CURRICULUM VITAE (UPDATED DEC. 15, 2017)

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EDUCATION

2004/08–2010/07	**Ph.D.**, Environmental Science & Engineering, Tsinghua University, Beijing
2006/09–2006/12	Exchange Student, Venice International University, Venice, Italy
2000/09–2004/07	**B.S.**, Environmental Engineering, Tsinghua University, Beijing

PROFESSIONAL EXPERIENCE

2015/08–Present	Professor, Chinese Academy of Sciences
2013/03–2015/07	Associate Research Scientist, Yale University
2010/06–2013/02	Postdoctoral Associate, Yale University

LANGUAGES

Native	Chinese Mandarin, Chinese Taiwanese
Fluent	English

RESEARCH INTERESTS

General: Industrial Ecology and Urban Ecology; Complex System Science; Environmental Economics, Natural Resources Economics, and Ecological Economics; Environmental Policy and Sustainable Resources Management

Specific: Anthropogenic Cycles of Materials, Environmental Consequences of International Trade, Urban Metabolism, Industrial Symbiosis, and Urban Environmental Management

JOURNAL SERVICE

Associate Editor

1) *Resources, Conservation, and Recycling*
2) *Energy, Ecology, and Environment*

Guest Editor for Peer-Reviewed Journals

3) 2015. Special Issue on "Characterizing Anthropogenic Stocks: Methods and Application", *Resources, Conservation, and Recycling* (In English)
4) 2015. Special Issue on Industrial Ecology in China, *Acta Ecologica Sinica* (In Chinese)

Reviewer for Peer-Reviewed Journals (In English)

1) Anthropocene
2) Applied Energy
3) Ecological Indicators
4) Ecological Modelling
5) Environment International
6) Environment, Development and Sustainability
7) Environmental Science & Technology
8) Environmental Technology & Innovation
9) Frontiers of Environmental Science and Engineering
10) Journal of Cleaner Production
11) Journal of Industrial Ecology
12) Journal of Material Cycles and Waste Management
13) Journal of Systems Science and Systems Engineering
14) Resources, Conservation and Recycling
15) Science of the Total Environment
16) Sustainable Energy Technologies and Assessments

Reviewer for Peer-Reviewed Journals (In Chinese)

17) Acta Ecologica Sinica
18) Advances in Climate Change Research
19) Resources Science
20) Research of Environmental Sciences

CONFERENCE SERVICE

Committee

2015 The Lead Organizer. Chinese Environmental Scholars Forum. Yale University. May 30-31.

2014 One of the Five Initiators. Chinese Environmental Scholars Forum. Harvard University. Nov. 9th.

2013 Member of Technical Committee. The 7th International Conference of the International Society for Industrial Ecology. Ulsan, Korea.

2012 Member of Organizing Committee. The 3rd Asia-Pacific Meeting of the International Society for Industrial Ecology. Beijing, China.

Reviewer

2015 The 8th International Conference of the International Society for Industrial Ecology. Surrey, UK.

2013 The 7th International Conference of the International Society for Industrial Ecology. Ulsan, Korea.

2013 The 3rd Symposium on Industrial Ecology for Young Professionals. Ulsan, Korea.

2012 The 3rd Asia-Pacific Meeting of the International Society for Industrial Ecology. Beijing, China.

SCIENTIFIC COMMITTEES AND MEMBERSHIPS

2015/07–2016/12 **President.** Chinese Society for Industrial Ecology.

2015/03–2017/12 **Board Member**. The Sustainable Urban Systems Section of the International Society for Industrial Ecology.

2015/03–Present Member. Association of Environmental Engineering & Science Professors

2007/09–2008/08 **Poster Competition Chair**. The Student Chapter of the International Society for Industrial Ecology.

2006/07–Present Member. International Society for Industrial Ecology.

TRAINING EXPERIENCE (SELECTED)

2014 *Complex Systems Modelling and Networks*. New England Complex Systems Institute. Cambridge, MA.

2014 *Complex Physical, Biological & Social Systems*. New England Complex Systems Institute. Cambridge, MA.

2012 *Scientific Leadership & Management*. Yale University. New Haven, CT.

2010 *Fundamentals of Teaching in the Sciences*. Yale University. New Haven, CT.

PEER-REVIEWED JOURNAL PAPERS (*IN ENGLISH*):

1) **Chen, W.-Q.*** Dynamic Product-Level Analysis of In-Use Aluminum Stocks in the United States. *Journal of Industrial Ecology*. 2017, In Press: DOI: 10.1111/jiec.12710

2) Liu, S.; Tian, X.*; Cai, W.; **Chen, W.-Q.**; and Wang, Y. How the transitions in iron and steel and construction material industries impact China's CO^2 emissions: Comprehensive analysis from an inter-sector linked perspective. *Applied Energy*. 2018, 211: 64-75.

3) Jiang, D.*; **Chen, W.-Q.**; Liu, W.; and Chertow, M.* Inter-Sectoral Bisphenol A (BPA) Flows in the 2012 Chinese Economy. *Environmental Science & Technology*. 2017, 51 (15): 8654–8662

4) Zhang, C.; **Chen, W.-Q.***; Liu, G.; and Zhu, D.-J. Economic growth and the evolution of material cycles: An analytical framework integrating material flow and stock indicators. *Ecological Economics*. 2017, 140: 265-274.

5) Shi, Y.-L.; **Chen, W.-Q.***; Wu, S.-L.; and Zhu, Y.-G.* Anthropogenic Cycles of Arsenic in Mainland China: 1990-2010. *Environmental Science & Technology*. 2017, 51(3): 1670-1678.

6) Huang, C.; Han, J.*; and **Chen, W.-Q.** Changing Patterns and Determinants of Infrastructures' Material Stocks in Chinese Cities. *Resources, Conservation and Recycling*. 2017, 123: 47-53.

7) **Chen, W.-Q.***; Shi, Y.-L.; Wu, S.-L.; and Zhu, Y.-G.* Anthropogenic Arsenic Cycles: A Research Framework and Features. *Journal of Cleaner Production*. 2016, 139:328-336.

8) Nuss, P.*; **Chen, W.-Q.***; Ohno, H.; and Graedel, T.E. Structural Investigation of Aluminum in the US Economy using Network Analysis. *Environmental Science & Technology*. 2016, (50): 4091-4101.

9) Ohno, H.*; Nuss, P.; **Chen, W.-Q.***; and Graedel, T.E. Deriving the Metal and Alloy Networks of Modern Technology. *Environmental Science & Technology*. 2016, (50): 4082-4090.

10) **Chen, W.-Q.***; Graedel, T.E.; Nuss, P.; and Ohno, H. Building the Material Flow Networks of Aluminum in the 2007 U.S. Economy. *Environmental Science & Technology*. 2016, (50): 3905-3912.

11) Zeng, X.-L.*; Gong, R.-Y.; **Chen, W.-Q.**; and Li, J.-H.* Uncovering the Recycling Potential of 'New' WEEE in China. *Environmental Science & Technology*. 2015 (50): 1347-1358.

12) **Chen, W.-Q.*** and Graedel, T.E.* In-Use Product Stocks Link Manufactured Capital to Natural Capital. *Proceedings of the National Academy of Sciences of the United States of America*. 2015, 112(20): 6265-6270.

13) **Chen, W.-Q.*** and Graedel, T.E. Improved Alternatives for Estimating In-Use Material Stocks. *Environmental Science & Technology*. 2015, 49(5): 3048–3055.

14) Ciacci, L.; Eckelman, M.J.; Passarini, F.*; **Chen, W.-Q.**; Vassura, I.; and Morselli, L. Historical Evolution of Greenhouse Gas Emissions from Aluminum Production at a Country Level. *Journal of Cleaner Production*. 2014, 84:540-549.

15) **Chen, W.-Q.*** Recycling Rates of Aluminum in the United States. *Journal of Industrial Ecology*. 2013, 17(6): 926-938.

16) Ciacci, L.; **Chen, W.-Q.**; Passarini, F.*; Eckelman, M.J.; Vassura, I.; and Morselli, L. Historical Evolution of Anthropogenic Aluminum Stocks and Flows in Italy. *Resources, Conservation and Recycling*. 2013, 72:1-8.

17) **Chen, W.-Q.*** and Graedel, T.E. Anthropogenic Cycles of the Elements: A Critical Review. *Environmental Science & Technology*. 2012, 46: 8674-8586.

18) **Chen, W.-Q.*** and Graedel, T.E. Dynamic Analysis of Aluminum Stocks and Flows in the United States: 1900-2009. *Ecological Economics*. 2012, 81: 92-102.

19) **Chen, W.-Q.*** and Shi, L. Analysis of Aluminum Stocks and Flows in Mainland China from 1950 to 2009: Exploring the Dynamics Driving the Rapid Increase in China's Aluminum Production. *Resources, Conservation and Recycling*. 2012, 65: 18-28.

20) **Chen, W.-Q.**; Shi, L.*; and Qian Y. Substance Flow Analysis of Aluminium in Mainland China for 2001, 2004 and 2007: Exploring its Initial Sources, Eventual Sinks and the Pathways linking them. *Resources, Conservation and Recycling*. 2010, 54(9): 557-70.

21) Xu, M.*; Allenby, B.R.; and **Chen, W.-Q.** Energy and Air Emissions Embodied in China-US Trade: Eastbound Assessment Using Adjusted Bilateral Trade Data. *Environmental Science & Technology*. 2009, 43: 3378-84.

22) Wen, Z.-G.*; Zhang, K.-M.; Huang, L.-Y.; Du, B.; **Chen, W.-Q.**; and Li W. Genuine Saving rate: An Integrated Indicator to Measure Urban Sustainable Development towards an Ecocity. *International Journal of Sustainable Development and World Ecology*. 2005, 12: 184-96.

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