POSTER TIMETABLE

Day 1 – Wednesday 21st June (Main hall)

Poster number	Poster topic	Presenters	Group
1	EVOLUTION OF PELLET SHAPE DURING INITIAL STAGES OF SPHERONISATION	**Syahmeer M. How [1,2]**, Sarah L. Rough[1], Liguang Wang[1,3] & Ian D. Wilson[1]	1 Department of Chemical Engineering and Biotechnology, University of Cambridge, UK 2 Department of Process and Food Engineering, Faculty of Engineering, Universiti Putra Malaysia, Malaysia 3 School of Chemical Engineering, The Universityof Queensland, Australia
2 (Paper 67)	ROLLER COMPACTION; DECREASE THE AMOUNT OF FINES IN MILLING STAGE	**Mohamed N. Mohamed[1]**, Riyadh B Al-Asady, Manfred Felder[2], James D. Litster & Agba D Salman	1 Department of Chemical and Biological Engineering, University of Sheffield, UK. 2 Alexanderwerk AG, Remscheid, North Rhine-Westphalia, Germany
3	STRUCTURATION OF PLANT-BASED MILK POWDER FOR IMPROVED CONSTITUTION	**Kathrin Kramm[1]**, Jana Kammerhofer[2], Vincent Meunier[3], Swantje Pietsch-Braune[1] & Stefan Heinrich[1]	1 Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany 2 Nestlé Product Technology Center, Switzerland 3 Nestlé Research, Switzerland
4	TWIN PRO® - FUSION OF TWO ROCESSES: HIGH SHEAR GRANULATION AND FLUIDIZED BED DRYING IN ONE PROCESS	**Soeren E. Lehmann[1]** & Lars Steinke[2]	1 Glatt Pharmaceutical Services GmbH & Co.KG, Germany 2 Glatt GmbH, Werner-Glatt-Straße 1, Germany
5	CORRELATING PARTICLE PROPERTIES WITH PROCESS PARAMETERS IN FLUIDIZED BED SPRAY GRANULATION AND ITS APPLICATION IN DYNAMIC FLOWSHEET SIMULATION	**Xiye Zhou** , Robert Kräuter & Stefan Heinrich	Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany
6	DEM MODELLING OF DRY POWDER SPREADING PROCESS FOR LITHIUM-ION BATTERY ELECTRODE MANUFACTURING	**Hamza Mohamed[1,2]**, Ruihuan Ge[1,2], Denis Cumming[1,2] & Rachel Smith[1,2]	1 Department of Chemical and Biological Engineering, The University of Sheffield, Sheffield, UK 2 The Faraday Institution, Quad One, Harwell Science and Innovation Campus, UK

Poster number	Poster topic	Presenters	Group
7	TABLET MICROSTRUCTURE INDUCED BY EMBOSSED FEATURES OF COMPACTING PUNCH: CASE STUDY ANALYSIS	**Gweni Alonso Aruffo[1]**, Driss Oulahna[2] & Abderrahim Michrafy[2]	1 Université de Toulouse, Mines Albi, Centre ICA, France 2 Université de Toulouse, Mines Albi, CNRS, Centre RAPSODEE, France
8	OPEN-SOURCE FLOWSHEET SIMULATION ENVIRONMENT FOR DYNAMIC SIMULATION OF PARTICULATE PROCESSES	Vasyl Skorych & **Stefan Heinrich**	Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology (TUHH), Germany
9	MICROCOAT™ FOR SUSTAINED RELEASE ORALLY DISINTEGRATING GLICLAZIDE TABLETS	**Kavil Patel[1]**, Darragh Murnane[2] , Craig Richardson[1] & Fang Liu[1,2]	1 Fluid Pharma Ltd., UK 2 University of Hertfordshire, UK
10	SUBMICRON AG-COATED CU PARTICLES AS FILLER IN SINTERING PASTE: CONTROL OF AG DEWETTING AND IMPROVEMENT OF SINTERABILITY THROUGH SURFACE MODIFICATION USING CARBOXYLIC ACID	Yeongjung Kim & **Jong-Hyun Lee**	Department of Materials Science and Engineering, Seoul National University of Science and Technology, Republic of Korea
11	DRYING BEHAVIOUR USING THE QBCON® 1 CONTINUOUS DRYER	**Katharina Kiricenko**, Peter Kleinebudde	Heinrich Heine University, Institute of Pharmaceutics and Biopharmaceutics, Germany
12	THE EFFECT OF ROLL SPEED ON THE PREDICTION OF RIBBON SOLID FRACTION	**Martin Lück[1]**, Matthias De Saeger[2] & Peter Kleinebudde[1]	1 Institute of Pharmaceutics and Biopharmaceutics, Heinrich Heine University Duesseldorf, Germany 2 Department of Pharmaceutics, Laboratory of Pharmaceutical Technology, Belgium
13	EMPLOYING A NOVEL MULTI-RESONANCE MICROWAVE SENSOR FOR IN-LINE MOISTURE MONITORING OF FLUIDIZED BED AGGLOMERATION	**Gero Stöckl**, Aitor Atxutegi & Stefan Heinrich	Hamburg University of Technology (TUHH), Institute of Solids Process Engineering and Particle Technology, Germany

Poster number	Poster topic	Presenters	Group
14	MIMICKING THE STRUCTURE OF NATURAL COMPOSITES BY MERGING SPRAY DRYING AND WARM COMPACTION PROCESS	**Sophia Rothberg[1]**, Swantje Pietsch-Braune[1], Stefan Heinrich[1]	1 Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany
15	COMPARISON OF DEM SOFTWARE FOR THE SIMULATION OF COMPACTION OF BIPLANAR TABLETS	**Amine Ait Ouazzou[1]**, Yogesh M. Harshe[2], Vincent Meunier[2] Jan H. Finke[3], Stefan Heinrich[1]	1 Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany 2 Nestlé Research, Switzerland 3 Institute for Particle Technology and Center of Pharmaceutical Engineering - PZV, Technical University of Braunschweig, Germany
16	PREDICTION OF DROPLET SIZE DISTRIBUTION FROM TWIN FLUID NOZZLES	**Leander Vinzenz Mehlis[1,2]**, Jens Bartsch[1], WernerHoheisel[2], Patrick Kranz[3] & Markus Thommes[1]	1 Laboratory of Solids Processing, TU Dortmund, Germany 2 Formulation Technology, Invite GmbH, Germany 3 Process Modelling and Design, Bayer AG, Germany
17	REGIME ANALYSIS APPROACH FOR HIGH-SHEAR WET GRANULATION SCALE UP	Matthew Reading[1], **Stefan Bellinghausen[1]** & Dana Barrasso[2]	1 Siemens Process Systems Engineering, UK 2 Siemens Process Systems Engineering, USA
18	INFLUENCE OF SPRAY PARAMETERS ON COATING STRUCTURE IN FLUIDIZED BED GRANULATION	**Maike Orth**, Swantje Pietsch-Braune & Stefan Heinrich	Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany
19	MODELING THE PARTICLE SIZE DISTRIBUTION OF AGROCHEMICAL POWDER BLENDS: A DATA ANALYSIS ON THE OPERATING CONDITIONS OF A PILOT SCALE JET MILL	**Srishti Khurana[1]**, Sweta Somasi[2], Samual R. Zukowski[1] & Ryan Berner[1]	1 Formulation Process Science and Technology, USA 2 Small Molecules Discovery and Development, Corteva Agriscience, USA
20	PREDICTING TABLET PROPERTIES USING IN-LINE MEASUREMENTS AND EVOLUTIONARY EQUATION DISCOVERY	**Issa Munu[1,2]**, Leonard Nicusan[1], Jason Crooks[2], Kendal Pitt[2], Christopher Windows-Yule[1] & Andrew Ingram[1]	1 School of Chemical Engineering, University of Birmingham, United Kingdom 2 GSK Global Supply Chain, United Kingdom

Poster number	Poster topic	Presenters	Group
21	INVESTIGATING THE HEAT SENSITIVITY OF HYPROLOSES WITH DIFFERENT PARTICLE SIZES DURING TABLETING	**Hanna D. Grumann** & Peter Kleinebudde	Heinrich Heine University Duesseldorf, Institute of Pharmaceutics and Biopharmaceutics, Germany
22	MIXING AND SEGREGATION RATES AND MECHANISMS IN AN AGITATED VESSEL	Marv Khala[1], **Colin Hare[1]**, Chuan-Yu Wu[2], Navin Venugopal[3] , Martin J. Murtagh[4] & Tim Freeman[5]	1 School of Engineering, Newcastle University, Newcastle upon Tyne, UK 2 Department of Chemical and Process Engineering, University of Surrey, UK 3 Corning Inc., United States 4 Materials Science & Engineering, Cornell University, United States 5 Tewkesbury, UK
23	MANUFACTURE OF MINI-TABLETS AND THEIR CONTINUOUS ROBOTIC COMPOUNDING INTO MULTI-UNIT DOSAGE SYSTEMS	Elizaveta Mutylo[1, 2], Erik Sonntag[1, 2], David Smrčka[2], Jan Vrba[3], Daniel Pecek[2] & **Frantisek Stepanek[1, 2]**	1 Department of Chemical Engineering, University of Chemistry and Technology Prague, Czech Republic 2 Zentiva, k.s., Czech Republic 3 Department of Computing and Control Engineering, University of Chemistry and Technology Prague, Czech Republic
24	STRUVITE (MGNH4PO4.6H2O) GRANULATION FROM SEAWATER USING FLUIDIZED BED HOMOGENEOUS CRYSTALLIZATION TECHNOLOGY	Thi Hanh Ha[1], Nicolaus N.N. Mahasti[1], **Ming Chun Lu[2]** & Yao Hui Huang[1]	1 Department of Chemical Engineering, National Cheng Kung University, Taiwan 2 Department of Environmental Engineering, National Chung Hsing University, Taichung City 40227, Taiwan
25	MODUL P ROTARY TABLET PRESS: INVESTIGATING THE FORMULATION VARIABLES	**Shengda Hou**, Riyadh B Al-Asady & Agba D Salman	Department of Chemical and Biological Engineering, University of Sheffield, UK

Poster number	Poster topic	Presenters	Group
26	HYBRID MODELLING OF PHARMACEUTICAL MIXTURE PROPERTIES: PREDICTIVE SOLUTIONS FOR PARTICLE SIZE, SHAPE, FLOW, AND DENSITY	**Mohammad Salehian[1,2]**, Jonathan Moores[2], Isra' Ibrahim[2] & Daniel Markl[1,2]	1 Digital Medicines Manufacturing (DM2) Research Centre, Centre for Continuous Manufacturing and Advanced Crystallisation (CMAC), Strathclyde Institute of Pharmacy & Biomedical Sciences, University of Strathclyde, UK. 2 Centre for Continuous Manufacturing and Advanced Crystallisation (CMAC), Strathclyde Institute of Pharmacy & Biomedical Sciences, University of Strathclyde, UK.
27	THE ROLE OF INTERPARTICLE FORCES IN THE FLOWABILITY FOR GRANULATION PROCESSES	**Jordan E. Monroe** & Heather N. Emady	School for Engineering of Matter, Transport and Energy, Arizona State University, USA
28	STRUCTURAL AND FUNCTIONAL ANALYSIS OF A NEW CO-PROCESSED TABLETING EXCIPIENT	René Rösemeier-Scheumann[1,2], **J. H. Finke[1,2]**, U. Bobe[3], A. Bozon[3] & A. Kwade[1,2]	1 Institute for Particle Technology (iPAT), TU Braunschweig, Germany 2 Center of Pharmaceutical Engineering (PVZ), Germany 3 Nestlé Product Technology Centre, Singen, Germany
29	RECLAMATION OF ALUMINUM AS ALPHA-AL(OH)3 PELLET FROM AQUEOUS SOLUTION VIA FLUIDIZED-BED HOMOGENEOUS CRYSTALLIZATION TECHNOLOGY	**Kai-Yang Chang**, Nicolaus N.N. Mahasti & Yao-Hui Huang	Department of Chemical Engineering, National Cheng Kung University, Taiwan
30	MICRO SCALE INVESTIGATIONS OF AGGLOMERATION AND DEAGGLOMERATION DUE TO SINGLE COLLISIONS BETWEEN WETTED PARTICLES	**Falk Bunke** & Stefan Heinrich	Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology (TUHH), Germany
31	INVESTIGATION OF FLUIDIZATION- AND MIXING BEHAVIOR OF NANO- AND MICRON PARTICLES IN A VIBRATED FLUIDIZED BED WITH PULSATED GAS FLOW	**Zhi Cheng Hua**, Swantje Pietsch-Braune, Aitor Atxutegi & Stefan Heinrich	Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany
32	VIRTUAL PROTOTYPING OF WET GRANULATION PROCESSES	**Timo Plath**, Stefan Luding & Homas Weinhart	Multi-Scale Mechanics, TFE, ET, MESA+, University of Twente, The Netherlands;

Poster number	Poster topic	Presenters	Group
33	TAKING A MECHANISTIC APPROACH TO UNDERSTANDING THE EFFECT OF AGITATION ON UNDESIRED AGGLOMERATION IN AN AGITATED FILTER DRYER	**Suruthi Gnanenthiran[1]**, Pari Rao[2], Christopher Hewitt[2], James Litster[1] & Rachel Smith[1]	1 Particle Technology Group, Department of Chemical and Biological Engineering, University of Sheffield, UK 2 Chemical Development, Pharmaceutical Technology & Development, Operations, AstraZeneca, UK
34	INDUSTRIAL CASE STUDY ON APPLICATION OF ROLLER COMPACTION MODELLING FOR SCALE UP AND TECH TRANSFER	Lorenzo Poloni[1], Martin Lubej[1], **Arnesh Palanisamy[1]** & Bindhu Gururajan[1,2]	1 Novartis Pharma AG, Novartis Campus, CH 2 School of Engineering, University of Edinburgh, UK
35	FLUIDISED BED GRANULATION – ADVANCED PROCESS CONTROL FOR CONSISTENT PRODUCT QUALITY	**Samuel Solomon[1]**, Chris O'Callaghan[2], Caroline McCormack[2], Marcus O'Mahony[3], Ian Jones[2], Gavin Walker[1,4] & Patrick Cronin[5]	1 University of Limerick, Dep. Of Chemical Sciences, Ireland. 2 Innopharma Technology, Ireland. 3 Pharmaceutical Manufacturing Technology Centre, Bernal Institute, University of Limerick, Ireland. 4 Solid State Pharmaceutical Centre, Bernal Institute, University of Limerick, Ireland 5 Dairy Processing Technology Centre, Bernal Institute, University of Limerick, Ireland.
36	INFLUENCE OF DRYING TECHNIQUE ON STRUCTURAL PARAMETERS AND LIPID OXIDATION STABILITY OF PLANT-BASED MILK POWDERS	**Teresa Kurtz[1]**, Klara Haas[2], Olivier Schafter[2], Vincent Meunier[2] & Stefan Heinrich[1]	1 Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany 2 Nestlé Research, Switzerland
37	STATIC AND DYNAMIC VAPOR SORPTION OF HYDROPHOPIC STARCH ESTER POWDERS AND CORRESPONDING TABLETS	**Ioannis Partheniadis**, Georgios Stathakis & Ioannis Nikolakakis	Laboratory of Pharmaceutical Technology, School of Pharmacy, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece
38 (Paper 68)	GRANULATION OF FLY ASH RESOURCES FOR WASTE UTILIZATION AND MATERIAL RECYCLING – A REVIEW	**Gabriel Borowski**	Faculty of Environmental Engineering, Lublin University of Technology, Poland

Poster number	Poster topic	Presenters	Group
39	STEAM GRANULATION VERSUS WET GRANULATION: IMPACT ON GRANULE AND TABLETS PROPERTIES	**Erica Franceschinis[1]**, Elena Fontanel[1], Giulia De Santi[1], Nicola Realdon[1], Greta C. Magnano[2] & Dario Voinovich[2]	1 PharmaTeG-Pharmaceutical Technology Group- Department of Pharmaceutical and Pharmacological Science, University of Padua, Italy 2 Department of Chemical and Pharmaceutical Sciences, University of Trieste, Italy

POSTER TIMETABLE

Day 2 – Thursday 22nd June (Main hall)

Poster number	Abstract Title	Presenters	Group
40	EFFECT OF FEED RATE AND ROTATION SPEED ON PROPERTIES OF AGGLOMERATES PRODUCED WITH THE FLEXOMIXTM SYSTEM	**Olukayode I. Imole** & Peter G. J. van der Wel	Research and Development, Hosokawa Micron B.V., The Netherlands
41	NUMERICAL ANALYSIS OF INTER TABLET COATING UNIFORMITY OF TABLETS IN A LAB SCALE DRUM COATER	**Pradeep Muramulla**, Srikanth Gopireddy, Thomas Profitlich & Nora Urbanetz	Daiichi Sankyo Europe GmbH, Germany
42	FORMULATION AND CHARACTERISATION OF HETERO-AGGREGATES FROM CONTINUOUSLY OPERATED OPPOSED-JET FLUIDIZED BEDS	**Ali Massomi**, Jochen Schmidt & Andreas Bück	Friedrich-Alexander-Universität Erlangen-Nürnberg, Lehrstuhl für Feststoff- und Grenzflächenverfahrenstechnik, Germany.
43	PHARMACEUTICAL TWIN SCREW GRANULATION OF ALPHA-D-LACTOSE MONOHYDRATE WITH POLYETHYLENE GLYCOL 4000; AN INVESTIGATION OF GRANULE AND TABLET ATTRIBUTES	**Nana K. G. Sekyi[1]**, Adrian L. Kelly[1], Nejat Rahmanian[1] & Anant Paradkar[2]	1 Department of Chemical Engineering, Faculty of Engineering & Informatics, University of Bradford, UK 2 School of Pharmacy & Medical Sciences, Faculty of Life Sciences, University of Bradford, UK
44	HYBRID MODELLING OF PHARMACEUTICAL MIXTURE PROPERTIES: PREDICTIVE SOLUTIONS FOR PARTICLE SIZE, SHAPE, FLOW, AND DENSITY	**Mohammad Salehian[1,2]**, Jonathan Moores[2], Isra' Ibrahim[2] & Daniel Markl[1,2]	1 Digital Medicines Manufacturing (DM2) Research Centre, Centre for Continuous Manufacturing and Advanced Crystallisation (CMAC), Strathclyde Institute of Pharmacy & Biomedical Sciences, University of Strathclyde, UK. 2 Centre for Continuous Manufacturing and Advanced Crystallisation (CMAC), Strathclyde Institute of Pharmacy & Biomedical Sciences, University of Strathclyde, UK.
45	ASSESSMENT AND CHARACTERIZATION OF GRANULES PRODUCED IN A SINGLE SCREW EXTRUDER	Aaran Chauhan[1] & **Nejat Rahmanian[2]**	1 43 Huggett Close, United Kingdom 2 Richmond Road, University of Bradford, Bradford, United Kingdom
46	DEVELOPMENT AND OPTIMIZATION OF DIRECT PELLETIZATION TECHNIQUE BY USING PROCEPT GRANULATOR	**Azza A. Mahmoud**, Géza Regdon jr. & Katalin Kristó	Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Hungary

Poster number	Abstract Title	Presenters	Group
47 (Paper 69)	DUST RELEASE AND SIMULTANEOUS SEPARATION BY MEANS OF ELECTROSTATICALLY ASSISTED SPRAY NOZZLE SYSTEMS - EXPERIMENTAL PROCEDURES	**Marcus Weidemann** & Eberhard Schmidt	University of Wuppertal, Institute of Particle Technology, Rainer-Gruenter-Strasse Building FF, Germany
48	THE EFFECT OF VARYING COMPRESSION FORCE AND SPEED ON PHARMACEUTICAL TABLET CRITICAL QUALITY ATTRIBUTES	**Jeanina-Monica Bungau**, Riyadh B. Al-Asady & Agba D. Salman	Department of Chemical and Biological Engineering, University of Sheffield, UK
49	INTEGRATED MODEL CONTROL OF FLUIDIZED BED GRANULATION	Line Koleilat[1], Joshua Hanson[2], Jonathan Wade[2], Christian Karl Paasche[3], Carl Wassgren[1] & **Paul Mort[1]**	1 Purdue University, USA 2 Eli Lilly & Company, USA 3 Hüttlin GmbH, Syntegon Company, Germany
50	COMPARATIVE ANALYSIS OF POROSITY MEASUREMENT TECHNIQUES USING PHARMACEUTICAL MATERIALS	**Arnesh Palanisamy[1]**, Lizbeth Martinez[1] & Bindhumadhavan Gururajan[1,2]	1 Novartis Pharma AG, Novartis Campus, CH 2 Department of Materials and Processes, University of Edinburgh, Old College, UK
51 (Paper 70)	INFANT MILK RECONSTITUTION: INVESTIGATION OF THE HOMOGENEITY OF PARTICLE SUSPENSION	**Zheng Wang[1]**, Riyadh B Al-Asady[1], Constantijn Sanders[2] & Agba D Salman[1]	1 Department of Chemical and Biological Engineering, University of Sheffield, UK 2 Nestlé Product Technology Centre, Switzerland
52	FLOWSHEET SIMULATIONS APPLIED FOR OPTIMIZATION AND SUSTAINABILITY OF PORCELAIN TILE MANUFACTURING	**C. L. Alves[1]**, V. Skorych[1], A. de Noni Jr.[2], D. Hotza[2], S.Y. Gómez González[2], & S. Heinrich[1]	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
53	THE INFLUENCE OF CALCIUM IONS ON THE PROCESSABILITY OF CROSCARMELLOSE SODIUM IN EXTRUSION/SPHERONIZATI-ON	**Finn Siebel** & Peter Kleinebudde	Institute of Pharmaceutics and Biopharmaceutics, Heinrich Heine University Düsseldorf, Germany

Poster number	Abstract Title	Presenters	Group
54	EVALUATION OF DIFFERENT MANNITOL GRADES IN DRY GRANULATION PROCESS BY ROLLER COMPACTION	Matteo Cerea[1], Luca Palugan[1], Anastasia Foppoli[1], **Andrea Gelain[2]**, Alberto Cozzi[3], Graeme Macleod[4], Alice Melocchi[1] & Andrea Gazzaniga[1]	1 Università degli Studi di Milano, dip. di Scienze del Farmaco, Italy 2 Freund-Vector corp. Italy 3 Disproquima, Via Mauro Venegoni, Legnano (MI) 4 SPI Pharma, Rockwood Office Park, Delaware
55	FOOD VS PACKAGING: MODELLING MASS TRANSFER FROM POWDER COMPACTS INTO PACKAGING	**Luc Dewulf[1]**, Michael K. Hausmann[2], Annabel Bozon[3], Gerhard Niederreiter[2], & Agba D. Salman[1]	1 Department of Chemical and Biological Engineering, University of Sheffield, United Kingdom 2 Nestlé Research, Switzerland 3 Nestlé Product Technology Centre, Germany
56 (Paper 71)	TO IMPROVE MILK POWDER QUALITY BY DRY COATING	**Yongang Ma**, Riyadh B Al-Asady & Agba D Salman	Department of Chemical and Biological Engineering, University of Sheffield, United Kindgom
57	COARSE-GRAINED DISCRETE ELEMENT SIMULATION AND EXPERIMENTAL STUDY OF WET GRANULATION PROCESS	**Roxana Saghafian Larijani[1]**, Vanessa Magnanimo[1], Stefan Luding[2] & Alexander Munnoch[3]	1 Soil MicroMechanics, Faculty of Engineering Technology, University of Twente, Netherlands 2 Multiscale Mechanics, Faculty of Engineering Technology, University of Twente, Netherlands 3 Johnson Matthey Technology Centre, UK
58	PREPARATION AND EXAMINATION OF THE COMPRESSIBILITY OF TITANATE NANOTUBE-API COMPOSITES	**Tamás Sovány**, Dalma Erdei, Ranim Saker, Yasmin Ranjous, Géza Regdon jr.	Institute of Pharmaceutical Technology and Regulatory Affairs, University of Szeged, Hungary
59	A NOVEL MECHANISTIC MODEL TO DESCRIBE THE SWELLING OF DISINTEGRATING GRANULES	**Peyman Mostafaei**, Bilal Ahmed, Francesca Magnasco, Faraj Shmam, Neeru Bala & Rachel Smith	Department of Chemical and Biological Engineering, University of Sheffield, UK

Poster number	Poster topic	Presenters	Group
60	EFFECTIVENESS OF PREDICTING SPHERICAL AGGLOMERATE PROPERTIES USING A POPULATION BALANCE MODEL	**Victoria Kitching**, Bilal Ahmed, Kate Pitt, James D. Litster & Rachel M. Smith	Department of Chemical and Biological Engineering, The University of Sheffield, UK
61	PREDICTION OF GRANULE CRITICAL QUALITY SIZE ATTRIBUTES IN A TWIN SCREW WET GRANULATOR USING POPULATION BALANCE MODELLING	**Neeru Bala[1]**, Jeremiah Corrigan[1,2], Bilal Ahmed[1], Jonathan Meyer [2], Marek Schongut[2], Kai Lee[2], Martin Rowland[2], James D. Litster[1], Neil Dawson[2] & Rachel Smith[1]	1 Particle Technology Group, Department of Chemical and Biological Engineering, University of Sheffield, UK 2 Pfizer Inc., UK
62	INVESTIGATING PROCESS VARIABLES THAT AFFECT LOGO-BRIDGING	**Euan F. Murgatroyd** & Ian P. Gabbott	Pharmaceutical Technology and Development, AstraZeneca, UK
63	DEM-CFD SIMULATION OF VOLUMETRIC EXPANSION OF GRANULAR MATERIALS	Chuan-Yu Wu & **Jiawei Hu**	School of Chemistry and Chemical Engineering, University of Surrey, UK
64	ACTIVE MATERIAL-CARBON BLACK (AM-CB) SPHERICAL CO-AGGLOMERATES FOR IMPROVED HANDLING OF LI-ION BATTERY MATERIAL	**Kunal Pardikar**, Jediah Capindale, Kate Pitt, Denis Cumming, & Rachel Smith	Department of Chemical and Biological Engineering, The University of Sheffield, Sheffield, UK
65	NUMERICAL INVESTIGATION OF GRANULE FLOW CHARACTERISTICS IN AN INTENSIVE MIXER USING DEM	Ali Z. Al hassn[1], **Kimiaki Washino [2]** , Ei L. Chan[2] & Agba D. Salman[3]	1 Department of Chemical Engineering, College of Engineering, University of Diyala, Iraq 2 Department of Mechanical Engineering, Osaka University, Japan 3 Department of Chemical and Biological Engineering, University of Sheffield, UK
66	CONTINUOUS MANUFACTURING OF PHARMACEUTICAL TABLETS: EFFECT OF DIFFERENT UNITS AND FORMULATION PARAMETERS	**Riyadh B Al-Asady[1]**, Chalak S.Omar[2], Jeanina M. Bungaue [1] & Agba D. Salman[1]	1 Department of Chemical and Biological Engineering, University of Sheffield, UK 2 Multidisciplinary Engineering Education, The Diamond, University of Sheffield, UK

Poster number	Poster topic	Presenters	Group
67	FAST TO CLINIC: MATERIAL SPARING PLATFORM APPROACH TO ROLLER COMPACTION PROCESS DEVELOPMENT	**Ranjit Dhenge [1]**, Chandan Bhugra[2], Parind Desai[2], Stephanie Lam[2] & Daniel Goodwin[3]	1Global Supply Chain, GlaxoSmithKline, UK 2 Research and Development, GlaxoSmithKline, USA 3 Research and Development, GlaxoSmithKline, UK
68	REPLICATING RING-DIE PELLETING PROCESS WITH SINGLE-DIE PELLET PRESS: EVALUATION AND OPTIMIZATION	**Prutha Nagaraja [1]**, Dejan Miladinovic [2] Laurent Cavin[3], Thomas G Gfroerer[3], Andreas Thuermer [3], Odd Ivar Lekang [1] & Kristian Berland [1]	1 Department of Mechanical Engineering and Technology Management, Norwegian University of LifeScience, Norway 2 Department of Animal and Aquacultural Sciences, Norwegian University of Life Science, Norway 3 Form giving and Customer Specific Blends, Plastic Additive, BASF Schweiz AG, Switzerland
69	RESTRUCTURATION OF FOOD POWDER USING ROLLER COMPACTOR TO INCREASE THE SHELF LIFE	**Yang S. Mohamad[1]**, Riyadh Al-Asady[1], Mingzhe Yu[1], Manfred Felder[2], Vincent Meunier[3], James Litster[1] & Agba D. Salman[1]	1Department of Chemical and Biological Engineering, University of Sheffield, UK 2 Alexanderwerk GmbH, Germany
70	USING POSITRON EMISSION PARTICLE TRACKING (PEPT) TO EVALUATE MIXING IN AN AXIAL INCLINE BLENDER FOR CONTINUOUS DIRECT COMPRESSION (CDC)	**Owen Jones-Salkey[1,2]**, Andrei L. Nicusan[1], Dominik Werner[1], Kit Windows-Yule[1], Andrew Ingram[1], Sean Clifford[2] & Gavin K. Reynolds[2]	1 School of Chemical Engineering, University of Birmingham, UK 2 Oral Product Development (R&D), AstraZeneca, UK
71	REAL-TIME GRANULE SIZE MEASUREMENT IN A TABLET PRODUCTION LINE: INVESTIGATION OF GRANULE SIZE IN FLUDIZED BED DRYER	**Shengda Hou**, Jeanina M. Bungău, James D. Litster & Agba D. Salman	Department of Chemical and Biological Engineering, University of Sheffield, UK
72	A REVIEW：AMORPHICITY CONTROL OF LACTOSE PARTICLES BY SPRAY DRYING	**Yifan Sun**, Xuqian Li, Zheng Wang & Agba D. Salman	Department of Chemical and Biological Engineering, University of Sheffield, UK
73	A REVIEW: CONTROL THE CONTENT MIGRATION OF DROPLET DURING SPRAY DRYING PROCESS	**Daiyao Wu**, Xuqian Li, Zheng Wang & Agba Salman	Department of Chemical and Biological Engineering, University of Sheffield, UK

Poster Timetable – Day 2

Poster number	Poster topic	Presenters	Group
74	ACROSS THE LENGTH SCALES: SINGLE DROPLET DRYING IN THE SPRAY DRYER	**Xuqian Li[1],** Riyadh B Al-Asady[1], Constantijn Sanders[2], Agba.D.Salman[1]	1 Department of Chemical and Biological Engineering, University of Sheffield, UK 2 Nestec Ltd., Nestlé Product Technology Centre, Switzerland
75	COMPARING THE ENERGY EFFICIENCY OF GRANULATION PROCESSES	**Yashodh H Karunanayake[1]**, Linda Brütsch[2], Vincent Meunier[2] & Agba D Salman[1]	1 Department of Chemical and Biological Engineering, University of Sheffield, UK 2 Nestle Research Lausanne, Switzerland
76 (Paper 72)	INVESTIGATING THE INFLUENCE OF DRYING METHODS ON THE SURFACE MORPHOLOGY OF LACTOSE TABLET WITH DETERMINATION OF MOSITURE CONTENT USING NIR-CHEMICAL IMAGING	**Kawther F. Kadhim**, Riyadh Al-Asady, James D. Litster, & Agba D. Salman	Department of Chemical and Biological Engineering, University of Sheffield, UK
77	PREDICTING BULK POWDER BEHAVIOURS BASED UPON INDIVIDUAL PARTICLE PROPERTIES – A DEM APPROACH	**Charley Wu**	School of Chemistry and Chemical Engineering, University of Surry, UK