## POSTER TIMETABLE

## Day 1 – Wednesday 26<sup>th</sup> June

NO.	Abstract Title	Names of Author (s)	Authors' details	Presentation type
1	STUDY THE EFFECT OF WET GRANULATION AND FUSION METHODS ON PREPARATION, CHARACTERIZATION, AND RELEASE OF LORNOXICAM SACCHAT EFFERVESCENT GRANULES	Zainab E. Jassim, Nawal A. Rajab & <u>Nada H.</u> <u>Mohammed</u>	Department of pharmaceutics, College of pharmacy, University of Baghdad, Baghdad, Iraq.	POSTER ONLY
2	ECONOMY OF GRANULATION VS INDUSTRIAL PRODUCTION CHALLENGES	Oliver Genz	inprotec AG, Neuer Weg 1; D-79423 Heitersheim, Germany	POSTER ONLY
3	A DEM STUDY OF RELATIONSHIP BETWEEN MECHANICAL STRENGTH AND GEOMETRICAL PARAMETERS OF AGGLOMERATES COMPOSED OF PLANT MATERIALS	Joanna Wiącek & Józef Horabik	Institute of Agrophysics, Polish Academy of Sciences, Poland	POSTER ONLY
4	EXPERIMENTAL STUDY ON THE ELECTROSTATIC CHARACTERISTICS OF L-ISOLEUCINE POWDER	Kwangseok Choi <sup>1</sup> , Tomonori Kato <sup>2</sup> & Wookyung Kim <sup>3</sup>	National Institute of Occupational Safety and Health, Japan     Ajinomoto Co., Inc, Japan     Department of Mechanical Systems Engineering, Hiroshima University, Japan	POSTER ONLY

5	SHAPING OF COMPLEX ALUMINA COMPONENTS VIA LASER ADDITIVE MANUFACTURING OF SPRAY-DRIED CERAMIC GRANULES	Stefan Pfeiffer <sup>1,2</sup> , Kevin Florio <sup>3</sup> , Malgorzata Makowska <sup>4</sup> , Konrad Wegener <sup>3</sup> , Christos Aneziris <sup>2</sup> , Thomas Graule <sup>1,2</sup>	Laboratory for High Performance Ceramics, Empa –     Swiss Federal Laboratories for Materials Science and     Technology, Switzerland      Institute of Ceramic, Glass and Construction     Materials, Germany      Institute of Machine Tools and Manufacturing, ETH – Swiss Federal Institute of Technology Zurich,     Switzerland      Photons for Engineering and Manufacturing Group,     PSI – Paul Scherer Institut, Villigen, Switzerland	POSTER ONLY
6	MONTE CARLO MODELLING OF SPRAY FLUIDIZED BED AGGLOMERATION	Abhinandan K. Singh & Evangelos Tsotsas	Chair of Thermal Process Engineering, Otto-von- Guericke University, Germany	POSTER ONLY
7	ALL YOU NEED IS TWO TABLETS - HOW AXIAL RECOVERY IS THE KEY TO A PRECISE OUT-OF-DIE TABLET DENSITY PREDICTION	Cosima Hirschberg <sup>1</sup> , Shubhajit Paul <sup>2</sup> , Jukka Rantanen <sup>1</sup> & Changquan C. Sun <sup>2</sup>	Department of Pharmacy, University of Copenhagen,     Denmark      Department of Pharmaceutics, University of     Minnesota, US	POSTER ONLY
8	INVESTIGATION OF CONTINUOUS WURSTER GRANULATION WITH EXTERNAL PRODUCT CLASSIFICATION	Daniel Müller <sup>1</sup> , Andreas Bück <sup>2</sup> & Evangelos Tsotsas <sup>1</sup>	Department of Thermal Process Engineering,     Institute of Process Engineering, Otto von Guericke     University, Germany.      Institute of Particle Technology, Friedrich-Alexander     University, Germany.	POSTER ONLY
9	EXPERIMENTAL STUDY AND DEM MODELLING OF THE CONTACT BEHAVIOUR OF CYLINDRICAL PARTICLES	Philipp Grohn <sup>1</sup> , Sergiy Antonyuk <sup>1</sup> & Stefan Heinrich <sup>2</sup>	Institute of Particle Process Engineering, Technische Universität Kaiserslautern, Germany      Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany	POSTER ONLY

10	SIMULATION OF CONTINUOUS SPRAY COATING IN SPOUTED BEDS USING RECURRENCE CFD	Paul Kieckhefen, Swantje Pietsch, Stefan Heinrich	Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany	POSTER ONLY
11	DYNAMIC FLOWSHEET SIMULATION SYSTEM WITH ADVANCED CONSIDERATION OF THE SOLID PHASE	Vasyl Skorych, Maksym Dosta, Ernst-Ulrich Hartge & Stefan Heinrich	Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany	POSTER ONLY
12	INTERCHANGEABILITY OF LACTOSE GRADES IN WET MANUFACTURING PROCESSES MONITORED BY DYNAMIC VAPOUR SORPTION (DVS)	Vera Fichtner, Christian Nowak & <u>Franz K. Penz</u>	Meggle, BG Excipients & Technology, Germany	POSTER ONLY
13	IN-LINE MONITIORING OF COATING LAYER THICKNESS IN A SPOUTED BED VIA OPTICAL COHERENCE TOMGRAPHY	Swantje Pietsch <sup>1</sup> , Anna Peter <sup>2</sup> , Patrick Wahl <sup>2</sup> , Johannes Khinast <sup>2,3</sup> & Stefan Heinrich <sup>1</sup>	Hamburg University of Technology, Germany     Research Center Pharmaceutical Engineering GmbH,     Austria     Institute of Process and Particle Engineering, Graz	POSTER ONLY
14	WETTING OF SOLUBLE AND HETEROGENEOUS POWDERS	Jana Kammerhofer <sup>1</sup> , Lennart Fries <sup>1</sup> , Laurent Forny <sup>1</sup> , Julien Dupas <sup>2</sup> , Stefan Heinrich <sup>3</sup> & Stefan Palzer <sup>4</sup>	Nestlé Research Center, Lausanne, Switzerland     Nestlé Product Technology Center Orbe, Switzerland     Hamburg University of Technology, Germany     Nestlé S.A., Avenue Nestlé, Vevey, Switzerland	POSTER ONLY
15	GRANULATION OF WET GRANULAR MEDIUM IN ROTATING DRUM	T-Trung. Vo <sup>1,2</sup> , Patrick Mutabaruka <sup>3</sup> , Saeid Nezamabadi <sup>1</sup> , Jean-Y. Delenne <sup>4</sup> & Farhang Radjai <sup>1</sup>	1 LMGC, Université de Montpellier, France 2 Bridge and Road Department, Danang Architecture University, Vietnam. 3 (MSE)2, UMI 3466 CNRS-MIT, MIT Energy Initiative, Cambridge 02139, USA. 4 IATE, UMR1208 INRA-CIRAD-Université de Montpellier-SupAgro, France.	POSTER ONLY

16	SCALING UP A CONTINOUS WET TWIN- SCREW GRANULATION PROCESS	Margarethe Richter	Thermo Fisher Scientific, Germany	POSTER ONLY
17	EXPERIMENTAL STUDIES OF SAND EROSION BEHAVIOUR ON PIPELINE STEEL UNDER DIFFERENT PARTICLE CONCENTRATION AND SIZES	Yan Yang <sup>1, 2</sup> , Hongmin Xu <sup>1</sup> , Haoping Peng <sup>1</sup> , <u>Chuang Wen<sup>3</sup></u> & Yuqing Feng <sup>4</sup>	1 School of Petroleum Engineering, Changzhou University, China  2 Department of Mechanical Engineering, Technical University of Denmark, Denmark 3 Faculty of Engineering, University of Nottingham, University Park, UK  4 CSIRO Mineral Resources, Clayton, Australia	POSTER ONLY
18	STRUCTURE ANALYSIS OF SODIUM BENZOATE LAYERS FROM DRYED DEPOSITED DROPLETS	Manuel Janocha, Evangelos Tsotsas & Diethard Kürschner	Chair of thermal process engineering, Otto-von- Guericke University, Germany	POSTER ONLY
19	EFFECT OF FEED DRY MATTER CONTENT ON POWDER PROPERTIES OF MICELLAR CASEIN POWDER	Sissel B. Kavli, Denise F. Silva & <u>Lilia M. Ahrné</u>	Department of Food Science, University of Copenhagen, Denmark	POSTER ONLY
20	EXPERIMENTAL INVESTIGATION OF PARTICLE DISPERSION IN CONTINUOUS SPRAY AGGLOMERATION PROCESS IN A HORIZONTAL FLUIDIZED BED	Jiajie Du <sup>1</sup> , Andreas Bück <sup>2</sup> & Evangelos Tsotsas <sup>1</sup>	1 Thermal Process Engineering, Otto von Guericke University, Germany  2 Institute of Particle Technology, FAU Erlangen- Nuremberg, Germany	POSTER ONLY
21	SCALE-UP INVESTIGATIONS OF TABLETING PROCESSES FROM LAB TO PRODUCTION SCALE	Daniel Puckhaber <sup>1,3</sup> , Isabell Wünsch <sup>1,3</sup> , Jan Henrik Finke <sup>1,3</sup> , Volker Klock <sup>2</sup> , Yean Yik Geörg2, Frank Kleine Jäger <sup>2</sup> & Arno Kwade <sup>1,3</sup>	Institute for Particle Technology, TU Braunschweig, Germany     BASF SE, Carl-Bosch Straße 38, Germany     PVZ - Centre for Pharmaceutical Engineering, Germany	POSTER ONLY

22	EFFECT OF PROCESS PARAMETERS ON GRANULATION OF ALUMINA POWDERS	Aswin V. Muthachikavil, Swati Sahu, V. S. Buddhiraju & V. Runkana	Tata Research Development and Design Centre, Tata Consultancy Services, India	POSTER ONLY
23	APPLICATIONS OF MECHANISTIC MODELS FOR INDUSTRIAL WET GRANULATION PROCESSES: DATA REQUIREMENTS, BEST PRACTICES, AND TYPICAL WORKFLOWS	Dana Barrasso <sup>1</sup> , Leonor <u>Rosa</u> <sup>2</sup> & Sean K. Bermingham <sup>2</sup>	1 Process Systems Enterprise Inc., USA 2 Process Systems Enterprise Ltd., UK	POSTER ONLY
24	CATCH ME IF YOU CAN - AUTOMATIC DETECTION OF SCORCHED OR OTHER FOREIGN PARTICLES IN GRANULATION PROCESS USING INLINE PROBES	Mirco Wegener, Hai Tran-Long & Sebastian Maaß	SOPAT GmbH, Germany	POSTER ONLY
25	DEM-PBM COUPLING FOR MULTISCALE ANALYSIS OF TWO-COMPONENT HIGH- SHEAR WET GRANULATION PROCESSES	Vasyl Skorych <sup>1</sup> , Indu Muthancheri <sup>2</sup> , Stefan Heinrich <sup>1</sup> , Rohit Ramachandran <sup>2</sup> , <u>Maksym Dosta<sup>1</sup></u>	1 Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany 2 Rutgers University, USA	POSTER ONLY
26	EFFECT OF PARTICLE COATING ON THE PERFORMANCE OF FOOD POWDERS	Diamanto Angelopoulou <sup>1</sup> , Vincent Meunier <sup>2</sup> , Laurent Forny <sup>2</sup> , Gerhard Niederreiter <sup>2</sup> & Agba D. Salman <sup>1</sup>	Department of Chemical and Biological Engineering, University of Sheffield, UK     Nestlé Research, Lausanne, Switzerland	POSTER ONLY
27 (Paper 73)	MEASURING RIBBON STRENGTH AT A GERTEIS PACTOR DURING THE GRANULATION PROCESS	Barbara Fretter <sup>1</sup> , Florian Schorr <sup>2</sup> , Klaus Steffens <sup>3</sup> & Paul Gerteis <sup>4</sup>	Solids Development Consult GmbH, Germany     University of Bonn, Germany     University of Bonn, Gerhard-Domagk-Str, Bonn, Germany     Gerteis Maschinen + Processengineering AG, Switzerland	POSTER PAPER (73)

28	GROWTH AND INTERNAL MICROSTURCTURE OF GRANULES FROM WETTING AND NON-WETTING POWDER BLENDS	Leon Farber <sup>1</sup> , Duaa Alaaraj <sup>2</sup> , Michael Gentzler <sup>1</sup> &  Rachel Smith <sup>2</sup>	Centre for Materials Science and Engineering, MSD, USA      Chemical and Biological Engineering, University of Sheffield, UK	POSTER ONLY
29	FINITE ELEMENT ANALYSIS: FEEDING POWDER FLOW IN ROLLER COMPACTION	Mingzhe Yu <sup>1</sup> , Peter Polak <sup>2</sup> , Marcus Becker Hardt <sup>3</sup> , Chalak S. Omar <sup>1</sup> , Csaba Sinka <sup>2</sup> , Alexander Schmidt <sup>3</sup> , James D. Litster <sup>1</sup> & Agba D. Salman <sup>1</sup>	Department of Chemical and Biological Engineering, University of Sheffield, UK     Department of Engineering, University of Leicester, UK     Alexanderwerk AG, Remscheid, Germany	POSTER ONLY
30	MECHANISTIC CONSIDERATION OF MICRO- PROCESSES DURING COMPRESSION OF WELL-DEFINED MODEL POWDERS	Isabell Wünsch <sup>1,2</sup> , Alexander Diener <sup>1</sup> , Jan. H. Finke <sup>1,2</sup> , Edgar John <sup>3</sup> , Michael Juhnke <sup>3</sup> & Arno Kwade <sup>1,2</sup>	Institute for Particle Technology, Technische Universität Braunschweig, Germany      Center of Pharmaceutical Engineering (PVZ), Technische Universität Braunschweig, Germany      Novartis Pharma AG, Basel, Switzerland	POSTER ONLY
31 (Paper 74)	THE LIMITATIONS OF NIR-CHEMICAL IMAGING FOR DETERMINATION THE TABLET MOISTURE CONTENT	Kawther F. Kadhim, Riyadh Al-Asady, Feng Li, James D. Litster & Agba D. Salman	Department of Chemical and Biological Engineering, University of Sheffield, UK	POSTER PAPER (74)
32 (Paper 75)	CONTINUOUS MANUFACTURING IN THE PHARMACEUTICAL INDUSTRY: REVIEW OF DIFFERENT SIMULATION METHODS	Sihan Wang <sup>1</sup> , Kimiaki Washino <sup>2</sup> , Riyadh B. Al Asady <sup>1</sup> , Chalak S. Omar <sup>1</sup> , James D. Litster <sup>1</sup> & Agba D. Salman <sup>1</sup>	Department of Chemical and Biological Engineering,     University of Sheffield, United Kingdom     Department of Mechanical Engineering, Osaka     University, Japan	POSTER PAPER (75)

33	DYNAMIC BEHAVIOUR OF THE SPRAY GRANULATION IN CONTINUOUSLY OPERATED HORIZONTAL FLUIDISED BEDS	Eugen Diez <sup>1</sup> , Christoph Neugebauer <sup>2</sup> , Stefan Palis <sup>2</sup> , Achim Kienle <sup>2</sup> , Lisa Mielke <sup>3</sup> , Evangelos Tsotsas <sup>3</sup> , Andreas Bück <sup>4</sup> & Stefan Heinrich <sup>1</sup>	Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany      Chair of Automation and Modelling, Otto von Guericke University Magdeburg, Germany      Chair of Thermal Process Engineering, Otto von Guericke University Magdeburg, Germany      Institute of Particle Technology, Friedrich-Alexander University, Germany	POSTER ONLY
34	INFLUENCE OF CARRIER PARTICLE SOLUBILITY ON REDISPERSIBILITY OF NANOPARTICLE-LOADED GRANULES	Martin Wewers <sup>1,2</sup> , Jan H. Finke <sup>1,2</sup> , M. Juhnke <sup>3</sup> & A. Kwade <sup>1,2</sup>	Institut für Partikeltechnik, Technische Universität Braunschweig, Germany     Zentrum für Pharmaverfahrenstechnik, Germany     Novartis Pharma AG, Switzerland	POSTER ONLY
35	FABRICATION OF HIGHLY-FILLED COMPOSITES USING SPOUTED BED SPRAY COATING	H. Sophia Rothberg <sup>1</sup> , Eduard Eichner <sup>1</sup> , Maksym Dosta <sup>1</sup> , Stefan Heinrich <sup>1</sup> & Gerold A. Schneide <sup>r2</sup>	Institute of Solids Process Engineering and Particle Technology, Hamburg University of Technology, Germany     Institute of Advanced Ceramics, Hamburg University of Technology, Germany	POSTER ONLY
36	An INTEGRATED RATE PROCESSES MODEL FOR HIGH SHEAR WET GRANULATION AND ITS APPLICATION FOR SCALE-UP	Maitraye Sen, Salvador García-Muñoz, <u>Jonathan</u> <u>Brett Wade</u> & James Miesle	Eli Lilly & Company, Indianapolis, USA	POSTER ONLY
37	AGGLOMERATION OF (NICKEL/MANGANESE/COBALT) HYDROXIDE IN TAYLOR VORTEX FLOW	Queme Pena Mayra Maritza & <u>Woo-Sik Kim</u>	Functional Crystallization Center, Department of Chemical Engineering, Kyung Hee University, Korea	POSTER ONLY

38 (Paper 76)	ESTIMATION ON THE CAPILLARY FORCE OF AN ASYMMETRIC LIQUID BRIDGE ADHERED TO TWO PARTICLES WITH NONCIRCULAR CONTACT LINE	Kazuo Murase, Keisuke Arai & Takato Ohtsuka	Department of Applied Chemistry, Chuo University, 1-13-27, Kasuga, Bunkyo-ku, Tokyo, 1128551, Japan	POSTER PAPER (76)
39	EXAMINATION OF THE PHYSICAL & PERFORMANCE EFFECTS OF 2 DIFFERENT CONTROL MODELS ON SCALE-UP OF AN ENTERIC WURSTER COATING PROCESS	Chris O'Callaghan <sup>1</sup> , Piyush Patel <sup>2</sup> , Edward Godek <sup>3</sup> , Christian Knopf <sup>4</sup> , Chris Baer <sup>4</sup>	1 Innopharma Technology, Ireland 2 Colorcon, 275 Ruth Rd, USA 3 Glatt Air Techniques, USA 4 Glatt Innovation Centre, Hertzallee 3, Germany	POSTER ONLY
40 (Paper 77)	THE PLASTIC DEFORMATION OF A SINGLE PARTICLE BEFORE AND AFTER ROLLER COMMPACTION PROCESS	Riyadh B. Al-Asady, Michael J. Hounslow & Agba D. Salman	Department of Chemical and Biological Engineering, University of Sheffield, UK	POSTER PAPER (77)
41	DRAG RESISTANCE OF POROUS AGGLOMERATES IN FLUIDIZED BED GRANULATION	Yali Tang	GEM-Z 2.137, Multiphase and Reactive Flows group, Department of Mechanical Engineering, Eindhoven University of Technology, The Netherlands	POSTER ONLY
42	STUDY ON THE AERATED DISCHARGING PROCESS BASED ON A TWO-DIMENSIONAL HOPPER	Xiaolei Guo, Jiming He, Haifeng Lu & Xin Gong	Key Laboratory of Coal Gasification and Energy Chemical Engineering of Ministry of Education, Shanghai Engineering Research Center of Coal Gasification East China University of Science and Technology, PR China	POSTER ONLY
43	MECHANISTIC MODELING OF SPHERICAL AGGLOMERATION PROCESS FOR PHARMACEUTICAL MANUFACTURING	Omid Arjmandi-Tash, Siti N. M. Yusoff, Jonathan D. Tew, Rachel M. Smith & James D. Litster	Department of Chemical & Biological Engineering, The University of Sheffield, UK	POSTER ONLY

44	EFFECTS OF MATERIAL TYPES AND OPERATING CONDITIONS ON PROPERTIES OF PARTICLES PRODUCED WITH PULSE COMBUSTION DRYING	Daniel Pramudita <sup>1</sup> , Arne Teiwes <sup>2</sup> , <b>Abhinandan K.</b> <b>Singh<sup>1</sup>,</b> Michael Jacob <sup>2</sup> & Evangelos Tsotsas <sup>1</sup>	1 Chair of Thermal Process Engineering, Otto Von Guericke Universität Magdeburg, Germany 2 Glatt Ingenieurtechnik GmbH, Weimar, Germany	POSTER ONLY
45	THE INFLUENCE OF LIGNIN ON API CONTENT UNIFORMITY IN CONTINUOUS TWIN-SCREW WET GRANULATION PROCESSES	Mahboubeh Pishnamazi <sup>1</sup> ,  Hamza Y. Ismail <sup>1</sup> , Saeed Shirazian <sup>1</sup> , Gavin M. Walker <sup>1</sup> & Maurice N. Collins <sup>2,3</sup>	Department of Chemical Sciences, Bernal Institute, Synthesis and Solid State Pharmaceutical Centre (SSPC), University of Limerick, Ireland     Stokes Laboratories, Bernal Institute, University of Limerick, Ireland     Health Research Institute, University of Limerick, Ireland	POSTER ONLY
46	MODEL-DRIVEN SCALE-UP FRAMEWORK FOR HIGH-SHEAR WET GRANULATION	Stefan Bellinghausen <sup>1</sup> , Dana Barrasso <sup>2</sup> , Emmanuela Gavi <sup>3</sup> , Laura Jerke <sup>3</sup> , Pranay K. Ghosh <sup>3</sup> , Agba D. Salman <sup>1</sup> & James D. Litster <sup>1</sup>	Department of Chemical and Biological Engineering, University of Sheffield, UK     Process Systems Enterprise Inc., USA     F. Hoffmann-La Roche AG, Switzerland	POSTER ONLY
47	COMPARATIVE GRANULATION OF A PHARMACEUTICAL FORMULATION USING DIFFERENT GRANULATION TECHNIQUES	Andreas Sauer <sup>1</sup> , Marcus Becker-Hardt <sup>2</sup> , Carola Hanl <sup>3</sup> , Andreas van Kampen <sup>4</sup> , Thomas Meyer <sup>5</sup> & <u>Kathrin Nickel<sup>6</sup></u>	1 Shin-Etsu PFMD GmbH, , Germany 2 Alexanderwerk GmbH, Germany 3 Romaco Kilian GmbH, Germany 4 Romaco Innojet GmbH, Germany 5 Gebrüder Lödige Maschinenbau GmbH, Germany 6 Leistritz Extrusionstechnik GmbH, Germany	POSTER ONLY

48 (Paper 78)	NOVEL ALGORITHM FOR PARTICLE TRACKING VELOCIMETRY (PTV) OF NON- SPHERICAL PARTICLES	Zhaochen Jiang <sup>1,2</sup> , <u>Kaicheng Chen<sup>2</sup></u> ,  Andreas Bück <sup>1</sup> &  Evangelos Tsotsas <sup>2</sup>	Institute of Particle Technology (LFG), FAU     Erlangen-Nuremberg, Germany     Thermal Process Engineering, Otto-von-Guericke     University Magdeburg, Germany	POSTER PAPER (78)
49	A ROBUST SYSTEMS FRAMEWORK FOR MODELLING A TABLET MANUFACTURING PROCESS	Sean S. Clifford & Gavin K. Reynolds	Pharmaceutical Technology & Development, AstraZeneca, UK	POSTER ONLY
50	EFFECT OF CHEESE AGE AND ADDITION OF DAIRY INGREDIENTS ON WETTABILITY, DISPERSIBILITY AND TOTAL REHYDRATION OF CHEESE POWDER	Denise Felix da Silva, Anni Bygvrå Hougaard & Richard Ipsen	Department of Food Science, Faculty of Science, University of the Copenhagen, Denmark.	POSTER ONLY
51	THERMAL METHODS: HOW ACCURATELY THEY CAN BE USED FOR ASSESSMENT OF MIXING UNIFORMITY	Shreya Thakkar, Devilal Rathod & Manju Misra	Drug discovery lab, NIPER, India	POSTER ONLY
52	EFFECTS OF BINDER ADDITION ON THE TABLET QUALITY ATTRIBUTES OF A NOVEL AMORHPOUS SOLID DISPERSION	Samuel Solomon & Ahmad B. Albadarin	Department of Chemical Sciences, Bernal Institute, University of Limerick, Ireland	POSTER ONLY
53	EVALUATION OF AN ELECTRONIC GAMLEN GTP-1 PRESS TO MEASURE AND COMPARE COMPRESSIBILITY OF HE POWDER	Alessandro Contini, Peter Bolton, Katy Poole & Richard Cox	Energetic Materials Development Team, AWE, UK	POSTER ONLY
54 (Paper 79)	CALCIUM CARBONATE SCALE AND AGGREGATION IN OILFIELD: EFFECT OF MAGNESIUM ION AND SCALE INHIBITORS	Waleed Al Nasser & Yasser Al Jeshi	Saudi Aramco, Research and Development Center, Saudi Arabia	POSTER PAPER (79)

55 (Paper 80)	ADVANCES IN PARTICLE SIZE DISTRIBUTION PREDICTABILITY – BRIDGING THE EXPERIMENTAL GAP	Wilf Sangüesa	Product Management, The Fitzpatrick Company, Canada	POSTER PAPER (80)
56	FEEDBACK CONTROL OF FLUID BED GRANULATION USING REAL-TIME PARTICE SIZE MEASUREMENT	Theresa Reimers <sup>1;2</sup> , <u>Adrian Kape<sup>2</sup></u> , Jochen Thies <sup>2</sup> & Julian Quodbach <sup>1</sup>	Institute of Pharmaceutics and Biopharmaceutics,     Heinrich Heine University Düsseldorf, Germany     Glatt GmbH, Germany	POSTER ONLY
57	A STEP TOWARDS PREDICTIVE TABLET TENSILE STRENGTH	Bilal Khorsheed <sup>1</sup> , Ian Gabbott <sup>2</sup> , Gavin K. Reynolds <sup>2</sup> & Agba D. Salman <sup>1</sup>	Department of Chemical and Biological Engineering,     University of Sheffield, UK     AstraZeneca Pharmaceuticals, UK	POSTER ONLY
58	PREPARATION OF NANOPARTICLES VIA BUBBLE BURSTING	Xiaofei Xu, Yu Han, Fengxia Liu, Wei Wei & Zhijun Liu	R&D Institute of Fluid and Powder Engineering, Dalian University of Technology, China	POSTER ONLY
59 (Paper 81)	USING MIXER TORQUE REOMETRY FOR THE ASSESSMENT OF CHIA AS A BINDER FOR OBTAINING QUINOA GRANULES	Rosana Pereira da Silva, Jefferson Gaziro, Wily Edgardo Alayo Mendoza, Fanny Judhit Vereau Reyes, Alane Sousa Silva & Humberto Gomes Ferraz	Department of Pharmacy, Faculty of Pharmaceutical Sciences, University of São Paulo, Brazil	POSTER PAPER (81)
60 (Paper 82)	QUANTIFYING FLOWING PROPERTIES OF SPRAY-DRIED POWDERS BEFORE AND AFTER GRANULATION	Geoffroy Lumay <sup>1</sup> , Liselotte De Smet <sup>2</sup> , Filip Van der Gucht <sup>3</sup> , Filip Francqui <sup>4</sup> & <u>Naveen Mani</u> <u>Tripathi<sup>4</sup></u>	1 GRASP Laboratory, CESAM Research Unit, University of Liège, Belgim 2 Xedev, Zelzate, Belgium 3 ProCepT, Zelzate, Belgium 4 GranuTools, Awans, Belgium	POSTER PAPER (82)

61	ULTRATHIN COATING OF PARTICLES IN FLUIDIZED BED USING SUBMICRON DROPLETS	Maksim Mezhericher <sup>1</sup> , Christian Rieck <sup>2</sup> , <b>Rongyi</b> <b>Zhang<sup>2</sup></b> , Nikolay Razorenov <sup>3</sup> & Evangelos Tsotsas <sup>2</sup>	1 Department of Mechanical and Aerospace Engineering, Princeton University, USA 2 Thermal Process Engineering, Otto von Guericke University, Germany 3 Department of Mechanical Engineering, Shamoon College of Engineering, Israel	POSTER ONLY
62	EFFECT OF GRANULATION ADDITIVES ON THE HARDNESS AND SURFACE ABRASION OF FERTILIZER GRANULES	Roslyn J. Baird, Colin Rivers, Rodrigo C. da Silva, Fien Degryse & Michael J. McLaughlin	Fertiliser Technology Research Centre, University of Adelaide, Australia	POSTER ONLY

## POSTER TIMETABLE

## Day 2 – Thursday 27<sup>th</sup> June

63	GROWTH CHARACTERISTICS OF FINE PARTICLES WITH DIFFERENT WETTABILITY DURING VAPOR HETEROGENEOUS CONDENSATION	XueLi Chen <sup>1,2</sup> , RunZhe LIU <sup>1,2</sup> , <b>ShiJie ZHU</b> <sup>1,2</sup> , Xin ZHONG <sup>1,2</sup> , DeXi MENG <sup>1,2</sup> & HaiFeng LU <sup>1,2</sup>	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	POSTER ONLY
64 (Paper 83)	HYDRODYNAMIC SIMULATION OF MOVING BED HEAT EXCHANGER	Zhijun Liu, Fengxia Liu, Xiaofei Xu, Chaoyang Wang & Wei Wei	R&D Institute of Fluid and Powder Engineering, Dalian University of Technology, China	POSTER PAPER (83)
65 (Paper 84)	COMPARISON OF THE MECHANICAL PROPERTIES OF HYDROPHOBIC STARCH ESTERS	Nizar Al-Zoubi <sup>1</sup> , Adel Ardakani <sup>2</sup> , Faten Odeh <sup>2</sup> , Nina Sakhnini <sup>2</sup> , Ioannis Partheniadis <sup>3</sup> & <u>Ioannis</u> <u>Nikolakakis<sup>3</sup></u>	Faculty of Pharmacy, Applied Science Private University, Jordan      Faculty of Pharmaceutical Sciences, Hashemite University, Jordan      Department of Pharmaceutical Technology, School of Pharmacy, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece	POSTER PAPER (84)
66	HIGH TEMPERATURE FLUIDIZED BED SPRAY COATING - NEW POSSIBILITIES IN CATALYST DESIGN	Arne Teiwes & Michael Jacob	Glatt Ingenieurtechnik GmbH, Germany	POSTER ONLY
67 (Paper 85)	IMPACT OF COMPRESSION PRESSURE ON PHARMACEUTICAL FORMULATIONS CONTAINING MAGNESIUM ALUMINOMETASILICATES	Pavlína Komínová, Diem Trang Tran & Petr Zámostný	Department of Organic Technology, University of Chemistry and Technology Prague, CZE	POSTER PAPER (85)

68	PHARMACEUTICAL EXCIPIENTS PROPERTIES AND THEIR IMPACT ON THE SCREW FEEDING PERFORMANCE OF CONTINUOUS PROCESSING LINES	Bianca A.M.C.Santos <sup>1</sup> , Flavia Almada do Carmo <sup>1</sup> , Walkiria Schlindwein <sup>2</sup> , Carlos Rangel Rodrigues <sup>1</sup> , Lucio Mendes Cabral <sup>1</sup> , Gordon Muirhead <sup>3</sup> , Julian Westrup <sup>3</sup> & <b>Kendal Pitt</b> <sup>3</sup>	Faculty of Pharmacy, Federal University of Rio de Janeiro, Brazil     De Montfort University, Leicester, United Kingdom     GlaxoSmithKline, Ware, United Kingdom	POSTER ONLY
69	COATING OF FINE-DISPERSE PARTICLES IN FLUDIZED BED	Rongvi Zhang, Torsten Hoffmann & Evangelos Tsotsas	Department of Thermal Process Engineering, Otto von Guericke University, Germany	POSTER ONLY
70 (Paper 86)	MIXER TORQUE REOMETRY AS A TOOL TO OBTAIN THE IDEAL GRANULATION CONDITIONS OF CALCIUM CARBONATE	Rosana Pereira da Silva & Humberto Gomes Ferraz	Department of Pharmacy, Faculty of Pharmaceutical Sciences, University of São Paulo, Brazil	POSTER PAPER (86)
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