

Dr. LIMING TANG

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EDUCATION

- 2007.6-present **Case Western Reserve University, OH, USA**
Postdoctoral Research Associate, Polymer
Advisor: Christoph Weder
- 2006.7-2007.6 **University of Connecticut, CT, USA**
Post-doctoral Fellow, Polymer
Advisor: Alex. Asandei
- 2006.2-2006.6 **University of Prince Edward Island, Charlottetown, Canada**
Post-doctoral Fellow, Chemistry
Advisor: Kevin Smith
- 2002.9-2006.1 **Changchun Institute of Applied Chemistry (CIAC), Chinese Academy of Science (CAS), Changchun, China**
Ph. D, Polymer and Organic Chemistry
Thesis: Study on transitional metal complexes with β -enaminoketonato ligands for olefin polymerization
- 1995.9-1998.7 **Beijing University of Chemical Technology, Beijing, China**
M.S., Polymer Chemistry
Thesis: Study on the crystallization of VDC/VC copolymer
- 1991.9-1995.7 **Shenyang Institute of Chemical Technology, Shenyang, China**
B.S., Polymer Chemistry

EXPERIENCE

Academic Experience

- 06/07-present Case Western Reserve University
Post-doctoral Research
Self-Assessing Photoluminescent polymers
- 07/06-06/07 University of Connecticut, USA
Post-doctoral Research
Study on ring-opening polymerization, living radical polymerization using

transition metal complexes as catalysts and synthesis of complex polymer architectures.

- 02/06-06/06 University of Prince Edward Island, Canada
Post-doctoral Research
Synthesis and reactivity of catalytic Cr(II) and Cr(III) complexes for carbon-carbon bond forming reactions
- 09/02-01/06 State Key Lab of Polymer Physics and Chemistry,
Changchun Institute of Applied Chemistry, CAS, China
Doctoral research
Synthesizing a series of bis(β -enaminoketonato) and bis(β -diketiminato) titanium/zirconium/vanadium/chromium complexes and investigating their effects on polymerization behavior. Under moderate condition, these complexes are efficient catalysts for ethylene, ethylene/cycloolefin, ethylene/ α -olefins and ethylene/diene.
Synthesis and ethylene polymerization of mononuclear and binuclear neutral nickel catalysts as well as radical polymerization and hyperbranch polymerization.
- 09/95-06/98 Beijing University of Chemical Technology, China
Master research
The manufacture process for VDC/VC polyvinylidene chloride film was simulated step by step to analyze the effects of processing parameters, including temperature, strain and time, on crystallization.

Industrial Experience

- 03/00-05/02 Assistant Engineer, Beijing Leminggen Corporation, Beijing, China
Synthesis of pharmaceutical intermediate
- 07/08-02/00 Assistant to manager, Beijing Building Materials Trade Tower, Beijing, China

Teaching Experience

- 09/96-06/97 Beijing University of Chemical Technology, Beijing, China
Teaching assistant
Conducted the experiment of polymer chemistry and polymer physical for the undergraduate students

- 03/97-06/98 Beijing University of Chemical Technology, Beijing, China
Student advisor for undergraduate research
Directed undergraduate research projects for the undergraduate students
- 02/05-12/05 Changchun Institute of Applied Chemistry, CAS, Changchun, Jilin, China
Student advisor
Conducted 40 weeks of research projects for one undergraduate student and one graduate student

PUBLICATIONS

Papers

- (1) **LM Tang**, YG Li, WP Ye and YS Li.
“Ethylene/propylene copolymerization with bis(β -enaminoketonato) titanium complexes”, *Journal of Polymer Science: Part A: Polymer Chemistry*. 2006, 44: 5846-5854.
- (2) **LM Tang**, YQ Duan and YS Li.
“Syntheses, structures and ethylene polymerization behavior of β -diketiminato titanium complexes”, *Journal of Organometallic Chemistry*. 2006, 691: 2023-2030.
- (3) **LM Tang**, T Hu, L Pan and YS Li.
“Ethylene/ α -olefin copolymerization with bis(β -enaminoketonato) titanium complexes activated with MMAO”, *Journal of Polymer Science: Part A: Polymer Chemistry*. 2005, 43: 6323-6330.
- (4) **LM Tang**, T Hu, YJ Bo, YS Li and NH Hu.
“Titanium complexes bearing two aromatic-substituted β -ketoiminato ligands: syntheses, structures, and olefin polymerization behavior”, *Journal of Organometallic Chemistry*. 2005, 690: 3125-3133.
- (5) **LM Tang**, YQ Duan and YS Li.
“Copolymerization of ethylene and cyclopentene with bis(β -enaminoketonato) titanium complexes”, *Journal of Polymer Science: Part A: Polymer Chemistry*. 2005, 43: 1681-1689.
- (6) CL Song, **LM Tang**, YG Li, XF Li, J Chen, YS Li.
“Preparation of linear α -olefins to high-molecular weight polyethylenes using cationic α -diimine nickel(II) complexes containing chloro-substituted ligands”, *Journal of Polymer Science: Part A: Polymer Chemistry*. 2006, 44: 1964-1974.
- (7) T Hu, **LM Tang**, XF Li, YS Li and NH Hu.
“Synthesis and ethylene polymerization activity of a novel, highly active single-component binuclear neutral nickel(II) catalyst”, *Organometallics*. 2005, 24: 2628-2634.

- (8) LY Zhang, S Ling, Q Wang, **LM Tang**
 “Study on the dynamic crystalline process of VDC/VC copolymers in their film extrusion”, *Journal of Beijing University of Chemical Technology (Natural Science)*. 1999, 26: 40-43.
- (9) **LM Tang**, JQ Wu, YQ Duan, L Pan, YG Li, YS Li.
 “Ethylene Polymerizations, and the Copolymerizations of Ethylene with Hexene or Norbornene with Highly Active Mono(β -enaminoketonato) Vanadium(III) Catalysts”. *Journal of Polymer Science: Part A: Polymer Chemistry*. (Submitted)
- (10) U Baisch, R Poli, **LM Tang**, J. L. Conway, K. M. Smith.
 “Controlled Radical Polymerization of Vinyl Acetate by use of Half-Sandwich Chromium Complexes”. *Angew. Chem.* (revised)

Patents

- (11) Yue-Sheng Li, **Liming Tang**, Yi-Qun Duan, Xue-Si Chen, Yan-Guo Li, Jing-Yu Liu, Gui-Bao Zhang
 “ β -Ketimine vanadium catalyst for alkene polymerization and its preparation and application”, *Faming Zhuanli Shenqing Gongkai Shuomingshu*, 2006, 33pp. CN 1850869 A 20061025 CAN 145:471999.
- (12) Yue-Sheng Li, **Liming Tang**, Yi-Qun Duan, Gui-Bao Zhang, Yan-Guo Li, Xue-Si Chen, Jing-Yu Liu
 “Preparation and application of β -dione monoimine vanadium catalyst for alkene polymerization”, *Faming Zhuanli Shenqing Gongkai Shuomingshu*, 2006, 47pp. CN 1850870 A 20061025 CAN 145:471998.
- (13) Yue-Sheng Li, Yi-Qun Duan, Yan-Guo Li, Gui-Bao Zhang, **Liming Tang**, Suo-Bo Zhang
 “Manufacture and application of alkene polymerization catalyst β -diketone imine vanadium complex containing trifluoromethyl group”, *Faming Zhuanli Shenqing Gongkai Shuomingshu*, 2006, 39pp. CN 1884310 A 20061027.

CONFERENCE PROCEEDINGS

- (1) A. D. Asandei, **LM Tang**, G Saha, M. Gilbert, T A. Hanna, LH Liu. “Comparison of (ArO)₂TiClX (X = Cl, Cp) complexes in the living ring opening polymerization of caprolactone”. 234th American Chemical Society National Meeting. Boston, MA. 2007.
- (2) A. D. Asandei, YH Chen, **LM Tang**, T A. Hanna, LH Liu. “Controlled styrene radical polymerization initiated by epoxide ring opening with dichlorotitanium phenoxides.” 233rd American Chemical Society National Meeting, Chicago, IL. 2007
- (3) K.M. Smith J.L. Conway, **LM Tang**, U Baisch, R Poli. “Organometallic Single Electron

Transfer Reactivity: Alkyl Halide Activation and Controlled Radical Polymerization with CpCr(Nacnac) Complexes.” 90th Canadian Chemistry Conference. Winnipeg, Canada. 2007.

- (4) **LM Tang**, YS Li. “Highly Active, Thermally Robust mono(β -ketoiminato) Vanadium(III) Catalysts for Olefin Polymerization.” 89th Canadian Chemistry Conference. Halifax, Canada. 2006.
- (5) **LM Tang**, YS Li. “Ethylene/propylene copolymerization with bis(β -enaminoketonato) titanium complexes” 2005 National polymer congress. Beijing, China. 2005.
- (6) **LM Tang**, YS Li. “Ethylene/ α -olefin copolymerization with bis(β -enaminoketonato) titanium complexes activated with MMAO.” 12th National catalyst congress. Beijing, China, 2004.
- (7) **LM Tang**, YS Li. “Copolymerization of ethylene and cyclopentene with bis(β -enaminoketonato) titanium complexes.” PC world polymer congress. Changchun, China, 2004.