

Chu-Long Huang
Room 611, Qiu Tiansheng Experimental Building
Department of Resources and Environmental Sciences, Quanzhou Normal University
398, Donghai Street, Quanzhou 362000, Fujian province, P. R. China
Tel/Wechat: +86-18965621528
E-mail: huangchulong1718@163.com and clhuang@qztc.edu.cn
QQ: 954598875

CURRICULUM VITAE

PROFESSIONAL BACKGROUND

1. Quanzhou Normal University

Professor (with tenure), Environmental and Ecological Engineering, 2015 to present
Associate Professor (with tenure), Material/Substance Flow analysis, 2012 to 2015
Associate Professor (with tenure), Sustainability of Water Resource Use, 2009 to 2011
Assistant Professor (with tenure), Sustainability of Water Resource Use, 2006 to 2009

2. University of Michigan, Ann Arbor, MI, 2017-2018

Visiting scholar, School of Environment and Sustainability, 2017 to 2018

3. Institute of Urban Environment, Chinese Academy of Sciences, Xiamen city, Fujian Province, China

Part-time associate researcher, Environmental and Ecological Engineering, 2016 to present

4. Research Centre for eco-environmental sciences, Chinese Academy of Sciences, Beijing, China

Postdoctoral fellowship, Substance/Material Flow Analysis, 2011 to 2016

5. Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences

Part-time Assistant Research Fellow, 2004-2006

GRANTS

1. Project Director, Response mechanism of phosphorus flow efficiency in food systems to phosphorus retention capacity in aquatic systems (52070119), General project of the National Natural Science Foundation of China (2021-2024)
2. Project Director, Environmental Effects of Copper Flows in Fujian's Car Industry (2017R0093), Soft Science Project, funded by Fujian Provincial Department of Science and Technology (2017 to 2020)
3. Project Director, Effect of mangrove wetland degradation and restoration on heavy metals accumulation in soil in Luoyang river estuary, supported by Open Fund of Key Laboratory for Subtropical Mountain Ecology (Ministry of Science and Technology and Fujian Province funded).
4. Project Director, Comparison of dynamic virtual water saving potential of solid waste reuse between different industrial structures' economic systems (JA13272), funded by Fujian Province Education Department (2013 to 2016)
5. Project Director, Evaluation on Metabolic Efficiency of Urban Water Resource in Rain Shadow Zone of Subtropical Monsoon Climate (2012M520402), China Postdoctoral Science Foundation funded project.
6. Project Member, Urban Environmental Quality and Health Effect (KZCX2-YW-T08), one of the CAS/SAFEA international partnership programs for creative research teams, supported by Chinese Academy of Sciences (CAS) and State Administration of Foreign Experts Affairs
7. Project Director, Analysis of Countermeasures and Evolving Trend of Water Resources Supply and Demand Balance in Fujian Province in Mid-term or Long-term Future (2006F3115), Innovation Foundation for Young Sci-tech Talents of Fujian Province Granted by Fujian Provincial Department of Science and Technology (2006 to 2009)

8. Project Director, Sustainability Assessment of Agricultural Water Resources Use under urbanization strategy policy in Quanzhou prefecture(JA04262), one of Sci-tech Projects funded by Fujian Province Education Department (2004 to 2006)
9. Sub-project Member, Efficient use approach and spatial and temporal variation pattern of regional water and soil resources using in agriculture (KZCX1-SW-19-1-02), a sub-project of One of the Knowledge Innovation Projects in the Chinese Academy of Sciences(2004 to 2006)
10. Project Member, Study on Functions of Soil Animals in Diverse Conditions in Forest Ecosystems in Da Xing'an Mountains (40271006), a project supported by Chinese National Science Foundation (2002-2004)

PUBLICATIONS

Representative peer-reviewed articles

1. The 8th author, Climate mitigation potential of sustainable biochar production in China. *Renewable and Sustainable Energy Reviews* 2023, 175, 113145. <https://doi.org/10.1016/j.rser.2023.113145>
2. The 3rd author, Optical properties of sedimentary dissolved organic matter in intertidal zones along the coast of China: Influence of anthropogenic activities. *Science of The Total Environment*, 2023, 864, 161159. <https://doi.org/10.1016/j.scitotenv.2022.161159>
3. First author, Growing phosphorus dilemma: The opportunity from aquatic systems' secondary phosphorus retention capacity. *Science of The Total Environment*, 2021, 796, 148938. <https://doi.org/10.1016/j.scitotenv.2021.148938>
4. Corresponding author, Eutrophication and lakes dynamic conditions control the endogenous and terrestrial POC observed by remote sensing: Modeling and application. *Ecological Indicators*, 2021, 129, 107907.
5. First author, Copper-induced ripple effects by the expanding electric vehicle fleet: A crisis or an opportunity. *Resources Conservation and Recycling*, 2020, 161, 104861. <https://doi.org/10.1016/j.resconrec.2020.104861>
6. The 6th author, Driving forces of nitrogen input into city-level food systems: Comparing a food-source with a food-sink prefecture-level city in China. *Resources Conservation and Recycling*, 2020, 160, 104850. <https://doi.org/10.1016/j.resconrec.2020.104850>
7. First author, Changing phosphorus metabolism of a global aquaculture city. *Journal of Cleaner Production*, 2019, 225,1118-1133. <https://doi.org/10.1016/j.jclepro.2019.03.298>
8. First author, Effects of urbanization on phosphorus metabolism in a typical agricultural area. *Journal of Cleaner Production*, 2019, 214, 803-815. <https://doi.org/10.1016/j.jclepro.2019.01.008>
9. Corresponding author, Processes for the removal of triclosan in the environment and engineered systems- A review. *Environmental Reviews*, 2019, 27, Number ja. <https://doi.org/10.1139/er-2019-0007>
10. The 3rd author, Food phosphorus flows in a low-income, food- and phosphorus-deficient country. *Agronomy-Basel* , 2019, 9(5), 212. <https://doi.org/10.3390/agronomy9050212>
11. First author, Datasets of mass of phosphorus flows in Zhangzhou city in China. *Data in Brief*, 2019, 25, 104080. <https://doi.org/10.1016/j.dib.2019.104080>
12. The 4th author, Continental-scale pollution of estuaries with antibiotic resistance genes. *Nature Microbiology*, 2017, 2, 16270. <https://doi.org/10.1038/nmicrobiol.2016.270>
13. First author, Triclosan: a review on systematic risk assessment and control from the perspective of substance flow analysis. *Science of the Total Environment*, 2016, 566-567, 771-785.1 October 2016. <https://doi.org/10.1016/j.scitotenv.2016.05.002>
14. First author, Water conservation significance of municipal solid waste management: A case of Xiamen in China. *Journal of Cleaner Production*, 2016, 129, 693-703. 15 August 2016.

<https://doi.org/10.1016/j.jclepro.2016.03.062>

15. First author, Substance flow analysis and assessment of environmental exposure potential for triclosan in mainland China. *Science of the Total Environment*, 2014, 499, 265-275. 15 November 2014.

<https://doi.org/10.1016/j.scitotenv.2014.08.032>

16. First author, Substance flow analysis for nickel in mainland China in 2009. *Journal of Cleaner Production*, 2014, 84, 450-458. <https://doi.org/10.1016/j.jclepro.2013.12.079>

17. First author, Urban water metabolism efficiency assessment: integrated analysis of available and virtual water. *Science of the Total Environment*, 2013, 452-453, 19-27.

<https://doi.org/10.1016/j.scitotenv.2013.02.044>

18. First author, Using material/substance flow analysis to support sustainable development assessment: A literature review and outlook. *Resources Conservation and Recycling*, 2012, 68, 104-116.

<https://doi.org/10.1016/j.resconrec.2012.08.012>

19. First author, Assessment of urban water metabolism based on integrated analysis of available and virtual water: a case of Xiamen in China. *ACTA ECOLOGICA SINICA*, 36(22), 2016. (in Chinese)

20. First author, Analysis on Systematic Water Scarcity Based on Establishment of Water Scarcity Classification System. *Meteorological and Environmental Research*, 2(7), 57-61/86, 2011.

21. First author, Trend analysis of water resources supply and demand balance in Fujian Province in Socio-economic transformation period. *WATER RESOURCES PROTECTION*, 2010, 26(3), 13-17. (in Chinese)

22. First author, Problems and countermeasures of water resources supply and demand balance in Fujian province in mid-term or long-term future. *CHINA WATER RESOURCES*, 2009(9), 53-55, 4. (in Chinese)

23. First author, Spatial differentiation of water resources supply and demand balance in Fujian province. *RESOURCES SCIENCE*, 2009, 31(5), 750-756. (in Chinese)

24. First author, Analysis of dominant factors on water resources supply and demand balance in Fujian province in the future. *CHINA RURAL WATER AND HYDROPOWER*, 2009(10), 27-31, 35. (in Chinese)

25. First author, Evaluation of spatio-temporal distribution of regional water resources supply and demand balance capacity based on the index system. *CHINA RURAL WATER AND HYDROPOWER*, 2009(3), 28-31, 35. (in Chinese)

26. First author, Evaluation on supply-demand balance trend of water resources in Fujian province based on index system. *JOURNAL OF ANHUI AGRICULTURAL SCIENCE*, 2009, 37(22) , 10588- 10592. (in Chinese)

27. First author, Fuzzy comprehensive evaluation on the sustainable utilization of regional agricultural water resources. *JOURNAL OF ANHUI AGRICULTURAL SCIENCE* 2009, 37(5), 2174- 2177, 2216. (in Chinese)

28. First author, Sustainability evaluation of agricultural water resources use in Quanzhou administrative area of Fujian province. *JOURNAL OF ANHUI AGRICULTURAL SCIENCE*, 2009, 37(1), 268-273. (in Chinese)

29. First author, Development of indicators system for sustainability assessment of agricultural water resources use. *JOURNAL OF QUANZHOU NORMAL UNIVERSITY (NATURAL SCIENCE)*, 2006, 24(6), 66-71. (in Chinese)

30. First author, Grey clustering evaluation of utilization of agricultural water resources in Northeast China. *ARID ZONE RESEARCH*, 2006, 23(2), 229-235. (in Chinese)

31. First author, Indicators system for sustainability assessment of water resources use in China. *RESOURCES SCIENCE*, 2006, 28(2), 33-40. (in Chinese)

32. First author, Factor analysis on spatial variation of sustainable utilization of agricultural water resources. *SCIENTIA GEOGRAPHICA SINICA*, 2006, 26(3), 284-291. (in Chinese)

33. First author, On construction and application of indicators system of sustainable utilization of agricultural water resources. *RESEARCH OF AGRICULTURAL MODERNIZATION*, 2005, 26(6), 422-425, 430. (in Chinese)

34. First author, Advances in studies of sustainable utilization of agricultural water resources. *SYSTEM*

- SCIENCES AND COMPREHENSIVE STUDIES IN AGRICULTURE, 2005, 21(2), 141-145 .(in Chinese)
35. Corresponding author, Efficiencies of earthworms (*Eisenia foetida*) decomposing forest litters. ACTA ECOLOGICA SINICA, 2005, 25(9), 2427-2433. (in Chinese)
36. First author, Ecological distribution of *Lumbricidain* in Maoer mountain forest ecosystem. CHINESE JOURNAL OF ECOLOGY, 2005, 24(1), 9-14. (in Chinese)
37. First author, Research progress on environmental and ecological functions of earthworm. CHINESE JOURNAL OF ECOLOGY, 2005, 24(12), 1466-1470. (in Chinese)
38. First author, Study on population dynamics of earthworms in Maoer mount forest ecosystem. FOREST ENGINEERING, 2004, 20(1), 3-4. (in Chinese)
39. First author, Current progresses of Chinese mangrove wetlands research. WETLAND SCIENCE, 2004, 2(4), 303-308. (in Chinese)
40. First author, The ecological distribution of earthworms in Maoer mount forest ecosystem. NATURAL SCIENCES JOURNAL OF HARBIN NORMAL UNIVERSITY, 2003, 19(6), 92-95. (in Chinese)
41. First author, Ecological distribution and developing strategy of *Acanphopanax Senticosus* in the drainage basin of mount Er-long reservoir. NATURAL SCIENCES JOURNAL OF HARBIN NORMAL UNIVERSITY, 2002, 18(1), 92-95. (in Chinese)
42. The 3rd author, Effects of soil fauna on litter decomposition. Chinese Geographical Science, 2001, 11(3), 283-288.

Notes:

The 42nd article can be seen in <http://www.springerlink.com/content/v15285564646684q/>

The other english articles can be seen in <http://www.sciencedirect.com/science/journal/09213449/68>

All Chinese articles and reviews can be seen in <http://epub.cnki.net/grid2008/index/ZKCALD.htm>

All articles and reviews can also be seen in <http://scholar.google.com.au/>

Books

1. Water Resources Planning and Management—Principle, Method and Application. Xi'an: Xi'an Map Press. 2010. (in Chinese)

<http://www.xadtcbs.com/> Telephone: 86-29-87604179

2. Establishment and Application of Indicators System for Sustainability Assessment of Agricultural Water Resources Use. Beijing: Chemistry Industry Press. 2008. (in Chinese)

<http://shop.cip.com.cn//product/20081001/135999787122029546.html> Telephone: 86-10-64518811

3. Telmatology Introduction. Changchun: Jilin Science and Technology Press. 2006. (in Chinese)

<http://www.jlpg.cn/main/> Telephone: 86-431-85621745

PRESENTATIONS

1. Huang C.L. A brief review on P scarcity characterization. 2022 International Conference on Resource Sustainability. 2022-08-02.

2. Huang C.L. Copper-induced ripple effects of passenger vehicle industry transition: a crisis or an opportunity. 2021 International Conference on Resource Sustainability. 2021-07-21.

3. Huang C.L. The systemic resource-environmental effects of structural adjustment in the automotive industry. The 2021 Annual Meeting of the Environmental Geology Branch of the Chinese Society of Environmental Sciences, 2021-12-05.

4. Huang C.L. Resource footprint and environmental effect of phosphorus metabolism in anthroposphere: evidence from Zhangzhou in China. The 5th sustainable phosphorus summit (Session 6-Oral 3), Chinese Agricultural University and Yuntianhua Group, 2016, Kunming.

5. Huang C.L.. Water conservation significance of municipal solid waste recycling: a case of Xiamen in China (Poster). Substance flow analysis of triclosan in mainland(Oral report by second author), ISWA BEACON 3rd International Conference on Final Sinks: from product design to clean cycles and safe final sinks, August 23-26, 2015, Taipei, Taiwan.
6. "Trend analysis of water resources supply and demand balance in Fujian Province in socio-economic transformation period". Proceedings of the 2008 Joint Academic Conference of "Scientific, technologic, social challenges due to global changes and natural disasters", sponsored by CNC-WCRP、CNC-IGBP、CNC-IHDP and CNC-DIVERSITAS, Beijing, January 8-10, 2009.
<http://www.meeting.edu.cn/meeting/subject/review!detailfp.action?id=487>.
7. "Ecological functions of earthworm in Maoer forest ecosystem". Proceedings of ecology and holistic harmonizing sustainable development, sponsored by Ecological Society of China, September, 2004.

EDUCATION

1. **Graduate University of the Chinese Academy of Sciences**, Changchun, Jilin province, P.R. China
Ph.D. in Environmental sciences, July 2006
with Graduate Certificate in Sustainability assessment of water resources use, offered by Northeast Institute of Geography and Agroecology
2. **Harbin Normal University**, Harbin, Heilongjiang province, P.R. China
M.S. in Physical Geography, June 2003
with Graduate Certificate in soil animals ecology, offered by School of Geographical Sciences

Membership and Professional Service

International Society for Industrial Ecology (ISIE), Member, 2023-present
 The Chinese Society for Industrial Ecology, Member, 2020-present
 The Geographical Society of China, Member, 2005-present
 The Chinese Society of Natural Resources, Member, 2021-present
 The Geographical Society of Fujian Province, Standing Director, 2022-present
 The Tropical and Subtropical Resources Research Professional Committee of the Chinese Society of Natural Resources, Member, 2022 to date)
 Expert Consultant Panel of Major Projects of Quanzhou Normal University Servicing Western Taiwan Straits Economic Zone Granted by Fujian Provincial People's Government, Member, 2009 to 2013
 Quanzhou No.5 middle School, Part-time Vice President Appointed by Education Bureau and Science and Technology Association, Quanzhou Municipal Government, 2009-2013

Reviewer (Journal manuscripts)

Resources Conservation and Recycling
 Journal of Cleaner Production
 Chemosphere
 Environmental Pollution
 Environmental Science and Pollution Research
 Environmental Technology & Innovation
 地球与环境

AWARDS

Fujian Provincial High Level Talents, Fujian Provincial Government

High level talents in Quanzhou City, Quanzhou Municipal Government
Prominent Teacher of Quanzhou Normal University, Quanzhou Normal University, 2011,2021
Excellent Advisor of Undergraduate Dissertations in Quanzhou Normal University, 2009
Prominent Teacher of Quanzhou Normal University, Quanzhou Normal University, 2007

PROFESSIONAL LICENSES

Academic Leader Candidate by Quanzhou Normal University, 2009
Secondary School Teacher Credential of P.R. China by National Education Committee of P.R. China, 1996
College or University Teacher Credential of P.R. China by National Education Department of P.R. China, 2007

TEACHING EXPERIENCE

Introduction of Environmental Engineering and Science in English (2006 to date);
Environmental Protection (2015 to date);
Environmental Planning (2005-2008);
Eco-environmental Planning (2007 to 2015);
Environmental Planning and Management (2007 to 2009);
Environment and Sustainable Development (2008-2009);
Environmental Sociology (2008 to date);
Basic Ecology (2005, 2008, 2011);
Physical Geography (2007, 2011);
Water Resource Planning and Management (2008 to 2014)