

Bio 2014

Biography-- Surendra C. Mehta, PhD

Following a successful career at Warner Lambert/Parke Davis Research Division for about 29 years, at several levels of responsibility, decided to start as an independent consultant in January 1999.

At Warner Lambert/Parke Davis was a staff member in Pharmaceuticals, Parenterals, Analytical, Pharmacokinetics and Drug Metabolism. Worked on compounds in a large number of therapeutic areas including antivirals, antinfectives, cardiovascular, CNS drugs and wound healing area both as a Project Team and Specific Compound Team member.

As a Director of Pharmaceuticals and Drug Delivery responsible for directing laboratory experiments on all new compounds including providing documents for IND and NDA regulatory filings.

Successful marketed compounds include Lipitor, Lopid, Accupril, Neurontin, Enoxacin, Rezulin, Dilantin, Vidarabine, Thrombin, Elase.

As a consultant for over 14 years, consulted in the area of water-insoluble compounds to improve bioavailability of compounds for major, medium sized companies including Capsugel, Gattefosse, Boeringer Ingelheim, Baxter, Foster, Novell.

Consulted for Capsugel for over 8 years recommending them to enter the area of water-insoluble compounds using Lipid-Based Drug Delivery systems specifically self-emulsifying micro and nano delivery systems. As a Scientific/Technical Consultant for Capsugel conducted Focus Groups for insoluble molecules with representatives of major pharmaceutical companies.

As a spokesperson for Capsugel made presentations to most pharmaceutical companies throughout USA, Europe and Japan. Conducted a symposium for Gattefosse in Mumbai, India for pharmaceutical companies in India.

Curriculum Vitae

Surendra C. Mehta, PhD

Surendra Mehta, is a consultant to the pharmaceutical industry in the area of physical pharmacy and drug delivery technologies. He received his MS in industrial pharmacy and Ph.D. in Pharmaceutical Chemistry (under Prof. W. I. Higuchi) from the University of Michigan. After 2 years of post-doctoral work on formulation of parenteral anticancer compounds at the University of Michigan for the National Cancer Institute, he joined Park-Davis Co.

At Parke-Davis, Division of Warner Lambert Co., his industrial career spanned about 29 years where he progressed through the ranks as a group head in preformulation/exploratory research, analytical development and parenteral formulations development, section head in Pharmacokinetics/Drug Metabolism and section director and director of Pharmaceutics and Drug Delivery. On January 1, 1999 he left Warner Lambert (Parke-Davis Research Division) to pursue additional areas of interest and is a consultant to the pharmaceutical industry. He has published and has been issued several patents in the area of solution and solid state kinetics, controlled release of drug, synthesis of novel polymers, purification/stabilization and formulation of peptides, development of parenteral formulations and improving the solubility/dissolution rate of insoluble compounds. He is an invited speaker at regional, national and international meetings on specialized drug delivery systems.

His areas of interest are selection, development, and commercialization of lead compounds using novel drug delivery systems.

Membership: 1) Prior to post-graduation Rho Chi and Sigma Xi
2) American Association of Pharmaceutical Sciences (AAPS)
3) Controlled Release Society (CRS) not currently

Honors: Gold Medal for the highest Scholastic Average for the Bachelor in Pharmacy degree (B. Pharm), L. M. College of Pharmacy, Gujarat University, Ahmedabad, India

Partial List of Publications

- 1) Issues and Approaches for Improving the Solubility and Bioavailability of Poorly Water Soluble Compounds. S. Mehta, Bulletin Technique Gattefossé No. 91, 65-72 (1998)
- 2) Wettability of a hydrophobic drug by surfactant solutions. P. E. Luner, S. Babu, S. Mehta, Int. J. of Pharm. 128, 29-44 (1996)
- 3) Preformulation studies to aid in the development of an injectable formulation of PD 144872, a radiosensitizing anticancer agent. A.S. Kearney, S. C. Mehta and G. Radebaugh, Int. J. of Pharm. 102, 63-70 (1994)
- 4) Targeted lymphatic transport and modified systemic distribution of CI-976, a lipophilic lipid-regulator drug, via a formulation approach. D. J. Hauss, S.C. Mehta and G. W. Radebaugh, Int. J. of Pharm. 108, 85-93 (1994)
- 5) Effect of polyvinylpyrrolidone on the crystallinity and dissolution rate of solid dispersions of the antiinflammatory CI-987. A. S. Kearney, D. L. Gabriel, S. C.

- Mehta and G. W. Radebaugh. *Int. J. of Pharm.* 104, 169-174 (1994)
- 6) Mechanism of Drug Release from an Acrylic Polymer-Wax Matrix Tablet. H-P Huang, S. C. Mehta, G. W. Radebaugh and M. B. Fawzi. *J. Pharm. Sci.* 83 (6) 795-797 (1994)
 - 7) Determination of CI-976, a lipid regulator, in rat plasma and mesenteric lymph by reversed-phase high-performance liquid chromatography. D. J. Hauss, P. J. Martin, S. C. Mehta and G. W. Radebaugh. *J. Chromatogr.* 613, 336-339 (1993)
 - 8) The Interconversion Kinetics, Equilibrium, and Solubilities of the Lactone and Hydroxyacid Forms of the HMG-CoA Reductase Inhibitor, CI-981. A. S. Kearney, L. F. Crawford, S. C. Mehta and G. W. Radebaugh. *Pharm. Res.* 10 (10), 1461-1465 (1993)
 - 9) The effect of structural changes on the intramolecular degradation of the 'dipeptoid" CI-988. A. S. Kearney, S. C. Mehta and G.W. Radebaugh. *Int. J. of Pharm.* 92, 63-70 (1993)
 - 10) Aqueous Stability and Solubility of CI-988, a Novel "Dipeptoid" Cholecystokinin-B Receptor Antagonist. A. S. Kearney, S. C. Mehta and G. W. Radebaugh. *Pharm. Res.* 10 (8) 1092-1095 (1992)
 - 11) Validation of a computerized image analysis system for particle size determination – Pharmaceutical Applications. J. P. Zingerman, S. C. Mehta, J. M. Salter and G. W. Radebaugh. *Int. J. of Pharm.* 88 303-312 (1992)
 - 12) Enhancement of the stability of thrombin by polyols: microcalorimetric studies. A. M. Boctor, S. C. Mehta. *J. Pharm. Pharmacol.* 44, 600-603 (1992)
 - 13) The effect of cyclodextrins on the rate of intramolecular lactamization of gabapentin in aqueous solution. A. S. Kearney, S. C. Mehta and G. W. Radebaugh. *Int. J. of Pharm.* 78, 25-34 (1992)
 - 14) Treatment of experimental pseudomonas corneal ulcers with Enoxacin, a Quinolone antibiotic. *Arch. Ophthalmol.* 104, 1230-1232 (1986)
 - 15) Determination of 4,5-dihydro-6-[4-(1H-imidazol-1-yl)phenyl]-3(2H)-pyridazinone hydrochloride, a new cardiotonic, in plasma and urine by reversed-phase high-performance liquid chromatography. A. G. Hayes, S. Mehta and T. Chang. *J. Chromatog.* 336, 446-451 (1984)
 - 16) Dissolution rate of high energy sulfathiazole-povidone coprecipitates II: characterization of form of drug controlling its dissolution rate via solubility studies . A. P. Simonelli, S.C. Mehta and W. I. Higuchi. *J. Pharm. Sci.* 65 (3) 355-361 (1976)
 - 17) Inhibition of sulfathiazole crystal growth by polyvinylpyrrolidone. A. P. Simonelli, S. C. Mehta and W. I. Higuchi. *J. Pharm. Sci.* 59 (5) 633-637 (1970)
 - 18) Rate of crystal growth of sulfathiazole and methylprednisolone. S.C. Mehta, P. D. Bernardo, W. I. Higuchi and A. P. Simonelli. *J. Pharm. Sci.* 59 (5) 638-644 (1970)
 - 19) Dissolution rates of high energy polyvinylpyrrolidone –sulfathiazole copreipitates. A. P. Simonelli, S.C. Mehta and W. I. Higuchi. *J. Pharm. Sci.* 58 538-549 (1969)
 - 20) Infrared Attenuated Total Reflectance (ATR) Method for observing the water-mediated surface phase reversion of methylprednisolone II to I during dissolution. W. I. Higuchi, W. E. Hamlin and S. C. Mehta. *J. Pharm. Sci.* 58 (9) 1145-1146 (1969)

21) Polymorphism and Drug Availability II – Dissolution rate behavior of the polymorphic forms of sulfathiazole and methylprednisolone. W. I. Higuchi, P. D. Bernardo and S. C. Mehta. J. Pharm. Sci. 56 200-207 (1967)

Partial List of Patents

“Soluble Calcium Lactate Antibacterial Complexes As Non-irritating Parenteral Forms”. S. Mehta, H-P Huang, M. Fawzi and G. Radebaugh. Singapore Patent 46482 issued March 30, 1999.

“Soluble Calcium Lactate Antibacterial Complexes As Non-irritating Parenteral Forms”. S. Mehta, H-P Huang, M. Fawzi and G. Radebaugh. European Patent EP0666743 issued Dec. 2, 1998.

“Soluble Calcium Lactate Antibacterial Complexes As Non-irritating Parenteral Forms”. S. Mehta, H-P Huang, M. Fawzi and G. Radebaugh. Mexican Patent 185952 issued Sept. 12, 1997.

“Soluble Calcium Lactate Antibacterial Complexes As Non-irritating Parenteral Forms”. S. Mehta, H-P Huang, M. Fawzi and G. Radebaugh. New Zealand Patent 256962 issued Dec. 5, 1996.

“Soluble Calcium Lactate/Quinolone carboxylic acids or Naphthyridine carboxylic acids Complexes as Non-Irritating Parenteral Forms”. S. Mehta, H-P Huang, M. Fawzi and G. Radebaugh. Australian Patent 670838 issued Nov. 19, 1996.

“Soluble Calcium Lactate Antibacterial Complexes As Non-irritating Parenteral Forms”. S. Mehta, H-P Huang, M. Fawzi and G. Radebaugh. US Patent 5290794 issued March 1, 1994.

“Process for Preparing an Ultra-pure Thrombin Preparation”. A. Boctor, S. Mehta and G. Radebaugh. US Patent No. 5,525, 498 issued June 11, 1996.

“Ultra-Pure Thrombin Preparation”. A. Boctor, S. Mehta and G. Radebaugh. US Patent No. 5,397,704 issued March 14, 1995.

“Ultra-Pure Thrombin Preparation”. A. Boctor, S. Mehta and G. Radebaugh. US Patent No. 5,281,528 issued January, 28, 1995.

"Methylene Pyrrolidone Copolymers for Contact Lens and Pharmaceutical Preparations". S. Song, S. Mehta, K. Murthy, R. Nesbitt and M. Fawzi. US Patent No. 5,035,884 issued July 30, 1991.

"Copolymers from N-alkyl-3-alkenylene-2-pyrrolidone". S. Song, S. Mehta, K. Murthy, R. Nesbitt and M. Fawzi. US Patent No. 4,931,519 issued June 5, 1990.

"N-substituted-3-alkenylene-2-pyrrolidone Compounds". S. Song, S. Mehta, K. Murthy, R. Nesbitt and M. Fawzi. US Patent No. 4,851,545 issued July 25, 1989.

"Silicone Elastomer Transdermal Matrix System". S. Song, Z. Rashidbaigi, S. Mehta, R. Nesbitt and M. Fawzi. US Patent No. 4,814,173 issued March 21, 1989.

"Transdermal Matrix System". S. Song, Z. Rashidbaigi, S. Mehta, R. Nesbitt and M. Fawzi. US Patent No. 4,789,547 issued December 6, 1988.