# DR. RONG FAN

# DONNAN AND ROBERT ROBINSON LABORATORY, DEPARTMENT OF CHEMISTRY, THE UNIVERSITY OF LIVERPOOL, CROWN STREET, LIVERPOOL L69 7ZD, UNITED KINGDOM PHONE 44-151-794 3559 • E-MAIL <u>rongfan@liverpool.ac.uk</u>

# EDUCATION

Sept., 1996 ~ Nov., 2001	Department of Chemical Engineering at <b>Zhejiang University</b> , Hangzhou, P. R. China
Major	Chemical Engineering
Academic Degree	Doctor of Philosophy
Thesis Project	<b>Study on the Kinetics and Reaction Engineering Problem of Syndiotactic</b> <b>Polymerization of Styrene with Homogeneous Metallocene Catalysts</b> Research Advisor: Professor Bo-Geng Li Funded by National Natural Science Foundation of China and SINOPEC
GPA	3.52(overall), for 4.0 grading system
Sept., 1989 ~ July, 1993	Department of Chemical Engineering, Suchow University, P. R. China
Major	Chemical Engineering
Academic Degree	Bachelor of Science
Thesis Project	<b>Fundamental Studies on devolatilization of SMA Resin</b> Research Advisor: Professor Qingming Pan Funded by SINOPEC GPA: 3.70(overall), for 4.00 Grading System
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#### WORK EXPERIENCES

Postdoctoral Fellowship at Department of Chemistry, <b>The University of Liverpool</b> , UK Research Assistant at Department of Chemical Engineering, <b>Zhejiang University</b> , P. R. China Teaching Assistant at Department of Chemical Engineering, <b>Suchow University</b> , P.R. China	2002 ~ present 1996 ~ 2001 1993 ~ 1996
Projects Conducted:	
Synthesis of Low Cost Surfactant Used in Supercritical Carbon Dioxide	2002 ~ present
• Studies on Reaction Engineering of Syndiotactic Polymerization of Styrene with Homogeneous Metallocene Catalysts	1997 ~ 2001
Synthesis and Supporting of Homogeneous Metallocene	1996
Separation of Ethanol/Water Mixture by Pervaporation	1996
• Synthesis and Characterization of Super Adsorption Resin by Inverse Suspension Polymerization	1994 ~ 1995
Microwave Initiated Polymerization of Acrylic Acid and Acrylate	1993 ~ 1994
Fundamental Studies on devolatilization of SMA Resin	1993

#### TEACHING EXPERIENCES

1996 ~ present	Research Assistant for an Independent Research Program for undergraduate Students,
	Zhejiang University
1993 ~ 1996	Instructor of "Chemical Reaction Engineering" for Undergraduate Students, Suchow
	University
1993 ~ 1996	Instructor of "Fine Chemical Engineering Experiment" for Undergraduate Students,
	Suchow University
1995	Instructor of "Organic Chemistry Experiment" for Undergraduate Students, Suchow
	University

#### AWARDS RECEIVED

First-Class DongGang Scholarship for Doctoral Students, 2000;

ZhuangShi Scholarship, 1999;

Excellent Graduate Student, 1998, 1999;

First-Class Guanghua Scholarship, 1998;

"Zhejiang University & Xianju" Excellent graduate Student Scholarship, 1997;

Outstanding Undergraduate Student Scholarship of Suchow University, 1993;

Excellent Student Pacemaker of Suchow University, 1992;

Excellent Student, 1990, 1991;

First-Class People's Scholarship, 1990, 1991;

Zhujingwen Scholarship, 1990, 1991, 1992, 1993;

#### PUBLICATIONS

**Conference Papers:** 

- <u>Rong Fan</u>, Kun Cao, Baofang Li and Bo-Geng Li, "Bulk Syndiotactic Polymerization of Styrene with Cp\*TiCl<sub>3</sub>/ MAO/Al(i-Bu)<sub>3</sub> Metallocene Catalyst ----- Particle Morphology and Nucleation Mechanism", The 3<sup>rd</sup> Joint China/USA Chemical Engineering Conference, 2000.8, Beijing, 10-074
- 2. <u>Rong Fan</u>, Wei Liu, Kun Cao, Lianfang Feng, et al., "*Preparation and Mechanism Studies on Powdery Syndiotactic Polystyene*", Tenth National Symposium on Chemical Engineering, 2000.5, Zhenzhou
- Bo-Geng Li, <u>Rong Fan</u>, Kun Cao, Baofang Li, "Bulk Precipitation Polymerization of Styrene with Cp\*TiCl<sub>3</sub>/MAO/Al(i-Bu)<sub>3</sub> Metallocene Catalyst ----- Nucleation Mechanism and Particle Morphology", China-Germany Symposium on Organometallic Catalysts and Olefin Polymerization, Hangzhou, 2000.10, 43
- 4. Wei Liu, <u>Rong Fan</u>, Kun Cao, Bo-Geng Li, et al., "*Kinetics and Polymer Morphology of Syndiotactic Bulk Polymerization of Styrene*", Symposium of Polymerization and Polymer Reaction Engineering with Metallocene Catalyst, Hangzhou, 1998.9, 55

Journal Papers and Books:

- 1. <u>Rong Fan</u>, Wei Liu, Bo-Geng Li and Baofang Li, "Advances in Supported Metallocene Catalysts for Olefin Polymerization", Polymeric Materials Science and Engineering(Chinese), 1999, 15(6), 1
- 2. <u>Rong Fan</u>, Bo-geng Li, Wei Liu, et al, "Agitation Effect on the Preparation of Syndiotactic Polystyrene with Homogeneous Metallocene Catalyst", J. Chem. Eng. of Chinese Univ.(Chinese), 2001, 15(5), 429

- 3. <u>Rong Fan</u>, Kun Cao, Baofang Li, Hong Fan, Bo-Geng Li, "*Morphology and Crystallinity of Nascent sPS in Bulk Polymerization with Homogeneous Metallocene Catalyst*", European Polymer Journal, 2001, 37(11), 2335
- 4. <u>Rong Fan</u>, Bo-Geng Li, Kun Cao, et al., "*Full-range kinetic study of bulk syndiotactic polymerization of styrene with homogeneous metallocene catalyst*", Accepted by J. Appl. Polym. Sci., 2001
- 5. Bo-Geng Li, <u>Rong Fan</u>, "Synthesis of Powdery Syndiotactic Polystyrene with Homogeneous Metallocene Catalysts ----- Kinetics and Morphologies", Organometallic Catalysts and Olefin Polymerization, edited by Junquan Sun, Hangzhou, 2000
- 6. Wei Liu, Bo-Geng Li, <u>Rong Fan</u>, Kun Cao and Zuren Pan, et al.,"*Study on Syndiotactic Polymerization of Styrene with Metallocene*", Chemical Reaction Engineering and Technology(Chinese), 1999(3), 221
- <u>Rong Fan</u>, Xiulin Zhu, Jianmei Lu, Mei Gu, "Studies on Inverse Suspension Polymerization of Sodium Acrylate and Water Adsorption Properties of the Obtained Polymers", Polymeric Materials Science and Engineering(Chinese), 1995, 11(6), 25
- 8. Keda Zhang, Ke Song, <u>Rong Fan</u>, "*Separation of Ethanol/Water Mixture by Pervaporation through the Blend Membrane of Sodium Alginate with PVA*", Polymeric Materials Science and Engineering(Chinese), 1998, 14(1), 52
- 9. Keda Zhang, Rong Fan, "Preparation of Benzil by Oxidation with Air", Chinese Chemical Letters, 1996, 7(1), 7
- 10. Mei Gu, Jianmei Lu, Xiulin Zhu and Rong Fan, "Polymerization of Acrylamide by Microwave", Polymeric Materials Science and Engineering(Chinese), 1997, 13(5), 2
- 11. <u>Rong Fan</u>, Bo-Geng Li, "Synthesis of Syndiotactic Polystyrene(sPS) with Homogeneous Half-Titanocene ----- Molecular Weight and Molecular Weight", Submitted
- 12. <u>Rong Fan</u>, Bo-Geng Li, "*Mechanism of Gelation and Granulation of Nascent Syndiotactic Polystyrene during Bulk Polymerization*", Submitted
- 13. <u>Rong Fan</u>, Bo-Geng Li, " *Crystallization during Bulk Syndiotactic Polymerization of Styrene with Homogeneous Half-Titanocene ----- Nucleation Mechanism and Crystallization*", In preparation
- 14. <u>Rong Fan</u>, Bo-Geng Li, " *Effects of TIBA on the kinetics of Syndiotactic Polymerization of Styrene with Cp\*TiX<sub>3</sub>/MAO catalyst*", In preparation

## **RESEARCH INTERESTS**

Synthesis of Functional Macromolecules; Supercritical Polymerization; Kinetic Modelling and Simulations on Olefin Polymerization Process; Design and Scaling-up of Polymerization Reactor ; Nascent Polymer Morphology

## COMPUTER EXPERIENCE

Good command of operating the following software:

- Programming Languages: C/C++, Basic;
- Software Packages: Matlab, Origin, AutoCAD, Microsoft Office series, Visio, etc.;
- Operating Systems: Windows NT Workstation, Windows 95(/98), Win31, DOS.