

CV of Li Fang-Bai

Dr. F. B. Li, Professor in Soil Environmental Chemistry, has been a full-time staff in the Guangdong Institute of Eco-Environmental and Soil Sciences since 1996. He held the deputy director of the institute and the associate director of Guangdong Key Laboratory of Agricultural Environment Pollution Integrated Control since 2002. He had also been a Postdoctoral Fellowship in the Department of Civil & Structural Engineering of the Hong Kong



Polytechnic University in 2002-2004. His major research interests include the environmental application, mechanisms at molecular scale and management at regional scale of iron biogeochemical cycles, soil pollution control at regional scale and remediation in sites, and developing novel environmental materials and techniques. His works have resulted in the publication of over 100 articles in reputable journals and international conference proceedings. He is the editorial board member of Global Journal of Environmental Science & Technology.

1. Academic Qualifications:

- ✧ Ph. D, 1999.07 (Environmental Engineering), South China Technological University, Guangzhou, China
- ✧ M. Ph., 1996.07 (Environmental Soil Science), South China Agricultural University, Guangzhou, China
- ✧ B. Sc., 1990.07 (Soil Science), Chinese Agricultural University, Beijing, China.

2. Previous Academic Position held

- ✧ 2003.11-now, Professor, Guangdong Institute of Eco-Environmental and Soil Sciences
- ✧ 2002.08-2004.09, Postdoctoral Fellowship, Department of Civil & Structural Engineering, Hong Kong Polytechnic University
- ✧ 2001.09-2003.11, Associate Professor, Guangdong Institute of Eco-Environmental and Soil Sciences
- ✧ 1996.07-2001.08, Assistant Professor, Guangdong Institute of Eco-Environmental and Soil Sciences

3. Professional Affiliations

- ✧ Council Member of Soil Science Society of China
- ✧ Member of Soil Chemistry Committee and Soil Environment Committee, Soil Science Society of China
- ✧ Vice President of Soil Science Society of Guangdong Province
- ✧ Member of Academic Committee of Pollution Control and Remediation Center, Chinese Academic of Science
- ✧ Member of Journal Editorial Board for Global Journal of Environmental Science & Technology

4. Representative Research Grants and Projects as a Principal Investigator

- ✧ 2011.01-2015.12, “Soil Chemistry” (National Outstanding Youth Scientific Foundation)
- ✧ 2010.01-2012.12, “The dependence of the interactively interfacial reaction of reductive dechlorination for polychlorinated compounds with iron cycles on the weathering characteristics of red soils” (NSFC No. 40971149)
- ✧ 2008.01-2010.12, “Interfacial & Interactive Dechlorination Transformation of DDTs Driven by Iron-reducing Bacterium and Iron Oxides” (NSFC No. 40771105)
- ✧ 2007.01-2010.12, “Development of Arsenic Pollution Control Techniques for Soil Contamination Remediation in a Tungsten Mineral Area” (Chinese EPA and Guangdong EPA)
- ✧ 2006.01-2008.12, “The Abiotic Transformation of Polychlorinated Compounds at the Interface of Red Soils and Water” (NSFC No. 20577007)
- ✧ 2005.01-2009.12, “Development of Soil Polychlorinated Compounds Pollution Control Techniques in the South China” (Guangdong R&D)
- ✧ 2004.01-2006.12, “The Photochemical Degradation of Organic Pollutants in the Suspension of Iron oxides and Carboxylic Acids under UVA Illumination” (NSFC No. 20377011)
- ✧ 2003.01-2003.12, “Photocatalytic Degradation of Organic Pollutants Driven Modified TiO₂ Under UVA Illumination” (NSFC No. 20203007)

5. Honorary and Awards

- ✧ The New Century National Hundred Talent Project (2009)
- ✧ The 10th National Young Scientist Award - National Science and Technology Association (2007)
- ✧ The 9th Ding Ying Science and Technology Award - Guangdong Provincial Science and Technology Association (2007)
- ✧ The First Prize in the Medal of Science and Technology in Guangdong Province, “The soil environmental quality and safety of agricultural products in the Typical Area of Guangdong Province” - the People’s Government of Guangzhou Province (2009)

- ✧ The First Prize in the Medal of Science and Technology in Guangdong Province, “Fundamental Research Concerning the Environmental Technique of Photocatalytic Titanium Dioxide” - the People’s Government of Guangzhou Province (2005)
- ✧ The Second Prize in the Medal of Science and Technology in Guangdong Province, “Non-point Source Pollution and Control in Zhu Hai” - the People’s Government of Guangzhou Province (2003)

6. List of 20 representative publications

- (1) Wu C. Y.; *Li F. B.; Zhou S. G.; Zhuang L. (2010) Fe(III)-Enhanced Anaerobic Degradation of 2,4-Dichlorophenoxyacetic Acid by a Dissimilatory Fe(III)-Reducing Bacterium *Comamonas Koreensis* CY01. *FEMS Microbiology Ecology*. 71, 106-113.
- (2) Li F.B.*; Li X.M.; Zhou S.G.; Zhuang L.; Xu W.; Liu T.X. (2010) Reductive dechlorination of DDT in dissimilatory iron-reducing system of *Shewanella decolorationis* S12 and α -FeOOH. *Environmental Pollution*. 158, 1733-1740.
- (3) Feng C.H., Li F.B.*, Mai H.J., Li X.Z. (2010) Bio-Electro-Fenton Process Driven by Microbial Fuel Cell for Wastewater Treatment. *Environ. Sci. Technol.* 44, 1875-1880.
- (4) Liu C.P.; Luo C.L.; Gao Y.; Li F.B.*; Lin L.W.; Wu C.A.; Li X.D. (2010) Arsenic contamination and potential health risk implications at an abandoned Tungsten mine, southern China. *Environmental Pollution*. 158, 820-826.
- (5) Li F.B.*; Tao L.; Feng C.H.; Li X.Z.; Sun K.W.; Zhou S.G. (2009) Electrochemical Evidences for Promoted Interfacial Reactions: The Role of Fe(II) Adsorbed onto γ -Alumina and Titania in Reductive Transformation of 2-Nitrophenol. *Environ. Sci. Technol.* 43(10), 3656-3661.
- (6) Li X.M.; Zhou S.G.; Li F.B.*; Wu C.Y.; Zhuang L.; Xu W.; Liu L. (2009) Fe(III) oxide reduction and carbon tetrachloride dechlorination by a newly isolated *Klebsiella pneumoniae* strain L17. *Journal of Applied Microbiology*. 106, 130-139.
- (7) Liu L.; Li F.B.*; Feng CH.; Li XZ. (2009) Microbial fuel cell with an azo-dye-feeding cathode. *Appl Microbiol Biotechnol.* 85, 175-183.
- (8) Wang Y.; Wang L.S.; Li F.B.*; Liang J.B.; Li Y.T.; Dai J.; Loh T.C.; Ho Y.W. (2009) Effects of Oxytetracycline and Sulfachloropyridazine Residues on the Reductive Activity of *Shewanella decolorationis* S12. *Journal of Agricultural and Food Chemistry*. 57(13), 5878-5883.
- (9) Lan Q.; *Li F. B.; Liu, C. S.; Li X. Z. (2008) Heterogeneous Photodegradation of Pentachlorophenol with Maghemite and Oxalate under UV Illumination. *Environ. Sci. Technol.* 42, 7918–7923
- (10) Liu T. X.; Li X. Z.; Li F. B. (2008) AgNO₃-induced photocatalytic degradation of odorous methyl mercaptan in gaseous phase: mechanism of chemisorption and photocatalytic reaction.

Environ. Sci. Technol. 42(12); 4540-4545

- (11) X. Z. Li, **F. B. Li.** (2001) Study of Au/Au³⁺-TiO₂ Photo-catalysts Toward Visible Photo-Oxidation for Water and Wastewater Treatment. *Environ. Sci. & Technol.* 35, 2381-2387.
- (12) ***Li F. B.**; Wang X. G; Liu C. S.; Li Y. T.; Zeng F.; Liu L. (2008) Reductive Transformation of Pentachlorophenol on the Interface of Subtropical Soil Colloids and Water. *Geoderma.* 148, 70-78
- (13) ***Li F.B.**, Wang X. G, Li Y. T., Liu C. S., Zeng F., Zhang L. J., Hao M. D., Ruan H. D. (2008) Enhancement of the Reductive Transformation of Pentachlorophenol by Polycarboxylic Acids at the Interface of Iron Oxides-Water. *Journal of Colloid and Interface Sciences.* 321(2), 332-341.
- (14) Zhang H.H., ***Li F.B.**, Wu Z.F., Li D.Q., Xu, D.R., Yuan H.X. (2008) Baseline Concentrations and Spatial Distribution of Trace Metals in Surface Soils of Guangdong Province, China. *Journal of Environmental Quality.* 37, 1-9.
- (15) ***Li F.B.**, Li X. Z., Hou M. F., Cheah K. W., Choy W. C. H.. (2005) Enhanced photocatalytic activity of Ce³⁺-TiO₂ for 2-mercaptobenzothiazole degradation in aqueous suspension for odor control. *Applied Catalysis A: General*, 285, 181-189.
- (16) ***Li F.B.**, Li X. Z., Ao C. H., Hou M. F., Lee S. C. (2004) Photocatalytic Conversion of NO using TiO₂-NH₃ Catalysts in Ambient Air Environment. *Applied Catalysis B: Environmental*, 54, 275-283.
- (17) ***Li F.B.**, Li X.Z., Hou M.F. (2004) Photocatalytic degradation of 2-mercaptobenzothiazole in aqueous La³⁺-TiO₂ suspension for odor control, *Applied Catalysis B: Environmental*, 48, 185-194.
- (18) **Li F.B.** and Li X.Z. (2002) Photocatalytic properties of gold/gold ion-modified titanium dioxide for wastewater treatment, *Applied Catalysis A: General*, 228(1-2), 15-27.
- (19) **Li F.B.** and Li X.Z. (2002) The enhancement of photodegradation efficiency using Pt-TiO₂ catalyst, *Chemosphere*, 48 (10): 1103-1111.
- (20) X. Z. Li, **F. B. Li**, C.L.Yang and W.K.Ge. (2001) Photo-catalytic activity of WO_x-TiO₂ under Visible Light Irradiation. *J. Photochem. & Photobio. A: Chem.* 141 (2-3), 209-217.

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