

Papers on PHARMA PROCESSES by PSE-Lab

CMIC Department – Politecnico di Milano

davide.manca@polimi.it

Keywords: Modeling; Simulation; Microencapsulation process; Drug release; Polymer and copolymer solutions; Particle coating; Drug delivery; Controlled release; Active principles; Mechanochemical activation; Perforated pans; Granulation; Evaporation; Drying systems; Soft sensors; Process Analytical Technologies (PAT); Optimal trajectory; Recipe; Production control; At-line control; In-line control; On-line control; Pharmacokinetics; Physiologically Based Pharmacokinetic models (PBPK); Compartmental models; Area Under the Curve (AUC); Drug peak concentration.

- (42) **MICROENCAPSULATION OF ACTIVE PRINCIPLES IN PHARMACEUTICAL PROCESSES: MODELING AND EXPERIMENTAL VALIDATION**
D. Manca, M. Rovaglio, I. Colombo, R. Serinelli, M. Tonini
Proceedings of ICheaP-5, **2**, 1013, Florence, (2001)
- (51) **MICROENCAPSULATION OF ACTIVE PRINCIPLES IN PHARMACEUTICAL PROCESSES: MODELING AND EXPERIMENTAL VALIDATION**
D. Manca, M. Rovaglio, I. Colombo
AIDIC Conference Series, Elsevier, ISBN 0391-7401, Milan, pp. 207-214, (2002)
- (57) **MODELING THE CONTROLLED RELEASE OF MICROENCAPSULATED DRUGS: THEORY AND EXPERIMENTAL VALIDATION**
D. Manca, M. Rovaglio
Chemical Engineering Science, **58**, Issue 7, 1337-1351, (2003)
[http://dx.doi.org/10.1016/S0009-2509\(02\)00623-1](http://dx.doi.org/10.1016/S0009-2509(02)00623-1)
- (59) **MODELING THE POLYMER COATING IN MICROENCAPSULATED ACTIVE PRINCIPLES**
D. Manca, M. Rovaglio, I. Colombo
Proceedings of ESCAPE-13, 1115-1120, Elsevier, ISBN 0-444-51368-X, (2003)
[http://dx.doi.org/10.1016/S1570-7946\(03\)80267-5](http://dx.doi.org/10.1016/S1570-7946(03)80267-5)
- (70) **HIGH ENERGY MECHANOCHEMICAL ACTIVATION OF ACTIVE PRINCIPLES**
D. Manca, N. Coceani, L. Magarotto, I. Colombo, M. Grassi
"Nuove Frontiere di Applicazione delle Metodologie dell'ingegneria Chimica" Convegno GRICU 2004 Porto d'Ischia (Napoli) 12-15 Settembre 2004, 123-126, ISBN: 88-87030-80-4, (2004)
- (72) **MICROENCAPSULATION OF ACTIVE PRINCIPLES**
D. Manca, I. Colombo
"Nuove Frontiere di Applicazione delle Metodologie dell'ingegneria Chimica" Convegno GRICU 2004 Porto d'Ischia (Napoli) 12-15 Settembre 2004, 161-164, ISBN: 88-87030-80-4, (2004)
- (118) **HOW TO MAKE A PERFORATED PAN PAT-COMPLIANT**
D. Manca, C. Funaro, F. Cembali, G. Mondelli, G. Tarozzi, P. Ragazzini
Pharmaceutical Engineering, **28**, 5, 60-69, (2008)
- (136) **CONCEPTUAL DESIGN OF A PSEUDO-CONTINUOUS GRANULATOR-DRYER**
D. Manca, G. Bertuzzi, L. Rabaglia, F. Nucci
Proceedings of the 9th International Symposium on Agglomeration, Sheffield UK, 22-26 June, **13**, 1-10, (2009)

- (154) **INFERENCEAL MEASURES AND SOFT SENSORS FOR DYNAMIC TRACKING OF PROCESS VARIABLES**
D. Manca
Symposium on Industrial Applications of EUDRAGIT, Bologna, pp. 2.3.1-50, 12-13 October, (2011)
- (193) **A PHYSIOLOGICALLY-ORIENTED MATHEMATICAL MODEL FOR THE DESCRIPTION OF IN VIVO DRUG RELEASE AND ABSORPTION**
R. Del Cont, M. Abrami, D. Hasa, B. Perissutti, D. Voinovich, A. Barba, G. Lamberti, G. Grassi, I. Colombo, D. Manca, M. Grassi
ADMET & DMPK, **2**, 2, 80-97, (2014)
<http://dx.doi.org/10.5599/admet.2.2.34>