

Xiaoyong Chen
College of Arts and Sciences
Governors State University
1 University Parkway
University Park, IL 60484-0975

TEL: (708) 534 - 4557; **FAX:** (708) 534 - 1641; **Email:** xchen@govst.edu

Education and Training

- Ph.D. in Plant Ecophysiology, Charles Darwin University, NT, Australia
- M.Sc. in Forest Ecology, CSUFT, Changsha, Hunan, China
- B.Sc. in Forestry, Central South University of Forestry and Technology (CSUFT), Changsha, Hunan, China

Professional Experience

- Full Professor, Aug. 2014 - current, Governors State University (GSU), IL, USA
- Associate Professor, Sept. 2006 – Aug. 2014, (Tenured since Aug. 2009), GSU, IL, USA
- Postdoctoral Associate, 2003-2006, University of British Columbia Okanagan, Canada
- Postdoctoral Associate, 2001-2003, University of Toronto, Canada

Teaching Experience

- **Courses taught at GSU, IL, USA (2006 -):**
 - ❖ **For graduate students**
 - * BIOL 8990 Graduate Thesis/Project
 - * BIOL 8998 Research Presentation
 - * BIOL 8860 Ecosystem Ecology
 - * BIOL 8861 Ecosystem Ecology Laboratory
 - * BIOL 8830 Plant Microenvironment
 - * BIOL 8831 Plant Microenvironment Laboratory
 - * BIOL 7110 Graduate Seminar
 - * BIOL 6536 Environmental Hydrology
 - * BIOL 6537 Environmental Hydrology Laboratory
 - ❖ **For undergraduate students**
 - * BIOL 4990 Undergraduate Research I
 - * BIOL 4992 Undergraduate Research II
 - * BIOL 4536 Environmental Hydrology
 - * BIOL 4537 Environmental Hydrology Laboratory
 - * BIOL 4460 Plant Physiology
 - * BIOL 4461 Plant Physiology Laboratory
 - * BIOL 2102 Biological Science Foundations
 - * BIOL 2107 Biological Science Foundations Laboratory
 - * BIOL 1500 General Biology I
 - * BIOL 1501 General Biology I Laboratory
 - * BIOL 1100 Human Biology

- * BIOL 1101 Human Biology Laboratory
- **Courses taught at CSUFT, Hunan, China (1985-1997; 2011- (Summer))**
- ❖ **For Graduate Students**
 - * Biogeochemical Cycle of Nutrients
 - * Long-Term Forest Ecology Research
 - * Urban Ecology
 - * Academic English: Reading, Presentation & Writing
- ❖ **For undergraduate students**
 - * Forest Ecology
 - * Plant Physiology
 - * Forest Hydrology

Publications in Peer-Reviewed Journals

- Wang, Q., Wu, Y., Yao, T., Peng, Y., Chen, X., Yang, P., Nie, S., Li, J., Farooq, T.H., Wang, G. and Wu, X., 2025. Assessment of water quality and microbial diversity across different land use areas in the Taojia River, China. *Journal of Cleaner Production*, 523, 146377.
- Huang, X., Peng, Y., Yan, W., Yan, T., Liang, X., Lei, J., Chen, X. and Qi, Y., 2025. Aboveground and Belowground Input Effects on Soil Health in Urban Camphor Tree Forests. *Sustainability*, 17(14): 6358. <https://doi.org/10.3390/su17146358>
- Yang, H., Fan, S., Jiang, M., Hu, Y., Chen, X., Chen, C., Liu, W., Zeng, Y., Peng, K., Wang, Y. and Wang, G., 2025. Biochar-organic fertilizer synergy drives microbial-mediated C-sequestration and N-cycling in mixed forests toward sustainability. *Journal of Environmental Management*, 392: 126892. <https://doi.org/10.1016/j.jenvman.2025.126892>
- Zhong, P., Wei, S., Wang, Z., Ou, H., Wang, Y., He, H., Lu, W., Chen, X., Liu, S., Li, S. and Wang, G., 2025. Impact of seasonal drought on soil multifunctionality in dry-hot valley forests. *Plant and Soil*, 2025 Aug 14: 1-21. <https://doi.org/10.1007/s11104-025-07750-7>
- Wu, Q., Rao, C., Yan, W., Peng, Y., Wang, E. and Chen, X., 2025. Microclimatic Influences on Soil Nitrogen Dynamics and Plant Diversity Across Rocky Desertification Gradients in Southwest China. *Plants*, 14(8): 1251. <https://doi.org/10.3390/plants14081251>
- Wang, J., Jiang, Y., Peng, Y., Chen, X., Yan, W., Liang, X., Wu, Q. and Fang, J., 2025. Influence of *Miscanthus floridulus* on Heavy Metal Distribution and Phytoremediation in Coal Gangue Dump Soils: Implications for Ecological Risk Mitigation. *Plants*, 14(6): 836. <https://doi.org/10.3390/plants14060836>
- Lei, J., Peng, Y., Dang, P., Gao, X., Chen, X. and Yan, W., 2025. Microbial Necromass Nitrogen Accumulation and Its Response to Soil Multifunctionality Following Plantation Restoration in a Subtropical Karst Region. *Land Degradation & Development*, 36(7): 2504-2514. <https://doi.org/10.1002/ldr.5513>

- He, T.; Lei, J.; Peng, Y.; Wang, R.; Chen, X.; Liu, Z.; Gao, X.; Dang, P. & Yan, W. 2025. Thinning Intensity Enhances Soil Multifunctionality and Microbial Residue Contributions to Organic Carbon Sequestration in Chinese Fir Plantations. *Plants*, 14, 579. <https://doi.org/10.3390/plants14040579>.
- Fang, J.; Feng, X.; Peng, Y.; Wang, J.; Wu, X.; Yan, W. & ***Chen, X.** 2025. Variation Patterns of Fine Root Biomass, Production, and Turnover Rates in Four Subtropical Forests of China. *Forests*, 2025, 16, 220.
- **Chen, X.**; Gsell, T.; Yunker, J.; Randa, L.; Peng, Y. & Carrington, M. 2025. Soil Aggregation, Aggregate Stability, and Associated Soil Organic Carbon in Huron Mountains Forests, Michigan, USA. *Forests*, 2025, 16, 219.
- Gu, Y.; Jiao, J.; Xu, H.; Chen, Y.; He, X.; Wu, X.; Wang, J.; **Chen, X.**; He, H. & Yan, W. 2025. Intercropping improves the yield by increasing nutrient metabolism capacity and crucial microbial abundance in root of *Camellia oleifera* in purple soil. *Plant Physiology and Biochemistry*, 219, 109318, <https://doi.org/10.1016/j.plaphy.2024.109318>
- Liu, Y.; Zhang, L.; Yan, W.; Peng, Y.; Sun, H. & ***Chen, X.** 2024. Drought-induced alterations in carbon and water dynamics of Chinese fir plantations at the trunk wood stage. *Plants*, 13, 2937. <https://doi.org/10.3390/plants13202937>
- Tang, Y.; Yang, H.; Hu, Y.; Zeng, Y.; Wang, Y.; Zhao, Y.; **Chen, X.**; Wu, Y. & Wang, G. 2024. Effects of fertilization and planting modes on soil organic carbon and microbial community formation of tree seedlings. *Plants*, 13, 2665. <https://doi.org/10.3390/plants13182665>
- Yan, T.; Liu, X.; Yan, W.; Lei, J.; Peng, Y.; Wang, J.; Zhang, X. & ***Chen, X.** 2024. Effects of litter removal and biochar application on soil properties in urban forests of southern China. *Forests*, 15, 1745. <https://doi.org/10.3390/f15101745>
- Li, Z.; Mao, C.; Wu, Q.; Peng, Y.; Wang, J.; Zhang, B.; Zhang, S.; Liang, X.; Yan, W. & ***Chen, X.** 2024. Temporal variations in aboveground biomass, nutrient content, and ecological stoichiometry in young and middle aged stands of Chinese Fir forests. *Plants*. 13, 1877.
- Zhang, Y.; Lei, J.; Peng, Y.; **Chen, X.**; Li, B.; Chen, Y.; Xu, Y.; Farooq, T.H.; Wu X.; Wang, J. & Yan, W. 2024. Impact of Intercropping on Nitrogen and Phosphorus Nutrient Loss in *Camellia oleifera* Forests on *Entisol* Soil. *Forests* 2024, 15, 461.
- Li, Z.; Wu, Q.; Peng, Y.; Lei, J.; Liu, S.; Mao, C.; Liu, X.; Wang, J.; Yan, W. & **Chen, X.** 2024. Diurnal, Seasonal, and Vertical Changes in Photosynthetic Rates in *Cinamomum camphora* Forests in Subtropical China. *Forests*, 15, 183.
- Wang, J.; Zhao, J.; Yang, R.; Liu, X.; Zhang, X.; Zhang, W.; **Chen, X.**; Yan, W. & Wang, K. 2024. Interplanting leguminous shrubs boosts the trophic interactions of soil micro-food web in a karst grassland. *Soil Biology and Biochemistry*, 188, 109224.
- Wang, J.; Zhang, X.; Wang, H.; Liu, T.; Fayyaz, A.; Gonzalez, N.; Wang, J.; **Chen, X.**; Zhao, J. & Yan, W. 2024. Leguminous crop restores the carbon flow attenuation from

nitrogen loading within soil nematode food web in a *Camellia oleifera* plantation. *Journal of Environmental Management*, 349, 119580.

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- He, P.; Yan, W.; Peng, Y.; Lei, J.; Zheng, W.; Zhang, Y.; Qi, Y. & **Chen, X.** 2023. Seasonal Dynamics of Soil Respiration and Its Autotrophic and Heterotrophic Components in Subtropical Camphor Forests. *Forests*, 14, 2397.
- Gu, Y., Chen, X., Shen, Y., **Chen, X.**, He, G., He, X., Wang, G., He, H. & Lv, Z. 2023. The response of nutrient cycle, microbial community abundance and metabolic function to nitrogen fertilizer in rhizosphere soil of *Phellodendron chinense* Schneid seedlings. *Front. Microbiol.* 14:1302775.
- Wen, H.; Dan, P.; Liu, T.; Li, Z.; **Chen, X.**; Cao, Y.; Li, Y. & Yan, W. 2023. Allelopathic Mechanisms in *Camellia oleifera*–*Arachis hypogaea* L. Intercropping. *J. Agric. Food Chem.* 71, 19434–19444.
- Li, Z.; Yan, W.; Li, Y.; Xiao, Y.; Shi, Y.; Zhang, X.; Lei, J.; Min, K.; Pan, Y.; **Chen, X.**; Liu, Q. & Jiang, G. 2023. Particle Size Determines the Phytotoxicity of ZnO Nanoparticles in Rice (*Oryza sativa* L.) Revealed by Spatial Imaging Techniques. *Environ. Sci. Technol.* 2023, 57, 13356–13365.
- Farooq, T.H., Nawaz, M.F., Qasid, M., Shakoor, A., Ahmad, I., Gul, S., Shahzad, K. & **Chen, X.** 2023. Divergent consequences of bio-resources on morphological plasticity and biochemical responses in early-stage leguminous species: Sustainable productivity approaches. *Geoscience Frontiers*. 2023, 101660.
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- Lei, J., Cao, Y., Wang, J., Chen, Y., Peng, Y., Shao, Q., Dan, Q., Xu, Y., **Chen, X.**, Dang, P. & Yan, W. 2023. Soil Nutrients, Enzyme Activities, and Microbial Communities along a Chronosequence of Chinese Fir Plantations in Subtropical China. *Plants*. 12, 1931.
- Zou, D., Wu, Y., Peng, Y., Lei, J., Wang, G., Wang, J., Pan, Y., Yan, W. & **Chen, X.** 2023. Characterization and application of Fe-modified biochar alleviating Cr(VI) stress in pak choi seedling cultivated in Cr-polluted hydroponics, *Chemosphere*. 340, 2023, 139793.

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- Zheng, W., Wu, Q., Rao, C., **Chen, X.**, Wang, E., Liang, X. & Yan, W. 2023. Characteristics and interactions of soil bacteria, phytocommunity and soil properties in rocky desertification ecosystems of Southwest China. *Catena*. 220 (2023) 106731.
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- Zheng, W., Hu, L., Chen, Z., Tang, J., Pan, Y., Yan, W., **Chen, X.**, Peng, Y. & Chen, L. 2023. Effects of perfluorinated compounds homologues on chemical property, microbial composition, richness and diversity of urban forest soil. *Ecotoxicology and Environmental Safety*. 249 (2023) 114458.
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typical sediments in tetracycline pollution remediation. *Frontiers in Microbiology*, 13:964401.

- Liu, T., Wu, X., Li, H., Ning, C., Li, Y., Zhang, X., He, J., Filimonenko, E., Chen, S., **Chen, X.**, Gibson, D., Kuzyakov, Y. & Yan, W. 2022. Soil quality and r – K fungal communities in plantations after conversion from subtropical forest. *Catena*, 219:106584.
- Yan, W., Farooq, T.H., Chen, Y., Wang, W., Shabbir, R., Kumar, U., Riaz, M.U., Alotaibi, S.S., Peng, Y. & **Chen, X.** 2022. Soil nitrogen transformation process influenced by litterfall manipulation in two subtropical forest types. *Front. Plant Sci.* 13:923410.
- Luo, J., Wu, Y., **Chen, X.**, He, T., Zeng, Y., Wang, G., Wang, Y., Zhao, Y. & Chen, Z. 2022. Synergistic adsorption-photocatalytic activity using Z-scheme based magnetic ZnFe₂O₄/CuWO₄ heterojunction for tetracycline removal. *Journal of Alloys and Compounds*, 910, 164954.
- Tang, Y., Hu, X., Xu, Z., **Chen, X.**, Zeng, Y., Wang, G., Wang, Y., Liu, G., Zhao, Y. & Wu, Y. 2022. The effects of g-C₃N₄/biochar and g-C₃N₄ on bacterial community in riverbed sediment. *Environ Sci Pollut Res.* 29, 85286-85299.
- Wang, Y., **Chen, X.**, Zou, D., Lei, J., Wu, X., Wang, J. Yan, W. & Liang, X. 2022. Biomass, carbon storage and nutrient content of coarse woody debris in secondary-growth forests in southern Hunan. *Acta Ecologica Sinica*, 42(8): 3441-3448.
- Farooq, T., Li, Z., Yan, W., Shakoor, A., Kumar, U., Shabbir, R., Peng, Y., Alotaibi, S., Wrobel, J., Kalaji, H. & **Chen, X.** 2022. Variations in litterfall dynamics, C:N:P stoichiometry and associated nutrient return in pure and mixed stands of Camphor tree and Masson pine forests in Subtropical China. *Front. Environ. Sci.* 10, 903039.
- Li, Z., Yan, W., Liu, Y., Liang, X. & **Chen, X.** 2022. Simulation of soil CO₂ efflux under different hydrothermal conditions based on general regression neural network. *Agricultural and Forest Meteorology*, 316, 108847.
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- Wang, J., Farooq, T.H., Aslam, A., Shakoor, A., **Chen, X.** & Yan, W. 2021. Non-targeted metabolomics reveal the impact of phenanthrene stress on root exudates of ten urban greening tree species. *Environmental Research*, 196, 110370.
- Chen, Z., He, Z., Zhou, M., Xie, M., He, T., Zhao, Y., **Chen, X.**, Wu, Y. & Xu, Z. 2021. In-situ synthesis of biochar modified PbMoO₄: An efficient visible light-driven photocatalyst for tetracycline removal. *Chemosphere*. 284, 131260
- Li J., Cao X., Wang Y., Yan W., Peng Y. & **Chen X.** 2021. Effects of thinning on soil nutrients in a chronosequence of Chinese fir forests in subtropical China. *Annals of Forest Research*, 64(1): 147-158.
- Farooq, T.H., **Chen, X.**, Shakoor, A., Li, Y., Wang, J., Rashid, M.H.U., Kumar, U. & Yan, W. 2021. Unraveling the influence of land-use change on $\delta^{13}\text{C}$, $\delta^{15}\text{N}$, and soil

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- Tian, D., **Chen, X.**, Kang, W., Wen, S. & Wei, X. 1989. Studies on the microclimate in a small watershed of Chinese fir Plantation. *Journal of Central-South Forestry University*, 9: 29-37 (in Chinese with English abstract).
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- Tian, D., **Chen, X.** & Wen, S. 1988. Nutrient analysis of forest ecosystem watersheds. *Journal of Central-South Forestry University* 8: 1-11 (in Chinese with English abstract).
- **Chen, X.**, Pan, W., Tian, D. & Wen, S. 1988. Hydrological processes of a forest ecosystem in subtropical region of China. *Proceedings of International Conference of Forest Hydrology*, Pp. 62-66. Prague, Czechoslovakia.

Research Grant Application

- “Effect of invasive earthworms on soil aggregation and soil organic matter in old-growth forests in Huron Mountains, Michigan”. 2021-2023 Huron Mountain Wildlife Foundation, \$1,1538 total, with \$3846 per year, Xiaoyong Chan and Mary Carrington,

(Approved).

- “Characters of earthworm in various old-growth forests Huron Mountain, Michigan”. 2021 LSAMP program. \$3000, Xiaoyong Chen, (Approved).
- “Enhancing undergraduates’ academic success through project-based learning”. 2018-19 Center for the Junior Year Faculty Research Grant (CJY FRG). \$2986, Xiaoyong Chan and Mary Carrington, (Approved) (Due to the ongoing COVID-19 pandemic, the deadline of this grant was extended to May 2021).
- “Evaluating soil organic carbon pools and fractions in selected forest types in the Huron Mountain, Michigan”. 2019 Huron Mountain Wildlife Foundation, \$4966, Xiaoyong Chan and Mary Carrington, (Rejected).
- “Assessing changes of soil organic carbon fractions across a chronosequence of restored tallgrass prairies in Illinois”. 2018 GSU Research Grant. \$1320, Xiaoyong Chan and Mary Carrington, (Approved).
- “Urbanization: Causes, Effects and Management”. 2018 Spring/Summer, GSU Intellectual Life Grant. \$500, Xiaoyong Chen (PI), (Approved).
- “Quantifying soil organic carbon fractions under main land use/land cover types in Nachusa Grasslands”. 2018 Friends of Nachusa Grasslands Scientific Research Grant. \$3,000, Xiaoyong Chan and Mary Carrington, (Approved).
- “Assessing Changes of Soil Organic Carbon Fractions across a Chronosequence of Restored Tallgrass Prairies in Illinois”. 2017 GSU Research Grant. \$2,268, Xiaoyong Chan and Mary Carrington, (Approved).
- “Biomass, Morphology and Distribution of Fine Roots in Three Plant Communities in Thorn Creek, IL”. 2017 GSU Undergraduate Creative Activity, Research, and Scholarship (UCARS) Grant. \$1,705, Xiaoyong Chan and Mary Carrington, (Approved).
- “Land-use impacts soil organic carbon fractions in Northeastern Illinois”. 2017 GSU University Interdisciplinary Grant Program. \$3,500, Xiaoyong Chan, Mary Carrington, Joong-Won Shin and Kulugammanna Ranmohotti, (Rejected).
- “Biodiversity: Theory and Practice”, 2017 Spring/Summer, GSU Intellectual Life Grant. \$500, Xiaoyong Chen, (Approved).
- “Water resources: Crisis, Challenge and Sustainable management”. 2016 Spring/Summer, GSU Intellectual Life Grant. \$500, Xiaoyong Chen, (Approved).
- “Evaluating Water Infiltration under Different Land Use/Land Cover Types in the Chicago area, Illinois”. 2016 Illinois Water Resources Center: Annual Small Grants. \$8,677, Xiaoyong Chen, Wendy Leonard, Hashim Mian, Melissa Franco and Roxanne Brown, (Rejected).
- “Climate change: Causes, Impacts and Adaptation”, 2015 Spring/Summer, GSU Intellectual Life Grant. \$500, Xiaoyong Chen. (Approved).
- “Effects of Grazing by Bison vs. Fire in Young Tallgrass Prairie Restoration Sites”, 2014 Friends of Nachusa Grasslands Scientific Research Grant. \$2,200, Mary Carrington and Xiaoyong Chen, (Rejected).
- “Chemical composition of root exudates from selected plant species in Illinois”, 2014 GSU Research Grant. \$1,820, Xiaoyong Chen, (Approved).
- “Effect of land-use changes on water infiltration processes in Northeastern Illinois”, 2010 GSU University Research Grant. Xiaoyong Chen, (Approved).
- “Growth analysis of riparian and upland forests in the Throne Creek watershed”. 2008

- GSU Research Grant. \$550, Xiaoyong Chen, (Rejected).
- “Properties of major tree species in riparian and upland forest”. 2008 Professional Development Grant, GSU Alumni Association. \$1,000, Xiaoyong Chen, (Approved).
 - “Effects of different plant communities on water quality in Northeast Illinois”. 2008 GSU Research Grant. \$1200, Laura Kennedy and Xiaoyong Chen.
 - “Evaluation of large woody debris in stream and riparian ecosystems on Thorn Creek, Illinois”. 2008 Conservation 2000 - Ecosystems Program, Illinois Department of Natural Resources, Xiaoyong Chen, Mary Carrington and Jon Mendelson, (Rejected)
 - “Effect of land use change on chemical composition in streams in Thorn Creek”. 2008 GSU Intellectual Life Grant. \$500, Xiaoyong Chen, (Rejected).
 - “Land covers change impacts on soil carbon storage”. 2007 Professional Development Grant, GSU Alumni Association. \$1,000, Xiaoyong Chen, (Approved).
 - “Characteristics of woody debris in the Thorn Creek watershed”. 2007 GSU Research Grant, \$3,500, Xiaoyong Chen, (Approved).
 - “Water mining and potential implication for water management in the Okanagan Basin, British Columbia”. 2005-2006, Environment Canada. CAN\$10,000/yr. Xiaoyong Chen (Investigator).
 - “Long-term evaluation of impacts of wildfire and mountain pine beetle infestation on large woody debris recruitment and transportation processes”. 2004-2006, Forest Science Program, British Columbia, Canada. CAN\$25,473/yr. Xiaoyong Chen (Investigator).
 - “In-stream LWD as a sustainability indicator at spatial and temporal scales for headwater streams of the BC interior”. 2004-2005, Forest Science Program, British Columbia, Canada. CAN\$68,250/yr. Xiaoyong Chen (Investigator).
 - “Productivity and nutrient biogeochemical cycling of small watersheds in Southern China”, 1995-2000, Ministry of Forestry, China. RMB\$63,000/year, Xiaoyong Chen (Co- PI).
 - “Productivity and nutrient biological cycling of tea-oil forests”, 1994-1996, Department of Forestry, Hunan Province, China. RMB\$14,500/year, Xiaoyong Chen (PI).
 - “Physiological processes of evergreen broad-leaf forests in sub-tropic region of China”, 1992-1994, The National Natural Scientific Foundation, China. RMB\$15,000/year, Xiaoyong Chen (PI).
 - “Research on plantation ecosystems in south of China”, 1990-1995, Ministry of Forestry, China. RMB\$55,000/year, Xiaoyong Chen (Co-PI).
 - “Structure, function and productivity of Chinese fir plantation ecosystems”. 1988-1990, Ministry of Forestry, China. RMB \$50,000/year. Xiaoyong Chen (Investigator).

Presentations (*GSU Student, Since 2002)

- *Townsend, B. & **Chen, X.** Changes in Salinity, Conductivity, Dissolved Oxygen, and Temperature of Water in Ponds Around Governors State University. 2025 GSU Research Day, April 16 - 17, 2025.
- *Reji, R. & **Chen, X.** Temporal-spatial Changes in Water Qualities in the Governors State University Area. 2025 GSU Research Day, April 16 - 17, 2025.
- Gsell, T. & **Chen, X.** Influence of Invasive Earthworms to Microbial Abundance and Carbon Usage in Three Unique Forest Type Soils in the Upper Peninsula of Michigan. 2024 ESA Great Lakes Regional Conference, Kalamazoo, Michigan on April 5 - 7, 2024.

- **Chen, X.**, Gsell, T. & Yunger, J. Characteristics of earthworms in selective forest types in Michigan-Illinois region. 2024 ESA Great Lakes Regional Conference, Kalamazoo, Michigan on April 5 - 7, 2024.
- **Chen, X.**, Gsell, T. & Yunger, J. Characteristics of earthworms in selective forest types in Michigan-Illinois region. 2024 GSU Research Day, April 17 - 19, 2024.
- **Chen, X.**, Yunger, J., Gsell, T., Carrington, M., Randa, L., *Arroyo, P., *Naliwko, M., *Yunger, A. & Peng, Y. Species and distribution of exotic earthworms in forests in Huron Mountain Preserve, Michigan. The 14th Annual Meeting of the Midwest-Great Lakes Chapter of the Society for Ecological Restoration, Leopold Center & Vennebu Hill, Baraboo, Wisconsin, April 14 to 16, 2023.
- *Arroyo, P., **Chen, X.** & Carrington, M. Storage and distribution of organic carbon in various soil aggregate sizes in old growth northern hardwood forests. The 14th Annual Meeting of the Midwest-Great Lakes Chapter of the Society for Ecological Restoration, Leopold Center & Vennebu Hill, Baraboo, Wisconsin, April 14 to 16, 2023.
- *Johnson, N. & **Chen, X.** Comparison of soil organic carbon stocks in two forest types in Huron Mountains, Michigan. GSU Research Days, GSU Campus, March 30-31, 2023.
- *Arroyo, P., **Chen, X.** & Carrington, M. Storage and distribution of organic carbon in various soil aggregate sizes in old growth northern hardwood forests. GSU Research Days, GSU Campus, March 30-31, 2023.
- Yunger, J., Gsell, T. & **Chen, X.** From wolves to worms: Multi-trophic level interactions. GSU Research Days, GSU Campus, March 30-31, 2023.
- *Arroyo, P., Carrington, M., Gsell, T., **Chen, X.** & Yunger, J. Body dimension and length-weight relationships of invasive exotic earthworm species in Huron Mountains forests. 2023 Illinois LSAMP Symposium, Double Tree, Lisle, IL 60532, February 24-25, 2023.
- **Chen, X.**, Gsell, T., Younger, J., *Naliwko, M. and *Santomieri, Q. 2022. Characteristics of invasive exotic earthworms in North American hardwood forests. GSU Research Week, GSU Campus, April 5-8, 2022.
- **Chen, X.** and Carrington, M. 2022. Soil aggregation and associated soil organic carbon in two forest types in the Huron Mountains, Michigan. GSU Research Week, GSU Campus, April 5-8, 2022.
- *Santomieri, Q., *Gacgacao, K., *Naliwko, M. and **Chen, X.** 2022. Effects of invasive earthworms on Huron Mountain Forest Soil Composition. 2022 Illinois LSAMP Symposium, Hilton Rosemont, Chicago O'Hare, February 25-26, 2022.
- **Chen, X.** 2021. Impacts of plant community changes on soil carbon contents in Northeastern Illinois. The 14th Asia Oceania GEO (AOGEO) Symposium & 2021 Environmental Monitoring and Protection (TG7) Workshop. Online, 5 November 2021, 09:00am-18:00pm (UTC +8, Beijing, China).
- **Chen, X.**, Carrington, M., *Davis, M. and *Nguy, J. 2021. Soil aggregate fractions and soil aggregate stability in old-growth forests of Huron Mountain, Michigan. GSU Research Week, GSU Campus, April 5-9, 2021.
- **Chen, X.** and Gsell, T. 2021. Both artificial root exudates and natural *Koelreuteria paniculata* exudates modify bacterial community structure and enhance phenanthrene biodegradation in contaminated soils. GSU Research Week, GSU Campus, April 5-9, 2021.

- **Chen, X.**, Carrington, M. and *Carlock, S. 2019. Soil Aggregate Stability and Size Distribution under Different Land Uses in Nachusa Grasslands, Northern Illinois. GSU Research Day, GSU Campus, April 12, 2019.
- *Davis, M., **Chen, X.** and Gsell, T. 2019. Pomegranate Extract Inhibits *Staphylococcus aureus*, *Staphylococcus hemolyticus* and *Dermabacter hominis* Growth. GSU Research Day, GSU Campus, April 12, 2019.
- *Munoz, F., *Aranda, L., **Chen, X.** and Carrington, M. 2019. Biomass and spatial distribution of fine roots in an oak forest. GSU Research Day, GSU Campus, April 12, 2019.
- *Owikoti, R., *Acosta, D., *Scruggs, M. and **Chen, X.** Assessment of Soil Particle Size Distribution under Four Land Covers in Nachusa Grasslands of Northern Illinois. GSU Research Day, GSU Campus, April 12, 2019.
- **Chen, X.** 2019. Structural and Functional Role of Large Woody Debris in Stream Ecosystems. GSU Biology Seminar Series, GSU Campus, February 21, 2019.
- **Chen, X.** 2018. Soil carbon pool and efflux in plant ecosystems. Presented for PAI application, Division of Science, Mathematics and Technology, GSU, November 12, 2018.
- **Chen, X.** and Carrington, M. 2018. Quantifying Soil Organic Carbon Fractions under Land Use Types in Nachusa Grasslands. 2018 Nachusa Grasslands Science Symposium, Nachusa Grasslands Headquarters, Franklin Grove in October 20, 2018.
- **Chen, X** and *Kahl, N. 2018. “Urbanization: Causes, Effects and Management” (6 posters), GSU Research Day, GSU Campus, April 06, 2018.
- **Chen, X** and *Brown, R. 2017. “Biodiversity: Theory and Practice” (7 posters), GSU Research Day, GSU Campus, April 07, 2017.
- **Chen, X** and *Borgman, S. 2016. “Water resources: Crisis, Challenge and Sustainable Management” (5 posters), GSU Research Day, GSU Campus, April 01, 2016.
- **Chen, X.** 2016. “Current International Collaboration Research Programs in Environmental Biology”. Poster presentation, GSU Research Day, GSU Campus, April 1, 2016.
- *Schwarz, L and **Chen, X.** 2016. “Rhizosphere Interactions: A Study of Tree Root Exudates across Species”. Poster presentation, GSU Research Day, GSU Campus, April 1, 2016.
- **Chen, X.** 2015. “Climate change: Causes, Impacts and Adaptation” (9 posters), Research exhibition, GSU Campus, April 20-30, 2015.
- *Avelis, R. and **Chen, X.** 2015. “Effects of Land Use Changes on Butterfly Diversity of Early Spring in Northeastern Illinois”. Post presentation, The 21st Annual GSU Student Research Conference, GSU Campus, April 28, 2015.
- **Chen, X.** 2015. Spatial distribution of large woody debris in Thorn Creek watershed in Northeastern Illinois. Poster presentation, 7th Midwest-Great Lakes and Chapter Meeting, Chicago Botanic Gardens, Glencoe, IL, March 27-29, 2015.
- He, B., Li, J., Wang, R., Chen, Y., Tang, B. and **Chen, X.** 2014. “Soil infiltration under different grass types in Southwestern China”. Poster presentation, The Ecology Society of America 99th Annual Meeting, Sacramento, CA, August 10-15, 2014.
- Huang, H., He, B., Qian, J., Yao, Y., Li, J. and **Chen, X.** 2014. “Soil particle size distribution and aggregates stability as affected by cultivated orange daylily

communities”. Poster presentation, The Ecology Society of America 99th Annual Meeting, Sacramento, CA, August 10-15, 2014.

- **Chen, X** and D’Arcy, K. 2013. “Impacts of plant community changes on soil carbon in northeastern Illinois”. Poster presentation, Fifth Midwest-Great Lakes SER Chapter Meeting, Wooster, Ohio, April 12-14, 2013.
- *Leonard, W., *Zumpf. C., *Murphy, A., *Radic, L., *Alli-Afoke, O. and **Chen, X**. 2013. Characteristics of infiltration process in three land covers in Northeast Illinois. Oral presentation, The 19th Annual GSU Student Research Conference, GSU Campus, April, 2013.
- *Alli-Afoke, O. and **Chen, X**. 2013. Influence of soil type on plant growth of corn and beans seedlings. Post presentation, The 19th Annual GSU Student Research Conference, GSU Campus, April, 2013.
- **Chen, X**. 2012. “Enhancing carbon sequestration: Concept, Research and management”. Oral presentation, Research Seminar, Xiang Lake Botany Park, Shenzhen, Guangdong, China, August 03, 2012.
- **Chen, X**. 2011. “Development and Management of Carbon Sink Forestry”. Oral presentation, The Second Session of Oasis Forum, Zhangye, Gansu, China, July 18-20, 2011.
- **Chen, X**. 2011. “Research advance in carbon bio-cycling in vegetation ecosystems in Northern America”. Oral presentation, The First Postgraduate Student Conference in Ecology, Changsha, Hunan, China, June 11, 2011.
- **Chen, X.**, He, B. and Wan, D. 2010. “The impact of land use change on soil erosion in Three Gorges Reservoir regions of China”. The Ecological Society of America 95th Annual Meeting. Pittsburgh, PA, August 1-6, 2010.
- He, B., Zhao, X. and **Chen, X**. 2010. “Soil organic carbon losses and its consequence for land use/land cover change in southwestern China”. The Ecological Society of America 95th Annual Meeting. Pittsburgh, PA, August 1-6, 2010.
- **Chen, X**. 2009. “Distribution and dynamic of large woody debris in south interior of British Columbia, Canada”. Research seminar, Oral presentation, College of Life Science, Southwest University, Chongqing, China, July 21, 2009.
- **Chen, X**. 2009. “Development and application of a distributed hydrological model”. Research seminar, Oral presentation, College of Resources and Environment, Southwest University, Chongqing, China, July 20, 2009.
- **Chen, X**. 2008. “Stand structures in floodplain and upland forests in northeastern Illinois”. Oral presentation, The Ecological Society of America 93rd Annual Meeting. Milwaukee, Wisconsin, August 3-8, 2008.
- Yan, W., Tian, D., **Chen, X.**, Deng, X., Peng, Y., Peng, C., Xiang, W. and Kang, W. 2008. “Quantification of runoff from a small Chinese fir watershed in Central South of China”. Oral presentation, The Ecological Society of America 93rd Annual Meeting. Milwaukee, Wisconsin, August 3-8, 2008.
- Kang, W., Tian, D., **Chen, X.**, Peng, Y., Peng, C., Xiang, W., Deng, X. and Yan, W. 2008. “Change of rainfall interception loss at different aged stands in Chinese fir plantations”. Oral presentation, The Ecological Society of America 93rd Annual Meeting. Milwaukee, Wisconsin, August 3-8, 2008.
- Tian, D., Yan, W., Peng, Y., **Chen, X.**, Peng, C., Xiang, W. and Deng, X. 2008. “Daily and seasonal patterns in soil CO₂ efflux at different aged plantations of Chinese fir in

southern China”. Oral presentation, The Ecological Society of America 93rd Annual Meeting. Milwaukee, Wisconsin, August 3-8, 2008.

- *Skorich, A. and **Chen, X.** 2008. Microclimate variability in a prairie and an adjacent woodland in Northeast Illinois. Oral presentation, The 14th Annual GSU Student Research Conference, GSU Campus, May 2008.
- *Nanda, K.G. and **Chen, X.** 2008. Above ground tree biomass in different forest communities in Thorn Creek, Northeastern Illinois. Post presentation, The 14th Annual GSU Student Research Conference, GSU Campus, May 2008.
- **Chen, X.** & Wei, X. 2005. Large woody debris and channel morphological pattern at forested watersheds in south interior of British Columbia, Canada, The Ecological Society of America 90th annual meeting & IX International Congress of Ecology, Montreal, Canada, August 10, 2005.
- **Chen, X.** 2005. Potential impacts of hydro-stations on aquatic ecosystem ----- The Abitibi River as a case study. Research Seminar, Timmis, Canada, Feb. 10, 2005.
- **Chen, X.** 2005. The role of silvicultural research in the sustainable management of boreal forest ecosystems. Research Seminar, Northern Forest Ecosystem Research Centre, Thunder Bay, Canada, Jan.18, 2005.
- **Chen, X.** 2004. Growth and yield models and modeling. Research Seminar, Ontario Forest Research Institute, Sault Ste. Marie, Canada, Oct. 07, 2004
- **Chen, X.** 2004. Climate change and carbon sequestration in forest ecosystems. Department Seminar, University of British Columbia Okanagan, Canada, Jan. 22, 2004.
- **Chen, X.** 2003. Construction and application of distributed hydrological model. Department Seminar, Central South University of Forestry and Technology, China, Sept. 01, 2003.
- **Chen, X.** 2003. A remote sensing-driven distributed hydrological model: mapping evapotranspiration in a forested watershed, International Conference of Watershed Management and Modeling, Nanjing, China, Aug, 28, 2003.
- **Chen, X.** 2003. Scaling processes of evapotranspiration at selected spatial resolutions. Department Seminar, University of Toronto. Jul. 17, 2003.
- **Chen, X.** 2002. Terrainlab: A distributed hydrological model, Department Seminar. University of Toronto, Sept. 10, 2002.

Award

- 2025, Faculty Research Excellence Awards, GSU
- 2025, GSU Teacher Contact, Collaboration, and Celebration Award Recipient (2025 Spring semester).
- 2024, The inaugural recipients of Faculty Research Excellence Awards, GSU
- 2024, GSU Teacher Contact, Collaboration, and Celebration Award Recipient (2024 Spring semester & 2024 Fall semester).
- 2023, GSU Teacher Contact, Collaboration, and Celebration Award Recipient (2023 Spring semester & 2023 Fall semester).
- 1997-2001, Postgraduate Scholarship, Northern Territory University, Australia
- 1997-2001, Tropical Savannas CRC Postgraduate Scholarship, Australia
- 1994, State Council Special Allowance, China

- 1993, The Third Class Award of the National Scientific and Technological Advancement, China
- 1991, The First Class Award of the Scientific and Technological Advancement, Ministry of Forestry, China

Service Activities

❖ Internal

- Faculty Senate, GSU (2022 -2024)
- College Grievance Committee, CAS (2019-2020, 2021-2022, 2022-2023, 2023-2025)
- Biology Faculty Search Committee, CAS (2020, 2024)
- Division Personnel Committee, CAS (2019-2021)
- Division Curriculum Committee, CAS (2018-2022)
- Administrative Policies Committee, GSU (2017-2019)
- Faculty Senate, GSU (2015 - 2017)
- College Personnel Committee, CAS (2014 - 2016)
- Biology Faculty Search Committee, CAS (2014)
- Educational Policies Committee, GSU (2012 - 2014)
- Academic Program Review Committee, GSU (2007 - 2011)
- Comprehensive Quality Improvement and Accreditation Committee, GSU (2008-2010)
- Research Proposal Review Committee, CAS (2010 - 2012)
- Division Personnel Committee, CAS (Chairperson) (2012 - 2014)
- Grievance Committee, CAS (2012 - 2015)
- Philosophy and Bioethics Faculty Search Committee, CAS (2013).
- Settling Pond Rehabilitation Project Search Committee, GSU (2009)
- History Faculty Search Committee, CAS (2007)
- Inorganic Chemistry Faculty Search Committee, CAS (2007)

❖ External

- Guest editor for the Special Issue "Influence of Environmental Changes on Forest Soil Quality and Health" in 'Forests' (IF 2.9, ISSN 1999-4907), (August 2023-October 2024).
- Guest editor for the Special Issue "Nutrient Cycle and Hydrological Process of Plant Ecosystems" in 'Plants' (IF 4.658, ISSN 2223-7747), (January 2022- June 2023).
- Member, Editorial Board of *PEDOSPHERE*, (2014 -)
- Member, Editorial Board of *Advances in Water Science and Technology*, (2014 - 2021)
- Member, Associate Editorial Board of *The Open Ecology Journal* (2018 -2020)
- Member, Board of Directors of the Great Lakes Midwest Chapter of Society for Ecological Restoration International, (2012 - 2014)
- Chair, USA Alumni Association of Central South University of Forestry and Technology, China (2007 -2018)
- Member of Ecological Society of America (2007 - 2019)
- Member of Society for Ecological Restoration in USA (2012 - 2016)

❖ **Reviewer for Peer-Reviewed Journals and Research Grants**

- Austin Journal of Earth Science; Archives of Agronomy and Soil Science; Canadian Journal of Remote Sensing; Chinese Journal of Ecology; Chinese Science Bulletin; Ecological Modeling; Ecology and Environmental Sciences; Environmental Reviews; Environmental Modeling and Software; Environmental Science and Pollution Research; Forest Ecology and Management; Forest Research; Forestry Studies in China; Forests; Global Change Biology; Journal of Central South University of Forestry and Technology; Journal of Environmental Management; Journal of Geoscience and Environment Protection; Journal of Hydrology; Journal of Soil and Sediments; Land Degradation & Development; PEDOSPHERE; Plant and Soil; Plants; PLoS ONE; Polish Journal of Ecology; River Research and Applications; Soil Science; Southern Forests; Sustainability; Water
- The National Science Foundation Graduate Student Fellowship (GRSF) program, USA; The Georgian National Science Foundation, Georgia; National Natural Science Foundation of China