

高等学术论文写作 **Advanced Academic Writing Skills**

● 教师介绍 Faculty



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Research Field: The focus of Dr. Chen's research is on microbial technology and bioconversion of organic waste for bioenergy. Combining modern biocatalytic synthesis with the latest discoveries in microbiology, we have been undertaking research programs on utilization of lignocellulosic biomass and broad kinds of wastes, on natural product modification, on fermentation process, and on biosynthetic pathway engineering.

Education

September, 2002 – July, 2007:

Shandong University, China

Ph.D. in Microbiology

September, 1998 – July, 2002:

Shandong Agricultural University, China

B.S. in Biotechnology

Work Experience

January, 2018 – present: Professor

College of Chemical Engineering, Beijing University of Chemical Technology

January, 2013 – present: Deputy Dean,

Biomass Energy & Environmental Engineering Research Center, Beijing University of Chemical Technology, China

September, 2018 – September, 2019: Visiting Professor

Department of Biological & Agricultural Engineering, University of California, Davis, USA

September, 2017 – December, 2017: Visiting Scholar,

School of Business Society and Engineering, Mälardalen University,
Västerås, Sweden

January, 2012 – December, 2017: Associate Professor,
College of Life Science and Technology / College of Chemical
Engineering, Beijing University of Chemical Technology, China

August, 2011 – August, 2012: Postdoc Researcher,
Department of Biological & Agricultural Engineering, University of
California, Davis, USA

July, 2007 – December, 2011: Assistant Professor,
College of Life Science and Technology, Beijing University of
Chemical Technology, China

Representative Publications

1. Co-pretreatment of wheat straw by potassium hydroxide and calcium hydroxide: Methane production, economics, and energy potential analysis [J]. *Journal of Environmental Management*, 2019, 236: 720-726.
2. Anaerobic digestion of tobacco stalk: Biomethane production performance and kinetic analysis [J]. *Environmental Science and Pollution Research*, 2019, 26: 14250-14258.
3. Effects of temperature, heating rate, residence time, reaction atmosphere and pressure on biochar properties [J]. *Journal of Biobased Materials and Bioenergy*, 2019, 13: 1-10.
4. Transition from non-commercial to commercial energy in rural China: Insights from the accessibility and affordability [J]. *Energy Policy*, 2019, 127: 392-403.
5. Methane production through anaerobic digestion: Participation and digestion characteristics of cellulose, hemicellulose and lignin [J]. *Applied Energy*, 2018, 226: 1219-1228.
6. Methane production through anaerobic co-digestion of sheep dung and waste paper [J]. *Energy Conversion and Management*, 2018, 156: 279-287.
7. Anaerobic digestion of lipid-rich swine slaughterhouse waste: Methane production performance, long-chain fatty acids profile and predominant microorganisms [J]. *Bioresource Technology*, 2018, 269, 426-433.
8. Characterization and methane production of different nut residue wastes in anaerobic digestion [J]. *Renewable Energy*, 2018, 116: 835-841.
9. Enhancement of methane production from cotton stalk using different pretreatment techniques [J]. *Scientific Reports*, 2018, 8: 3463(1-9).
10. Employing response surface methodology (RSM) to enhance methane production from cotton stalk [J]. *Environmental Science and Pollution Research*, 2018, 25(8): 7618-7624.
11. Solid-state co-digestion of NaOH-pretreated corn straw and chicken manure under

- mesophilic condition [J]. *Waste and Biomass Valorization*, 2018, 9: 1027-1035.
12. Maximization of the methane production from durian shell during anaerobic digestion [J]. *Bioresource Technology*, 2017, 238: 433-438.
 13. Enhanced methane production of vinegar residue by response surface methodology (RSM) [J]. *AMB Express*, 2017, 7: 89(1-8).
 14. Impact of co-pretreatment of calcium hydroxide and steam explosion on anaerobic digestion efficiency with corn stover [J]. *Environmental Technology*, 2017, 38(12): 1465-1473.
 15. Pretreatment methods of lignocellulosic biomass for anaerobic digestion [J]. *AMB Express*, 2017, 7: 72(1-12).
 16. Enhancing the performance on anaerobic digestion of vinegar residue by sodium hydroxide pretreatment [J]. *Waste and Biomass Valorization*, 2017, 8(4): 1119-1126.
 17. Study on biomethane production and biodegradability of different leafy vegetables in anaerobic digestion [J]. *AMB Express*, 2017, 7: 1-9.
 18. In-situ injection of potassium hydroxide into briquetted wheat straw and meadow grass – Effect on biomethane production [J]. *Bioresource Technology*, 2017, 239: 258-265.
 19. Study of the combination of sulfuric acid treatment and thermal regeneration of spent powdered activated carbons from decolourization process in glucosamine production [J]. *Chemical Engineering & Processing: Process Intensification*, 2017, 121: 224-231.
 20. Bio-energy conversion performance, biodegradability, and kinetic analysis of different fruit residues during discontinuous anaerobic digestion [J]. *Waste Management*, 2016, 52: 295-301.
 21. Effect of lipase hydrolysis on biomethane production from swine slaughterhouse waste in China [J]. *Energy & Fuels*, 2016, 30(9): 7326-7330.
 22. Influence of steam explosion pretreatment on the anaerobic digestion of vinegar residue [J]. *Waste Management & Research*, 2016, 34(7): 630-637.
 23. Biochar applications and modern techniques for characterization [J]. *Clean Technologies and Environmental Policy*, 2016, 18: 1457-1473.
 24. Improve the anaerobic biodegradability by copretreatment of thermal alkali and steam explosion of lignocellulosic waste [J]. *BioMed Research International*, 2016, 2016, 1-10. <http://dx.doi.org/10.1155/2016/2786598>
 25. Potential of black liquor of potassium hydroxide to pretreat corn stover for biomethane production [J]. *BioResources*, 2016, 11(2): 4550-4563.
 26. Catalytic pyrolysis of tar model compound with various bio-char catalysts to recycle char from biomass pyrolysis [J]. *BioResources*, 2016, 11(2): 3752-3768.
 27. Impact of thermo-alkaline pretreatment on the anaerobic digestion of corn stover [J]. *Journal of Beijing University of Chemical Technology*, 2016, 43(5): 1-7.
 28. Pretreatment of Corn Stover for Methane Production with the Combination of

- Potassium Hydroxide and Calcium Hydroxide, *Energy & Fuels*, 2015, 29(9): 5841-5846.
29. Anaerobic digestion performance of vinegar residue in continuously stirred tank reactor [J]. *Bioresource Technology*, 2015, 186: 338-342.
 30. Enhancing methane production of corn stover through a novel way: sequent pretreatment of potassium hydroxide and steam explosion [J]. *Bioresource Technology*, 2015, 181: 345-350.
 31. Recent progress in study on technology for pretreating corn stalk to improve biogas production capacity of anaerobic digestors [J]. *Journal of Ecology and Rural Environment*, 2015, 31(5): 640-646.
 32. Anaerobic co-digestion of chicken manure and corn stover in batch and continuously stirred tank reactor (CSTR) [J]. *Bioresource Technology*, 2014, 156: 342-347.
 33. Thermophilic solid-state anaerobic digestion of alkaline-pretreated corn stover [J]. *Energy & Fuels*, 2014, 28(6): 3759-3765.
 34. Effects of moisture content in fuel on thermal performance and emission of biomass semi-gasified cookstove [J]. *Energy for Sustainable Development*, 2014, 21: 60-65.
 35. Comparison of methane production potential, biodegradability, and kinetics of different organic substrates [J]. *Bioresource Technology*, 2013, 149: 565-569.
 36. Biogas production from co-digestion of corn stover and chicken manure under anaerobic wet, hemi-solid, and solid state conditions [J]. *Bioresource Technology*, 2013, 149: 406-412.
 37. β -galactosyl-pyrrolidiny diazeniumdiolate: an efficient tool to investigate nitric oxide functions on promoting cell death [J]. *Applied Microbiology and Biotechnology*, 2013, 97(16): 7377-7385.
 38. Enhanced chemical and biological activities of a newly biosynthesized eugenol glycoconjugate, eugenol α -D-glucopyranoside [J]. *Applied Microbiology and Biotechnology*, 2013, 97(3): 1043-1050.
 39. Influence of particle size and alkaline pretreatment on the anaerobic digestion of corn stover [J]. *BioResources*, 2013, 8(4): 5850-5860.
 40. Influence of inoculum source and pre-incubation on bio-methane potential of chicken manure and corn stover [J]. *Applied Biochemistry and Biotechnology*, 2013, 171(1): 117-127.
 41. Synergistic interaction of β -galactosyl-pyrrolidiny diazeniumdiolate with cisplatin against three tumor cells [J]. *Archives of Pharmacal Research*, 2013, 36(5): 619-625.
 42. Study of anti-inflammatory activities of α -D-glucosylated eugenol [J]. *Archives of Pharmacal Research*, 2013, 36(1): 109-115.
 43. Evaluating methane production from anaerobic mono- and co-digestion of kitchen waste, corn stover, and chicken manure [J]. *Energy & Fuels*, 2013, 27(4): 2085-2091.
 44. Biochemical methane potential (BMP) of vinegar residue and the influence of feed to inoculum ratios on biogas production [J]. *BioResources*, 2013, 8(2): 2487-2498.

45. Utilizing denitrifying bacteria immobilized with ceramsite to remove NO₃-N from landscape water [J]. *Research of Environmental Sciences*, 2013, 26(6): 684-688.
46. An effective way to biosynthesize α -glucosyl eugenol with a high yield by *Xanthomonas maltophilia* [J]. *Pharmaceutical Biology*, 2012, 50(6): 727-731.
47. High production of β -glucosidase by *Aspergillus niger* on corncob [J]. *Applied Biochemistry and Biotechnology*, 2012, 168(1): 58-67.
48. Study on the changes of moisture content, temperature and forecast of growth and spoilage process of fungi in stored wheat [J]. *Journal of Chinese Cereals and Oils Association*, 2012, 27(5): 5-9+26.
49. A novel way to enhance the oil recovery ratio by *Streptococcus* sp. BT-003 [J]. *Journal of Basic Microbiology*, 2009, 49(5): 477-481.
50. Protoplast mutagenesis for improving β -glucosidase production of *Aspergillus niger* [J]. *Chinese Journal of Biotechnology*, 2009, 25(12): 1921-1926.

● **课程介绍 About Course**

The ability to write and to express thoughts in a clear manner is a vital step on the path to becoming a well-rounded and educated person. However, often students who study scientific disciplines discount this very important skill. Academic paper writing is more complex than just writing. This course provides general guidelines to assist graduate and Ph.D. students in writing better scientific documents and academic/research papers. Through 48 hours' practice, the students will be systematically trained and their abilities and skills for good academic writing will be significantly improved.

Outlines:

- Chapter 1 Introduction (1 hour)
- Chapter 2 Importance and Characteristics of Scientific Paper (1 hours)
- Chapter 3 How to Select an Appropriate Journal? (1 hours)
- Chapter 4 Start from Instruction to Authors (2 hours)
- Chapter 5 Principles and Grammar in Writing (2 hours)
- Chapter 6 Novelty and Significance (1 hours)
- Chapter 7 Article Types (2 hours)
- Chapter 8 How to Organize Main Structure? (6 hours)
- Chapter 9 Data Processing and Displaying (2 hour)
- Chapter 10 Prepare Figures and Tables in High Quality (2 hour)
- Chapter 11 Reference Managing (1 hour)
- Chapter 12 Always Follow the Style of Journal (1 hour)
- Chapter 13 Submission and Review Process (2 hour)
- Chapter 14 Ethics (1 hour)
- Chapter 15 Against Plagiarism (1 hour)
- Chapter 16 Practice on Assistant Software (8 hour)
- Chapter 17 Writing Practice (8 hour)