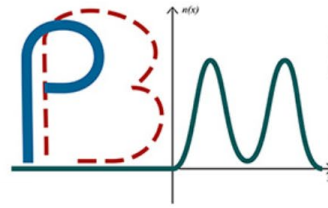




7th International Conference on Population Balance Modelling



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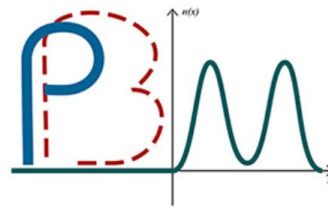
List of posters

Contribution and challenges of PBM in practical / novel applications

- Mathematical modelling and experimental study of hot-melt coating in ploughshare mixer*
Gurmeet Kaur, Mario Wörthmann, Heiko Briesen
Technical University of Munich / Germany
- A comparison of deterministic and multidimensional Monte Carlo methods for prediction of molecular and viscoelastic properties of hydrogels for biomedical applications*
Filippos F. Karageorgos, Costas Kiparissides
Aristotle University of Thessaloniki; Centre for Research and Technology Hellas / Greece
- A novel image analysis technique for 2D characterization of overlapping needle-like crystals*
Petros Neoptolemos, Nishank Goyal, Aurora J Cruz Cabeza, Anton A Kiss, Thomas Vetter, David J Milne
University of Manchester / United Kingdom
- Growth dynamics of the solid electrolyte interface (SEI) in lithium-ion batteries by a population balance model*
Luca Banetta, Graziano Frungieri, Gianluca Boccardo, Antonio Buffo, Daniele Marchisio, Marco Vanni
Politecnico di Torino / Italy; And Technische Universität München / Germany
- Model comparison for secondary nucleation by attrition*
Luca Bosetti, Marco Mazzotti
ETH Zurich / Switzerland
- Modeling study of a 3-stage process for the shape manipulation of plate-like crystals*
Daniel Biri, Anna Jaeggi, Pietro Binel, Ashwin Kumar Rajagopalan, Marco Mazzotti
ETH Zurich / Switzerland; And University of Manchester / United Kingdom
- Modeling-enabled data mining: demonstration through separation of enantiomers in crystallization wet-mill platforms*
Botond Szilágyi
Budapest University of Technology and Economics / Hungary



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Multiscale coupling of PBM

9. Multivariate population balance modeling of coprecipitation

Tobias Schikarski, Mohsen Shiea, Andrea Querio, Antonio Buffo, Wolfgang Peukert, Daniele Marchisio
Politecnico di Torino / Italy; And Friedrich-Alexander-University Erlangen-Nuremberg / Germany

10. Numerical methods applicable to moment-transformed PBE – Practical applications

Grzegorz Tyl, Mounir Bouaifi, Magdalena Jasińska
Warsaw University of Technology / Poland; Solvay / France.

11. Modelling and simulation of particle milling in a stirred tank using a coupled approach CFD-PBE

Zoé Mercier, Pascal Fede, Maxime Pigou, Eric Climent, Jean-Philippe Bayle, Eric Tronche, Abibatou Ndiayae
Université de Toulouse; And CEA / France

12. Modelling of fluidized bed reactors for ethylene polymerization – A multiscale model

Rita Alves, Timothy F.L. McKenna
Université de Lyon / France

14. CFD PBM simulation for hydrodynamics prediction in preneutralization chemical reactor

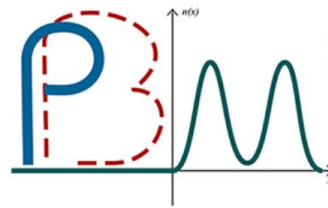
Safae Elmisaoui, Mohamed Hamou, Lhachmi Khama
Mohammed VI Polytechnic University; Mohamed V University; And Sultan Moulay Slimane University /
Maroc.

15. Modelling the coalescence probability in buoyancy-driven emulsions: motion of a drop toward a fluid-fluid interface at finite Reynolds number

Jean-Lou Pierson
IFP Energies Nouvelles / France



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Solution methods of PBM, stochastic PBM

16. *Model-guided control over polymorphism in an experimental setup consisting of two MSMPRS in series*
Ramona Achermann, Brigitta Bodák, Andraž Košir, Luca Bosetti, Daniel Biri, Marco Mazzotti
ETH Zurich / Switzerland

18. *A quasi-bivariate approach to tracking secondary particle properties within the class method framework*
Ronald Lehnigk, Dirk Lucas, Timo Niemi, Juho Peltola, Fabian Schlegel
Helmholtz-Zentrum Dresden – Rossendorf e.V. / Germany; And 2VTT Technical Research Centre Ltd / Finland.

19. *Steady state population balance solution: application to neodymium oxalate precipitation in a vortex reactor*
Cristian Camilo Ruiz Vasquez, Nouredine Lebaz, Isabelle Ramière, Denis Mangin, Murielle Bertrand
Université Montpellier; And University of Lyon; And CEA / France

20. *High-order discontinuous Galerkin scheme for the Smoluchowski coagulation equation*
Maxime Lombart, Guillaume Laibe
National Taiwan Normal University / Taiwan; And University of Lyon / France

21. *New scaling and structure of Eigen vectors of discretized equations for a class of breakup problems*
Anjali Kumari, Sanjeev Kumar
Indian Institute of Science / India

22. *Hybrid solution method in combined dosing-cooling industrial pharmaceutical crystallization processes*
Gustavo Lunardon Quilló, Satyajeet Bhonsale, Christos Xiouras, Jan F. M. Van Impe
KU Leuven; And Janssen R&D / Belgium

Identification and uncertainty analysis of PBM

23. *A new approach to analyze the equilibrium and transient behaviors of particulate systems with breakage and coalescence*
Moein Assar, Brian Arthur Grimes
Norwegian University of Science and Technology / Norway

24. *Robust optimization in nanoparticle technology: a proof of principle by quantum dot growth in a residence time reactor*
Jana Dienstbier, Kevin-Martin Aigner, Jan Rolfes, Wolfgang Peukert, Doris Segets, Lukas Pflug, Frauke Liers
Friedrich-Alexander-Universität Erlangen-Nürnberg; And Chair for Particle Science and Technology / Germany