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Dr Tan Bien

Personal Information Marital status: Married
Gender: Male

Nationality: ChineseDate of Birth: 13/07/1971Place of Birth: Enshi, China

Professional experience

2001-Present Liverpool Department of Chemistry, The University of Liverpool, UK

Senior Research Assistant

- Emulsion polymerization
- Synthesis of smart polymer nanospheres for targeted delivery

1999 - 2001 National Key Laboratory of Advanced Materials, Beijing Institute of Aeronautical Materials Beijing, China

Postdoctoral Fellow

- Polymer matrix composites
- High-temperature polyimide matrix composites
- Mechanism of thermal plastic toughen epoxy resin matrix composites
- Core-shell emulsion latex toughen epoxy resin matrix composites

Education

1996 - 1999 College of Material, South China University of Technology Guangzhou, China

Aerospace Institute of Materials and Processing, China Launch Vehicle Academy of Technology Beijing, China PhD

- Polymer material science and engineering
- Addition type silicone rubber
- Effects of space environment (atomic oxygen, UV, electromagnetism rays, high vacuum) on polymer material
- Silicone thermal control coatings being applied in satellite

1993 - 1996 Chemistry Department, Hubei University Wuhan, China **Master**

- Polymer material science and engineering
- Emulsion polymerization
- Miniemulsion polymerization
- Functional emulsion polymerization
- Concentrated emulsion polymerization

1989 - 1993 Chemistry Department, Hubei University Wuhan, China **Bachelor**

- Organic Chemistry
- Organic synthesis

Bachelor paper

Degree Dissertations

Synthesis of Intermediate for a Novel Anti-cancer Medicine

Mater thesis

Effects of Polymerization methods on Functional Emulsion Property

Doctor dissertation

 Behaviours of Space Grade Addition Silicone Rubber in the Space Simulation Environment and Its Application on Thermal Control Coatings

Science Research

Project supported by National Science Foundation of China

Studies on Nucleation of Miniemulsion Polymerization with Redox Initiators

Project supported by Natural Science Foundation of Hubei Province

• Effects of Polymerization methods on Functional Emulsion Property

Project supported by "Ninth Five-Year-Plan" of National Defence Study Foundation

High Performance Thermal Control Coatings

Project supported by China Postdoctoral Science Foundation

Study on Reaction Mechanism of TMS-1 Polyimide Resin and Its Composites

Awards received

Doctor degree dissertation has been chosen to be a candidate of the top 100 doctor's dissertation in china

Computer

FORTRAN, Basic were studied in the university, Pascal, Turbo C were also learned by myself. I can edit programs with them. MS Office and Windows were mastered, Information in English and Chinese are both easily treated to satisfy the requirements.

Characteristic

I like to study the mystery of the world, have broad mind and indomitable will, like to make friends, good at table tennis, volley ball and so on. For I believe tomorrow will be better, I can work under pressure.

Publications

2002

[41] Behaviors of Addition Type Silicone Rubber in Space Atomic Oxygen Environment Simulated, **Tan Bien**, Zhang Lianzheng, Zeng Yibing, He Fei, *Acta Polymeric Sinca*, Submitted

[40] Preparation of addition type silicone rubber and its property, **Tan Bien**, Zhang Lianzheng), Hao Zhigang, Zeng Yibing, Pan Huiming, *Polymer Material Science and Engineering*, Accepted

- [39] High-temperature Polyimide Composites), **Tan Bien**, Yi Xiaosu, *Polymer Material Science and Engineering*, Accepted
- [38] Behaviors of Addition Type Silicone Rubber in Space Atomic Oxygen Environment Simulated, **Tan Bien**, Zeng Yibing), Zhang Lianzheng, *Journal of Materials Engineering*, Accepted
- [37] Synthesis of UV Curable Modified Polysiloxane and Its Surface Property, **Tan Bien,** Pan Huiming, Chen Xiaohui, *Journal of Applied Polymer Science*, In press

2001

- [36]Interphase and its formational mechanism of GF/PVC composite prepared by aqueous suspension impregnation) , Yi Changhai, **Tan Bien**, Zeng Hanmin, *Journal of Aeronautical Materials* , 2001
- [35]Preparation of Stable Miniemulsion, **Tan Bien**, Zhang Hongtao, Hu Fang, Li Jianzong, *Polymer Material Science and Engineering*, 2001(2): 90~93
- [34] Study on Addition Type Silicone Thermal Control Coatings), **Tan Bien**, Zeng Yibing, Zhang Lianzheng, *Chinese Journal of Space Technology*, 2001(3)
- [33]Behaviors of Addition Type Silicone Thermal Control Coatings in Space Environment Simulated, **Tan Bien**, Zeng Yibing), Zhang Lianzheng, *Chinese Journal of Space Technology*, 2001(4)
- [32] Preparation of Platinum Catalyst for Addition Silicone and Their Catalysis Activity, **Tan Bien**, Zhao Hua, Pan Huiming, *Chinese Adhesives*, 2001(4)
- [31]Low Molecule Weight Material Removal from Silicone Rubber, **Tan Bien**, Zeng Yibing, Zhang Lianzheng, *Aerospace Materials and Technology*, 2001(3)
- [30] Study on Vulcanization Process of Silicone Addition Rubber, **Tan Bien,** Zhu Bo, Zhang Lianzheng, Hao Zhigang, *China Synthetic Rubber Industry*, 2001, 24(2): 103~104
- [29] High Temperature Polyimide Composites and Its Application in Aeronautical Engine, **Tan Bien**, Yi Xiaosu, *Journal of Aeronautical Materials*), 2001(3)
- [28] Mechanical Properties of Addition Type Silicone Rubber in Space Electromagnetic Environment Simulated, **Tan Bien**, ,Zhu Bo, Zeng Yibing, Zhang Lianzheng, Pan Huiming, *Special Purpose Rubber Products*, 2001(3)
- [27] Behaviors of addition type silicone rubber in space ultraviolet environment simulated, **Tan Bien**, Yin Zhaohui, Pan Huiming, Zhang Lianzheng, Zeng Yibing, *Journal of Functional polymer*, 2001(4)

2000

- [26] Study on Kinetics and Nucleation Mechanism of St-BA Miniemulsion Polymerization with Redox Initiators, **Tan Bien,** Zhang Hongtao, Hu Fang, Li Jianzong, *Acta Polymeric Sinca*, 2000 (2): 184~189 (**SCI**)
- [25] Studies on Particle Size Distribution and Nucleation Mechanism of St/BA Miniemulsion Polymerization with Redox Initiators, **Tan Bien**, Zhang Hongtao, Hu Fang, Li Jianzong, *Chemical Journal of Chinese Universities*, 2000 (1): 156~159 (**SCI**)

- [24] Effects of Polymerization Condition on Particle Size Distribution in St-BA-MAA Emulsion Polymerization Process , **Tan Bien** , Hu Fang , Zhang Hongtao , Li Jianzong , *Chemical Research in Chinese Universities* , 2000 (1) (SCD)
- [23] Study on Morphology of St-BA-MAA Composite Poly mer Latex, **Tan Bien,** Zhang Hongtao, Hu Fang, Li Jianzong, *Polymer Material Science and Engineering*, 2000 (3)
- [22]Study on Property of St-BA-MAA Composite Latex , Zhang Hongtao, Hu Fang), **Tan Bien,** Li Jianzong, *Polymer Material Science and Engineering*, 2000 (3)
- [21]Preparation of stable St/BA miniemulsion, **Tan Bien,** Zhang Lianzheng, Zhang Hongtao, Hu Fang, Li Jianzong, *Aerospace Materials and Technology*, 2000 (3)
- [20] Study on Properties of Miniemulsion Latex, **Tan Bien**, Hu Fang, Zhang Hongtao, Li Jianzong, *Chemistry and Adhesion*, 2000 (2): 51~54
- [19] Study on Vulcanization Process of Silicone Addition Rubber, **Tan Bien,** Zhang Lianzheng, Hao Zhigang, Pan Huiming, *Special Purpose Rubber Products*, 2000(4): 9~11
- [18] Study on Vulcanization Process of Silicone Addition Rubber, **Tan Bien,** Zhang Lianzheng, Hao Zhigang, Pan Huiming, 2000' National Postdoctoral Symposium, Science Press: 342~345

1999

- [17] Advances in Addition Silicone Rubber, **Tan Bien**, Zhang Lianzheng, Zhao Feiming, Pan Huiming, *China Synthetic Rubber Industry*, 1999 (2): 73~75
- [16] Platinum Catalyst Used in Silicone Industry, **Tan Bien,** Zhang Lianzheng, Zhao Feiming, Pan Huiming, *Aerospace Materials and Technology*), 1999 (3): 12~17
- [15] Synthesis of Methyl MQ and MTQ Silicone Resin and Its Propertie, Pan Huiming, **Tan Bien**, Huang Sujuan, Zhang Lianzheng, *Chinese Adhesives*, 1999 (6): 1~4
- [14] Miniemulsion Copolymerization of Styrene and Butyl Acrylate Initiated by Redox System at Lower Temperature: Reaction Kinetics and Evolution of Particle -Size Distribution, Huang He, Hu Fang, Zhang Hongtao, **Tan Bien**, Li Jianzong, Cheng shiyuan, *Journal of Applied Polymer Science*, 1999, 73 (3): 315~322 (SCI, EI)

1998

- [13] Preparation and Polymerization of Super Concentrated Emulsion of Styrene-Methacrylic Acid, **Tan Bien**, Zhang Hongtao, Lin Liulan, Hu Fang , Li Jianzong, *Chinese Journal of Applied Chemistry*, 1998 (5): $53\sim55$
- [12]Kinetics and Nucleation of Emulsion Copolymerization of Butyl Acrylate-Styrene-Methacrylic Acid with Mixed Emulsifiers, Zhang Hongtao, Li Jianzong, **Tan Bien**, Hu Fang, *Polymer Material Science and Engineering*, 1998

- [11] The Effect of Polymerization Condition on Particle Size Distribution of St-BA-MAA Latex, Zhang Hongtao, **Tan Bien,** Hu Fang, Yi Zhaohui, Li Jianzong, *Journal of Hubei University Nature Science Edition*, 1998 (4): 369~372
- [10] Miniemulsion Copolymerization of Styrene and Butyl Acrylate Initiated by Redox System at Lower Temperature Preparation and Polymerization, Huang He, Zhang Hongtao, Li Jianzong, Cheng shiyuan, Hu Fang, **Tan Bien**, *Journal of Applied Polymer Science*, 1998,68: 2029~2039 (**SCI, EI**)
- [9] Advances in Addition Type Silicone Rubber in China, **Tan Bien,** Zhang Lianzheng, Zhao Feiming, Pan Huiming, 98' National Sypomposium on Silicone, Hangzhou, 1998.10: 101~105
- [8] Progress in Silicone Thermal Control Coatings, Zhao Feiming, **Tan Bien,** Zhang Lianzheng, Shi Suxing, Wang Hui, Zeng Yibing, 98' National Sypomposium on Silicone, 1998.10: 16~20

1996

- [7] Study on Morphology of St-BA-MAA Composite Polymer Latex, Zhang Hongtao, Li Jianzong, Chen Peizhi, **Tan Bien,** Hu Fang, *Journal of Hubei University*· *Nature Science Edition*, 1996 (3): 213~217
- [6] Miniemulsion Preparation and Their Stability, Li Jianzong, Zhang Hongtao, Hu Fang, **Tan Bien**, *Journal of Hubei University Nature Science Edition*, 1996 (1): 53~56
- [5] Effects of Polymerization Condition on Size Distribution of St-BA-MAA Latex, Zhang Hongtao, Li Jianzong, **Tan Bien**, Hu Fang, *1st Asian Symposium on Emulsion Polymerization and Functional Polymeric Microspheres*, Hangzhou, 1996.10: $74\sim75$
- [4] Evolution of the Particle Size Distribution in Miniemulsion Polymerization, Li Jianzong, Hu Fang, Zhang Hongtao, **Tan Bien**, *1st Asian Symposium on Emulsion Polymerization and Functional Polymeric Microspheres*, Hangzhou, 1996.10:76~77

1995

- [3] Preparation and Polymerization of Stable Concentrated Emulsion, Zhang Hongtao, Li Jianzong, **Tan Bien,** Hu Fang, *Polymer Emulsion Communication*, 1995 (2): 40~44
- [2] Preparation of Miniemulsion, Li Jianzong, Zhang Hongtao, Hu Fang, **Tan Bien,** 95' National Sypomposium on Polymer Science, Guangzhou, 1995. 10: 70~71
- [1] Latex Particle Size Distribution and Carboxyl group distribution of S-BA-MAA, Zhang Hongtao, Li Jianzong, **Tan Bien**, Hu Fang, 95' National Sypomposium on Polymer Science, Guangzhou, 1995.10: 1127~1128