11 References

Akkar, A. (2004). Poorly soluble drugs: Formulation by Nanocrystals and SolEmuls Technologies. PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Akkar, A. and R. H. Muller (2003). "Intravenous itraconazole emulsions produced by SolEmuls technology." European Journal of Pharmaceutics and Biopharmaceutics **56**(1): 29-36.

Akkar, A., Muller, R. H. (2003). "Formulation of intravenous Carbamazepine emulsions by SolEmuls technology." European Journal of Pharmaceutics and Biopharmaceutics **55**(3): 305-312.

Ambudkar, S. V., et al. (1999). "Biochemical, cellular, and pharmacological aspects of the multidrug transporter." Annual Review of Pharmacology & Toxicology. **39**: 361-98.

Anuchapreeda, S., et al. (2002). "Modulation of P-glycoprotein expression and function by curcumin in multidrug-resistant human KB cells." Biochemical Pharmacology. **64**(4): 573-82.

Augustijns, P. F., et al. (2000). "Hydration changes implicated in the remarkable temperature-dependent membrane permeation of cyclosporin A." Biochemistry **39**(25): 7621-30.

Beckman-Coulter (1994). Handbook LS 230.

Benmoussa, K., et al. (1994). "Cyclosporin absorption is impaired by the fat substitutes, sucrose polyester and tricarballylate triester, in the rat." Pharm Res **11**(10): 1458-61.

Bermejo, M., et al. (1999). "Validation of a biophysical drug absorption model by the PATQSAR system." J Pharm Sci **88**(4): 398-405.

Bermejo, M., et al. (2004). "PAMPA--a drug absorption in vitro model 7. Comparing rat in situ, Caco-2, and PAMPA permeability of fluoroquinolones." Eur J Pharm Sci **21**(4): 429-41.

Bertea, C. M., et al. (2001). "Demonstration that menthofuran synthase of mint (Mentha) is a cytochrome P450 monooxygenase: cloning, functional expression, and characterization of the responsible gene." Arch Biochem Biophys **390**(2): 279-86.

Bhardwaj, R. K., et al. (2002). "Piperine, a major constituent of black pepper, inhibits human P-glycoprotein and CYP3A4." J Pharmacol Exp Ther **302**(2): 645-50.

Bittner, B., et al. (2002). "Improvement of the bioavailability of colchicine in rats by co-administration of D-alpha-tocopherol polyethylene glycol 1000 succinate and a polyethoxylated derivative of 12-hydroxy-stearic acid." Arzneimittel-Forschung. **52**(9): 684-8.

Böhm, B. H. L. (1999). Herstellung und Charakterisierung von Nanosuspensionen als neue Arzneiform für Arzneistoffe mit geringer Bioverfügbarkeit. PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Borst, P. and R. O. Elferink (2002). "Mammalian ABC transporters in health and disease." Annual Review of Biochemistry. **71**: 537-92.

Bott, S. E. and W. H. Hart (1990). Particle size analysis utilizing polarization intensity differential scattering. United States Patent 4953978, Coulter International Corp.

Buchmann, S., Fischli, W., Thiel, F. P., Alex, R. (1996). Aqueous microsuspension, an alternative intravenous formulation for animal studies. 42 nd Annual Congress of the International Association for Pharmaceutical Technology (APV), Mainz.

Burgess, D. J., et al. (2004). "Particle size analysis: ANNUAL MEETING OF PHARMACEUTICAL SCIENTISTS (AAPS) workshop report, cosponsored by the Food and Drug Administration and the United States Pharmacopeia." Annual Meeting of Pharmaceutical Scientists (AAPS) J **6**(3): e20.

Bushrab, N., F. (2006). PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Bushrab, N., F.; Müller, R.H. (2003). "Nanocrystals of Poorly Soluble Drugs for Oral Administration." NewDrugs **5**: 20-22.

Buttle, I. (2004). O/W-Emulsionen für die intravenöse Applikation von Arzneistoffen. PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Chang, T., et al. (1996). "The effect of water-soluble vitamin E on cyclosporine pharmacokinetics in healthy volunteers." Clin Pharmacol Ther **59**(3): 297-303.

Charman, S. A., et al. (1992). "Self-emulsifying drug delivery systems: formulation and biopharmaceutic evaluation of an investigational lipophilic compound." Pharm Res **9**(1): 87-93.

Charman, W. N. (2000). "Lipids, lipophilic drugs, and oral drug delivery-some emerging concepts." Journal of Pharmaceutical Sciences. **89**(8): 967-78.

Chen, K., et al. (2003). "Nanoparticle sizing with a resolution beyond the diffraction limit using UV light scattering spectroscopy." Optics Communications **228**: 1–7.

Chin, K. V., et al. (1993). "Function and regulation of the human multidrug resistance gene." Adv Cancer Res **60**: 157-80.

Chiu, Y. Y., et al. (2003). "Human jejunal permeability of cyclosporin A: influence of surfactants on P-glycoprotein efflux in Caco-2 cells." Pharm Res **20**(5): 749-56.

Degussa AG (2005). Available Information for AEROPERL® 300 Pharma, Business Line AEROSIL®.

Derochette, J. M. (2005). Microscopy and Mineral Images - The Becke line and dark field methods, skynet.

Dey, S., et al. (1997). "Evidence for two nonidentical drug-interaction sites in the human P-glycoprotein." Proc Natl Acad Sci U S A **94**(20): 10594-9.

Dresser, G. K., et al. (2002). "Evaluation of peppermint oil and ascorbyl palmitate as inhibitors of cytochrome P4503A4 activity in vitro and in vivo." Clin Pharmacol Ther **72**(3): 247-55.

Driscoll, D. F., et al. (2001). "Physicochemical assessments of parenteral lipid emulsions: light obscuration versus laser diffraction." Int J Pharm **219**(1-2): 21-37.

Eastman (2002). TPGS. Product information sheet.

El-Hinnawi, E. E. (1966). "Methods in chemical and mineral Microscopy." Elsevier.

Englund, G., et al. (2004). "Association between the number of coadministered P-glycoprotein inhibitors and serum digoxin levels in patients on therapeutic drug monitoring." BMC Med **2**: 8.

Fahr, A. (1993). "Cyclosporin clinical pharmacokinetics." Clin Pharmacokinet **24**(6): 472-95.

Fahr, A. and J. Seelig (2001). "Liposomal formulations of Cyclosporin A: a biophysical approach to pharmacokinetics and pharmacodynamics." Crit Rev Ther Drug Carrier Syst **18**(2): 141-72.

Fichera, M. A., Keck, C.M., Müller, R.H. (2004). Nanopure technology - drug nanocrystals for the delivery of poorly soluble drugs. Particles 2004, Orlando.

Fichera, M. A., Wissing S. A., Müller, R.H. (2004). Effect of 4000 bar homogenisation pressure on particle diminution in drug suspensions. APV, Nürnberg.

Fichtinger, A. (2004). Untersuchungen zur Stabilität, Lösungsgeschwindigkeit und Sättigungslöslichkeit von Cyclosporin-Nanosuspensionen. Diploma, Department of Pharmaceutical Technology, Freie Universität Berlin.

Frömming, K.-H. S., J., Ed. (1993). Cyclodextrines in Pharmacy. Boston, London, Kluwer Academic Publishers Dordrecht.

Garrigos, M., et al. (1997). "Competitive and non-competitive inhibition of the multidrug-resistance-associated P-glycoprotein ATPase--further experimental evidence for a multisite model." Eur J Biochem **244**(2): 664-73.

Gassmann, P., List, M., Schweitzer, A., Sucker, H. (1994). "Hydrosols - Alternatives for the Parenteral Applikation of Poorly Water Soluble Drugs." European Journal of Pharmaceutics & Biopharmaceutics. **40**: 64-72.

Gottesman, M. M. and I. Pastan (1988). "The multidrug transporter, a double-edged sword." J Biol Chem **263**(25): 12163-6.

Gottesman, M. M. and I. Pastan (1993). "Biochemistry of multidrug resistance mediated by the multidrug transporter." Annu Rev Biochem **62**: 385-427.

Gottesman, M. M. and S. V. Ambudkar (2001). "Overview: ABC transporters and human disease." Journal of Bioenergetics & Biomembranes. **33**(6): 453-8.

Grau, M. J. (2000). Untersuchungen zur Lösungsgeschwindigkeit, Sättigungslöslichkeit und Stabilität von hochdispersen Arzneistoffsuspensionen. PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Grigoleit, H. G. and P. Grigoleit (2005). "Peppermint oil in irritable bowel syndrome." Phytomedicine **12**(8): 601-6.

Haas, U. (2002). Physik für Pharmazeuten und Mediziner. Stuttgart, Wissenschaftliche Verlagsgesellschaft mbH.

Hadley, S. K. and S. M. Gaarder (2005). "Treatment of irritable bowel syndrome." Am Fam Physician **72**(12): 2501-6.

Hassan, M. M., Al-Yahya, M.A. (1987). Cyclosporine. Analytical profiles of drug substances. K. Florey. New York, Acaddemic Press. **16:** 145-206.

Hernandez-Trejo, N. (2006). PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Hiki, N., et al. (2003). "Peppermint oil reduces gastric spasm during upper endoscopy: a randomized, double-blind, double-dummy controlled trial." Gastrointest Endosc **57**(4): 475-82.

Horiba-Instruments (2004). Theory And Techniques Of Light Scattering, Presentation (800) 446-7422.

Huglin, M. B. (1972). Light Scattering from Polymer Solutions Ch. 6, Academic Press.

Jacobs, C. and R. H. Muller (2002). "Production and characterization of a budesonide nanosuspension for pulmonary administration." Pharmaceutical Research. **19**(2): 189-94.

Jacobs, C., Kayser, O., Muller, R. H. (2000). "Nanosuspensions as a new approach for the formulation for the poorly soluble drug tarazepide." International Journal of Pharmaceutics **196**(2): 161-164.

Johnson, B. M., et al. (2002). "An in vitro examination of the impact of polyethylene glycol 400, Pluronic P85, and vitamin E d-alpha-tocopheryl polyethylene glycol 1000 succinate on P-glycoprotein efflux and enterocyte-based metabolism in excised rat intestine." Annual Meeting of Pharmaceutical Scientists (AAPS) Pharmsci. **4**(4): 40.

Juliano, R. L. and V. Ling (1976). "A surface glycoprotein modulating drug permeability in Chinese hamster ovary cell mutants." Biochim Biophys Acta **455**(1): 152-62.

Kabanov, A. V., et al. (2003). "Pluronic block copolymers as modulators of drug efflux transporter activity in the blood-brain barrier." Adv Drug Deliv Rev **55**(1): 151-64.

Kasim, N. A., et al. (2004). "Molecular properties of WHO essential drugs and provisional biopharmaceutical classification." Mol Pharm **1**(1): 85-96.

Kayser, O. (2001). "A new approach for targeting to Cryptosporidium parvum using mucoadhesive nanosuspensions: research and applications." International Journal of Pharmaceutics **214**(1-2): 83-85.

Kayser, O. (2002). Nanosuspensionen als neue Arzneiform zur Therapie protozoischer Infektionen. Habilitation. Freie Universität Berlin.

Kayser, O., et al. (2003). "Natural products as antiparasitic drugs." Parasitology Research **90**(2).

Keck, C. (2003). Preparation and characterisation of fat emulsions for administration in the clinical study "constribution of particle size and type of emulsion to the effects of intraduodenal fat on antropyloroduodenal motility,appetite and plasma hormone concentrations". school of pharmacy. Dunedin, Otago University.

Keck, C. and R. H. Müller (2005). Characterisation of Nanosuspensions by Laser Diffractometry. ANNUAL MEETING OF PHARMACEUTICAL SCIENTISTS (AAPS), Nashville.

Keck, C. and R. H. Müller (2005). Particle Size Analysis with Laser Diffractometry is not sensitive enough to detect Changes in a Lipid Carrier System. ANNUAL MEETING OF PHARMACEUTICAL SCIENTISTS (AAPS), Nashville.

Keck, C., et al. (2004). Oral Drug Nanocrystals - Effect Of Potential Aggregation On Bioavailability. ANNUAL MEETING OF PHARMACEUTICAL SCIENTISTS (AAPS), Baltimore.

Kipp, J. E., Wong, J.C.T., Doty, M.J.,Rebbeck, C.L. (2003). Microprecipitation Method For Preparing Submicron Suspensions. United States Patent 6,607,784. USA, Baxter International Inc. (Deerfield, IL).

Krause, K. (2006). Arzneistoff- und Polymernanopartikel: Herstellung, Charakterisierung und Formulierung als Compounds, PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Krause, K. P. and R. H. Muller (2001). "Production of aqueous shellac dispersions by high pressure homogenisation." International Journal of Pharmaceutics. **223**(1-2): 89-92.

Krause, K. P., Kayser, O., Mader, K., Gust, R., Muller, R. H. (2000). "Heavy metal contamination of nanosuspensions produced by high-pressure homogenisation." International Journal of Pharmaceutics. **196**(2): 169-72.

Krauze, E., et al. (2002). "[Pyoderma gangrenosum--positive effect of cyclosporin A therapy]." Pol Merkuriusz Lek **13**(76): 336-40.

Lechuga-Ballesteros, D., et al. (2003). "Properties and stability of a liquid crystal form of cyclosporine-the first reported naturally occurring peptide that exists as a thermotropic liquid crystal." J Pharm Sci **92**(9): 1821-31.

Lehr, C. M. (2005). TPGS for inhibition of p-glycoprotein. ANNUAL MEETING OF PHARMACEUTICAL SCIENTISTS (AAPS), Baltimore.

Lelong, I. H., et al. (1992). "ATP and GTP as alternative energy sources for vinblastine transport by P-170 in KB-V1 plasma membrane vesicles." FEBS Lett **304**(2-3): 256-60.

Ley, I. (1998). A Colourful Tale –The Particle Size Analysis of Pigments, Beckman Coulter UK Ltd.

List, M., Sucker H. (1988). Pharmaceutical colloidal hydrosols for injection. GB Patent 2200048. GB, Sandoz LTD. CH.

Liversidge, G. G. and K. C. Cundy (1995). "Particle size reduction for improvement of oral bioavailability of hydrophobic drugs: I. Absolute oral bioavailability of nanocrystalline danazol in beagle dogs." International Journal of Pharmaceutics **125**(1): 91-97.

Loo, T. W. and D. M. Clarke (1999). "The transmembrane domains of the human multidrug resistance P-glycoprotein are sufficient to mediate drug binding and trafficking to the cell surface." J Biol Chem **274**(35): 24759-65.

Loo, T. W., et al. (2003). "Drug binding in human P-glycoprotein causes conformational changes in both nucleotide-binding domains." Journal of Biological Chemistry. **278**(3): 1575-8.

Lu, P., et al. (2001). "Drug transport by reconstituted P-glycoprotein in proteoliposomes. Effect of substrates and modulators, and dependence on bilayer phase state." Eur J Biochem **268**(6): 1687-97.

Lupien, S., et al. (1995). "Cytochrome P450 limonene hydroxylases of Mentha species." Drug Metabol Drug Interact **12**(3-4): 245-60.

Lupien, S., et al. (1999). "Regiospecific cytochrome P450 limonene hydroxylases from mint (Mentha) species: cDNA isolation, characterization, and functional expression of (-)-4S-limonene-3-hydroxylase and (-)-4S-limonene-6-hydroxylase." Arch Biochem Biophys **368**(1): 181-92.

Mainzer, A., et al. (1998). Perorale Mikroemulsionsformulierung-Sandimmun Optoral/Neoral. Pharmazeutische Technologie: Moderne Arzneiformen. R. H. Müller and G. E. Hildebrandt. Stuttgart, Wissenschaftliche Verlagsgesellschaft mbH**:** 169-177.

Malvern (2004). MRK529-01, Rapid refractive index determination for pharmaceutical actives. Mastersizer 2000 Application note.

Merisko- Liversidge, E. (2002). Nanocrystals: Resolving Pharmaceutical Formulation Issues associated with poorly water-soluble Compounds. Particles 2002, Orlando, Marcel Dekker.

Möschwitzer, J. (2006). Drug Nanocrystals Prepared by High Pressure Homogenisation - the Universal Formulation Approach for Poorly Soluble Drugs. PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Möschwitzer, J. and R. H. Müller (2004). Nanosuspensions as formulation principle for chemical stabilization of chemically labile drugs. International Meeting on Pharmaceutics, Biopharmaceutics & Pharmaceutical Technology, Nürnberg.

Mosharraf, M. N., C (1995). "The effect of particle size and shape on the surface specific dissolution rate of microsized practically insoluble drugs." Int J Pharm **122**: 35-47.

Mueller, R. H. and C. M. Keck (2004). Production of Cyclosporine Nanasuspensions for oral Delivery. International Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, Nürnberg.

Müller, B. W., Junis-Specht, F. (1998). Verfahren zur Herstellung von Pseudolatices und Mikro- oder Nanopartikeln und diese enthaltenden pharmazeutischen Präparaten. EP 0 605 933 B1. EP.

Müller, R. H. (1991). Colloidal Carriers for Controlled Drug Delivery and Targeting. Stuttgart, Boston, Wissenschaftliche Verlagsgesellschaft mbH, CRC Press.

Müller, R. H. (1991). Colloidal Carriers for Controlled Drug Delivery and Targeting. Stuttgart, Boston, Wissenschaftliche Verlagsgesellschaft mbH, CRC Press**:** 379.

Müller, R. H. (1996). Zetapotential und Partikeladung in der Laborpraxis. Stuttgart, Wissenschaftliche Verlagsgesellschaft mbH.

Müller, R. H. (2001). Dispersions for the formulation of slightly or poorly soluble drugs. PCT/EP01/08726, PharmaSol GmbH Berlin.

Müller, R. H. (2003). Preparation in form of a matrix material-auxiliary agent compound containing optimally an active substance. EP 0948321. Germany, PharmaSol GmbH.

Muller, R. H. and C. M. Keck (2004). "Challenges and solutions for the delivery of biotech drugs--a review of drug nanocrystal technology and lipid nanoparticles." J Biotechnol **113**(1-3): 151-70.

Muller, R. H. and K. Peters (1998). "Nanosuspensions for the formulation of poorly soluble drugs: I. Preparation by a size-reduction technique." International Journal of Pharmaceutics **160**(2): 229-237.

Muller, R. H. and S. Heinemann (1991). "Photon correlation spectroscopy and zeta potential characterization of model particles and colloidal drug carriers--essential information for the interpretation of cell culture studies." Biochem Soc Trans **19**(2): 502.

Muller, R. H., Becker, R., Kruss, B., Peters, K. (1999). Pharmaceutical nanosuspensions for medicament administration as systems with increased saturation solubility and rate of solution. United States Patent 5,858,410, Medac Gesellschaft für Klinische Spezialpraparate mbH.

Müller, R. H., Böhm, B. H. L., Grau, M. J. (2000). Nanosuspensions - a formulation approach for poorly soluble and poorly bioavailable drugs. Handbook of Pharmaceutical Controlled Release. D. L. Wise. New York, Marcel Dekker**:** 345-357.

Müller, R. H., Böhm, B.H.L. (2001). Dispersion Techniques for Laboratory and Industrial Scale Processing. Stuttgart, Wissenschaftliche Verlagsgesellschaft.

Müller, R. H. and G. E. Hildebrand (1998). Pharmazeutische Technologie: Moderne Arzneiformen. Stuttgart, Wissenschaftliche Verlagsgesellschaft.

Muller, R. H., et al. (2001). "Nanosuspensions as particulate drug formulations in therapy: Rationale for development and what we can expect for the future." Advanced Drug Delivery Reviews **47**(1): 3-19.

Müller, R. H., Jacobs, C., Kayser, O. (2003). DissoCubes - a novel formulation for poorly soluble and poorly bioavailable drugs. Modified-Release Drug Delivery Systems. M. J. Rathbone, Hadgraft, J., Roberts, M. S., Marcel Dekker**:** 135-149.

Müller, R. H., Lück, M., Kreuter J. (2003). Arzneistoffträgerpartikel für die gewebespezifische Arzneistoffapplikation. EP 1 023 052 B1. Deutschland, PharmaSol GmbH Berlin.

Müller, R. H., Lück,M., Kreuter J. (2001). Medicament excipient particles for tissue-specific application of a medicament. United States Patent 6,288,040, DDS Drug Delivery Services.

Müller, R. H., Mäder, K. ,Krause K. (2000). Verfahren zur schonenden Herstellung von hochfeinen Micro-/Nanopartikeln. PCT Application PCT/EP00/06535. Germany.

Müller, R. H., Peters, K., Becker, R., Kruss, B. (1995). Nanosuspensions - a novel formulation for the i.v. administration of poorly soluble drugs. 1st World Meeting APGI/APV, Budapest.

Müller, R. H., Peters, K., Becker, R., Kruss, B. (1995). Nanosuspensions for the i.v. Administration of Poorly Soluble Drugs - Stability During Sterilization and Long-Term Storage. 22 nd International Symposium of Controlled Release of Bioactive Materials, Washington DC.

Müller, R. H., Peters, K., Craig, D. (1996). Electron microscopic studies of nanosuspensions - particle shapes as a funktion of drug and surfactant. 23 International Symposium of Controlled Release of Bioactive Materials, Kyoto.

Müller, R. H., Schmidt, S. (2002). "PathFinder technology for the delivery of drugs to the brain." NewDrugs **2**: 38-42.

Müller, R. H., Schuhmann, R. (1996). Teilchengrößenmessung in der Laborpraxis. Suttgart, Wissenschaftliche Verlagsgesellschaft mbH.

Mutschler, E., et al. (2001). Mutschler Arzneimittelwirkungen - Lehrbuch der Pharmakologie und Toxikologie. Stuttgart, Wissenschaftliche Verlagsgesellschaft mbH.

N.N. (1997). Becke line. EOSC 221/ Introduction to Petrology. Earth and Ocean Sciences Course Manuscript, University of British Colombia.

Nguyen, H., et al. (2003). "Effect of flavonoids on MRP1-mediated transport in Panc-1 cells." Journal of Pharmaceutical Sciences. **92**(2): 250-7.

Novartis Pharma GmbH (2004). Sandimmun® Optoral product information.

O'Donohue, M. F., et al. (1995). "Modeling conformational changes in cyclosporin A." Protein Sci **4**(10): 2191-202.

O'Leary, T. J., et al. (1986). "Effects of cyclosporine A on biomembranes. Vibrational spectroscopic, calorimetric and hemolysis studies." Biophys J **49**(4): 795-801.

Pajeva, I. K. and M. Wiese (2002). "Pharmacophore model of drugs involved in P-glycoprotein multidrug resistance: explanation of structural variety (hypothesis)." Journal of Medicinal Chemistry. **45**(26): 5671-86.

Parikh, I., Selvaraj, U. (1999). Composition and method of preparing microparticles of water-insoluble substances. United States Patent 5,922,355. USA, Research Triangle Pharmaceuticals (Durham, NC).

Penkler, L., J., Muller, R, H., Runge, S.,A., Ravelli, V. (2003). Pharmaceutical cyclosporin formulation with improved biopharmaceutical properties, improved physical quality and greater stability, and method for producing said formulation. United States Patent 6,551,619. USA, Pharmatec International S.R.L.

Peters, K. (1999). Nanosuspensionen - ein neues Formulierungsprinzip für schwerlösliche Arzneistoffe. PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Porter, C. J. and W. N. Charman (2001). "In vitro assessment of oral lipid based formulations." Advanced Drug Delivery Reviews. **50**(Suppl 1): S127-47.

Porter, C. J., Charman, W. N. (2001). "Lipid-based formulations for oral administration: opportunities for bioavailability enhancement and lipoprotein targeting of lipophilic drugs." Journal of Receptor & Signal Transduction Research. **21**(2-3): 215-57.

Pouton, C. W. (2000). "Lipid formulations for oral administration of drugs: non-emulsifying, self-emulsifying and 'self-microemulsifying' drug delivery systems." Eur J Pharm Sci **11 Suppl 2**: S93-8.

Rabinow, B. E. (2004). "Nanosuspensions in drug delivery." Nat Rev Drug Discov **3**(9): 785-96.

Rasenack, N. and B. W. Muller (2002). "Dissolution rate enhancement by in situ micronization of poorly water-soluble drugs." Pharmaceutical Research. **19**(12): 1894-900.

Rawle, A. (2004). Optical properties and their measurement part 1-5. O. D. Training, Malvern.

Rawle, A. (2006). Optical properties : the Gladstone Dale approach. On Demand Training.

Rege, B. D., et al. (2002). "Effects of nonionic surfactants on membrane transporters in Caco-2 cell monolayers." European Journal of Pharmaceutical Sciences. **16**(4-5): 237-46.

Rezzani, R. (2004). "Cyclosporine A and adverse effects on organs: histochemical studies." Prog Histochem Cytochem **39**(2): 85-128.

Richardson, J. H. (1991). Handbook for the light microscope, Noyes Publication.

Rosenberg, M. F., et al. (1997). "Structure of the multidrug resistance P-glycoprotein to 2.5 nm resolution determined by electron microscopy and image analysis." J Biol Chem **272**(16): 10685-94.

Rote Liste (2003). Fachinformation. Aulendorf, Editio Cantor Verlag.

Ruiz-Garcia, A., et al. (1999). "Pharmacokinetics, bioavailability and absorption of flumequine in the rat." Eur J Pharm Biopharm **48**(3): 253-8.

Runge, S. (1998). Feste Lipidnanopartikel (SLN®) als kolloidaler Arzneistoffträger für die orale Applikation von Ciclosporin A. PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Russo, P. (2005). Differential Index of Refraction. How to do Guides from the Macromolecular Studies Group of Louisiana State University.

Sanchez-Castano, G., et al. (2000). "Intrinsic absolute bioavailability prediction in rats based on in situ absorption rate constants and/or in vitro partition coefficients: 6-fluoroquinolones." J Pharm Sci **89**(11): 1395-403.

Schmidt, K. G. and G. Heidermanns (1958). "Zur Technik der Staubmikroscopie mit Phasenkontrast und Grenzdunkelfeld." Staub **18**(236).

Schmidt, S. (2002). Parenterale O/W-Emulsionen: Plasmaproteininteraktionen und Inkorporation von Arzneistoffen. PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Schmitt, J. (1998). Parenterale Fettemulsionen als Arzneistoffträger. Moderne Arzneiformen. R. H. Müller, Hildebrand, G. E. Stuttgart, Wissenschaftliche Verlagsgesellschaft.

Schneppe, T., Müller, R.H. (2003). Qualitätsmanagement und Validierung in der pharmazeutischen Praxis. Aulendorf, Editio Cantor Verlag.

Sigel, R. Max Planck Institute of Colloids and Interfaces, Colloid Department. Potdsdam-Golm.

Simonelli, A. P., Mehta, S. C., Higuchi, W. I. (1970). "Inhibition of sulfathiazole crystal growth by polyvinylpyrrolidone." J Pharm Sci **59**(5): 633-8.

Sneader, W. (2005). Ciclosporin. Drug Discovery - A History, John Wiley & Sons**:** 298-299.

Sokol, R. J., et al. (1987). "Treatment of vitamin E deficiency during chronic childhood cholestasis with oral d-alpha-tocopheryl polyethylene glycol-1000 succinate." Gastroenterology **93**(5): 975-85.

Stieß, M. (1995). Mechanische Verfahrenstechnik 1. Berlin, Heidelberg, Springer Verlag.

Stroiber, R. E. and S. A. Morse (1994). Crystal Identification with the Polarising Microscope, Chapman & Hall.

Sucker, H., Gassmann P. (1994). Improvements in pharmaceutical compositions. GB- Patent 2269536A. GB, Sandoz LTD. CH.

Szu-Wen Wang, J. M., Chris McNulty, David Putnam, Hongming Chen, (2004). "Determination of P-glycoprotein inhibition by excipients and their combinations using an integrated high-throughput process." Journal of Pharmaceutical Sciences **93**(11): 2755-2767.

Tarr, B. D. and S. H. Yalkowsky (1989). "Enhanced intestinal absorption of cyclosporine in rats through the reduction of emulsion droplet size." Pharm Res **6**(1): 40-3.

Templin, S. (2004). Nanosuspensionen. PhD thesis, Department of Pharmaceutical Technology, Freie Universität Berlin.

Thies, J. and B. W. Muller (1998). "Size controlled production of biodegradable microparticles with supercritical gases." European Journal of Pharmaceutics and Biopharmaceutics **45**(1): 67-74.

Violante, M. R., Fischer; H. W. (1991). Method for making uniformly-sized particles from insoluble compounds. United States Patent 4,997,454. USA, The University of Rochester.

Voigt, R. (2006). Pharmazeutische Technologie. Stuttgart, Deutscher Apotheker Verlag.

Wacher, V. J., et al. (2002). "Peppermint oil enhances cyclosporine oral bioavailability in rats: comparison with D-alpha-tocopheryl poly(ethylene glycol 1000) succinate (TPGS) and ketoconazole." J Pharm Sci **91**(1): 77-90.

Wijnholds, J., et al. (2000). "Multidrug resistance protein 1 protects the choroid plexus epithelium and contributes to the blood-cerebrospinal fluid barrier." J Clin Invest **105**(3): 279-85.

Wolf, A., et al. (1997). "Cyclosporine A-induced oxidative stress in rat hepatocytes." J Pharmacol Exp Ther **280**(3): 1328-34.

Wu, C. and K.-Q. Xia (1994). Review of Scientific Instruments **65**(3): 587-590.

Xu, R. (1997). Multiangle Photon Correlation Spectroscopy in Particle Characterization. Particle and surface characterisation methods. W. Mehnert. Stuttgart, Medpharm Scientific**:** 1-17.

Yumoto, R., et al. (1999). "Transport of rhodamine 123, a P-glycoprotein substrate, across rat intestine and Caco-2 cell monolayers in the presence of cytochrome P-450 3A-related compounds." J Pharmacol Exp Ther **289**(1): 149-55.