

Dr Abolghasem Jouyban



Head of Pharmaceutical Analysis Laboratory

Professor of Pharmaceutical Analysis

Tel: 0098 411 3392584

Fax: 0098 411 3344798

E-mail: ajouyban@hotmail.com

Dr Jouyban's Home Page

Curriculum Vitae:

Dr Abolghasem Jouyban is graduated in Pharmacy from Tabriz University of Medical Sciences, Tabriz-Iran in 1989 and received his PhD in Pharmaceutical Analysis from Institute of Pharmaceutical Innovations, School of Life Sciences, University of Bradford, Bradford-UK in 2001.

He currently teaches Pharmaceutical/Analytical Chemistry for Pharmacy students, in Tabriz University of Medical Sciences.

Dr Jouyban has been awarded Prizes for the Best Lecturer in 1993 and for the Best Researcher in 1996 in the School of Pharmacy of Tabriz University of Medical Sciences. He got ORS Scholarship to study at the University of Bradford in 1998. In Iranian Scientific Razi Festival, 2000 he also has been awarded a Prize from President Khatami. He was the best researcher of Tabriz University of Medical Sciences in 2003, 2005 & 2006, and director of the best research project in Tabriz University of Medical Sciences in 2004, 2005 & 2006.

Dr Jouyban has gained Third Rank of 12th Razi festival in Pharmacy (Basic Sciences Research), 2006; Dec, Tehran-Iran and he has been awarded from President Ahmadinejad.

Current research programs:



Prediction of Drug Solubility in Mixed Solvent Systems

Prediction of Electrophoretic Mobility in Mixed Solvent Electrolyte Systems in Capillary Zone Electrophoresis

Prediction of Drug Solubility in Supercritical Fluids

Method Development for Analysis of Pharmaceuticals Using Capillary Electrophoresis and High Performance Liquid Chromatography

Research Experiences:

Mathematical representation of surface tension of mixed solvents

Modelling of entrainer effects on the solubility of solutes in supercritical carbon dioxide

Mathematical representation of the ratios of organic modifiers on retention of some CNS drugs in HPLC

Preparation of a new solid phase micro extraction fiber, and its applications in determination of solvents residuals in pharmaceuticals by capillary gas chromatography

Preparation of a new potentiometric sensor for determination of bisacodyl in pharmaceutical formulations

Comparison of publication status in international journals from some Iranian Medical Sciences Universities, 1992-2002

Mathematical representation of dielectric constants in mixed solvents

Modelling drug solubility in binary solvents using artificial neural networks

A comparative study of mathematical models for calculating density and its variations on the solubility prediction of drugs in supercritical carbon dioxide

A QSPR study of drug's electrophoretic mobility in capillary electrophoresis

A new spectrophotometric method for determination of sodium diclofenac in pharmaceutical formulations

Assessment of physician and pharmacist's comments on some dosage forms produced by different domestic companies to propose applied research projects in order to enhance quality of pharmaceutical products

Mathematical representation of viscosity of solvent mixtures

Publications

International Journals:

Jouyban A, Khoubnasabjafari M, Hamidi AA, Acree Jr WE. Ab initio solubility prediction of non-electrolytes in ternary solvents using a combination of Jouyban-Acree and Abraham models. *Asian Journal of Chemistry*. in press

Jouyban A, Ahmadi H, Soltani S. Predicting electrophoretic mobility of amino acids and small peptides using computational descriptors. *Asian Journal of Chemistry*. 2008; 20: 1148-1152.

Jouyban A, Fakhree MAA, Hamzeh-Mivehroud M, Acree Jr WE. Modelling the deviations of solubilities in water-dioxane mixtures from predicted solubilities by the Jouyban-Acree model. *Journal of Drug Delivery Science and Technology*. 2007 Sep; 17: 359-363.

Maleki R, Matin AA, Hosseinzadeh R, Jouyban A. PVC membrane sensor for diclofenac: Applications in pharmaceutical analysis and drug binding studies. *Pharmazie*. 2007 Sep; 62: 627-677.

Jouyban A, Khoubnasabjafari M, Acree Jr WE. Solubility prediction of pyrene in non-aqueous solvent mixtures using Jouyban-Acree. *Journal of Drug Delivery Science and Technology*. 2007 May; 19:1853-1862.

Jouyban A. prediction of drug solubility in water-propylene glycol mixtures using Jouyban-Acree model. *Die Pharmazie*. 2007 May; 62: 365-367.

Jouyban A, Acree Jr WE. Prediction of drug solubility in ethanol-ethyl acetate mixtures at various temperatures using the Jouyban-Acree model. 2007 Mar; *Journal of Drug Delivery Science and Technology*. 17: 159-160.

Jouyban A. Prediction of the optimized solvent composition for solubilization of drugs in water-cosolvent mixtures. *Die Pharmazie*. 2007 Mar; 62: 190-198.

Majidi MR, Jouyban A, Asadpour-Zeynali K. Electrocatalytic oxidation of hydrazine at overoxidized polypyrrole film modified glassy carbon electrode. *Electrochimica Acta*. 2007; 52: 6248-6253.

Jouyban A, Soltanpour Sh, Soltani S, Acree Jr WE. Solubility prediction of drugs in water-cosolvent mixtures using Abraham solvation parameters. *Journal of Pharmacy and Pharmaceutical Sciences*. 2007; 10: 263-277.

Soltani S, Babaei H, Asadpour Zeynali K, Jouyban A. Modeling vasorelaxant activity of some drugs/drug candidates using artificial neural networks. *Journal of Pharmacology and Toxicology*. 2007; 2: 411-426.

Matin AA, Maleki R, Farajzadeh MA, Farhadi Kh, Hosseinzadeh R, Jouyban A. Headspace SPME-GC method for acetone analysis and its biomedical application. *Chromatographia*. 2007; 66: 383-387.

Jouyban A. In silico prediction of drug solubility in water-dioxane mixtures using Jouyban-Acree model. *Die Pharmazie*. 2007 Jan; 62: 46-50.

Jouyban A. Solubility prediction of drugs in water-PEG 400 mixtures. *Chemical & Pharmaceutical Bulletin*. 2006 Nov; 54: 1561-1566.

Jouyban A, Acree Jr WE. Solubility prediction in non-aqueous binary solvents using a combination of Jouyban-Acree and Abraham models. *Fluid Phase Equilibria*. 2006 Nov; 249: 24-32.

Majidi MR, Jouyban A, Asadpour-Zeynali K. Voltammetric behavior and determination of isoniazid in pharmaceuticals by using overoxidized polypyrrole glassy carbon modified electrode. *Journal of Electroanalytical Chemistry*. 2006 Oct; 589: 32-37.

Majidi MR, Jouyban A, Abdollahi H, Asadpour-Zeynali K. Simultaneous voltammetric determination of cysteine, tyrosine and tryptophan by using principal component-artificial neural networks (PC-ANNs). *Asian Journal of Chemistry*. 2006 Oct; 18: 2445-2457.

Jouyban A, Khoubnasabjafari M, Chan H.K, Acree Jr WE. Mathematical representation of solubility of amino acids in binary aqueous-organic solvent mixtures at various temperatures using Jouyban-Acree model. *Die Pharmazie*. 2006 Sep; 61: 789-792.

Jouyban A, Khoubnasabjafari M, Acree Jr WE. Predicting solubility of anthracene in non-aqueous solvent mixtures using a combination of Jouyban-Acree and Abraham models. *Chemical and Pharmaceutical Bulletin*. 2006 Aug; 54: 1124-1130.

Jouyban A, Soltani S, Khoubnasabjafari M, Acree Jr WE. Refractive index correlation of solvent mixtures at various temperatures. *Asian Journal of Chemistry*. 2006 Jul; 18: 2037-2040.

Barzegar M, Rashidi MR, Jafari Rouhi, AH, Jouyban A, Jabbarbar F, Melekian A. Phenobarbital and phenytoin serum levels in children with status epilepticus and refractory status epilepticus candidate for midazolam infusion. *Child Neurology (Medimond Proceedings)*. 2006 Jun; 1-4.

Jouyban A, Khoubnasabjafari M, Acree Jr WE. Solubility prediction of anthracene in non-aqueous solvent mixtures using a combination of Jouyban-Acree and Abraham models. *Canadian Journal of Chemistry*. 2006 Jun; 54: 874-885.

Maleki R, Matin AA, Jouyban A. A membrane sensor for selective determination of bisacodyl in tablets. *Journal of Chinese Chemical Society*. 2006 Jun; 53: 613-618.

Hanaee J, Jouyban A, Rashidi MR, Esnaashari S, Acree WE Jr. Correlation of capacity factor of analytes in quaternary solvent mobile phases using Jouyban-Acree model. *Die Pharmazie*. 2006 May; 61: 417-419.

Jouyban A, Acree Jr WE. In silico prediction of drug solubility in water-ethanol mixtures using Jouyban-Acree model. *Journal of Pharmacy and Pharmaceutical Sciences*. 2006 May; 9: 262-269.

Jouyban A, Chan HK, Chew NYK, Khoubnasabjafari M, Acree WE Jr. Solubility prediction of paracetamol in binary and ternary solvent mixtures using Jouyban-Acree model. *Chemical & Pharmaceutical Bulletin*. 2006 Apr; 54: 428-431.

Jouyban A, Chew NYK, Chan HK, Khoubnasabjafari M, Acree Jr WE. Solubility prediction of salicylic acid in water-ethanol-propylene glycol mixtures using Jouyban-Acree model. *Die Pharmazie*. 2006 Apr; 61: 318-321.

Jouyban A, Khoubnasabjafari M, Acree WE Jr. Modeling the solvatochromic parameter (σ) of mixed solvents with respect to solvent composition and temperature using Jouyban-Acree model. *Daru*. 2006 Jan; 14: 22-25.

Jouyban A, Vaez-Gharamaleki Z, Matin AA, Djozan Dj, Acree WE Jr. Modeling of retention factors of analytes in chromatography with ternary solvent mobile phases, *Chemical Analysis (Warsaw)*. 2005; 50: 981-989.

Khoubnasabjafari M, Jouyban A, Acree Jr WE. Mathematical representation of solubility of electrolytes in binary solvent mixtures using Jouyban-Acree model. *Chemical and Pharmaceutical Bulletin*. 2005 Dec; 53 (12): 1591-1593.

Jouyban A, Rashidi MR, Vaez-Gharamaleki Z, Matin AA, Djozan Dj. Mathematical representation of analyte's capacity factor in binary solvent mobile phases using the Jouyban-Acree model. *Pharmazie*. 2005 Nov; 60 (11): 827-829.

Jouyban A, Khoubnasabjafari M, Vaez-Gharamaleki Z, Fekari Z, Acree Jr WE. Calculation of the viscosity of binary liquids at various temperatures using Jouyban-Acree model. *Chemical and Pharmaceutical Bulletin*. 2005; 53: 519-523.

Jouyban A, Fathi Azarbayjani A, Khoubnasabjafari M, Acree Jr WE. Mathematical representation of the density of liquid mixtures at various temperatures using Jouyban-Acree model. *Indian Journal of Chemistry A*. 2005; 44: 1553-1560.

Jouyban A, Jalilzadeh H, Yeghanli S, Asadpour-Zeynali K. Prediction of the retention factor in micellar electrokinetic chromatography using computational descriptors and an artificial neural network. *Polish Journal of Chemistry*. 2005; 79: 1565-1574.

Jouyban A, Majidi MR, Altria KD, Clark BJ, Asadpour-Zeynali K. Modelling the electrophoretic mobility of analytes in binary solvent electrolyte systems in capillary electrophoresis using artificial neural network. *Die Pharmazie*. 2005; 60: 656-660.

Matin AA, Farajzadeh MA, Jouyban A. A simple spectrophotometric method for determination of sodium diclofenac in pharmaceutical formulations. *ILFarmaco*. 2005; 60: 855-858.

Jouyban A, Yeghanli S, Khoubnasabjafari M. Modeling the capacity factor of analytes in MEKC. *Iranian Journal of Pharmaceutical Sciences*. 2005; 1: 47-57.

Hanaee J, Jouyban A, Dastmalchi S, Adibkia K, Mirzazadeh A, Barzegar-Jalali M. Solubility prediction at various temperatures using a single point determination. *Daru*. 2005; 13: 37-45.

Jouyban A, Chew N, Hak-Kim Chan, Chan Hak-Kim, Sabour M, Acree Jr WE. A unified cosolvency model for calculating solute solubility in mixed solvents. *Chem Pharm Bull*. 2005; 53 (6): 634-637.

Majidi R, Jouyban A, Asadpour Zeynali K. Genetic algorithm based potential selection in simultaneous voltammetric determination of isoniazid and hydrazine by using partial least squares (PLS) and artificial neural networks (ANNs). *Electroanalysis*. 2005 May; 17 (10): 915-918.

Jouyban A, Khoubnasabjafari M, Acree Jr WE. Mathematical representation of solute solubility in binary mixture of Supercritical fluids by using Jouyban-Acree Model. *Die Pharmazie*. 2005; 60: 527-529.

Jouyban A, Khoubnasabjafari M, Chan HK. Modeling the Entrainer Effects on Solubility of Solutes in Supercritical carbon Dioxide. *Chemical & Pharmaceutical Bulletin*. 2005; 53 (3): 290-295.

Jouyban A, Majidi MR, Asadpour-Zeynali K. Modeling the electrophoretic mobility of beta-blockers in capillary electrophoresis using artificial neural networks. *IL Farmaco*. 2005; 60: 255-259.

Jouyban A, Soltani S, Chan HK, Acree WE Jr. Modeling acid dissociation constant of analytes in binary solvents at various temperatures using Jouyban-Acree model. *Thermochimica Acta*. 2005; 428: 119-123.

Jouyban A, Majidi MR, Jabbaribar F, Asadpour-Zeynali K. Solubility prediction of anthracene in binary and ternary solvents by artificial neural networks (ANNs). *Fluid Phase Equilibria*. 2004; 255: 133-139.

Jouyban A, Fathi A, Barzegar-Jalali M, Acree WE Jr. Correlation of surface tension of mixed solvents with solvent composition. *Die Pharmazie*. 2004; 59: 937-941.

Jouyban A, Fathi Azarbayjani A, Acree Jr, WE. Surface tension calculation of mixed solvents with respect to solvent composition and temperature by using Jouyban-Acree model. *Chemical and Pharmaceutical Bulletin*. 2004; 52: 1219-1222.

Jouyban A, Majidi MR, Jalilzadeh H, Asadpour-Zeynali K. Modeling drug solubility in water-cosolvent mixtures using an artificial neural network (ANN). *IL Farmaco*. 2004; 59: 505-512.

Jouyban A, Soltanpour Sh, Chan HK. A simple relationship between dielectric constant of mixed solvents with solvent composition and temperature. *International Journal of Pharmaceutics*. 2004 Jan; 269: 353-360.

Jouyban A, Chan HK, Romero S, Khoubnasabjafari M, Bustamante P. Solubility prediction in water-ethanol mixtures based on excess free energy approach using minimum number of experimental data. *Die Pharmazie*. 2004; 59: 117-120.

Jouyban A, Khoubnasabjafari M, Yeghanli S, Grosse SC, Clark BJ. Electrophoretic behavior of alprenolol in mixed solvent electrolyte systems. *II Farmaco*. 2003; 58: 1039-1044.

Jouyban A, Chan HK, Clark BJ, Kennler E. Comparison of different algorithms to calculate electrophoretic mobility of analytes as a function of binary solvent composition. *Electrophoresis*, 2003; 24: 1596-1602.

Jouyban A, Grosse SC, Chan HK, Coleman MW, Clark BJ. Mathematical representation of electrophoretic mobility of basic drugs in ternary solvent buffers in capillary zone electrophoresis. *Journal of Chromatography A*. 2003; 994: 191-198.

Jouyban A, Acree WE Jr. Comments concerning "Solubility of anthracene in two binary solvents containing toluene". *Fluid Phase Equilibria*. 2003; 209: 155-159.

Jouyban A, Jabbaribar F, Chan HK. An improved empirical model to calculate solute solubility in supercritical carbon dioxide. *Die Pharmazie*. 2003; 58: 396-398.

Jouyban A, Yousefi BH. A quantitative structure property relationship study of electrophoretic mobility of analytes in capillary zone electrophoresis. *Computational Biology and Chemistry*. 2003; 27: 297-303.

Jouyban A, Chan HK, Khoubnasabjafari M, Clark BJ. Calculation of electrophoretic mobility in ternary solvent electrolyte systems. *Journal of Pharmaceutical and Biomedical Analysis*, 2003; 32: 297-303.

Jouyban A, Clark BJ. Describing solubility of polymorphs in mixed solvents by CNIBS/R-K equation. *Die Pharmazie*, 2003; 57: 861-862.

Jouyban A, Khoubnasabjafari M, Chan HK, Altria KD, Clark BJ. Predicting electrophoretic mobility of beta-blockers in water-methanol mixed electrolyte system. *Chromatographia*, 2003; 57: 191-196.

Jouyban A, Chan HK, Clark BJ, Acree WE Jr. Mathematical representation of apparent dissociation constants in aqueous-organic solvent mixtures. *International Journal of Pharmaceutics*, 2002; 246: 135-142.

Jouyban A, Grosse SC, Coleman MW, Chan HK, Kennler E, Clark BJ. Calculation of electrophoretic mobility in ternary solvent buffers in capillary zone electrophoresis using a mixture response surface method. *Analyst*, 2002; 127: 1188-1192.

Jouyban A, Chan H-K, Barzegar-Jalali M, Acree Jr WE. A model to represent solvent effects on the chemical stability of solutes in mixed solvent systems. *International Journal of Pharmaceutics*, 2002; 243: 167-172.

Jouyban A, Chan HK, Foster NR. Mathematical representation of solute solubility in supercritical carbon dioxide using empirical expressions. *Journal of Supercritical Fluids*, 2002; 24: 19-35.

Jouyban A, Romero S, Chan HK, Clark BJ, Bustamante P. A cosolvency model to predict solubility of drugs at several temperatures from a limited number of solubility measurements, *Chemical and Pharmaceutical Bulletin*, 2002; 50: 594-599.

Jouyban A, Rehman M, Shekunov BY, Chan HK, Clark BJ, York P. Solubility prediction in supercritical carbon dioxide using minimum number of experimental data. *Journal of Pharmaceutical Sciences*, 2002; 91: 1287-1295.

- Jouyban A, Ye J, Clark BJ. Non-aqueous capillary electrophoretic analysis of hexetidine in a commercial liquid formulation. *Die Pharmazie*, 2002; 57: 248-249.
- Jouyban A, Khoubnasabjafari M, Chan HK, Clark BJ, Acree WE Jr. Solubility prediction of anthracene in mixed solvents using a minimum number of experimental data. *Chemical and Pharmaceutical Bulletin*, 2002; 50: 21-25.
- Jouyban A, Chan HK, Clark BJ, Kennedler E. Mathematical representation of electrophoretic mobility in mixed aqueous-methanolic buffers in capillary zone electrophoresis. *Journal of Microcolumn Separation*, 2001; 13: 346-350.
- Jouyban A, Batish A, Rumbelow SJ, Clark BJ. Calculation of electrophoretic mobility of amines in methanol-aqueous electrolyte systems. *Analyst*, 2001; 126: 1958-1962.
- Jouyban-Gharamaleki A, Dastmalchi S, Chan HK, Hanaee J, Javanmard A, Barzegar-Jalali M. Solubility prediction for furosemide in water-cosolvent mixtures using the minimum number of experiments. *Drug Development and Industrial Pharmacy*, 2001; 27: 577-583.
- Jouyban-Gharamaleki A, York P, Hanna M, Clark BJ. Solubility prediction of salmeterol xinafoate in water-dioxane mixtures. *International Journal of Pharmaceutics*, 2001; 216: 33-41.
- Jouyban-Gharamaleki A, Clark BJ, Acree WE Jr. Models to predict solubility in ternary solvents based on sub-binary experimental data. *Chemical & Pharmaceutical Bulletin*, 2000; 48: 1866-1871.
- Jouyban-Gharamaleki A, Clark BJ, Acree WE Jr. Prediction of drug solubility in ternary solvent mixture. *Drug Development and Industrial Pharmacy*, 2000; 26: 971-973.
- Jouyban-Gharamaleki A, Romero S, Bustamante P, Clark BJ. Multiple solubility maxima of oxolinic acid in mixed solvents and a new extension of Hildebrand solubility approach. *Chemical & Pharmaceutical Bulletin*, 2000; 48: 175-178.
- Jouyban-Gharamaleki A, Khaledi MG, Clark BJ. Calculation of electrophoretic mobilities in water-organic modifier mixtures. *Journal of Chromatography A*, 2000; 868: 277-284.
- Jouyban-Gharamaleki A, Acree WE Jr, Clark BJ. Comments on "Margules equations applied to PAH solubilities in alcohol-water mixtures". *Environmental Science and Technology*, 1999; 33: 1953-1954.
- Jouyban-Gharamaleki A, Acree WE Jr. Comment concerning: solubility prediction of caffeine in aqueous N,N-dimethylformamide mixtures using the extended Hildebrand solubility approach. *International Journal of Pharmaceutics*, 1999; 177: 127-128.
- Jouyban-Gharamaleki A, Valae L, Barzegar-Jalali M, Clark BJ, Acree WE Jr. Comparison of various cosolvency models for calculating solute solubility in water-cosolvent mixtures. *International Journal of Pharmaceutics*, 1999; 177: 93-101.
- Jouyban-Gharamaleki A, Acree WE Jr. Comparison of models for describing multiple peaks in solubility profiles. *International Journal of Pharmaceutics*, 1998; 167: 177-182.
- Jouyban-Gharamaleki A, Barzegar-Jalali M, Acree WE Jr. Solubility correlation of structurally related drugs in binary solvent mixtures. *International Journal of Pharmaceutics*, 1998; 166: 205-209.
- Jouyban-Gharamaleki A. The modified Wilson model and predicting drug solubility in water cosolvent mixtures. *Chemical & Pharmaceutical Bulletin*, 1998; 46: 1058-1061.
- Jouyban-Gharamaleki A, Hanaee JA. Novel method for improvement of predictability of the CNIBS/R-K equation. *International Journal of Pharmaceutics*, 1997; 154: 245-247.
- Barzegar-Jalali M, Jouyban-Gharamaleki A. A general model from theoretical cosolvency models. *International Journal of Pharmaceutics*, 1997; 152: 247-250.
- Jouyban-Gharamaleki A. Chameleonic effect and some models for predicting drug solubility in solvent mixtures. *Chemical & Pharmaceutical Bulletin*, 1997; 45: 1383-1384.
- Jouyban-Gharamaleki A, Barzegar-Jalali M. Modelling of the chameleonic effect in solubility using statistical techniques. *Pharmaceutical Sciences*. 1996; 2: 559-560.
- Barzegar-Jalali M, Jouyban-Gharamaleki A, Hanaee J, Chokhachizadeh-Moghaddam MH. Comparison of double log-log, mixture response-surface and combined NIBS/Redlich-Kister solubility models. *International Journal of Pharmaceutics*. 1996; 144: 123-126.
- Barzegar-Jalali M, Jouyban-Gharamaleki A. Models for calculating solubility in binary solvent systems. *International Journal of Pharmaceutics*. 1996; 140: 237-246.

Iranian Journals:

- Jouyban A, Rashidi MR, Vaez-Gharamaleki Z, Matin AA, Djozan Dj. Retention of some anti-epileptic drugs in binary solvent mobile phases in RPLC. *Tabriz Pharmaceutical Sciences*. 2005; Spring: 31-38.
- Jouyban A, Barzegar-Jalali M, Nokhodchi A, Jabbaribar F, Hanaee J. Calculation of drug solubility in hydro-alcoholic mixtures using mobile order theory. *Tabriz Pharmaceutical Sciences*. 2004; 1: 107-116.

Barzegar M, Rashidi MR, Jafari Rouhi AH, Jouyban A, Jabbarbar F. Midazolam infusion in treatment of pediatric refractory status epilepticus. *Tabriz Pharmaceutical Sciences*. 2004; 1: 71-78.

Jouyban, A, Majidi MR, Jabbarbar F, Asadpour-Zeynali K. Modeling drug solubility in water-cosolvent mixtures using an artificial neural network (ANN). *Tabriz Pharmaceutical Sciences*. 2004; 1: 47-60.

Jouyban A, Chan HK, Khoubnasabjafari M. Application of the phenomenological model to electrophoretic mobility in mixed solvent electrolyte systems in capillary zone electrophoresis. *Iranian Journal of Pharmaceutical Research*. 2004; 3: 23-27.

Jouyban A, Clark BJ. Mathematical representation of electrophoretic mobility of propranolol in a binary solvent at various temperatures in capillary zone electrophoresis. *Tabriz Pharmaceutical Sciences*. 2003; 11-20.

Jouyban A, Chan HK, Khoubnasabjafari M, Clark BJ. Mathematical representation of electrophoretic mobility in ternary solvent electrolyte systems. *Daru*, 2002; 10: 92-97.

Pipelzadeh M, Jouyban A, Khodadadi A, Naylor IL. A new mathematical model to investigate drug treatment on the overall process of wound healing. *Iranian Biomedical Journal*, 2001; 5: 61-67.

Jouyban A, Chan HK, Khoubnasabjafari M, Jouyban N, Clark BJ. Modelling the electrophoretic mobility of basic drugs in aqueous methanolic buffers in capillary electrophoresis. *Daru*, 2001; 9: 1-5.

Mahboob SA, Arefhosseini SR, Noori M, Ebrahimi-Mameghani M, Jouyban A, Mohtadinia J. Nutritional status of zinc, copper, and plasma Zn/Cu ratio in coronary heart disease. *Research Journal of Tabriz University of Medical Sciences*, 1999; 3: 7-16.

Jouyban-Gharamaleki A, Chan HK, Barzegar-Jalali M. Evaluating prediction ability of different models used for solute solubility calculation in binary solvent systems. *Daru*, 2000; 8: 8-14.

Jouyban-Gharamaleki A, Hasan-Zadeh D, Barzegar-Jalali M. Solubility prediction of structurally related drugs in water-cosolvent mixtures. *Pharmaceutical Sciences (Journal of Tabriz School of Pharmacy)*, 1997; 4: 20-28, (Persian).

Jouyban-Gharamaleki A. Calculation of solute solubility in binary solvents using modified Wilson model. *Pharmaceutical Sciences (Journal of Tabriz School of Pharmacy)*, 1997; 3: 213-221, (Persian).

Jouyban-Gharamaleki A, Sabour M, Chokhachizadeh-Moghaddam MH, Hanaee J, Barzegar-Jalali M. Solubility estimation of structurally related drugs in binary solvent mixtures. *Daru (Journal of Tehran School of Pharmacy)*, 1999; 7: 1-5, (English).

Barzegar-Jalali M, Jouyban-Gharamaleki A, Hanaee J, Chokhachizadeh-Moghaddam MH. A novel empirical model for calculating solubility in binary solvent systems. *Daru (Journal of Tehran School of Pharmacy)*, 1996; 6: 37-47, (Persian).

Blourtchian SM, Jouyban-Gharamaleki A, Nokhodchi A. Silicon isoesters of drugs. *Daru and Darman*, 1993; 10: 36-41, (Persian).

Books (Translated from English)

1. Jouyban-Gharamaleki A, and Samini M. *Pharmacology (Woodbury and Stick)*. Tabriz-Iran, 1990.

2. Djozan Dj, Hanaee J, Jouyban-Gharamaleki A, and Dastmalchi S. *High performance liquid chromatography (Lindsay S)*. Tabriz-Iran, 1996

Presentations:

International:

Jouyban A, Hanaee J, Rashidi MR, Esnaashari S, Acree Jr WE. Correlation of retention factor of analytes in quaternary solvent mobile phases using Jouyban-Acree model. *Malaysian Pharmaceutical Conference*. November 2005; Malaysia .

Jouyban A, Soltani S. Modelling the electrophoretic mobility in capillary electrophoresis using a linear solvation energy relationship. December 2003; Qatar.

Jouyban A. Prediction of electrophoretic mobility in capillary electrophoresis using topological indices. *Malaysian Pharmaceutical Conference*. October 2003; Malaysia.

Jouyban A. Mathematical representation of solute solubility in supercritical carbon dioxide with entrainer. *11th International Pharmaceutical Technology Symposium (IPTS 2002)*. September 2002; Istanbul-Turkey.

Jouyban A, Grosse SC, Coleman MW, Chan HK, Clark BJ, Kenndler E. Mathematical representation of electrophoretic mobility of beta-blockers in ternary solvent buffers in capillary zone electrophoresis using a mixture response surface method. *13th International Symposium on Capillary Electroseparation Techniques*. September 2002; Helsinki-Finland.

Nokhodchi A, Azarmir O, Hassan-Zadeh D, Ghafourian T, Jalali MB, Jouyban A. Prediction of paracetamol solubility using different cosolvency models in ternary solvent mixtures. 4th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology. April 2002; Florence-Italy.

Clark BJ, Jouyban A, Batish A, Rumbelow SJ. Prediction of electrophoretic mobility of amines in methanol-aqueous electrolyte systems. 24th International Symposium on High Performance Liquid Phase Separations and Related Techniques. June 2000; Seattle-USA.

Jouyban-Gharamaleki A, Harrison MW, Myers P, Clark BJ. Separation of drugs by electrochromatography with a C18 alumina packed capillary. 2nd International Meeting on Capillary Electrochromatography. August 1998; York-England.

Jouyban-Gharamaleki A, Hanaee J, Dastmalchi S, Javanmard A, Barzegar-Jalali M. Solubility of furosemide in water-cosolvent mixtures and various cosolvency models. 2nd World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology. May 1998; Paris-France.

Jouyban-Gharamaleki A, Sabour M, Abbaspoor J. Multiple solubility maxima and a new extension of Hildebrand solubility approach. 2nd World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology. May 1998; Paris-France.

Jouyban-Gharamaleki A. The chameleonic effect and a new extension of Hildebrand solubility approach. First Italian-Swiss Meeting on Medicinal Chemistry. September 1997; Turin-Italy.

Mahboob S, Arefhosseini SR, Noori M, Ebrahimi Mameghani M, Jouyban-Gharamaleki A, Mohtadinia J. Nutritional status of zinc, copper and serum Zn/Cu ratio in coronary heart disease. 16th International congress of nutrition. July 1997; Montreal-Canada.

Jouyban-Gharamaleki A, Barzegar-Jalali M. Predicting solubility in mixed solvents at various temperatures. AIMECS 97 (AFMC International Medicinal Chemistry Symposium). July 1997; Seoul-S Korea.

Barzegar-Jalali M, Jouyban-Gharamaleki A. A novel empirical model for predicting the solubility of structurally related drugs in binary solvent mixtures. 14th International Symposium on Medicinal Chemistry. Maastricht, September 1996; The Netherlands.

National:

Jouyban A, Vaez-Gharamaleki Z, Matin AA, Djozan Dj, Acree Jr WE. modelling the retention of analytes in RPHPLC with respect to solvent composition of the mobile phase using Jouyban-Acree model. First Seminar of Medicinal & Natural Products Chemistry. May 2005; Shiraz-Iran.

Jouyban A, Vaez-Gharamaleki Z, Soltani S, Dastmalchi S, Adadpour-Zeynali K. A genetic algorithm based MLR model to represent the electrophoretic mobility in capillary electrophoresis using topological indices.

Jouyban A, Fekari Z, Matin AA, Vaez Z, Acree WE Jr. Modeling the viscosity of binary solvents at various temperatures. 9th Iranian Seminar of Pharmaceutical Sciences. August 2004; Tabriz-Iran.

Jouyban A, Khoubnasabjafari M, Chan HK. Modeling the solute solubility in entrained supercritical fluids. 9th Iranian Seminar of Pharmaceutical Sciences. August 2004; Tabriz-Iran.

Jouyban A, Majidi MR, Asadpour-Zeynali K, Jalilzadeh H. A generalized artificial neural network for solubility prediction of anthracene in binary solvents. 9th Iranian Seminar of Pharmaceutical Sciences. August 2004; Tabriz-Iran.

Jouyban A, Majidi MR, Asadpour-Zeynali K. Modeling the electrophoretic mobility of beta-blockers ternary solvent buffers in capillary electrophoresis using artificial neural networks. 9th Iranian Seminar of Pharmaceutical Sciences. August 2004; Tabriz-Iran.

Jouyban A, Maleki R, Matin AA. Construction of a membrane sensor for selective determination of bisacodyl in pharmaceutical preparations. 9th Iranian Seminar of Pharmaceutical Sciences. August 2004; Tabriz-Iran.

Jouyban A, Fathi-Azarbaijani A, Soltani S, Vaez Z, Acree WE Jr. Modeling the density of binary solvents at various temperatures. 9th Iranian Seminar of Pharmaceutical Sciences. August 2004; Tabriz-Iran.

Hanaee J, Jouyban A, Dastmalchi S, Mirzazadeh A, Barzegar-Jalali M. Solubility prediction at various temperatures using a single determination. 9th Iranian Seminar of Pharmaceutical Sciences. August 2004; Tabriz-Iran.

Matin AA, Farajzadeh MA, Esnaashari S, Jouyban A. A Simple Spectrophotometric Method for Determination of Sodium Diclofenac in Pharmaceutical Formulations. 13th Iranian Seminar of Analytical Chemistry. April 2004; Mashhad-Iran.

Jouyban A, Fathi Azarbayjani A, Acree WE Jr. Modelling the Surface tension of mixed solvents at various temperatures. 13th Iranian Seminar of Analytical Chemistry. April 2004; Mashhad-Iran.

Jouyban A, Yeghanli S, Jabbaribar F. Modelling the retention behaviour of analytes in MEKC using chemical descriptors. 13th Iranian Seminar of Analytical Chemistry. April 2004; Mashhad-Iran.

Jouyban A, Soltani S, Matin AA, Acree Jr WE. Modelling acid dissociation constant of analytes in binary solvents at various temperatures. 13th Iranian Seminar of Analytical Chemistry. April 2004; Mashhad-Iran.

Jouyban A, Matin AA, Soltani S, Djozan Dj. Modelling the retention of analytes in RP-HPLC with respect to solvent composition. 13th Iranian Seminar of Analytical Chemistry. April 2004; Mashhad-Iran.

Majidi MR, Asad-pur-Zeynali, Jouyban A. Modeling and prediction of anthracene solubility in mixed solvents by artificial neural networks (ANNs). 12th Iranian Seminar of Analytical Chemistry, January 2003; Babolsar-Iran.

Jouyban A, Soltanpour Sh. A model to calculate dielectric constant of mixed solvents at different temperatures. 8th Iranian Conference of Pharmaceutical Sciences, September 2002; Shiraz-Iran.

Jouyban A. Optimization of solvent composition of the running buffer in capillary electrophoresis. 8th Iranian Conference of Pharmaceutical Sciences, September 2002; Shiraz-Iran.

Jouyban-Gharamaleki A, Clark BJ. Mathematical representation of skin permeability of drugs from binary mixtures. 14th Iranian Congress of Physiology and Pharmacology, May 1999; Tehran-Iran.

Jouyban-Gharamaleki A, Hanaee J, Hajizadeh-Shahsavari N, Azimipour-Alamdari, Barzegar-Jalali M. Formulation of acetaminophen oral solution and study on its stability. Fifth Iranian Conference of Pharmaceutical Sciences, August 1997; Tehran-Iran.

Jouyban-Gharamaleki A, Shirangi M, Barzegar-Jalali M. A novel application of the excess free energy model for solubility prediction of structurally related drugs in water-cosolvent mixtures. Fifth Iranian Conference of Pharmaceutical Sciences, August 1997; Tehran-Iran.

Barzegar-Jalali M, Dastmalchi S, Jouyban-Gharamaleki A, Khosravi A, Yousefi K. Formulation and physicochemical stability of ranitidine syrup. Fifth Iranian Conference of Pharmaceutical Sciences, August 1997; Tehran-Iran.

Barzegar-Jalali M, Jouyban-Gharamaleki A, Hanaee J, Kalantarian SM, Ghamari-Khamneh S. Formulation and physicochemical stability of acetaminophen suspension. Fifth Iranian Conference of Pharmaceutical Sciences, August 1997; Tehran-Iran.

Jouyban-Gharamaleki A, Barzegar-Jalali M. Comparison of accuracy and predictability of various cosolvency equations. Fifth Iranian Conference of Pharmaceutical Sciences, August 1997; Tehran-Iran.

Milani S, Jouyban-Gharamaleki A, Pourabdolahi P, Ghaemmaghami J. Anthropometric measurements of new born infants in Tabriz, Oromieh and Zanjan. 2nd Iranian Congress of Nutrition, November 1992; Tabriz-Iran.

Blourtchian SM, Jouyban-Gharamaleki A. Medicinal organosilicon compounds. 4th Iranian Pharmaceutical Congress, October 1992; Tabriz-Iran.

Jouyban-Gharamaleki A, Mahboob S. Zinc, copper and pregnancy. 10th Iranian Congress of Physiology and Pharmacology, December 1991; Ahwaz-Iran.

Tabatabaei Sh, Jouyban-Gharamaleki A, Nokhodchi A. New formulation of nystatin oral drop. 2nd Iranian Seminar of Industrial Pharmacy, September 1991; Mashhad-Iran.

Mahboob S, Sohrabpouri H, Jouyban-Gharamaleki A. Serum copper, zinc and copper/zinc ration in contraceptive users. 3rd Iranian Pharmaceutical Congress, March 1991; Ahwaz-Iran.

Jouyban-Gharamaleki A, Mahboob S, Pourabdolahi P, Milani S. Assessment of some intrauterine growth indices. 3rd Iranian Pharmaceutical Congress, March 1991; Ahwaz-Iran.