Poster session on tuesday, 19 March 2024

Continuously exhibited from 09:00 - 17:00 h, with special presentations by authors from 11:00 - 11:30 h and 13:00 - 15:00 h. The number indicates the poster panel number.

Pediatric and geriatric drug delivery and gender medicine

01. The development of orodispersible dosage forms containing zein-based nanostructures for paediatric use
A. Cornilă, S. Iurian, D. Muntean, I. Tomuță and A. Porfire

02. A Retrospective Quantification of Gastric and Duodenal Fluid Volumes of Older Adults using Magnetic Resonance Imaging (MRI)
C. Demeester, M. van der Veken, J. Brouwers, R. Vanslembrouck, A. Dallmann, T. Wendl and P. Augustijns

03. Development of standard vehicles for compatibility studies with oral paediatric drug products
C. Eckert, S. Klein, C. Stillhart, L. Wagner, E. Scheubel, I. Prevot and M. Lindenberg

04. The effect of sparkling water on the systemic pharmacokinetics of paracetamol in older adults
F. Harder, M. Bresseleers, J. Brouwers, T. Vanuytsel and P. Augustijns

05. Can individual taste perceptions bias the results of taste panel studies? Lessons learned from an in vivo investigation with paediatric ODMTs
F. Karkossa, F.-F. Janke, L. Freerks and S. Klein

06. Taking medicines the milky way: How does milk affect disintegration of mini-tablets with a taste-masking coating?
F. Karkossa, E.-S. Poloni and S. Klein

07. In silico evaluation of the immunogenicity of L-asparaginase from Penicillium cerradense in T cells
P. Magalhaes, G. Pappas and K. Andrade

08. In vitro modified-release of hydrocortisone paediatric mini-tablets
C. Protopapa, K. Tzamalis, P. Madouros, A. Siamidi and M. Vlachou

09. Physicochemical characterization of fasting duodenal contents of older adults with moderate cognitive impairment and comparison with data in young adults: Initial data
A. Asteriadis, E. Bocharova, G. Alevizopoulos, K. Goumas, T. Argyropoulos, E. Voulgari, M. Vertzoni and C. Reppas

10. Real-life dosing conditions in older adults and geriatric patients - biopharmaceutical perspective
D. Sarwinska, M. Grimm, J. Krause, P. Schick, M. Gollasch and W. Weitschies

11. The impact of advanced age on the physicochemical characteristics of duodenal contents under fasting conditions: initial data
E. Bocharova, A. Asteriadis, K. Goumas, T. Argyropoulos, A. Bampali, C. Reppas and M. Vertzoni

12. Investigation of age-dependent oral absorption in children: Potential and limitations of a bottom-up modelling approach
F. Winter, J. Lange and S. K.

Physical pharmacy and preformulation

13. Combining Deep Eutectic Solvents and SEDDS for the delivery of poorly soluble drugs: a possible pathway
G. Balenzano, A. Spennacchio, A. Lopalco, G. F. Racaniello, A. Cutrignelli, V. Laquintana and N. Denora

14. Impact of high HLB-Gelucires on amorphous solubility and crystallization of ketoprofen from the supersaturated state
S. Bertoni, B. Albertini and N. Passerini

15. Imiquimod solubility in different solvents: an interpretative approach
D. Sorgi, S. Germani, R. Nicolella Gentile, A. Bianchera and R. Bettini

16. Interaction of carbamazepine with (2 hydroxy)propyl-β cyclodextrin, in solution and in the solid state
F. El-Saleh, C. Mahnen, N. Heshmati, K. Lawal, N. E. Santos, F. A. A. Paz and S. S. Braga

17. Stabilization mechanisms of amorphous sugars via co-lyophilization with polymer
C. Giannachi, A. Crean, E. Allen and S. Vucen

18. In vitro evaluation of hair damage induced by UVA and UVB radiations
A. Picco, L. Giovannelli, G. Diana, I. Miletto, E. Bari, L. Segale and E. Ugazio

19. CLASSIC NMR spectroscopy as an in-situ approach to monitor mechanochemical cocrystallisation of pharmaceutical systems using solvents of different polarity
A. M. Golkowska, Y. Z. Khimyak and K. P. Nartowski

20. Predicting the long-term stability of ASDs
B. Grönniger, E. Fritschka, I. Fahrig and G. Sadowski

21. High-throughput approach to accelerate the co-crystal screening of the calcium-channel blocker cilnidipine
M. Guidetti, R. Hilfiker, M. Kuentz, A. Bauer-Brandl and F. Blatter

22. Assessment of Erosion and Dissolution behavior of ASDs by using VCM Technique
V. HAVENITH, A. Sauer and D. Nakhla

23. Innovative high-throughput approaches for formulation analysis during the early stages of low-solubility drug development
F. Hládek, O. Navrátil, S. Chvíla, D. Smrčka and F. Štěpánek

24. In silico Screening of Drug-Polymer Miscibility for Solid Dispersion Formulation Development
M. Hofsaess, N. Sherck, N. Rozak, F. Brandl, S. Koehler, T. Cech and T. Agnese

25. Controlling quality and kinetics of ASD drying processes
J. Kerkhoff, D. Borrmann and G. Sadowski

26. Accelerated Screening of Spray-dried Ternary Co-Amorphous Formulations
V. Klimša, L. Mašková, O. Kašpar, G. Ruphuy and F. Štěpánek

27. High-throughput screening of solid SMEDDS
M. Krov, M. Škuta, O. Rychecký, E. Králová and F. Štěpánek

28. How to assess supersaturation in co-amorphous polymeric bosentan systems?
D. Strojewski and A. Krupa

29. Optimizing spray-dried ASDs for capsule administration
L. Luca, J. Macedo, L. Vandevivere, E. De Coninck, L. De Smet and F. Van der Gucht

30. Physical Aging and its Effect on Molecular Mobility of Pharmaceuticals below Glass Transition
A. Mansuri, E. Scholz, D. Geßner, H. van Lishaut and T. Müller

31. Compaction and Structural-Mechanical Properties of Tablets as a Function of Volume Ratios of Excipients
V. Mohylyuk

32. The formation and characterization of novel itraconazole eutectic phases comprising non-steroidal anti-inflammatory drugs
Y. Naida and L. Tajber

33. Influence of co-milling conditions on drugs of different glass forming ability classes
N. Pätzmann, P. J. O`Dwyer, B. T. Griffin, M. Kuentz and J. Beránek

34. Synergistic interactions in ternary amorphous solid dispersions dependent on phase homogeneity using HPC-UL
F. Pöstges, J. Lenhart, E. Stoyanov, D. J. Lunter and K. G. Wagner

35. The Formulation Parameters Effect on the Physicochemical Properties of Lyophilizates with Probiotics
S. Pavloková, N. Fülöpová, N. Chomová, A. Franc, D. Mudroňová and P. Sivulič

36. Novel in situ formulations of stabilized hypochlorous acid with potential multi-purpose use against skin and soft-tissue biofilm infections
A. K. Pham, M. M. Fazli, M. Hiorth and P. Rongved

37. Manufacturing and characterization of particle-based silica aerogels for pharmaceutical applications
J. Pierick, A. Zarinwall, J. H. Finke and G. Garnweitner

38. Different or the Same? Exploring the Properties of Celecoxib Amorphous Forms Obtained by Different Methods
M. Wang, I. Martins, O. Frederiksen, J. Gong and T. Rades

39. Investigating salt formation using mechanochemistry with sulfa drugs and co-former piperazine
A. Ryan, B. Twamely and L. Tajber

40. Overcoming the low solubility of novel pyrazoloquinolinone ligand (CW-02-79) by combination of drug-phospholipid complex and nanoemulsion technology: design and physicochemical evaluation
T. Stanković, T. Ilić, M. Petković, I. Pantelić, V. Dobričić, J. M. Cook, M. Savić and S. Savić

41. Implementation of a high throughput ASD screening workflow in the refined developability classification system (rDCS)
M. B. Senniksen, N. Wyttenbach, S. Page and J. Dressman

42. Amorphous chlorhexidine (free base) dissolves less rapidly compared to crystalline
C. Henaff, J. Siepmann, F. Siepmann and J.-F. Willart

43. PLX4720: an intriguing case of polymorphism in an anti-cancer drug
D. Sonaglioni, E. Tombari, E. Mugnaioli, S. Capaccioli and M. Gemmi

44. Understanding Molecular Mechanism of Interplay Fenofibrate-HPC by Using NMR Spectroscopy
E. Stoyanov and M. Martin-Pastor

45. The Influence of Sterilization by Gamma Radiation on the Novel Collagen/Carboxymethylcellulose Blend Film Wound Dressing Swelling and Mechanical Properties
K. Tenorová and R. Masteiková

46. Enhancing Drug Solubility Using Novel Pharmaceutical Excipients
P. Balcerzak, L. Miinea, V. Kushwah, I. Saraf, O. Zupancic, A. Paudel, N. DiFranco and E. Draganoiu

47. Assessing polymer miscibility in binary polymer blend matrix obtained by the hot-melt extrusion process
N. Zupan, S. Van de Steene, T. De Beer, E. Dudognon and S. Florin Muschert

Bioavailability, absorption enhancement and in-vitro/in-vivo correlations

49. Amorphous solid dispersions of cannabidiol (CBD) based on hot melt extrusion
R. Abreu Villela, Z. Misic, S. Herzig and M. Kuentz

50. Preparation and characterization of hydrophobic complexes to enhance oral delivery of the therapeutic peptide salmon calcitonin
P. Al-Maghrabi, T. Rades and A. Müllertz

51. Highly loaded mesoporous silica particles as an alternative formulation strategy for lipophilic compounds
M. B. Brenner and K. G. Wagner

52. A standardised in vitro release method for quality control of extended-release mini-tablets
S. Broocks, M. Gebhardt and S. Klein

53. COMPASS - a simple tool for physiologically-based rapid screening of the dissolution differences relevant for the pharmacokinetics of oral medicines
D. Danielak, D. Myslitska, J. Paszkowska, J. Dobosz, M. Staniszewska, M. Smoleński, G. Banach, M. Winiarski, G. Garbacz and M. Romański

54. Making biopredictive dissolution methods more predictive - easy pharmacokinetic simulations with LADMEos2
M. Romański, D. Danielak, G. Banach, M. Winiarski and G. Garbacz

55. Scientific-Based Formulation Development of Poorly Soluble Compounds at Ultra-Small Scale
S. Avril, M. Kolukisa, G. Marino, O. Schinzinger and A. Denninger

56. Production and characterization of ternary amorphous solid dispersions of ibuprofen by spray drying
B. A. Dzokwe Kene, K. J Paluch and M. Isreb

57. Assessing the effect of pH value and lipid content in fed dissolution medium on in vitro cinnarizine release
T. Felicijan, I. Rakoše, J. Trontelj and M. Bogataj

58. Improving active pharmaceutical ingredient Formulation by hot melt extrusion
V. de Margerie, P. Boulet and M. Gallas

59. Lipids and the solubilizing capacity of postprandial human intestinal fluids
B. Goovaerts, J. Brouwers, M. Braeckmans, M. Koziolek and P. Augustijns

60. Establishment of in vitro-in vivo correlation (IVIVC) for an acidic drug of febuxostat using dissolution test with bicarbonate buffer
M. Higashino and K. Sugano

61. Eudragit E PO and bile salts interplay in biorelevant media: a case study with an ASD of a model PROTAC
N. Hofmann, M. Harms and K. Mäder

62. Using molecularly dissolved drug concentrations in PBBMs improves the oral absorption prediction from supersaturating formulations
F. L. Holzem, J. Petrig Schaffland, M. Brandl, A. Bauer-Brandl and C. Stillhart

63. Predicting pharmacokinetic performance of buccal products using the MicroFLUX setup
J. R. Jørgensen and M. M. Knopp

64. Porous silicon nanoparticles made by controlled aggregation for improving bioavailability of poorly soluble drugs
H. M. Johnsen, W. Filtvedt, M. Hiorth and J. Klaveness

65. Bioequivalence prediction based on in vitro flux assay through the example of aripiprazole
S. Kádár, S. Lee, A. Kennedy, R. Ruiz, E. Borbás and B. Sinkó

66. Brick dust molecule formulated in lipid-based formulations - predictions of in vivo performance using the in vitro lipolysis model
H. S. Kirschbaum, C. Jede, L. Köhl, N. Köhl, P. O´Dwyer, R. Holm, M. Kuentz and B. Griffin

67. Mucus expression in in vitro models of nasal mucosa for preclinical drug testing
L. Klintz and S. Reichl

68. Predicting food effects using the dynamic gastric model (DGM) in combination with a duodenal module
M. Knopp, L. Hansen and A. Müllertz

69. The Interplay of Lopinavir and Ritonavir in Dissolution from Amorphous Solid Dispersions
M. Kokott and J. Breitkreutz

70. In vitro characterization of lipid nanoparticles to improve the oral bioavailability of a poorly soluble antitumor drug
O. Lemasson, S. Briançon, V. Bourgeaux and S. Bourgeois

71. Enhancing absorption assessments of weakly basic drug candidates by small scale precipitation testing
S. Mayer, K. Krollik, A. Lehmann, C. Wagner and W. Weitschies

72. Stability and solidification of thymol-loaded self-microemulsifying drug delivery system
G. Koutná, J. Muselík, K. Kubová, J. Vysloužil, D. Vetchý, J. Kotouček and J. Mašek

73. Development of a new Blue Light-based method to induce oxidative stress on rabbit's corneal epithelium cells (RCE)
V. Paganini, P. Chetoni, D. Monti, S. Tampucci and S. Burgalassi

74. Creating biorelevant membrane for drug absorption testing: The printability and characterization of an alginate-based hydrogel and its compatibility with NIH-3T3 cells
D. Pritts, F. Štěpánek, Ph.D. and J. Beránek, Ph.D.

75. Biodegradable materials for improving oral absorption of carbamazepine: an eco-sustainable approach
E. Quarta, A. Bianchera and R. Bettini

76. Rheological adaptation of hydrogels as in vitro substitutes for human vitreous body
F. Reichel, T. Auel, M. C. Hacker and A. Seidlitz

77. Predicting Mucus Interaction for Drug Substances
L. Scheller, J. Kehrein and L. Meinel

78. Study towards the implementation of a novel dynamic in vitro model of the blood-brain barrier
H. Schulz and S. Reichl

79. Solid Oral Dosage Forms containing Cannabidiol: Balancing API Loading, Physico-Chemical Stability & in vivo Pharmacokinetic Performance
C. Schweiggert, T. Zwick, T. Lindemann, R. Gössl, E. Chenal, M. Beck, C. Schäfer, A. Zabara and A. Besheer

80. Influence of bovine serum albumin on colonic absorption, mucus permeation and solubility of celecoxib
D. Suljovic, R. Berthelsen, J. Christensen, T. Rades and A. Müllertz

81. Comparison of experimental and computational methods for determination of passive drug permeability
A. Tywoniak, K. Storchmannová, M. Balouch, J. Juračka, F. Štěpánek and K. Berka

82. PEGylated surfactants and droplet sizes influence colonic mucus permeation of self-emulsifying drug delivery system (SEDDS)
Z. Yu, J. Jacobsen and A. Müllertz

Parenteral delivery

83. Dissolution testing of parenteral model drug suspensions using agarose hydrogels and dialysis adapters of various sizes
T. Boralewski, T. Auel and A. Seidlitz

84. The utility of 2-hydroxyropyl β cyclodextrin in solubilizing posaconazole
F. El-Saleh, N. Heshmati, C. Mahnen, K. Lawal and C. Muehlenfeld

85. Development and Assessment of a Novel Oil Based Anti Adhesion Agent Incorporated with Xanthan Gum
J. Lee, J. Lee, H. Kim and S.-J. Hwang

86. Enhanced Bupivacaine Delivery through Multivesicular Liposome Optimization Using Prilling Technique
G. Lee, J. Lee, J. You and S.-J. Hwang

87. Apisolex™ Polymers: Solubility Enhancing Excipients for Parenteral Formulations
P. Balcerzak, E. Draganoiu, B. Sullivan, K. Sill and L. Miinea

88. Development of in situ gelling liquid crystalline systems based on glycerol monooleate for subcutaneous application
M. Vitek, A. Zvonar Pobirk, M. Gašperlin and M. Gosenca Matjaž

89. The Link Between Surfactant Concentration and Particle Size to Predict the Amount of Stabilizer Needed to Prepare Physical Stable Nanosuspensions
N. Zulbeari, S. S. Mustafova and R. Holm

90. The Use of Ultrasound as a Pre-milling Technique to Prepare Nanosuspensions with High-Pressure Homogenization
N. Zulbeari and R. Holm

Gene and advances therapy products

91. Lipopolyplexes: the effect of cationic polymer on the cytotoxicity and DNA transfection efficiency
G. Anderluzzi, S. Franzè, C. Ricci, T. Mohamed, E. Del Favero, V. Magnaghi and F. Cilurzo

92. Stabilization of mRNA-LNPs by Lyophilization
L. Behrens and W. Frieß

93. RP-HPLC-CAD-Method for simultaneous quantification of charged and uncharged lipids used in lipid nanoparticle formulations
V. Bender and R. Süss

94. Optimizing physicochemical properties and in vitro performance of siRNA-lipid nanoparticles using design of experiments
S. Carneiro, E. Chiesa, A. Giglio, I. Genta and O. Merkel

95. Role of Fluorination of Indole-Side Chains in Guanidinium-Containing Methacrylamide Polymers for DNA and RNA Delivery
A. Dzierza, J. Egger, M. Koetzsche, L. S. Reichel, A. Traeger, K. Peneva and D. Fischer

96. Reprogramming tumor-associated macrophages using siRNA-LNPs
S. Gul, Q. Wang, J.-L. Perfettini, J. Vergnaud, F. Fay and E. Fattal

97. Dually modified cellulose as non-viral vector for delivery and uptake of HDAC3 siRNA
J. Hülsmann, H. Lindemann, J. Wegener, M. Kühne, M. Godmann, A. Koschella, S. M. Coldewey, T. Heinzel and T. Heinzel

98. Trimethyl chitosan nanoparticles loaded with siRNA IL-6 and ascorbic acid: development and in vivo evaluation in dextran sodium sulfate-induced experimental colitis
D. Hales, D. Cenariu, B. Țigu, R. Drula, C. Moldovan, R. Munteanu, R.-I. Feder, C. Tomuleasa, A. Porfire and I. Tomuță

99. Development of lipoplex-loaded surface coatings for contact-triggered transfection
M. Krabbes, V. Kampik, J. Krieghof, M. Schulz-Siegmund and C. Wölk

100. Natural or synthetic? Investigation of different phospholipids as coating material for LNPs
M. Laabs, D. Mulac, A. Wünsch and K. Langer

101. Successful transfection of dendritic cells by eGFP mRNA-containing lipid nanoparticles
I. Lambart, J. Van Audenaerde, D. Quatannens, S. Schiller, S. Geißler, E. Lion, E. Smits and K. Mäder

102. Development of lipoplexes for miRNA delivery to T-Large Granular lymphocytes
L. Marcenta, B. Arpac, A. M. Mazzetta, S. Bortoluzzi, A. Teramo, R. Zambello, G. Marzaro, F. Mastrotto, P. Caliceti and S. Salmaso

103. Preparation of liposomes for siRNA drug delivery- Comparison between extrusion and sonication
S. Meinhard, C. Wölk and K. Mäder

104. Preparation of Chitosan Nanoparticles via Ionic Gelation using a new oscillating microfluidic device (FDmiX)
F. Mejzini, A. Gruber, B. Bobusch, G. Dürre, E. Schnapka, C. Willems, K. Richter and K. Mäder

105. Characterization of LNPs based on ionizable and cationic lipids: a comparison study
R. Rossi, F. Sechi, S. Perteghella, S. Tengattini, M. L. Sorrenti, C. Laura, P. Pallavicini, Y. A. Diaz Fernandez and M. C. Bonferoni

106. Shake it! Mechanical stress testing of LNPs
A. Ruppl, D. Kiesewetter, F. Strütt, M. Köll-Weber, R. Süss and A. Allmendinger

107. Cationic Hyper-Branched Cyclodextrin-Based Polymers: A novel strategy for siRNA delivery
A. Scomparin, D. Meloni, M. Argenziano, C. Cecone, F. Trotta, C. Dianzani and R. Cavalli

108. Characterization of PBAE – siRNA Micelleplex Assembly by Coarse Grained Molecular Dynamics
K. Steinegger, B. Winkeljann, A. Kromer and O. M. Merkel

Oral delivery

109. Influence of drug solid-state and distribution on ritonavir release from mesoporous silica under sink conditions
T. AL-Dagamin, J. O'Shea and A. Crean

110. Direct compression of binary mixtures containing mesoporous silica
J. Appelhaus and K. G. Wagner

111. Development of polymeric micelles to deliver olive leaf phenolic extract and ameliorate its intestinal permeability
M. C. Bergonzi, C. De Stefani, M. Vasarri, E. Ivanova Stojcheva, A. M. Ramos-Pineda, F. Baldi, A. R. Bilia and D. Degl'Innocenti

112. Artemisia absinthium l. extract microparticles: a new tool to reduce caloric intake
A. Candiani, G. Diana, F. Pollastro, F. Prodam, L. Giovannelli, M. Arlorio, J. D. Coisson and L. Segale

113. Comparison of Powder Surface Energy Measurement Methods
Z. Chu, C. Windows-Yule, I. Gabbot, G. Reynolds, R. Shinebaum and A. Ingram

114. Safety and acceptability of placebo pellets co-administered with a swallowing gel in healthy volunteers
G. Craye, A. Debunne, S. De Buyser, M. Baudelet, M. Petrovic, C. Vervaet, P. Tomassen and V. Vanhoorne

115. Development of a Multi-Drug Containing SNEDDS: Application for Treatment of Multi Drug Resistant Tuberculosis
J. Currie, T. Rades, A. Müllertz and A. Müllertz

116. Multiple linear regression analysis for the prediction of drug solubilities in self-nano emulsifying drug delivery systems (SNEDDS)
J. Currie, R. Peng, T. Rades and A. Müllertz

117. Microencapsulation of Probiotics: Formulation and Process Optimization
V. D'Amico, F. Siepmann, J. Siepmann, C. Neut, N. Denora and A. A. Lopedota

118. Flexible coatings achieve pH-targeted drug release via self-unfolding foils
L. De Vittorio, C. Milián Guimerá, R. McCabe, N. Göncü, S. Krishnan, L. H. E. Thamdrup, A. Boisen and M. Ghavami

119. Impact of Calcium Carbonate and Iron Oxide on Light Transmission in Empty Hard Capsules
S. Chakraborty, P. Kharkar, G. Adasul, S. Jacob, J. Bhat and S. Roberts

120. Formulation strategy to improve the encapsulation efficiency of thyme aqueous extract in alginate beads
G. Diana, A. Candiani, A. Picco, E. Bari, L. Giovannelli, M. L. Torre and L. Segale

121. Computational predictions of biorelevant solubility ratio upon dispersion and digestion of lipid-based formulations
L. Ejskjær, P. J. O'Dwyer, R. Holm, M. Kuentz, K. J. Box and B. T. Griffin

122. Carrageenan-based solutions for the sealing of liquid-filled pullulan hard capsules
N. Szweda, M. Rapin and P. Evans

123. Challenges in Tensile Strength Calculations for Special Tablet Formats
P. Kiefer, J. H. Rödder, R. Hirsch, R. F. Lammens and B. Fretter

124. Cellulose microcapsules for oral drug delivery
A. C. Gebhard, A. Mao, A. A. A. Autzen, A. J. Svagan and L. Hagner Nielsen

125. Do polysaccharide coatings facilitate site-specific release in the colon? Studies in healthy and dysbiotic pig models.
T. Giakoumis, J. O'Shea, G. Clarke and B. Griffin

126. Systems integrating prebiotics and extract from Saskatoon leaves (Amelanchier alnifolia) as a multidirectional support for the treatment of type II diabetes
A. Gościniak, P. Szulc and J. Cielecka-Piontek

127. Overcoming Cross-Linking In Soft Gelatin Capsules: A Fit-For-Purpose Approach
B. Hilbold, A. Galus and G. Enderlin

128. Tableting freeze-dried trehalose: a comprehensive investigation into mechanical characteristics
H. Hsein, C. Madi, V. Mazel, P. Tchoreloff and V. Busignies

129. Influence of coating materials on the esophageal transit of tablets
H. Hummler, S. Page, C. Stillhart, M. Grimm and W. Weitschies

130. Microbeads produced by prilling/vibration technique: a new way to use polyvinyl alcohol to enhance the solubility of BCS-class II drugs
M. Ivone, V. D'Amico, R. M. Iacobazzi, C. Lacassia, M. Franco, N. Denora and A. A. Lopedota

131. Calcium carbonate as an alternative to titanium dioxide in coating: the importance of particle engineering
N. Di Gallo, A.-G. Elia, A.-N. Knüttel, M. Riedel, A. von der Brelie and T. Kipping

132. Mini Tablet Development of Lysozyme: Excipient Compatibility in Liquid
K. Kopp, M. De Beer, J. Voorspoels, D. Van Lysebetten, C. Van Vooren and G. Van den Mooter

133. Design of co-amorphous fixed-dose combinations of bosentan and sildenafil base
D. Strojewski, S. Lalik, F. Danede, M. Marzec, J.-F. Willart and A. Krupa

134. Impact of Core Excipient Selection to Improve the Stability of a Moisture Sensitive Drug, Acetylsalicylic Acid
S. Kumar, V. Ambudkar, N. Velingkar, N. Tayade, P. Thakker, S. Damle and A. Rajabi-Siahboomi

135. Study of the tableting properties of freeze-dried products
C. Madi, H. Hsein, V. Busignies, P. Tchoreloff and V. Mazel

136. Development of lipid-based gastroretentive capsules and influence of digestion process
J. Mudric, K. Šavikin, L. Đekić, N. Krgović, S. Ibrić, N. Ćujić Nikolić and J. Đuriš

137. Computer-aided oral drug product development using a web-scraped database
J. D. Murray, H. Bennett-Lenane, P. J. O'Dwyer and B. T. Griffin

138. β-galactosidase orodispersible dosage forms for the treatment of lactose intolerance
U. M. Musazzi, C. Meazzini, G. Anderluzzi, G. Frigerio, F. A. Molteni, F. Selmin, P. Minghetti and F. Cilurzo

139. Advanced Modular Platform - an automated device for biopredictive testing of oral medicines
D. Myslitska, M. Staniszewska, J. Paszkowska, J. Dobosz, M. Smoleński, D. Danielak, M. Romański and G. Garbacz

140. In vivo study confirms Capsugel® Enprotect® capsule enteric properties in postprandial conditions
D. Nombret, M. Grimm, C. Dumont, V. Jannin and W. Weitschies

141. Optimization of drug incorporation in lipid pellet production by prilling
J. Pfeifer and H. Bunjes

142. The effect of droplet size on oral absorption in self-nano emulsifying drug delivery system
R. Pneg, T. Rades and A. Müllertz

143. Drug dissolution modelling based on computational fluid dynamics
N. Politova-Brinkova, H. Mircheva, N. Fotaki, S. Tcholakova and Z. Vinarov

144. Cannabinoids-based drugs – a new, silica-based delivery
I. Hochman, A. Eyal and J. Quadflieg

145. Texture Profile Analysis, a valuable tool for pharmaceutical oral dosage form evaluation: case study on chewable softgel capsules
F. Quemeneur, A. Igonin, C. Herry and S. Girod-Fullana

146. Famotidine-Indomethacin multicomponent solid forms: Investigating their structures and properties
A. Nascimento, I. Martins, M. Chorilli and T. Rades

147. Effect of the lysinate and arginate salt on the dissolution of ibuprofen
N. Rudolph, D. Plano, R. Cristofoletti, S. Klein and J. Dressman

148. Advancing oral delivery of biologics: Machine learning predicts peptide stability in the gastrointestinal tract
F. Wang, N. Sangfuang, L. E. McCoubrey, V. Yadav, M. Elbadawi, M. Orlu, S. Gaisford and A. W. Basit

149. Vacuum drum drying – a novel technology for enabling formulation principles in the development of oral solid dosage forms
B. Schönfeld, U. Westedt, B.-L. Keller and K. G. Wagner

150. Comparing the in vivo and in vitro disintegration of immediate release dosage forms using the Salivary Tracer Technique and the GastroDuo
P. Schick, M. Feldmüller, M. Koziolek, M. Tzvetkov and W. Weitschies

151. Water-in-oil emulsions as platform for solid lipid systems
A. Milanesi, A. Candiani, G. Diana, F. Loda, A. Foglio Bonda, L. Giovannelli and L. Segale

152. Amorphous solid dispersions (ASD) particles behavior in self-nanoemulsifying drug delivery system (SNEDDS) and biorelevant media
J. Shi, T. Rades and A. Müllertz

153. Compression of mesoporous silica carriers for delivery of protein containing self (nano)-emulsifying drug delivery systems
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154. Investigate your IR formulation the smart way: conjunction of design of experiments and artificial neural networks for generation of individual dissolution profiles
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155. Characterisation of luminal contents in the proximal colon of healthy adults
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156. In-vitro characterization of the mucoadhesive properties of tablets in stomach and intestinal environments
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157. Evaluation of developmental TiO2-free high productivity and high opacity coating system at different scales
J. Teckoe, T. Moffa, A. Howlander, M. Ghimire and D. Ferrizzi

158. Evaluation of stability and physical parameters of sitagliptin IR tablets coated with different titanium dioxide free coating systems.
J. Teckoe, V. Ambudkar, H. Bankhede, N. Tayade, P. Thakker, S. Damle and A. Rajabi-Siahboomi

159. The use of a caffeine formulation and salivary kinetics as a non-invasive method of measuring gastric water emptying
T. Tzakri, L. Rehenbrock, S. Senekowitsch, A. Rump, P. Schick, J. Krause, M. L. Kromrey, M. Grimm and W. Weitschies

160. Enzymatic prodrug degradation in the fasted and fed small intestine: in vitro studies and interindividual variability in human aspirates
Z. Vinarov, C. Tistaert, J. Bevernage, H. Bohets and P. Augustijns

161. Preparation of tablets based on newly synthesized pH- polymer for 5-fluorouracil delivery
I. Ivanova, T. Popova, M. Slavkova, B. Tzankov and C. Voycheva

162. Oleanolic acid microemulsions: formulation and evaluation of the antioxidant activity in RAW 264.7 cells
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163. Glibenclamide solid dispersions prepared by hot-melt extrusion: The impact on degradation and dissolution
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167. Development of an Electrospun PLGA implant for sustained ocular delivery of siponimod
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168. Dextrin-based polymers to enhance the oral bioavailability of apomorphine
M. Argenziano, G. Hoti, F. Caldera, A. Scomparin, L. Priano, A. Mauro, F. Trotta and R. Cavalli

169. Mechanistic understanding of the effect of plasticizer type and concentration on the breakage behavior of Kollicoat® SR coated pellets
A. Arslan, S. Li, J. M. Assis and G. P. Andrews

170. Hydrogel-based apparatus for release investigations on spatially graded carrier systems
L. Berten-Schunk and H. Bunjes

171. Formulation, optimization, and evaluation of sustained release paracetamol pellets for oral dispersion
S. Boraste and A. Ghule

172. Wound healing management through sustained release of actives from core-shell electrospun fibers
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173. ORODS gastroretentive systems based on osmotically driven expansion for metformin delivery
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174. Approaches for non-accelerated drug release from HPMC tablets in hydroethanolic media
T. Heinrich, A. Dashevskiy and R. Bodmeier

175. Effect of pore-former on pulsatile drug release from compression-coated tablets
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176. Feasibility of ultrasound-assisted compression process for the manufacture of implantable devices
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177. Impact of residual monomer on PLGA based long-acting injectables' release and stability
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178. Cannabidiol (CBD) delivery strategies by surfactant-based "soft" nanocarriers
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179. Optimization of liposomal formulation to achieve sustained release of dexamethasone
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180. Co-processed Hydroxypropyl Methylcellulose–Mannitol - A Directly Compressible Excipient for Controlled Release – Drug release and dose dumping risk analysis
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181. Co-processed Hydroxypropyl Methylcellulose–Mannitol - A Directly Compressible Excipient for Controlled Release – Physical characteristics analysis
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182. How calcium alginate addition alters dexamethasone release from PLGA implants
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183. Impact of the addition of cyclodextrins on dexamethasone release from PLGA based implants
N. K. Trinh, F. Siepmann, J. Siepmann and M. Hamoudi

184. Design of smart (stimuli-sensitive) galenic models for the formulation of active molecules
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185. Layer-by-layer assembled halloysite-polymer nanocomposites as prospective drug carriers
V. Jauković, M. Đuranović and S. Mugoša

186. Exploring poly(vinyl alcohol-co-vinyl acetate) copolymers as film-forming matrixes for hydrochlorothiazide
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187. Controlling the dissolution profile of immediate and sustained release Tofacitinib suppositories through the two chemical forms of the API
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188. Subcutaneous implant of tizanidine and lidocaine: Application to in vitro release studies.
C. J. Picco, R. F. Donnelly and E. Larrañeta

189. The silicon-based piezo micropump: an innovative drug delivery device
D. Plano, S. Kibler, N. Rudolph and J. Dressman

190. In vitro modified-release of omeprazole, from matrix tablets
C. Protopapa, G.-I. Sotiropoulou, A. Siamidi, R. E. Bikiaris, N. Bikiaris, I. Koumentakou, E. Christodoulou and M. Vlachou

191. ISFIs for periodontitis treatment based on less toxic solvents: Impact of the polymer content
F. Ramos, J.-F. Willart, A. Jamett, C. Neut, K. Agossa, J. Siepmann and F. Siepmann

192. ISFIs for periodontitis treatment based on less toxic solvents: Impact of the solvent composition
F. Ramos, J.-F. Willart, C. Neut, K. Agossa, J. Siepmann and F. Siepmann

193. Gastrointestinal controlled release of Rose Bengal from its Chitosan salt embedded in alginate matrix.
S. Demartis, C. J. Picco, C. G. Sanna, G. Rassu, P. Giunchedi and E. Gavini

194. Biodegradable hydrogel for sustained release of therapeutic peptide
E. Rosson, A. Weber, J. Sidi-Boumedine, D. Kryza, T. Brichart, L. David, F. Lux, E. Thomas, Y. Godrfin and O. Tillement

195. Development and characterization of biodegradable bioactive glass formuations as a dual-function platform for bone surgical infections: antibiotic delivery and osteogenic potential
H. Sarwar, H. Coleman, A. Courtenay and D. Lowry

196. The colon targeting efficacies of ulcerative colitis medications and their impacts on the colonic microbiome
L. McCoubrey, N. Seegobin, N. Sangfuang, F. Moens and A. Basit

197. Interactions and transport processes in silicone and acrylate matrices of patches containing indomethacin and isopropyl mirystate
J. Strankowska, M. Jamrógiewicz, B. Mikolaszek, K. Pieńkowska and M. Sznitowska

198. Self-emulsifying system disrupts coat function
J. Macků, K. Kubová, J. Vysloužil, J. Muselík, M. Pavelková, D. Vetchý, J. Brus and M. Urbanová

199. 5-Fluorouracil Encapsulation and Controlled Release in Smart Pellets
M. F. Bayan, A. Jaradat, M. H. Alyami and a. A. Y. Naser

Excipients and raw materials

200. Antimicrobial, anti-tyrosinase and cell cytotoxic activities of Apple Cyder Vinegar (ACV)
C. Boonlom and D. Shuwisitkul

201. Using Ion Chromatography/Mass spectrometry for Improved Sensitivity and Accuracy of Detecting Nitrites in Microcrystalline Cellulose
K. Zhu, M. Kerry, B. Serr, M. Mintert and M. Brackhagen

202. Evaluating the performance of a cetirizine diHCl formula-tion concept for direct compression using ZoomLab™
T. Cech, T. Agnese, A. Härtel, M. Hofsäss and F. Brandl

203. Comparison of the compaction properties of granulated lactose with superdisintegrants using direct compression
M. Charbaut, S. Thirault and L. Kerriou

204. Evaluation of a novel series of enteric copolymers for pharmaceutical applications: α hydroxycarboxylic acid modified polymethacrylates
F. Claußen, J. Blechar, D. A. H. Fuchs, E. Kersten, J. Al-Gousous, H. Frey and P. Langguth

205. Development of hydroxypropyl methylcellulose (HPMC) based titanium dioxide (TiO2) free coating
D. Czernik-Schulz, S. Kikuchi, I. Lesser, M. Fabian and A. Sauer

206. Benefits of an Optimal Tabletability DC Mannitol on Compression Setting Parameters
P. Lefèvre, N. Descamps, S. Croquet, T. Van der Oost and S. Amoussou-Guenou

207. Optimizing API Load and Minimizing Tablet Weight Leveraging an Innovative DC Mannitol
P. Lefèvre, N. Descamps, S. Croquet, T. Van der Oost and S. Amoussou-Guenou

208. Suppression of Related Substance in Tablets Containing Pressure-Sensitive Drugs with elongated Microcrystalline Cellulose
T. Okuda, T. Fujisawa and Y. Hayashi

209. Demonstrating the Utility of a New High Molecular Weight HPC to Make Smaller Modified Release Tablets
T. Botoy, B. Huebner, Q. Schwing, K. Karan, F. El-Saleh, H. Hübscher and T. Dürig

210. Exploring Alternative Biomolecule Surfactants: Comparative study of Protein Stabilization and Chemical Stability
S. Hafiz, M. P. Zoeller and N. Erwin

211. Impact of Critical Material Attributes of HPMC on the Robustness of CR Matrix Tablet Formulations
C. Huettermann, H. Feldmann, D. Homburg and M. Schenk

212. Enhancing Flow Properties and Preventing Sticking and Picking in Tablet Formulations: Exploring the Efficacy of StarTab® as a Multifunctional Additive
S. Kumar, L. Evans and J. Teckoe

213. Evaluation of a new disintegrant mixture from natural resources
C. Oblinger, G. Stobbe and M. Lachmann

214. Reduction of Agglomeration and Production Optimization for Enteric Pellet Coatings
J. Kremer, G. Stobbe and M. Lachmann

215. Effect of packing fraction on permeability of powders for pharmaceutical processes
M. Lupo, G. Lumay, A. Neveu and F. Francqui

216. Improved direct compression with Tricalcium Citrate
A. Mattusch, N. Zeiler, M. Münchbach, F. Weiher, M. Gerhart, M. Lachmann, V. Hagelstein and K. G. Wagner

217. Ascorbic acid as effective nitrite scavenger and nitrosamine mitigation agent in drug products
Z. Misic, A.-C. Bayne, M. Pagliari and F. Onofre

218. Impact of Particle Size on Lubrication Efficacy of Sodium Stearyl Fumarate
K. Okada, R. Serizawa, Y. Yamauchi, Y. Chen and T. Ohashi

219. Impact of Co-Processing on the Structural Evolution of Lactose and MCC, Investigated by Laboratory SAXS and WAXS
A. Hodzic, S. Kahn and F. Penz

220. CBD Solid Dispersion for Pharmaceutical Formulation
C. POPESCU, V. Patel, J. Zombek, T. Miller, C. Kurt, C. Borza and J. Dingman

221. Investigating the impact of Kollicoat Smartseal formulation concepts on their taste masking functionality
N. Rottmann, F. Bang, T. Agnese, L. Van Eeckhout, F. Detobel and I. Bogaerts

222. Titanium dioxide-free coating: Evaluation of Micronized Crospovidone as an Alternative White Pigment and Opacifier for Immediate Release Coatings
N. Rottmann, T. Agnese, L. Van Eeckhout and T. Pedersen

223. Anatomy of a crystal: Tailoring the solid-state of lipids as advanced excipients for filament-based 3D-printing
S. Salar-Behzadi, M. Abdelhamid, N. Mussner, C. Corzo, E. Slama, M. Spoerk, S. Reyer and T. Rillmann

224. An investigation of a novel, directly compressible, oil-carrying excipient in a solid, self-emulsifying delivery system
G. Sanchez-Villarta, A. Carpanzano and G. Warnke

225. Carmellose-calcium as a pelletization aid in extrusion-spheronization
F. Siebel and P. Kleinebudde

226. Enabling Stable and Directly Compressible Probiotic Tablet Formulations with a Novel Co-processed Mannitol-Starch Excipient
C. Siow, L. Ooi, K. H. Lam, J. Low and B. X. Tan

227. An insight into extended release tablets development using a multivariate approach
A. S. Sousa, J. Serra, C. Estevens, R. Costa and A. J. Ribeiro

228. Newly synthesized pH-sensitive polymer with potential for drug delivery carrier – determination of optimal grafting conditions
T. Popova, M. Slavkova, D. Tzankova, B. Tzankov and C. Voycheva

229. Comparative Stability Study of Polysorbate 20 and Polysorbate 80 Related to Oxidative Degradation
J. Weber, B. Kozuch, T. Diederichs, P. Garidel and K. Mäder

230. Lactose-free, dose-proportional MUPS formulations for four strengths of rivaroxaban
P. Edinger, M. Papaioannou, M. Wagner, T. Hess and D. Zakowiecki

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Poster session on Wednesday, 20 March 2024

Continuously exhibited from 09:00 - 17:00 h, with special presentations by authors from 11:00 - 11:30 h and 13:00 - 15:00 h. The number indicates the poster panel number.

Protein formulation

01. Tableting monoclonal antibodies as a key for local administration: feasibility study
J. Auffray, H. Hsein, T. Noel and P. Tchoreloff

02. Improving Martini 3 Simulations - A Study on Lysozyme Self-interaction Behavior -
J. Binder, M. Zalar, M. Huelsmeyer, M. Siedler, R. Curtis and W. Friess

03. In-Situ Monitoring of Structural Modifications of Therapeutic Antibodies Using ITFE Spectroscopy
L. Brack, R. Schroeder and O. Merkel

04. Aggregation of monoclonal antibodies in clinical practice - How critical are the in-hospital handling and transport?
M. Cohrs, N. Clottens, P. Ramaut, K. Braeckmans, T. Bauters and H. L. Svilenov

05. Development of a High Throughput Oxidation Profiling Strategy for Monoclonal Antibody products
P. Fischer, M. Hülsmeyer and O. Merkel

06. Oxidation liability screening in biopharmaceutical development using FT-IR
T. C. Höltkemeier, M. Venerito, I. Fischer, K. Bechtold-Peters and W. Friess

07. Conjugates of a viral protein with dextran to modulate the immunological environment
J. Konrad, P. Neckermann, K. Hoecherl, R. Wagner, D. Pauly, A. Baeumner and M. Breunig

08. The Colder the Better? Sustainability in Frozen Storage of Protein Drug Substance
R. Nagel, K. Bechtold-Peters and W. Friess

09. Lyso-phosphatidylcholine to replace polysorbates as an interfacial stabilizer for parenteral protein formulations
E. Papadopoulos and W. Frieß

10. Novel Developmental Surfactant for Improved Protein Stabilization
J. Katz, B. Yezer, A. N. Nolin, S. J. Jordan and O. Petermann

11. Highly concentrated monoclonal antibody formulations for subcutaneous administration with viscosity reducing excipients
M. Prašnikar, M. Bjelošević Žiberna, I. Grabnar, A. Žula and P. Ahlin Grabnar

12. Amino Acid-derivatized Amphiphiles for Antibody Stabilization
J. Reiß, S. Schneid and M. Hacker

13. Stabilising proteins in inhalable formulations: finding the right protein and excipient combination
F. Roth and R. Scherließ

14. Molecular Dynamics Study of Protein Aggregation at Moving Interfaces
T. Sarter and W. Friess

15. Development of a Convenient Lipase-based Therapy for Cystic Fibrosis
A. Müller-Lucks, H. Früchtenicht, M. von Hofmann and R. Scherließ

16. UF/DF process optimization to enable ultra-high concentration protein formulations
Y. Weber, M. Siedler and W. Frieß

17. Water activity as an indicator for antibody stability in lyophilized formulations
M. Zäh, G. Winter, S. Groël, C. Brandenbusch and G. Sadwoski

18. Preventing protein aggregation through neutralization of partially unfolded states
M. Zalar, J. Binder, W. Frieß and R. Curtis

19. The mysteries of protein stabilization by arginine-pullulan mixtures: various lyophilized proteins adhere differently to established mechanisms
K. Nguyen, D. Zillen, W. Hinrichs and H. Frijlink

Packaging

20. Design, Optimization & Analysis of a Biocompatible Vial Stopper Polymer Coating
J. Downey, R. Unitt, L. O'Neill, A. Crean and K. Ryan

21. Investigation of Mechanical Stress on Vials during Freezing using Strain Gauges
D. Henle, L. Mühlfeld, P. Garidel and W. Frieß

22. Characterization of the design space in a pharmaceutical packaging line regarding blister integrity
A. Márton, J. Bartsch, R. Heumann, W. Hoheisel, M. Markus and M. Thommes

23. Relative Humidity as a Function of Time in Sustainable Blister Packs
J. Pech, C. Kaminski, M. Markus, R. Heumann, J. Winck and M. Thommes

24. Electrospun-based membranes as innovative active packaging
A. Ungolo, M. Ruggeri, B. Vigani, C. Viseras, S. Rossi and G. Sandri

Pharmaceutical manufacturing and engineering

25. Drug micro-suspensions on porous carriers: The carrier capacity and the release efficiency
O. Švehla, F. Šembera and P. Zámostný

26. From desired dissolution profile to particle size distribution: solving the inverse problem
S. Đukaj, J. Kolář, R. Lehocký, A. Zadražil and F. Štěpanek

27. Continuous Twin Screw Hot Melt Granulation: Formulation Development of an Amorphous Solid Dispersion of a Celecoxib using MCC and HPMCAS
G. P. Andrews, T. I. Brannigan, D. S. Jones, S. Li and Y. Tian

28. Production of lipid-based nanoformulations encapsulating biologics using anhydrous twin-screw extrusion
G. Andrews, Y. Tian, S. Cullen, S. Li and D. Jones

29. Asset intensification: Application of modelling tools and methodologies from a CDMO perspective
F. Ataide, J. L. Santos and F. Gaspar

30. CFD Modelling of Supercritical CO2-assisted Spray Drying for Drug Particle Production
M. Baassiri, V. Ranade and L. Padrela

31. Optimization of a pharmaceutical multi-component powder blending process using DEM simulations
B. Benque, M. Habeler, B. Schmid, J. Remmelgas and J. Khinast

32. Magnetic scaffolds for the mechanotransduction stimulation in tendon tissue regeneration
E. Bianchi, M. Bañobre-Lopez, M. Ruggeri, E. Del Favero, C. Ricci, B. Vigani, S. Rossi, C. Sangregorio, L. Casettari and G. Sandri

33. A preliminary screening of glucan particles as carriers for propolis tablets
A. Brejchová, E. Králová, E. Mutylo, A. Opravil and F. Štěpánek

34. Use of natural polymers for the encapsulation of eugenol
A. Caballero-Román, A. Nardi-Ricart, R. Vila, J. R. Ticó and M. Miñarro

35. Employing ZoomLab™ to accelerate and scientifically structure the development of a loratadine tablet
T. Cech, T. Agnese, A. Härtel, M. Hofsäss and F. Brandl

36. Investigating the necessity of sieving prior to fluid bed granulation of ibuprofen
T. Agnese, F. Bang, T. Cech, G. Modelli, C. Funaro and L. Menarini

37. Experimental investigation of die filling performance as a function of material properties for different process throughputs
L. De Souter, B. Nitert and T. De Beer

38. Engineering of Highly Drug Loaded, Free-Flowing Particles via Tangential Spray Fuid Bed Granulation
F. Engelsing, J. Thies, A. Grave and J. Quodbach

39. Effect of punch coating on sticking of materials with different properties
I. Bialuch, K. S. Rimpl, K. Lachmann and J. H. Finke

40. Process-determined local coat porosity controls release behaviour of press-coated tablets
M. Nikiforova and J. H. Finke

41. Innovations in Pharmaceutical and Biopharmaceutical Particle Engineering through Advanced Spray Drying Technologies for Targeted Pulmonary Delivery Applications
L. Foley, A. Ziaee and E. O'Reilly

42. Automated and DoE Supported Approach for Optimizing the Process Parameter of a Rotary Tablet Press
B. Fretter, I. Hemming, T. Brinz and R. F. Lammens

43. Solution coating vs powder layering in fluid bed for preparation of hypromellose-coated minitablets
J. Scotti, A. Gelain, M. Cerea, A. Foppoli, L. Palugan and G. Buratti

44. Investigation of Milling of Structural Analogs to Treat Tuberculosis
M. Hansen, N. Zulbeari and R. Holm

45. Influence of membrane diameter, oil phase and emulsifier concentration in premix membrane emulsification
C. Heidenreich, D. Jupke, J. H. Finke, A. Kwade and H. Bunjes

46. Mechanical Properties of Amorphous Solid Dispersions Extrudates and Impact on Milling
V. Henner-Kulkarni

47. Interaction of thermal and rheological parameters critical for the processability of polyvinyl alcohol-based systems during hot melt extrusion
F. Hess, T. Kipping, W. Weitschies and J. Krause

48. Formulating an Anti-Epileptic Drug into an Amorphous Solid Dispersion via Spray Drying
E. Hill and E. O'Reilly

49. Preparation and development of personalized medicine formulations utilizing mesoporous silica
Z. Hlavackova, D. Zuza, E. Sonntag and F. Stepanek

50. Modeling of Vacuum Contact Drying in an Agitated Filter Dryer
S. Irndorfer, D. Jajcevic, J. Remmelgas, A. Derrick, S. Mathew, J. Mustakis, G. Jolin, H. Amini, B. Glasser and J. Khinast

51. Development of a macrospherical system based on SBA-15 for the formation of solid dispersions
B. Jaime Escalante, L. M. Melgoza Contreras, G. Leyva Gómez and N. Mendoza Muñoz

52. The challenge of formulating an amorphous solid dispersion of thermally labile compounds: Fenbendazole as a case of study
M. O. Jara, G. Bedogni, L. Vargas Michelena, D. Davis, B. Behrend-Keim, D. Miller, C. Salomon and R. O. Williams III

53. Influence of metal membrane structure in high pressure nanoemulsification
D. Jupke, J. M. Lück, C. Heidenreich, H. Bunjes, J. Rösler, A. Kwade and J. H. Finke

54. Production of Hydrogel-Based Curcumin-Loaded O/W Suspoemulsions
K. Köhler, T. Bodmer, S. F. Hartmann, M. Kleiner and C. M. Keck

55. Modeling non-Newtonian polymer flow behavior in pharmaceutical twin-screw extrusion processes
V. Kimmel, F. El-Saleh, J. Winck and M. Thommes

56. Evaluation of temperature exposure of nanoparticles during spray drying
I. Klein and D. Steiner

57. Advancements in the application of gated RNN for the in-die prediction of the tensile strength of tablets
N. Yadmand and S. Klinken

58. Preparation of personalized sustained release tablets using a single-tablet-scale direct compression process
A. Kottlan, P. Waidhofer, B. J. Glasser and J. G. Khinast

59. Excipient Compositions to support a Capsule to Tablet Development approach
S. Kumar and J. Teckoe

60. Prolamins based nanofibers doped Selenium Nanoparticles for wound healing
S. Marsani, M. Ruggeri, B. Vigani, S. Rossi and G. Sandri

61. Mechanistic and data-driven models for tablet dissolution to identify key parameters in continuous direct compression
K. Matsunami, A. Ryckaert, R. Mariën, B. Bekaert, V. Vanhoorne, T. De Beer, C. Vervaet and A. Kumar

62. Toward the use of decision trees to predict tablet capping
V. Mazel, J. Meynard, P. Tchoreloff and F. Amado-Becker

63. Experimental method development for parameter estimation of particle drying kinetics in fluidized bed
L. Mehlis, M. Büning, W. Hoheisel, J. Bartsch, P. Kranz and M. Thommes

64. Degradation of gelatin formulations in soft capsule production upon storage at elevated temperatures
N. Meier and G. Reich

65. Predicting Process Parameters Relevant for the Production of Amorphous Solid Dispersions by Hot Melt Extrusion
S. Meyer, T. Gottschalk, J. Winck and M. Thommes

66. Optimization of inter- and intra-tablet coating variability in a lab-scale coating process using DEM-MC simulations
F. Mostafaei, J. Khinast, J. Remmelgas and T. Forgber

67. Discrete Element Method analysis of the effect of screw-agitator speed ratio on pharmaceutical powder feeder performance
L. Naranjo, P. Van Liedekerke, T. De Beer and A. Kumar

68. Development of clay-doped microfibers via centrifugal spinning
C. Nomicisio, M. Ruggeri, B. Vigani, C. Taviot-Guého, C. Viseras, S. Rossi and G. Sandri

69. Optimization of mixing technology of granular materials from the aspects of their physical properties and batch-to-batch variability
D. Novák, S. Römerová, P. Komínová and P. Zámostný

70. Monitoring fluconazole deposition inside mesoporous materials using solid-state NMR spectroscopy
M. Nowak, A. Dyba, A. Gołkowska, A. Nieckarz, K. Krajewska, K. Malec, D. Iuga, B. Karolewicz, Y. Khimyak and K. Nartowski

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A. Parkes, G. Walker, A. Ziaee and E. O'Reilly

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I. Partheniadis and I. Nikolakakis

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M. Passon, S. De Smedt and H. Svilenov

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N. Märkle, G. Warnke and M. Pein-Hackelbusch

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A. Pelloux, D. Ach-Hubert and S. Caquant

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T. Bodmer, A. Pennemann, A. Grave, M. Nowak and O. Germershaus

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G. Piel, N. Penoy, L. Delma, N. Homkar, S. Egrek, R. Sacheli, P. Y. Sacré, M. P. Hayette, S. Rasmane and B. Evrard

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M. Pollini, M. Ruggeri, B. Vigani, S. Rossi and G. Sandri

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V. Patel, H. Injety, C. POPESCU, P. Freed and V. Tuliani

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I. Pretzer-Schmer, V. Düphans and J. Look

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S. Pugliese and G. Reich

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M. Reuther, N. Rollet, F. Debeaufort and O. Chambin

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L.-M. Mareczek, C. Riehl, M. Harms and S. Reichl

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M. Rosch and F. Gütter

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K. Rouaz El Hajoui, M. Suñé Pou, A. Nardi Ricart, J. M. Suñé Negre, P. Pérez Lozano and E. García Montoya

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V. Sancho Ochoa, V. Fernández Ruiz, O. Morejón Zayas, P. Pérez Lozano and E. García Montoya

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J. K. Scheper, A. Cordoba, A. Padros, N. Ventosa, J. M. De la Fuente, I. Vrcek, M. Srinivas, R. Holzer, T. Serchi and N. Günday-Türeli

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P. Schlosser and H. Bunjes

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A. Schmid, T.-S. Sonsalla and J. Look

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L. S. Steinecker, P. Edinger, T. Hessberger, T. Heß, S. Bock and J. Breitkreutz

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E. Szabó, P. Záhonyi, Á. G. Müncz, A. Haraszti and Z. K. Nagy

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S. Tanabe, S. Gopireddy and K. Yaginuma

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L. Unverzagt and C. Wischke

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L. Goossens, L. Vandevivere, J. Macedo, E. De Coninck, L. De Smet and F. Van der Gucht

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M. Vecera, J. A. Tomas and F. Stepanek

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K. Vorländer, A. Kwade, I. Kampen and J. H. Finke

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L. Wagner, A. Kwade and J. H. Finke

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S. Wetzel, A. Altmann, G. Warnke, I. Hemming, P. Stirm and T. Brinz

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C. Winter, A. Springer, J.-L. Descamps, J. Hoefinghoff, A. Paudel and M. Stankovic-Brandl

100. Advantages of combining polymers and lipids in extrusion processes
C. Yüce, L. Cheron, A. Geissler-Fichtner and E. Gattefossé

101. Novel approach integrated T-shaped partial least squares regression and transfer learning for tableting scale-up
K. Yaginuma, K. Matsunami, L. Descamps, A. Ryckaert and T. De Beer

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F. Zavřel, O. Dammer and F. Štěpánek

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D. Zecevic, V. Andronis, K. Voges and A. Gryczke

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J. Zeman, S. Pavloková, D. Vetchý, Z. Moravec, L. Matějovský and V. Pitschmann

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M. Zettl, C. Tetyczka, C. Glader, R. Jeitler, S. Stephan, Y. Wang, P. Caisse, M. Spoerk, E. Roblegg and J. Khinast

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C. Zhang, G. Frenning, M. van de Weert, S. Bjerregaard, J. Rantanen and M. Yang

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O. Zupancic, A. Dogan, J. Matic, V. Kushwah, C. Alva, M. Spoerk and A. Paudel

Buccal and nasal delivery

109. Stability evaluation of hydrophilic gel containing extract of Cotinus coggygria bark
N. Dragicevic, M. Tomovic, J. Bradic and J. Zivkovic

110. A nanocomposite formulation for Nose-to-brain delivery of bambuterol repurposed in Alzheimer's Disease Treatment
A.-C. Groo, L. Séguy, T. Culerier, A. Davis, S. Corvaisier, C. Rochais, P. Dallemagne and A. Malzert-Fréon

111. A Novel In-Vitro Sublingual Cell Culture Model Unveiling Dynamic Epithelial-Immune Cell Interactions
S. Hartl, S. Zeiringer, C. Reiterer, M. Derler, M. Absenger-Novak, R. Jeitler, M. Mussbacher, E. Fröhlich and E. Roblegg

112. Swelling and dissolution studies on lipid containing mucoadhesive films
N. Hellmund and D. Steiner

113. Spray dried antigen-loaded microparticles as a potential anti-tuberculosis vaccine
M. Mehanny and J. E. Pearl

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C. Migone, L. Vizzoni, B. Grassiri, Y. Zambito, B. Ferro, G. Batoni, S. Esin, F. Mori, M. Franzini and A. M. Piras

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E. Pantazoglou, N. Zanjanizadeh Ezazi, L. Hosta-Rigau, J. Jacobsen and L. Hagner-Nielsen

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P. Party, S. S. Sümegi and R. Ambrus

117. Formulation, Optimization and Evaluation of Mucoadhesive Buccal Patch of Miconazole Nitrate
P. Pingale, S. Manbhav, S. Boraste and S. Amrutkar

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C. Serri, V. Quagliariello, G. Rassu, I. Cruz-Maya, M. Piccioni, S. Crispi, M. P. Di Cagno, V. Guarino, P. Giunchedi and E. Gavini

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B. Vigani, G. Zucca, M. Perucchini, C. Valentino, M. Ruggeri, G. Sandri and S. Rossi

Microbioma and drug delivery

120. Comparing metabolization of sulfasalazine and baicalin by intestinal microbiota using MimiCol³
D.-S. Seradj, R. Beeck, A. Haase, L. Neubauer, S. Senekowitsch, J. Krause, P. Schick and W. Weitschies

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N. Sangfuang, L. E. McCoubrey, M. Marzorati, J. Ghyselinck, L. Vertrepen, J. De Munck, J. De Medts, M. Orlu, S. Gaisford and A. W. Basit

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L. Chiarentin, C. Cardoso, V. Moura, F. Major, J. Catita, M. Miranda and C. Vitorino

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J. F. Christfort, M. Ortis, H. Van Nguyen, K. Zór, A. Boisen, A. Doglio and R. Marsault

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B. Demir, B. Fischer, J. C. Matros and M. Hacker

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P. Doesburg, J.-O. Andersen, C. Scherr and S. Baumgartner

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M. Freitas, P. Souza, S. Cardoso, E. Ximenes Ferreira Filho, A. Pessoa Junior and P. Oliveira Magalhães

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W. Grabowska, M. Kalyukina and H. Khalili

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E. Hausmann, S. Sansaloni-Pastor and N. Lange

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J. Heade, T. Thureby Engleund, F. Fredholt and H. Mørck Nielsen

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M. Heybeck, B. Scheidel and W. Weitschies

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C. Kühnl and R. Scherließ

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H. Küllmar, C. S. Leopold and M. Schöler

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D. Klaus, M. Schulz-Siegmund and T. Brinz

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W. Liu, M. Zhu, F. Fu and Y. Chen

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A. C. Ortiz, R. Sierpe, S. Bollo and J. O. Morales

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S. Manellari, U. M. Musazzi, P. Rocco and P. Minghetti

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A. Olszewska, O. Egorova, G. Gaggia, K. Mylona, S. Pitchford, J. Rickard and B. Forbes

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D. R. Perinelli, F. Del Bello, E. Torregiani, M. Cespi, G. F. Palmieri and G. Bonacucina

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S. Ramos, I. Fernandes, M. Galésio and A. Vicente

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T. Rimkus and S. Reichl

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V. Klimša, G. Ruphuy, J. Jonáš, L. Mašková, O. Kašpar, P. Žvátora and F. Štěpánek

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D. Shuwisitkul and S. Tunvichien

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M.-L. Trutschel, H. Kruschwitz, J. Mittag, P. Garidel and K. Mäder

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J. Voglhuber-Höller, S. Resch, J. K. Scheper and A. Falk

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Z. Xu, S. Pitchford and B. Forbes

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J. Yang, Y. Yuan, L. Yuan, F. Liu and Y. Lu

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J. Ahn, J. Lee, J. Park and S.-j. Hwang

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L. Bertocchi, A. Bianchera and R. Bettini

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A. Caumon, C. Cailleau, L. Benrabah, R. Pires-Brazuna and N. Tsapis

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A. Cotter, N. Alhajj, N. J. and L. Padrela

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J. Djuris, S. Ibric and S. Cvijic

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B. Grassiri, E. Semih, L. More O'Ferrall, M. Piateck, A. M. Healy, C. Ehrhardt, D. Griffith, K. Kavanagh, G. Batoni and A. M. Piras

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Y. Jeon, K. Rama and S.-J. Hwang

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V. Ruggiero, F. Mariano, R. P. Aquino, R. Zacco and P. Russo

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J. Schembera, R. Leister, C. Müller and R. Scherließ

2D/3D printing

165. 3D-printed lipid-based oral dosage forms with tailored drug release: From design to reality
M. Abdelhamid, M. Spoerk, J. A. Afonso Urich, E. Fröhlich, D. Lochmann, S. Reyer, T. Freichel and S. Salar-Behzadi

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I. Adamov, M. Stanojlović, M. Kalaba, N. Pešić, D. Medarević, B. Ivković, D. Kočović and S. Ibrić

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C. Alva, E. Goetzinger, J. Matić, V. Mohan, T. Rillmann, S. Abrahmsén-Alami, J. Booth, S. Salar-Behzahdi and M. Spoerk

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Y. Abdalla, M. Ferianc, A. Awad, J. Kim, M. Elbadawi, M. Orlu, M. Rodrigues and A. Basit

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S. Ayyoubi, Z. Kafa and L. Ruijgrok

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L. Balters and S. Reichl

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E. Bari, G. M. Di Gravina, S. Croce, F. Scocozza, L. Cobianchi, F. Auricchio, M. A. Avanzini, M. L. Torre and M. Conti

172. Silk fibroin 3D printed bioink for controlled release of MSC extracellular vesicles in tendon regeneration
E. Bari, G. M. Di Gravina, F. Scocozza, S. Perteghella, B. Frongia, S. Tengattini, L. Segale, L. Giovannelli, M. L. Torre and M. Conti

173. Combining 3D printing and mesoporous silica to develop a controlled release personalized form
M. Monteil, N. Sanchez-Ballester, G. Rydzek, C. Gerardin, G. Velette, I. Soulairol and S. Begu

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J. Brożyna, M. Katychów, T. Serafin, K. Malec, M. Nowak, B. Karolewicz and M. Kozakiewicz-Latała

175. Drug loading of films by inkjet printing in comparison to standard dosage forms
F. Brokmann, A. Daab, I. Reiter, W. Weitschies and C. Rosenbaum

176. Continuous shear rheological analysis of thermoresponsive drug delivery systems containing fish collagen
M. L. Bruschi and D. T. Uchida

177. Defining critical points in 3D printed pharmaceutical systems obtained by SLA
V. Linares, M. Casas, J. Huwyler and I. Caraballo

178. Development of 3D-printed tablets based on Eudragit® S100 for colonic delivery of 5-amino salicylic acid
F. Shojaie, C. Ferrero and I. Caraballo

179. Suspension-type drug-loaded AffinisolTM filaments for 3D printing: critical points
G. Mora-Castaño, M. Millán-Jiménez and I. Caraballo

180. Personalization of data matrix encoded hydrocortisone orodispersible films using inkjet printing
L. Rodríguez-Pombo, P. Carou-Senra, E. Rodríguez-Martínez, P. Januskaite, C. Rial, P. Félix, C. Álvarez-Lorenzo, A. W. Basit and A. Goyanes

181. Predicting pharmaceutical inkjet printing outcomes using machine learning
P. Carou-Senra, J. J. Ong, B. Muñiz-Castro, I. Seoane-Viaño, L. Rodríguez-Pombo, P. Calabar, C. Álvarez-Lorenzo, A. W. Basit, G. Pérez and Á. Goyanes

182. 3D-printed oral dosage form for the oral delivery of enoxaparin
A.-T. Chatzitaki, D. G. Fatouros and I. S. Vizirianakis

183. HPMC as a polymer matrix for FDM printing
M. Cielas, B. Karolewicz and M. Kozakiewicz-Latała

184. A new concept for a 3D printed expandable Drug Delivery System
M. Cirilli, C. Rosenbaum, M. Cerea, W. Weitschies, A. Gazzaniga and J. Krause

185. Eco-sustainable melatonin-loaded CMC 3D-printed hydrogels for personalised wound healing
M. Zarur, A. Goyanes, C. Alvarez-Lorenzo and A. Concheiro

186. 3D printing, automate to individualize: Process validation and quality control
E. Diaz-Torres, J. Suárez-González, A. M. Santoveña-Estévez and J. B. Fariña

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S. Cvijic, S. Ibric and J. Djuris

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S. Eder, D. Treffer, S. Theissl, G. Khinast, S. Heupl, B. Brandl and M. Spoerk

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J. Elbl, M. Veselý and J. Gajdziok

190. Potential benefit of using different divalent cations to produce pre-crosslinked 3D printable alginate hydrogels for pharmaceutical applications
G. Falcone, P. Mazzei, R. Aquino, A. Boccaccini, P. Del Gaudio and P. Russo

191. Micro and macro effects along the process chain of filament 3D printed dosage forms with high API load
M. Tidau and J. H. Finke

192. Decentralized manufacturing of 3D printed medicines: a case study
I. Seoane-Viaño, X. Xu, J. Jie-Ong, A. Campos-Álvarez, A. Stulz, C. Marcuta, L. Kraschew, W. Mohr, A. W. Basit and A. Goyanes

193. Fast simultaneous fabrication of multiple pharmaceutical forms with different morphologies using volumetric 3D printing
L. Rodríguez-Pombo, L. Martínez-Castro, X. Xu, J. Jie-Ong, D. Nieto García, A. González-Santos, J. Flores-González, C. Alvarez-Lorenzo, A. W. Basit and A. Goyanes

194. In-line mass uniformity testing in a pharmaceutical 3D printer
C. Bendicho-Lavilla, L. Rodríguez-Pombo, P. Januskaite, C. Rial, C. Alvarez-Lorenzo, A. W. Basit and A. Goyanes

195. Manufacturing of drug-loaded contact lenses using inkjet printing
T. Pollard, I. Seoane-Viaño, J. Jie-Ong, P. Januskaite, S. Awwad, M. Orlu, M. F. Bande, A. W. Basit and A. Goyanes

196. Visualizing disintegration of SLS 3D printed tablets in the gastrointestinal tract of humans using MRI
I. Seoane-Viaño, T. Pérez-Ramon, J. Liu, P. Januskaite, E. Guerra-Baamonde, J. González-Ramírez, M. Vázque-Caruncho, A. W. Basit and A. Goyanes

197. New Approaches for 3D Powder Printing and Moulding of Solid Dosage Forms with Fast Consolidating Excipients
U. J. Griesser, M. Schönemann, M. F. Noisternig and D. E. Braun

198. Hybrid Bioinks for 3D Printed Osteoporotic Bone Scaffolds: Advancing Controlled Drug Delivery and Nanoscale Integration
A. Guidone, P. Coppola, C. Tommasino, C. Sardo, A. Soriente, M. G. Raucci, G. Gomez d'Ayala, R. P. Aquino and G. Auriemma

199. Exploring applications of plant-derived polymers in fused deposition modeling of oral pharmaceutical tablets
K. H. Lam, N. Chua, K. T. Chow, H. P. Goh, Y. S. Lui, O. Häusler, A. Billa, M. Albert and T. Ernica

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W. He, H. Mu and N. Genina

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A. G. Crișan, N. Couți, R. I. Iovanov, A. S. Porfire, S. M. Iurian, L. M. Rus, T. Casian and I. Tomuță

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A. K. Jørgensen, A. Dowek, J. J. Ong, M. Annereau, L. Denis, A. Rieutord, A. Basit and A. Goyanes

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A. K. Jørgensen, J. J. Ong, Z. Zhu, S. Gaisford, A. Goyanes and A. Basit

204. Electrophotographic powder application and 3D printing of pharmaceutical oral films
S.-P. Kopp, V. Medvedev, K. Tangermann-Gerk, N. Wöltinger, R. Rothfelder, F. Graßl, M. R. Heinrich, P. Januskaite, A. Goyanes and A. W. Basit

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A. Juppo, S. Nuhi, A. Raitala, M. Stolt, N. Palmroos, T. Tjäder and T. Nurmi

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W. Kooijman, V. Levine, R. J. Kok, J. Lindh and J. Quudbach

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M. Kozakiewicz-Latała, M. Lewandowska, D. Braun and B. Karolewicz

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N. Lamrabet, N. Gottschalk, T. Kipping and A. Ambruosi

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J. Lenhart and D. Lunter

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V. Levine, M. Paulsson, J. Quodbach and J. Lindh

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M. Elbadawi, H. Li, S. Sun, A. Basit and S. Gaisford

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J. Macháčková, K. Matzick, M. Nevyhoštěná and A. Komersová

213. 3D-Printed Risperidone Implants for Long-Term Schizophrenia Treatment
E. Magill, E. Utomo, C. Picco, J. Domingues-Robles, A. Permana and E. Larraneta

214. Patient-individual dosing of poorly water-soluble drugs - printing drug-containing, oily inks on structured film templates
L. Mahlberg and D. Steiner

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C. Mentrup, T. Auel, J. Breitkreutz and A. Seidlitz

216. Matrix tablets x 3D printed dosage form with active ingredient against Alzheimer's disease
M. Nevyhoštěná, A. Komersová, J. Macháčková and V. Pejchal

217. Volumetric printing of swellable drug delivery devices
Y. C. Oh, J. J. Ong, H. Alfassam, E. Díaz-Torres, A. Goyanes, G. Williams and A. Basit

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L. R. Oldfield, T. Auel and A. Seidlitz

219. Development of novel semi-solid extrusion 3D-printed gel tablets intended for customized drug therapy
U. Paaver, K. Roostar, A. Meos, S. Airaksinen, N. Sandler-Topelius and J. Heinämäki

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L. Paoletti, F. Baschieri, C. Migliorini, C. Di Meo, O. Monasson, E. Peroni and P. Matricardi

221. Effects of Design Parameters on Drug Release from 3D-Printed Tablets for Patient-Tailored Pulmonary Disease Therapy
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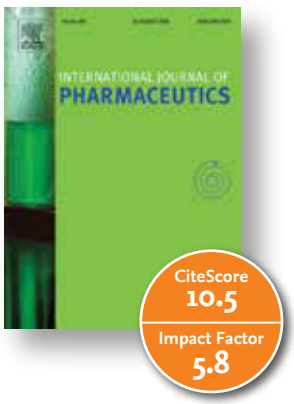

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