREDICT THE BEHAVOUR OF BILAYER TABLETS DURING UNIAXIAL TENSILE TEST Alexander Krok ¹ , Peter Peciar ³ , Paddy McGowan ⁴ , Joesry F. El Hebieshy ¹ , Keith Bryan ² & Sandra Lennihan ¹ <i>1 Department of Process, Energy and Transport Engineering, Cork Institute of Technology, Ireland 2 Department of Mechanical, Biomedical and Manufacturing Engineering, Cork Institute of Technology, Ireland 3 Slovak University of Technology, Slovakia 4 MEDIC, Cork Institute of Technology, Ireland</i>		30. MODELLING THE RECONSTITUTION OF WATER-SOLUBLE POWDERS Chiamaka C. Nnaeozie ¹ , Constantijn Sanders ² , Edgar Chavez Montes ³ , Laurent Forny ⁴ , Gerhard Niederreiter ⁴ , Michael J. Hounslow ¹ & Agba D. Salman ¹ <i>1 University of Sheffield, UK 2 Nestlé Product Technology, Switzerland 3 Nestlé R&D Orbe Switzerland 4 Nestlé Research Centre, Switzerland</i>		33. INFLUENCE OF POLYDISPERSITY AND NON-SPHERICITY OF PARTICLES ON THE STABILITY OF A THREE-DIMENSIONAL PRISMATIC SPOUTED BED Swantje Pietsch , Paul Kieckhefen & Stefan Heinrich <i>Hamburg University of Technology, Germany</i>		36. EXPERIMENTAL STUDY ON THE EFFECT OF METAL PROTRUSIONS INSIDE SILOS ON ELECTROSTATIC DISCHARGES Kwangseok Choi ¹ , Yuki Osada ² , Yuta Endo ¹ & Teruo Suzuki ² <i>1 National Institute of Occupational Safety and Health, Japan, 2 Kasuga Denki Inc., Japan</i>	

09.00-10.00		Plenary Lecture: Innovation in Food through Particle Science Prof. Gerhard Niederreiter, Nestle Research, Lausanne, Switzerland <i>Introduced by Prof. Stefan Heinrich</i>						Richemond									
10.00-10.30		Coffee Break / Poster presentations															
		Session 1: Twin Screw II Chair: Anh Phan		Richemond		Session 2: Compression II Chair: Kendal Pitt		Balthazar		Session 3: Fluidised bed III Chair: Gong Xin		Imperiale		Session 4: Reconstitution III Chair: Swantje Pietsch		Marie-Jeanne	
10.30-10.55		37. MODELLING TWIN SCREW GRANULATION USING COMPARTMENTAL POPULATION BALANCE APPROACH Hamza Y. Ismail ^{1,2} , Mehakpreet Singh ² , Saeed Shirazian ² , Darren Whitaker ¹ , Ahmad B. Albadarin ^{1,2} & Gavin Walker ^{1,2} <i>1 Pharmaceutical Manufacturing Technology Centre, University of Limerick, Ireland 2 Department of Chemical Sciences, University of Limerick, Ireland</i>		40. DEFORMATION AND STRENGTH OF COMPRESSIBLE GRANULES Ben D. Edmans & Iosif C. Sinka <i>University of Leicester, United Kingdom</i>		43. TEMPERATURE MEASUREMENT OF FLUIDIZING PARTICLES USING A THERMAL CAMERA Feng Li , Michael J Hounslow, James D. Litster & Agba D. Salman <i>University of Sheffield, Sheffield, UK</i>		46. RECONSTITUTION OF FOOD POWDERS: RECENT PROGRESSES AND UPCOMING CHALLENGES Jana Kammerhofer ¹ , Robert Mitchell ¹ , Julien Dupas ² , Alessandro Gianfrancesco ³ & Laurent Forny ¹ <i>1 Nestle Research, Lausanne, Switzerland 2 Nestlé Product & Technology Center, Orbe, Switzerland 3 Nestlé Systems Technology Center, Orbe, Switzerland</i>									
10.55-11.20		38. MULTISCALE MODELLING OF TWIN SCREW GRANULATION USING A DEM-PBM COUPLING FRAMEWORK Li Ge Wang ¹ , John P. Morrissey ² , Dana Barrasso ³ , David Slade ⁴ , Marina Sousani ⁵ , Kevin J. Hanley ² , Jin Y. Ooi ² & James D. Litster ¹ <i>1 University of Sheffield, UK 2 The University of Edinburgh, UK 3 Process System Enterprise, USA 4 Process System Enterprise, UK 5 DEM Solutions, UK</i>		41. MECHANICAL PROPERTIES OF CEREAL BARS EXPLAINED BY PARTICLE MOVEMENT ANALYSIS Elyane Bardou ¹ , Jan Engmann ² , Gerhard Niederreiter ² , & Agba Salman ¹ <i>1 University of Sheffield, Sheffield, UK 2 Nestlé Research, Switzerland</i>		44. FLUIDIZED BED GRANULES CONTAINING POLYMERIC NANOCAPSULES: GRANULES GROWTH BEHAVIOUR Edilene G. Oliveira ¹ , Rafaela S. Santos ¹ , Nathalie Jung ² , Maïke Windbergs ² , Adriana R. Pohlmann ¹ , Silvia S. Guterres ¹ & Ruy Carlos R. Beck ¹ <i>1 Federal University of Rio Grande do Sul, Porto Alegre, Brazil 2 Goethe-University Frankfurt, Germany</i>		47. EFFECTS OF STORAGE CONDITIONS ON PHYSICO-CHEMICAL PROPERTIES OF SPRAY-DRIED CAMEL MILK POWDER Thao M. Ho ¹ , Diem Trinh Ton Thi ^{1,2} , Bhesh R. Bhandari ¹ & Nidhi Bansal ¹ <i>1 The University of Queensland, Australia. 2 Nong Lam University, Vietnam</i>									
11.20-11.45		39. TWIN SCREW GRANULATION: A STUDY OF PRIMARY PARTICLE SIZE EFFECT ON GRANULATION BEHAVIOUR Jiankai Yang, Aquino L. Mundozah, Riyadh Al-Asady & Agba D. Salman <i>University of Sheffield, Sheffield, UK</i>		42. INFLUENCE OF COMPRESSION CONDITIONS ON THE COMPACTIBILITY OF THERMALLY PROCESSED POLYMERS Ioannis Partheniadis ¹ , Miltiadis Toskas ¹ , Alexandros E. Karantzalis ² Nizar Al-Zoubi ³ & Ioannis Nikolakakis ¹ <i>1 Aristotle University of Thessaloniki, Greece. 2 University of Ioannina, Greece 3 Hashemite University, Jordan</i>		45. RECONSTRUCTION OF BUBBLE SPATIAL DISTRIBUTION IN FLUIDIZED BED Yunning Li ^{1,3} , Jingguo Rong ² , Kai Zhang ² & Xianfeng Fan ³ <i>1 China Electricity Council, China. 2 North China Electric Power University, China. 3 The University of Edinburgh, UK</i>		48. MICROSTRUCTURE BASED SIMULATION OF THE DISINTEGRATION AND DISSOLUTION OF PHARMACEUTICAL TABLETS Martin Kalný , Zdeněk Grof & František Štěpánek <i>University of Chemistry and Technology, Czech Republic</i>									

11.45-13.00	Lunch/ Poster presentations							
13.00-14.00	Plenary Lecture: Advances in Continuous Manufacturing of Pharmaceutical Products Dr. Richard Green, Pfizer, UK <i>Introduced by Prof. Jim Litster</i>				Richemond			
14.00-14.30	Coffee Break / Poster presentations							
	Session 5: Caking Chair: Khashayar Saleh	Richemond	Session 6: Breakage & milling Chair: Ian Gabbot	Balthazar	Session 7: Mixing Chair: Jan Engmann	Imperiale	Session 8: Other Granulation I Chair: Humberto Gomes Ferraz	Marie-Jeanne
14.30-14.55	49. CAKING BEHAVIOUR OF LACTOSE DUE TO SOLID-STATE CRYSTALLIZATION OF AMORPHOUS CONTENT Zahra Afrassiabian ¹ , Mohammed Guessasma ² & Khashayar Saleh ¹ <i>1 Université de Technologie de Compiègne, France. 2 Laboratoire des Technologies Innovantes, France</i>		52. DISCRETE-ELEMENT SIMULATION OF BREAKAGE INSIDE BALL MILLS Luisa Fernanda Orozco ^{1,3} , Duc-Hanh Nguyen ⁴ , Jean-Yves Delenne ² , Philippe Sornay ³ , Farhang Radjai ¹ <i>1 Université de Montpellier, France 2 INRA, UMR IATE Montpellier, France 3 CEA, DEN, DEC, SA3E, LCU, 13108 Saint Paul les Durance, France 4 National University of Civil Engineering, Vietnam</i>		55. CONTROLLING OF THE MIXING BEHAVIOUR OF DRY COHESIVE PARTICLES Jarray Ahmed ¹ , Bert J. Scheper ¹ , Mehdi Habibi ² , Hao Shi ¹ & Stefan Luding ¹ <i>1 University of Twente, The Netherlands. 2 Wageningen University, The Netherlands</i>		58. INFLUENCE OF TYPE OF GRANULATORS ON FORMATION OF SEEDED GRANULES Nejat Rahmanian , Adrian Kelly, Nurul H. Jamaluddin & Victoria R. Kitching <i>University of Bradford, UK</i>	
14.55-15.20	50. INFLUENCE OF MAGNESIUM STEARATE COATING ON CAKING OF PVP Qinqin Chen ^{1,2} , Umair Zafar ¹ , Jinfeng Bi ² & Mojtaba Ghadiri ¹ <i>1 University of Leeds, UK. 2 Institute of Food Science and Technology, China</i>		53. THE EFFECT OF TARGET-PARTICLE SHAPE ON THE BREAKAGE AND ADHESION OF AN IMPACTING AGGLOMERATE Mohammad R. Tamadondar , Lilian de Martín & Anders Rasmuson <i>Chalmers University of Technology, Sweden</i>		56. ONLINE MONITORING OF POWDER MIXING USING AN OPTICAL CAMERA Yan Zhou ¹ , Feng Li ¹ , Constantijn Sanders ² , Sophie Samain ² , Gerhard Niederreiter ³ & Agba Salman ¹ <i>1 University of Sheffield, UK 2 Nestlé Product Technology Centre, Switzerland 3 Nestlé Research Centre, Switzerland</i>		59. USING GRAPHENE OR GRAPHENE OXIDE TO IMPROVE THE PHYSICAL QUALITY OF GRANULATED FERTILIZERS Shervin. Kabiri ¹ , Roslyn J. Baird ¹ , Ivan Andelkovic ¹ , Rodrigo C. da Silva ¹ , Fien Degryse ¹ , Dusan Losic ² & Michael J. McLaughlin ¹ <i>1 Fertiliser Technology Research Centre, University of Adelaide, Australia 2 School of Chemical Engineering, The University of Adelaide, Australia</i>	
15.20-15.45	51. ADHESION FORCE MEASUREMENT BY CENTRIFUGE TECHNIQUE AS A TOOL FOR PREDICTING INTERACTIVE MIXTURE STABILITY Diem Trang Tran , Radim Bittner & Petr Zámostný <i>University of Chemistry and Technology Prague, Czech Republic</i>		54. PARTICLE ATTRITION DURING PELLETING OF CORN STOVER: IMPACT OF MOISTURE CONTENT, RESIDENCE TIME AND PARTICLE SIZE Jaya Shankar Tumuluru ¹ , Eric Fillerup ¹ & Josh Kane ² <i>1 Bioenergy Technologies Department, Idaho National Laboratory, USA 2 Material Science Department, Idaho National Laboratory, USA</i>		57. NUMERICAL SIMULATION OF PARTICLES MIXING EFFECT BETWEEN HIGH SPEED STIRRING MIXER AND CYLINDER MIXER Shan Shan Wu, Gui Shang Pei, Gang Li & Xue Wei Lv <i>Department of Material Science and Engineering, University of Chong Qing, China</i>		60. PROTEIN-POLYPHENOL MULTILAYER MICROCAPSULES FOR ORAL DELIVERY OF BIOLOGICALLY ACTIVE COMPOUNDS IN FUNCTIONAL FOODS Maxim V. Kirvukhin <i>Institute of Materials Research and Engineering, A*STAR (Agency for Science, Technology and Research), Singapore</i>	

15.45-16.15	Coffee Break / Poster presentations							
	Session 9: Hot melt & Extrusion Chair: Gabriele Meesters	Richemond	Session 10: Other Granulation II Chair: Waleed Nasser	Balthazar	Session 11: Bio mass& Aerobic granulation Chair: Nejat Rahmanian	Imperiale	Session 12: The Meso Scale Chair: Hong Sing Tan	Marie-Jeanne
16.15-16.40	61. PERFORMANCE COMPARISON OF DOME AND BASKET EXTRUSION GRANULATION Sam Zukowski ¹ , Mike Frishcosy ¹ , Joe Hercamp ¹ , Srishthi Khurana ¹ , Madhusudhan Kodam ² , John Snedeker ¹ , Jake Taylor ¹ & Earl Williams ³ <i>1 Formulation Process R&D, Corteva Agriscience USA. 2 GAPTEC, Corteva Agriscience™, USA. 3 Formulation Process R&D, Corteva Agriscience™, Agriculture division of DowDuPont, USA</i>		64. EFFECT OF AGITATING CONDITIONS OF INTENSIVE MIXER ON AGGLOMERATION OF IRON ORE Kenta Takehara , Takahide Higuchi, Toshiyuki Hirose, Tetsuya Yamamoto & Kiyoshi Fukada <i>Steel Research Laboratory, JFE Steel Corporation, Japan.</i>		67. EVALUATION OF BIOMASS GRANULES AS ADSORBENTS FOR REMOVAL OF HEAVY METALS AND DYES Oluwafikayo O. Jaiveola , Haile Chan & Chirangano Mangwandi <i>Queen's University Belfast, UK</i>		70. THE INVESTIGATION OF HYDRATE-ANHYDRATE TRANSFORMATIONS USING RAMAN LINE-FOCUS MICROSCOPY Peter O. Okevo ^{1,2} , Oleksii Ilchenko ² , Roman Slipets ² , Peter E. Larsen ² , Anja Boisen ² , Thomas Rades ¹ & Jukka Rantanen ¹ <i>1 University of Copenhagen, Denmark 2 Technical University of Denmark</i>	
16.40-17.05	62. IMPROVEMENT OF TABLETABILITY VIA TWIN-SCREW MELT GRANULATION: FOCUS ON BINDER DISTRIBUTION Kristina E. Steffens & Karl G. Wagner <i>Department of Pharmaceutical Technology and Biopharmaceutics, University of Bonn, Germany</i>		65. EXTENDED APPLICATION OF A MECHANISTIC MODEL FOR INTERPRETING GRANULATION OF VARIOUS IRON ORE TYPES Deqing Zhu , Congcong Yang, Jian Pan & Zhengqi Guo <i>School of Minerals Processing & Bioengineering, Central South University, China</i>		68. CHEMICAL OXYGEN DEMAND -- A KEY PARAMETER THAT SHAPES THE AEROBIC GRANULATION "LIFE CYCLE" AND GRANULE MICROBIOME Zhiya Sheng, Rania A. Hamza, Jordan Kent, Anrishi Kanda & Joo Hwa Tay <i>University of Calgary, Canada</i>		71. EFFECT OF SURFACTANT VARIATIONS ON THE PENETRATION TIME OF HYDROPHILIC MICRON PARTICLE IMPACTING INTO THE GAS-LIQUID INTERFACE ShiJie Zhu ^{1,2} , CaiXiao Zhao ^{1,2} , HaiFeng Lu ^{1,2} & XueLi Chen ^{1,2} <i>1 Key Laboratory of Coal Gasification and Energy Chemical Engineering of Ministry of Education, East China University of Science and Technology, China 2 Shanghai Engineering Research Center of Coal Gasification, East China University of Science and Technology, China</i>	
17.05-17.30	63. HOT MELT GRANULATION AS A PLATFORM TO MANUFACTURE AMORPHOUS SOLID DISPERSIONS WITH ENHANCED DISSOLUTION PROPERTIES David S. Jones, Timothy Brannigan, Ammar Almajaan, Yiwei Tian , Shu. Li & Gavin P. Andrews. <i>Queen's University of Belfast, Northern Ireland, UK</i>		66. RHEOLOGICAL PROFILE IN MIXER TORQUE RHEOMETER OF SAMPLES CONTAINING FURAZOLIDONE AND DIFFERENT BINDERS Bruna Rodrigues Belem & Humberto Gomes Ferraz <i>University of São Paulo, Brazil.</i>		69. GROWTH AND TRANSFORMATION OF CARBONATES BY AEROBIC BIOMEDIATION Masaharu Fukue ¹ , Zbigniew Lechowicz ² , Yuichi Fujimori ³ & Kentaro Emori ⁴ <i>1 Japanese Geotechnical Association for Housing Disaster Prevention, Japan 2 Warsaw University of Life Sciences, Poland. 3 Chubu Sokuchi Research Institute Co., Japan. 4 Sanko Kaihatsu Co., Japan</i>		72. DOUBLE EMULSION (W/O/W) BASED PCL MICROPARTICLES TO ENCAPSULATE MICROBIAL CELLS Fengxia Liu , Chao Dong, Wei Wei, Zhiyi Li, Chunyu Wang, Jinyu Zhao & Zhijun Liu <i>Dalian University of Technology, China</i>	