

Curriculum Vitae

PERSONAL INFORMATION

Permanent resident of the United States under category of Extraordinary Ability (EB-1A)

PROFESSIONAL SKILLS

- Pharmaceutical dosage forms and drug delivery systems
- Microencapsulating techniques and microparticle preparations
- Polymer synthesis, characterization and processing
- Formulation and process developments of polymeric products
- Polymeric delivery systems for pharmaceuticals, proteins and other active agents
- Experimental design and Analysis
- Pharmaceutically acceptable polymers, liposome, polymerosome
- Gastroretentive drug delivery systems
- Formulation/ application of synthetic and natural hydrogel polymers
- Water-soluble and water-swellaable polymers
- Formulation of hydrocolloids, polysaccharide gums
- Formulation of adhesives and sealants
- Formulation/ compounding of solid and emulsion rubbers (latex and pseudo-latex)
- Broad knowledge of materials, technologies and manufacturing processes in polymer industries

EDUCATION

Ph.D. in Polymer (1993-1997): Department of Chemistry, Brunel University; London-United Kingdom

M.Sc. in Polymer (1987-1990): Department of Polymer Engineering, Tehran Polytechnic University; Tehran-Iran

B.Sc. in Polymer (1983-1987): Department of Chemical Engineering, Tehran Polytechnic University; Tehran-Iran

APPOINTMENT

ACADEMIA

Assistant Professor (May 2007-current) College of Pharmacy, Department of Pharmaceutical Sciences, *Nova Southeastern University*, Florida-United States

Postdoctoral Research Associate (April 2001- March 2002): Department of Industrial and Physical Pharmacy (IPPH), *Purdue University*, Indiana-United States

Head of Department (1996-2001): *Iran Polymer Institute*, Tehran-Iran

Assistant Professor (1997-2001): *Iran Polymer Institute*, Tehran-Iran

Editor (part-time; 1997-1999): *Iran University Press*, Tehran-Iran

Assistant Editor (part-time; 1994-1997): *Iran University Press*, Tehran-Iran

Lecturer (1992-1997): *Iran Polymer Institute*, Tehran-Iran

Research Scientist (1987-1992): *Iran Polymer Institute*, Tehran-Iran

CURRENT TEACHING and ADMINISTRATIVE ACTIVITIES

Period	Year	Course	Topic	My role	Class size	School	Campus**
Aug-Dec	2007 (Fall)	Pharmaceutics I	Physical Pharmacy	Instructor	222	Nova*	FT, WP, PR
Jan-May	2008 (Spring)	Pharmaceutics II	Drug Delivery	Instructor	205	Nova	FT, WP, PR
Jan-May	2008 (Spring)	Pharmaceutics II	Drug Delivery	Coordinator	205	Nova	FT, WP, PR
Aug-Dec	2008 (Fall)	Pharmaceutics I	Physical Pharmacy	Instructor	212	Nova	FT, WP, PR
Aug-Dec	2008 (Fall)	Pharmaceutics I	Physical Pharmacy	Coordinator	212	Nova	FT, WP, PR

* *Nova Southeastern University, Fort Lauderdale, Florida, United States*

** *FT (Fort Lauderdale, Florida, US); WP (West Palm Beach, Florida, US); PR (Ponce, Puerto Rico)*

INDUSTRY

Principal Scientist (Dec 2006- May 2007): Drug Delivery Research, Formulation Development, *Abbott Laboratories*

Principal Scientist (May 2006- Dec 2006): Drug Delivery Research, Formulation Development, *Kos Pharmaceuticals, Inc.* Florida-United States; supervising group of 4 scientists (1 PhD, 3 M.Sc.) and managing an R&D lab to develop a novel **swellable diet aid** for human clinical trial; also responsible for intellectual properties, publications and presentations, helping R&D director with the department budget

Research Manager (February 2004- May 2006): Drug Delivery Research, Formulation Development, *Kos Pharmaceuticals, Inc.* Florida-United States; supervising group of 3 scientists (1 PhD, 2 M.Sc.) and managing an R&D lab to develop novel **gastroretentive oral drug delivery** systems for human clinical trial, also responsible for intellectual properties, publications and presentations

Senior Research Scientist (March 2002- February 2004): Drug Delivery Research, Formulation Development, *Kos Pharmaceuticals, Inc.* Florida-United States; supervising group of 2 scientists (1 PhD, 1 M.Sc.); Responsible for developing swellable gastroretentive platforms for proof of principle studies

Production Manager (1998-2001): *Nava-Baspar Chemical Co.*, Tehran-Iran

SELECTED PRODUCT DEVELOPMENT ACTIVITIES (Principal Investigator)

- ❑ A swellable diet aid for a phase I human clinical trial (*Kos Pharmaceuticals Inc.*, Florida-United States), 2004-2005
- ❑ A swellable gastroretentive drug delivery system for a phase I human clinical trial (*Kos Pharmaceuticals Inc.*, Florida-United States), 2002-2004
- ❑ Elastic and strong superporous hydrogels (*Purdue University, Department of Pharmaceutics and Biomedical Engineering, West Lafayette, Indiana-United States*), 2001-2002
- ❑ Water absorbent polymers for agricultural and hygienic applications (*Nava-Baspar Chemical Company and Iran Polymer Institute, Tehran-Iran*), 1998-2001

PUBLICATION/ PRESENTATION

PATENTS AND PATENT APPLICATIONS (US and Foreign Equivalent)

4. **Hydrogels Having Enhanced Elasticity and Mechanical Strength Properties** (Inventors: H Omidian, Y Qiu, DJ Kim, SC Yang, H Park and K Park); *Purdue Research Foundation, West Lafayette, IN 47907, United States*
 - 4.1 US Patent 6,960,617 (2005)
 - 4.2 US Patent Application 20030232895 (2003)
 - 4.3 World Patent Application WO03089506, (2003)
3. **Formation of Strong Superporous Hydrogels** (Inventors: H Omidian, J G. Rocca); *Kos Pharmaceuticals Inc., Hollywood, Florida 33020, United States*
 - 3.1 US Patent 7,056,957 (2006)

- 3.2 US Patent Application 20040224021 (2004)
- 3.3 World Patent Applications WO2004096127 (2004)
- 3.4 European Patent EP1620076 (2006)
- 2. **Superporous Hydrogels for Heavy Duty Applications** (Inventors: H Omidian, J G Rocca); Abbott Laboratories, United States (serial number 11/774,069)
 - 2.1 US Patent Application 20080089940 (2008)
- 1. **Very-Pure Superporous Hydrogels Having Outstanding Swelling Properties** (Inventors: H Omidian, C Gavrilas, W Han, G Li and J G Rocca); Abbott Laboratories, United States (Serial number 12/036,680)
 - 1.1 US Patent Application 20080206339 (2008)

JOURNAL PUBLICATIONS

- 36. H Omidian and K Park; Swelling Agents and Devices in Oral Drug Delivery, **Journal of Drug Delivery Science and Technology**, 18(2), 83-93, 2008
- 35. LA Felton, K Shah, J Yang, H Omidian, and JG Rocca, A Rapid Technique to Evaluate the Oxidative Stability of a Model Drug, **Drug Development and Industrial Pharmacy**, 33 (6), 683-9, 2007
- 34. H Omidian, K Park, JG Rocca; Recent Developments in Superporous Hydrogels; **Journal of Pharmacy and Pharmacology**, 59 (3), 317-327, 2007 (Cited 1 time)
- 33. H Omidian, JG Rocca, K Park; Elastic Superporous Hydrogel Hybrid of Polyacrylamide and Sodium Alginate; **Macromolecular Bioscience**, 6 (9), 703-710, 2006 (Cited 1 time)
- 32. J G. Rocca, H Omidian, K Shah; Gastric Retention Technologies: Commercial Status of Gastric Retention Technologies; **Drug Delivery Technology**, 5 (4), 40-46, April 2005
- 31. H Omidian, JG Rocca, K Park; Advances in Superporous Hydrogels; **Journal of Controlled Release**, 102 (1), 3-12, 2005 (Cited 20 times)
- 30. J G. Rocca, K Shah, H Omidian; Superporous Hydrogels containing Solid and Semi-solid Carriers, **Gattefosse Technical Bulletin**, 97, 73 – 84, October 2004
- 29. H Omidian, MJ Zohuriaan-Mehr, K Kabiri, K Shah; Polymer Chemistry Attractiveness: Synthesis and Swelling Studies of Glutinous Hydrogels in the Advanced Academic Laboratory; **Journal of Polymer Materials**, 21 (3), 281-292, 2004 (Cited 1 time)
- 28. A Salimi, H Omidian, MJ Zohuriaan-Mehr; Mechanical and Thermal Behavior of Epoxy-Novolak Film Adhesive, **Journal of Adhesion Science & Technology**, 17 (15), 1847-1861, 2003
- 27. J G. Rocca, H Omidian, K Shah; Progresses in Gastroretentive Drug Delivery Systems, **Business Briefing, PharmaTech**, 152-6, 2003

26. K Kabiri, H Omidian, MJ Zohuriaan-Mehr; Novel Approach to Highly Porous Superabsorbent Hydrogels: Synergistic Effect of Progens on Porosity and Swelling Rate, **Polymer International**, 52, 1158-1164, 2003 (Cited 26 times)
25. K Kabiri K, H Omidian, SA Hashemi, MJ Zohuriaan-Mehr; Synthesis of Fast-Swelling Superabsorbent Hydrogels: Effect of Crosslinker Type and Concentration on Porosity and Absorption Rate, **European Polymer Journal**, 39, 1341-8, 2003 (Cited 44 times)
24. K Kabiri, H Omidian, SA Hashemi, MJ Zohuriaan-Mehr; Concise Synthesis of Fast-Swelling Superabsorbent Hydrogels: Effect of Initiator Concentration on Porosity and Absorption Rate, **Journal of Polymer Materials**, 20 (1), 17-22, 2003 (Cited 7 times)
23. MJ Zohuriaan-Mehr, M Ghannadan, H Omidian; Liquid Hydrocarbon-Absorbent, 1: Preparation and Evaluation of Styrenic Absorbents for Liquid Aromatic Hydrocarbons; **International Journal of Polymeric Materials**, 52, 153-161, 2003
22. H Omidian, MJ Zohuriaan-Mehr, H Bouhendi; Polymerization of Sodium Acrylate in Inverse-Suspension Stabilized by Sorbitan Fatty Esters, **European Polymer Journal**, 39 (5), 1013-1018, May 2003 (Cited 1 time)
21. A Pourjavadi, MR Mahdavinia, MJ Zohuriaan-Mehr, H Omidian; Modified Chitosan. 1. Optimized Cerium Ammonium Nitrate-Induced Synthesis of Chitosan-graft-Polyacrylonitrile, **Journal of Applied Polymer Science**, 88 (8), 2048-2054, 2003 (Cited 20 times)
20. H Omidian, MJ Zohuriaan-Mehr, H Bouhendi; Aqueous Solution Polymerization of Neutralized Acrylic Acid using $\text{Na}_2\text{S}_2\text{O}_5/(\text{NH}_4)_2\text{S}_2\text{O}_8$ Redox Pair System under Atmospheric Conditions; **International Journal of Polymeric Materials**, 52 (4), 307-321, April 2003
19. H Omidian, K Park; Experimental Design in the Synthesis of Polyacrylamide Superporous Hydrogels, **Journal of Bioactive and Compatible Polymers**, 17 (6), 2002 (Cited 2 times)
18. H Omidian, MJ Zohuriaan-Mehr; DSC Studies on Synthesis of Superabsorbent Hydrogels; **Polymer**, 43 (2), 269-277, 2002 (Cited 18 times)
17. H Omidian, Reactions to an Innovation (Superabsorbent Polymers), **Chemistry and Development**, 2 (5), 44-47, 2001
16. MJ Zohuriaan-Mehr, H Omidian; Petroleum Resins: An Overview, **Journal of Macromolecular Science, Review in Macromolecular Chemistry and Physics**, C 40 (1), 23-49, 2000 (Cited 1 time)
15. H Omidian, Superabsorbents in Iran; From a Souvenir to Superabsorbent Technology, **Chemistry and Development**, 1 (2), 32-36, 2000
14. H Omidian, SA Hashemi, PG Sammes, I Meldrum; Modified Acrylic-based Superabsorbent Polymers (Dependence on Particle Size and Salinity), **Polymer**, 40, 1753-1761, 1999 (Cited 57 times)
13. H Omidian, SA Hashemi, PG Sammes, I Meldrum; Modified Acrylic-based Superabsorbent Polymers: Effect of Temperature and Initiator Concentration, **Polymer**, 39 (15), 3459-3466, 1998 (Cited 30 times)

12. H Omidian, SA Hashemi, PG Sammes, I Meldrum; A Model for the Swelling of Superabsorbent Polymers, **Polymer**, 39 (26), 6697-6704, 1998 (Cited 66 times)
11. H Omidian; Superabsorbents, **Iranian Journal of Chemistry**, Iran University Press, 11(1), 18-23, 1998
10. H Omidian; Evaluation of the Textbook Chemical Engineering Thermodynamics, Translated by Dr. M. Kalbasi, **Iranian Journal of Chemistry**, Iran University Press, 8(1), 59-61, 1995
9. H Omidian, SA Hashemi, F Askari, S Nafisi; Modifying Acrylic-based Superabsorbents II. (Modification of Process Nature), **Journal of Applied Polymer Science**, 54, 251-256, 1994 (Cited 15 times)
8. H Omidian, SA Hashemi, F Askari, S Nafisi; Modifying Acrylic-based Superabsorbents I. (Modification of Crosslinker and Comonomer Nature), **Journal of Applied Polymer Science**, 54, 241-249, 1994 (Cited 25 times)
7. H Omidian, SA Hashemi, F Askari, S Nafisi; Swelling and Crosslink Density Measurements for Hydrogels, **Iranian Journal of Polymer Science and Technology**, 3(2), 115-119, 1994
6. F Askari, S Nafisi, H Omidian, SA Hashemi; Synthesis and Characterization of Acrylic-based Superabsorbents, **Journal of Applied Polymer Science**, 50, 1851-1855, 1993 (Cited 34 times)
5. M Barikani, H Omidian; Preparation and Optimization of Nitrile-Phenolic Structural Adhesives, **Iranian Journal of Polymer Science and Technology**, 5 (1), 10-17, 1992
4. M Barikani, H Omidian; Study of the Parameters Affecting the Choice of Adhesive in Sandwich Panels and Honeycombs, **Iranian Journal of Polymer Science and Technology**, 4 (4), 28-38, 1991
3. M Barikani, H Omidian; Honeycombs, **Iranian Journal of Polymer Science and Technology**, 4 (1), 4-10, 1991
2. G Bakhshandeh, H Omidian, M Vafaian; Styrene-Butadiene Rubber, **Iranian Journal of Polymer Science and Technology**, 3 (1), 29-38, 1990
1. F Afshar-Taromi, H Omidian; Electrically Conducting Polymers, **Iranian Journal of Polymer Science and Technology**, 2 (2), 122-133, 1989

CONFERENCE PRESENTATIONS

33. LA Felton, K Shah, J Yang, H Omidian, J G. Rocca; A Rapid Technique to Evaluate the Oxidative Stability of A Model Drug; **American Association of Pharmaceutical Scientists (AAPS)**, Texas, USA; October, 2006
32. C Gavrilas, H Omidian, J G. Rocca; Dynamic Mechanical Properties of Superporous Hydrogels, **8th US-Japan Symposium on Drug Delivery Systems**, Hawaii, USA, December 18-23, 2005

31. C Gavrilas, H Omidian, J G. Rocca; A Novel Simulator to Evaluate Fatigue Properties of Superporous Hydrogels, **8th US-Japan Symposium on Drug Delivery Systems**, Hawaii, USA, December 18-23, 2005
30. G Li, H Omidian, J G. Rocca; Solvent Effects on the Swelling Properties of Superporous Hydrogels; **American Association of Pharmaceutical Scientists (AAPS)**, Tennessee, USA; November 6-10, 2005
29. W Han, H Omidian, J G. Rocca; Dynamic Swelling of Superporous Hydrogels Under Compression; **American Association of Pharmaceutical Scientists (AAPS)**, Tennessee, USA; November 6-10, 2005
28. R Townsend, J G. Rocca, H Omidian; Safety and Toxicity Studies of a Novel Gastroretentive Platform Administered Orally in a Swine Emesis Model, **The 32nd Annual Meeting of the Controlled Release Society (CRS)**, Miami, Florida, USA; June 18-22, 2005
27. H Omidian, C Gavrilas, J G. Rocca; Mechanical Properties of Gastroretentive Platforms Using A Novel Simulator; **The 32nd Annual Meeting of the Controlled Release Society (CRS)**, Miami, Florida, USA; June 18-22, 2005
26. C Gavrilas, H Omidian, J G. Rocca; A Novel Gastric Simulator; **The 32nd Annual Meeting of the Controlled Release Society (CRS)**, Miami, Florida, USA; June 18-22, 2005
25. W Han, G Li, H Omidian, J G. Rocca; Fast Responsive Superporous Hydrogels; **The 32nd Annual Meeting of the Controlled Release Society (CRS)**, Miami, Florida, USA; June 18-22, 2005
24. G Li, H Omidian, J G. Rocca; Wax-Loaded Superporous Hydrogel Platforms; **The 32nd Annual Meeting of the Controlled Release Society (CRS)**, Miami, Florida, USA; June 18-22, 2005
23. G Li, H Omidian, J G. Rocca; Acrylate-Chitosan Superporous Hydrogel Hybrids; **The 32nd Annual Meeting of the Controlled Release Society (CRS)**, Miami, Florida, USA; June 18-22, 2005
22. W Han, H Omidian, J G. Rocca; A Novel Acrylate Ester-based Superporous Hydrogel; **The 32nd Annual Meeting of the Controlled Release Society (CRS)**, Miami, Florida, USA; June 18-22, 2005
21. H Omidian, W Han, J G. Rocca; Superporous Hydrogels as Novel Carriers in Oral Drug Delivery; **The 32nd Annual Meeting of the Controlled Release Society (CRS)**, Miami, Florida, USA; June 18-22, 2005
20. G Li, H Omidian, J G. Rocca; Anisotropic Properties of Superporous Hydrogel Hybrids Intended for Gastric Retention; **American Association of Pharmaceutical Scientists (AAPS)**, Baltimore, USA; November 7-11, 2004
19. W Han, H Omidian, J G. Rocca; Reflexive Swellable Superporous Hydrogel Hybrids; **American Association of Pharmaceutical Scientists (AAPS)**, Baltimore, USA; November 7-11, 2004

18. PM Thangamathesvaran, H Omidian, A Rathinavelu, J G. Rocca; Metal-Chelated Superporous Hydrogels; Part2: Structural and Calorimetric Characterization; **AAPS Pharmaceutics and Drug Delivery Conference**, Philadelphia, USA; June 2004
17. PM Thangamathesvaran,, H Omidian, A Rathinavelu, J G. Rocca; Metal-Chelated Superporous Hydrogels; Part1: Morphology, hydration and Mechanical properties; **AAPS Pharmaceutics and Drug Delivery Conference**, Philadelphia, USA; June 2004
16. W Han, H Omidian, J G. Rocca; Evaluation of Gastroretentive Superporous Hydrogel Platforms Using Swine Model, **The 31st Annual Meeting of the Controlled Release Society (CRS)**, Honolulu, Hawaii, USA; June 12-16, 2004
15. Y Qiu, H Omidian, H Park, K Park; Hydrogels Having Enhanced Elasticity and Mechanical Strength Properties, **American Association of Pharmaceutical Scientists (AAPS)**, Salt Lake City, Utah, USA, October 26-30, 2003, Published in *AAPS Pharmsci*, 5(4), W4178, 2003
14. W Han, H Omidian, J G. Rocca; In Vivo and In Vitro Studies on Novel Gastroretentive Superporous Hydrogel (SPH) Platforms, **American Association of Pharmaceutical Scientists (AAPS)**, Salt Lake City, Utah, USA, October 26-30, 2003, Published in *AAPS Pharmsci*, 5(4), W4119, 2003
13. H Omidian, W Han, M Lally, J G. Rocca; Synthesis and Characterization of Novel Swellable and Elastic Gastroretentive Drug Delivery Systems, **American Association of Pharmaceutical Scientists (AAPS)**, Salt Lake City, Utah, USA, October 26-30, 2003, Published in *AAPS Pharmsci*, 5(4), T3181, 2003
12. J G. Rocca, H Omidian, K Shah; Controlled Release of Compounds Mediated by Retention in the Upper Part of the GI Tract, **The 30th Annual Meeting and Exposition of the Controlled Release Society (CRS)**, Glasgow, Scotland, July 19-23, 2003
11. H Bouhendi, H Omidian, MJ Zohuriaan-Mehr; Water-Swellable Poly (acrylic acid) as Thickening Agent, **The 6th Iranian Seminar on Polymer Science and Technology**, Tehran, Iran, May 2003
10. H Bouhendi, H Omidian, MJ Zohuriaan-Mehr; Precipitation Polymerization of Acrylic Acid, **The 6th Iranian Seminar on Polymer Science and Technology**, Tehran, Iran, May 2003
9. A Salimi, H Omidian, MJ Zohuriaan-Mehr; Modified Epoxy Film Adhesives, Part 2: Structural Changes, **The 6th Iranian Seminar on Polymer Science and Technology**, Tehran, Iran, May 2003
8. A Salimi, H Omidian, MJ Zohuriaan-Mehr; Modified Epoxy Film Adhesives, Part 1: Mechanical Properties, **The 6th Iranian Seminar on Polymer Science and Technology**, Tehran, Iran, May 2003
7. K Kabiri, H Omidian, SA Hashemi, MJ Zohuriaan-Mehr; Effect of Initiator Concentration on Synthesis and Properties of Fast-Swelling Superabsorbents, **The 7th National Iranian Chemical Engineering Congress**, Tehran, Iran, October 2002
6. H Omidian; Creating Porous Superabsorbent Structures, **The 5th International Seminar on Polymer Science and Technology**, Tehran, Iran, September 2000

5. F Askari, H Omidian; Polymers to Treat Industrial Water Wastes, **The 3rd Conference on Environmental Pollutants**, Gillan University, Gillan, Iran, 1999
4. H Omidian, SA Hashemi, PG Sammes, I Meldrum; Modeling of Superabsorbent Polymers, **International Seminar on Polymer Science and Technology**, Tehran, Iran, Nov 3-5, 1997
3. F Askari, S Nafisi, H Omidian, SA Hashemi; Synthesis, Characterization and Modification of Superabsorbents, **The 1st International Seminar of Polymer Science & Technology**, Shiraz, Iran, May 2-4, 1994
2. H Omidian, M Barikani; Optimization of Stresses in Adhesive Joints Involving a Vulcanizable Rubber and a Thermoset Resin, **The 4th International Conference on Reinforced Materials and Composite Technologies**, (Verbundwerk 92), Wiesbaden, West Germany, July 1-3, 1992
1. H Omidian, M Barikani; Parameters Influencing Adhesive Joints in Honeycombs and Sandwich Structures, **The 2nd International Conference on Polymer Science & Technology**, Tehran, Iran, 1990

BOOK CHAPTERS

5. H. Omidian and K Park; *Engineered High Swelling Hydrogels*, in **"Hydrogel Handbook"**; Kinam Park and Ray Ottenbrite, Editors; Springer, Publisher, *in preparation*
4. H. Omidian and K Park; *Polymers for Biomedical and Pharmaceutical Applications*, in **"Polymers as Biomaterials"**, (3rd edition); Severian Dumitriu, Editor; Marcel Dekker Inc, Publisher, *in preparation*
3. H. Omidian and K Park; *Polymers*, in **"Martin's Physical Pharmacy and Pharmaceutical Sciences"**, (6th edition); Patrick Sinko, Editor; Lippincott Williams & Wilkins (LWW), Publisher, *submitted*
2. H Omidian and K Park; *Fast Responsive Macroporous Gels*, in **"Macroporous Polymers"**, (1st Edition); Bo Mattiasson, A Kumar and I Galae, Editors; Taylor & Francis Group, LLC Publisher; *submitted*
1. H. Omidian and K Park; *Oral Targeted Drug Delivery Systems: Gastric Retention Devices*, in **"Oral Controlled Release Formulation Design and Drug Delivery: Theory to Practice"** (1st edition); Kinam Park and Hong Wen, Editors; John Wiley & Sons, Inc. Publisher, *submitted*

BOOKS

(Edited or Translated from English to Persian; Published by Iran University Press, Tehran, Iran)

11. H Omidian, A Pourjavadi, MJ Zohourian-Mehr, M Nadali, M Madani; **Chemical Process Industries**, 2007
10. H Omidian, M Vafaian; **Principles of Polymerization**, Volume 1, 2005
9. AR Ja'fari, V Movahhed, M Mehrabzadeh, H Omidian; **Elastomers and Rubber Compounding Materials**, Edited by H Omidian, 2004
8. AR Ja'fari, V Movahhed, M Mehrabzadeh, H Omidian; **Elastomers and Rubber Compounding Materials**, 2004
7. AR Salagegheh, A Pourjavadi, Z Vosough; **Practical Organic chemistry**, Edited by H Omidian, AR Salagegheh, A Pourjavadi, 2004
6. H Omidian; **Plastics Materials**, Volume 2, 2002
5. F Divsaalaar, P Abaachi; **Fundamentals of Composites Manufacturing**, Edited by H Omidian, 2001
4. H Omidian, M Vafaian; **Plastics Materials**, Volume 1, 1996
3. H Omidian, M Vafaian, A Pourjavadi; **Organic Chemistry**, Volume 3, 1996
2. H Omidian, M Vafaian; **Principles of Polymerization**, Volume 2, 1992
1. H Omidian, M Vafaian; **Principles of Polymerization**, Volume 1, 1990

LECTURE NOTES

Pharmaceutics I

- Overview of Physical Pharmacy
- States of Matter, Intermolecular Forces, Thermodynamics
- Electrolytes and Non-electrolytes
- Ionic Equilibria
- Buffers and Isotonic Solutions
- Polymer Basics
- Biomaterials
- Drug Stability
- Chemical Kinetics
- Interfacial Phenomena in Dispersed Systems

Pharmaceutics II

- Viscosity and Rheology
- Solubility, Partitioning and Diffusion
- Pharmaceutical Polymers

- ❑ Drug Delivery Basics
- ❑ Drug Delivery Technologies
- ❑ Capsule Dosage Forms
- ❑ Transdermal Drug Delivery
- ❑ Targeted Oral Drug Delivery
- ❑ Protein Delivery

RECOGNITION and AWARDS

- ❑ Recognized and Awarded for the Outstanding Research Paper published during 2007 in the Journal of Drug Development and Industrial Pharmacy; Informa 2008, US.
- ❑ Recognized and Awarded as the Outstanding Teacher Finalist in Recognition of Excellence and Innovation in Teaching (2008), College of Pharmacy, Nova Southeastern University, Florida-US
- ❑ Recognized and awarded at the 2005 Book of the Year festival (*Plastics Materials* published 1996 and 2002), Tehran-Iran
- ❑ Recognized and awarded by the Minister of Higher Education for conducting the best research program (1994), Tehran-Iran
- ❑ Recognized and awarded by the Director of the Iran Polymer Institute as the best researcher (1992), Tehran-Iran
- ❑ Recognized and awarded by the Minister of Higher Education for authoring the best research paper (1990), Tehran-Iran

RECENT TRAINING/ WORKSHOPS

- ❑ *Hydrocolloid Polymers; TIC Gums, Inc.*; Belcamp, MD, United States; Nov 9-10, 2006
- ❑ *Microencapsulation and Particle Coating* (1.8 CEUs); **Center for Professional Advancement**, Northbrook, IL, United States; Oct 4-6, 2006
- ❑ *Design and Analysis of Experiments* (3.5 CEUs); **Massachusetts Institute of Technology (MIT)**, Cambridge, MA, United States; July 10-14, 2006
- ❑ *Advances in Controlled Release Technology: Polymeric Delivery Systems for Pharmaceuticals, Proteins and Other Agents* (3.5 CEUs); **Massachusetts Institute of Technology (MIT)**, Cambridge, MA, United States; July 11-15, 2005
- ❑ *Current Good Manufacturing Practices (cGMPs) in the Clinical Development Environment*; **CATO Research Ltd**, Fort Lauderdale, FL, United States; Feb 5-6, 2004

- ❑ *Bulk Pharmaceutical and Chemical Process Developments*; **American Institute of Chemical Engineers (AIChE)**, Las Vegas, NV, United States; Nov 14-15, 2002

SUPERVISING GRADUATE STUDENTS

- ❑ A Salimi (M.Sc. Polymer Science and Engineering), Preparation and Characterization of Modified Epoxy-Novolak Structural Film Adhesives, **Iran Polymer Institute**, Tehran, Iran, 2001
- ❑ F Askari (M.Sc. Polymer Science and Engineering), Synthesis and Characterization of Partially- Hydrolyzed Poly (acrylamide) as Flocculent for Treating Industrial Water Wastes, **Iran Polymer Institute/ Tehran Azad University**, Tehran, Iran, 2000
- ❑ H Bouhendi (M.Sc. Polymer Science and Engineering), Synthesis and Characterization of Poly (Sodium Acrylate) as Thickener for Water-borne Systems, **Iran Polymer Institute**, Tehran, Iran, 1999
- ❑ K Kabiri (M.Sc. Polymer Science and Engineering), Synthesis and Characterization of Porous Acrylic-based Superabsorbent Polymers, **Iran Polymer Institute**, Tehran, Iran, 1999

REVIEWER for PEER-REVIEWED JOURNALS:

Journal of Polymer Engineering & Science
Carbohydrate Polymers
Starch
European Polymer Journal
Journal of Applied Polymer Science
Iranian Journal of Polymer Science and Technology
Drug Development and Industrial Pharmacy

AFFILIATIONS

- ❑ American Chemical Society (ACS)
- ❑ American Association of Pharmaceutical Scientists (AAPS)
- ❑ Controlled Release Society (CRS)
- ❑ American Society of Iranian Pharmaceutical Scientists (ASIPS)