

## 陈威



**陈威**，男，1970年出生于天津市

**电话：**022-6622-9517

**e-mail：**chenwei@nankai.edu.cn

**工作单位：**南开大学环境科学与工程学院

**职称/职务：**校特聘教授、博士生导师，天津市城市生态环境修复与污染防治重点实验室主任，南开大学中美环境修复与可持续发展中心主任

**学术任职：**美国Rice大学客座教授 (<http://ceve.rice.edu/Content.aspx?id=72>)

**学位：**博士

**专业资质：**美国注册工程师 (Registered Professional Engineer)

**研究领域：**人工纳米材料的环境效应，环境纳米技术，土壤与地下水污染和修复

**人才称号：**教育部“新世纪优秀人才”，天津市“131创新型人才培养程”第一层人选

### 主要学术经历：

1988.09—1992.07 南开大学环境科学系环境化学专业，获学士学位。

1992.09—1994.07 南开大学环境科学系环境化学专业，攻读硕士学位。

1994.09—1997.05 美国Rice大学环境科学与工程系，获硕士学位。

1997.06—1999.09 美国Rice大学环境科学与工程系，获博士学位。

1999.03—2004.08 美国Brown and Caldwell环境工程公司，技术指导。

2004.02—至今 南开大学环境科学与工程学院，校特聘教授（环境科学岗位）、博士生导师；天津市城市生态环境修复与污染防治重点实验室，主任。

2004.02—至今 Rice大学土木与环境工程系，客座教授。

2006.02—至今 南开大学中美环境修复与可持续发展中心，主任。

### 主要学术任职

1. 美国Rice大学土木与环境工程系，客座教授
2. 《环境化学》编辑委员会，委员
3. 中国环境科学学会土壤与地下水环境专业委员会，委员
4. 中国自然资源学会资源循环利用专业委员会，委员
5. 环保部第三届化学物质环境管理专家评审委员会，委员

### 社会职务

1. 天津市青年联合会第十一届委员会，委员

2. 天津市留学人员联谊会/天津市欧美同学会, 理事
3. 南开大学侨联暨留学归国人员联谊会, 委员

## 荣誉与奖励

1. 入选2008年中国优秀百篇最具影响国际学术论文
2. 获得“天津市优秀留学人员”荣誉称号
3. 入选中国科协高层次人才库
4. 入选2006年天津市“131创新型人才培养工程”第一层人选
5. 入选2005年教育部“新世纪优秀人才支持计划”
6. 获得2005年霍英东教育基金会高等院校青年教师基金资助

## 主要科研项目

1. 《稳定碳纳米颗粒悬浮物对于有机污染物在饱和多孔介质中运移行为的影响》, 国家自然科学基金面上项目(21177063), ¥700,000, 2012/01—2015/12(项目主持人)。
2. 《基于碳纳米材料的高效柔性太阳能电池和超级电容器研制》, 国际科技合作与交流专项(2011DFB50300), ¥6,000,000, 2011/01—2013/12(第一参加人)。
3. 《极性有机污染物与碳基纳米材料的特殊作用对不可逆吸附的影响》, 国家自然科学基金面上项目(20977050), ¥360,000, 2010/01—2012/12(项目主持人)。
4. 《利用新型纳米技术去除饮用水中藻毒素和内分泌干扰物的研究》, 教育部高等学校科技创新工程重大项目培育资金项目(708020), ¥400,000, 2009/01—2011/12(项目负责人)。
5. 《大沽排污河污染河道原位修复技术集成及应用》, 天津市科技创新专项资金项目子课题(08FDZDSF03400), ¥3,000,000, 2008/10—2010/12(项目负责人)。
6. 《油田区石油污染土壤生态修复技术与示范》, 国家高技术研究发展计划(863计划)重点项目(2007AA061200), ¥6,840,000, 2007/07—2010/12(项目负责人)。
7. 《土壤中持久性有机有毒污染物的迁移转化规律及对地下水的影响》, 国家自然科学基金重点项目(20637030), ¥2,000,000, 2007/01—2010/12(第一参加人)。
8. 《污染沉积物的活性反应格栅原位修复技术与机理的研究》, 天津市应用基础及前沿技术研究计划重点项目, ¥500,000, 2007/04—2010/03(第一参加人)。
9. 《吸附态1,1,2,2-四氯乙烷的非生物降解机理》, 教育部高等学校博士学科点专项科研基金(20060055035), ¥60,000, 2007/01—2009/12(项目主持人)。
10. 《中美环境修复与可持续发展中心联合实验室建设》, 天津市科技支撑计划重点项目, ¥200,000, 2007/10—2009/09(项目主持人)。
11. 《天津地区土壤中典型有机污染物环境标准与污染控制技术研究》, 天津市科技发展计划科技创新能力与环境建设平台项目,(06TXTJJC14000), ¥1,000,000, 2006/07—2009/06(项目主持人)。
12. 《土壤中被锁定有机污染物的反应活性》, 国家自然科学基金面上项目(20577024), ¥260,000, 2006/01—2008/12(项目主持人)。
13. 《土壤和沉积物中持久性有机污染物的生物可利用性》, 国家自然科学基金面上项目(20407013), ¥250,000, 2005/01—2007/12(项目主持人)。
14. 《土壤/沉积物中持久性有机污染物的生物可利用性》, 教育部科学技术研究重点项目(105044), ¥100,000, 2005/01—2007/12(项目主持人)。

## 教学经验

1. 2005至今: 讲授《土壤与地下水污染和修复》(南开大学硕士生/博士生课程)
2. 2007至今: 参与讲授《污染生态化学》(南开大学本科生课程)

## 主要学术论文

- Zhang, L. ; Zhu, D. ; Wang, H. ; Hou, L. ; Chen, W. 2012, “Humic Acid-Mediated Transport of Tetracycline and Pyrene in Saturated Porous Media,” *Environmental Toxicology and Chemistry* (available online).
- Wang, F. ; Zhu, D. ; Chen, W. 2012, “Effect of Copper Ion on Adsorption of Chlorinated Phenols and 1-Naphthylamine to Surface-Modified Carbon Nanotubes,” *Environmental Toxicology and Chemistry*, 31, 1, 100-107.
- Ge, M. ; Liu, L. ; Chen, W. ; Zhou, Z. 2012, “Sunlight-Driven Degradation of Rhodamine B by Peanut-Shaped Porous BiVO<sub>4</sub> Nanostructures in the H<sub>2</sub>O<sub>2</sub>-Containing System,” *CrystEngComm*, 14(3), 1038 - 1044.
- Tang, H. ; Zhu, D. ; Li, T. ; Kong, H. ; Chen, W. 2011, “Reductive Dechlorination of Activated Carbon-Adsorbed Trichloroethylene by Fe(0): Carbon as Electron Shuttle,” *Journal of Environmental Quality*, 40(6), 1878 - 1885.
- Zhang, L. ; Wang, L. ; Zhang, P. ; Kan, A.T. ; Chen, W. ; Tomson, M.B. 2011, “Facilitated Transport of 2,2',5,5'-Polychlorinated Biphenyl and Phenanthrene by Fullerene Nanoparticles through Sandy Soil Columns,” *Environmental Science & Technology*, 45, 1341 - 1348.
- Berlin, J. ; Yu, J. ; Lu, W. ; Walsh, E. ; Zhang, L. ; Zhang, P. ; Chen, W. ; Kan, A. ; Wong, M. ; Tomson, M. ; Tour, J. 2011, “Engineered Nanoparticles for Hydrocarbon Detection in Oil-field Rocks,” *Energy & Environmental Science*, 4, 2, 505 - 509.
- Lian, F. ; Huang, F. ; Chen, W. ; Xing, B. ; Zhu, L. 2011, “Sorption of Apolar and Polar Organic Contaminants by Waste Tire Rubber and Its Chars in Single- and Bi-solute Systems,” *Environmental Pollution* 159, 4, 850 - 857.
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- Ji, L. ; Chen, W. ; Bi, J. ; Zheng, S. ; Xu, Z. ; Zhu, D. ; Alvarez, P. 2010, “Adsorption of Tetracycline on Single-walled and Multi-walled Carbon Nanotubes as Affected by Aqueous Solution Chemistry,” *Environmental Toxicology and Chemistry*, 29, 12, 2713 - 2719.
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- Wang, L. ; Zhu, D. ; Duan, L. ; Chen, W. 2010, “Adsorption of Single-Ringed N- and S-Heterocyclic aromatics on Carbon Nanotubes,” *Carbon*, 48, 13, 3906 - 3915.
- Qi, Y. ; Chen, W. 2010, “Comparison of Earthworm Bioaccumulation between Readily-Desorbable and Desorption-Resistant Naphthalene: Implications for Bio-uptake Routes,” *Environmental Science & Technology*, 44, 1, 323 - 328.
- Zhang, D. ; Zhu, D. ; Chen, W. 2010, Response to Comment on “Sorption of Nitroaromatics to Soils: Comparison of the Importance of Soil Organic Matter versus Clay,” *Environmental Toxicology and Chemistry*, 29, 5, 1022 - 1024.
- Zhang, Z. ; Li, M. ; Chen, W. ; Zhu, S. ; Liu, N. ; Zhu, L. 2010, “Immobilization of Lead and Cadmium from Aqueous Solution and Contaminated Sediment Using Nano-Hydroxyapatite,” *Environmental Pollution*, 158, 2, 514-519.
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- Chen, W. ; Duan, L. ; Wang, L. ; Zhu, D. 2009, Response to Comment on “Adsorption of Hydroxyl- and Amino-Substituted Aromatics to Carbon Nanotubes,” *Environmental Science & Technology*, 43, 9, 3400 - 3401.
- Ji, L. ; Chen, W. ; Duan, L. ; Zhu, D. 2009, “Mechanisms for Strong Adsorption of Tetracycline to Carbon Nanotubes: A Comparative Study Using Activated Carbon and Graphite as Adsorbents,” *Environmental Science & Technology*, 43, 7, 2322 - 2327.
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- Yang, W. ; Zhang, J. ; Zhang, C. ; Zhu, L. ; Chen, W. 2009, "Sorption and Resistant Desorption of Atrazine in Typical Chinese Soils," *Journal of Environmental Quality*, 38, 1, 171-179.
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- Chen, W. ; Duan, L. ; Zhu, D. 2007, "Adsorption of Polar and Nonpolar Compounds to Carbon Nanotubes," *Environmental Science & Technology*, 41, 24, 8295-8300.
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- Chen, W. ; Kan, A.T. ; Tomson, M.B. 2000, Response to Comment on "Irreversible Adsorption of Chlorinated Benzenes to Natural Sediments - Implication for Sediment Quality Criteria," *Environmental Science & Technology*, 34, 4250-4251.
- Chen, W. ; Kan, A.T. ; Tomson, M.B. 2000, "Irreversible Adsorption of Chlorinated Benzenes to Natural Sediments - Implication for Sediment Quality Criteria," *Environmental Science & Technology*, 34, 385-392.
- Chen, W. ; Kan, A.T. ; Fu, G. ; Tomson, M.B. 2000, "Factors Affecting the Release of Hydrophobic Organic Contaminants from Natural Sediments," *Environmental Toxicology and Chemistry*, 19, 2401-24

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- Chen, W.; Kan, A.T.; Fu, G.; Vignona, L.C.; Tomson, M.B. 1999, “Adsorption-Desorption Behaviors of Hydrophobic Organic Compounds in Sediments of Lake Charles, Louisiana, USA,” *Environmental Toxicology and Chemistry*, 18, 1610-1616.
- Kan, A.T.; Fu, G.; Hunter, M.; Chen, W.; Ward, C.H.; Tomson, M.B. 1998, “Irreversible Sorption of Neutral Hydrocarbons to Sediments: Experimental Observations and Model Predictions,” *Environmental Science & Technology*, 32, 892-902.

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The College of Environmental Science and Engineering of Nankai University



南开大学环境科学与工程学院  
地址：天津市卫津路94号(300071)  
电话：022-23508807 022-23501117 传真：022-23501117  
电邮：hjxy@nankai.edu.cn