LIANG JINXUAN

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EDUCATION

Nanyang Technological University 2024.01 - Present

Doctor of Environmental Life Sciences Engineering

- Full-time PhD student （ https://scelse.sg/phd-student/ ）

National University of Singapore 2022.08 - 2024.01

Master of Environmental Engineering

- GPA：4.5/5.0
- Major Courses: Biological Treatment Process, Environmental Engineering Principles, Environmental Technology, Toxic Waste Management, Industrial Wastewater Control, Water Treatment Process

Dalian University of Technology 2018.09 - 2022.06

Bachelor of Environmental and Ecological Engineering

- Average Score: 86.5 (Top 10%)
- Major Courses: Principles of Chemical Engineering, Analytical Chemistry, Biochemistry, Physical Chemistry, Organic Chemistry, Inorganic Chemistry, C Programming Language, Advanced Mathematics, Linear Algebra, Ecotoxicology, Probability and Statistics
- Awards: American College Students Mathematical Modeling Contest SP Award (2022), Dalian University of Technology 2022 Outstanding Graduates (Top 10%), Dalian University of Technology 2022 Excellent Graduation Thesis (Top 5%), Dalian University of Technology Outstanding Scholarship (Twice)

PUBLICATION

- Gu C, **Liang J**, Liu M, et al. Aerobic degradation of bisphenol A by *Pseudomonas* sp. LM-1: Characteristic and pathway. ***Biodegradation***, 1-9 (2022).
- Tang Q, Wu M, Zhang Y, Li J, **Liang J**, et al. Performance and bacterial community profiles of sequencing batch reactors during long-term exposure to polyethylene terephthalate and polyethylene microplastics. ***Bioresource Technology*** 347: 126393 (2022).

PROFESSIONAL EXPERIENCE

Teaching Assistant at Nanyang Technological University 2024.01 - Present

- CH5200 Food Microbiology: a joint course co-developed by Nanyang Technological University (NTU) and Wageningen University & Research (WUR)
- ES3203 The Genome and Society
- Primary mentor for two undergraduates' final-year project
- Delivered a research presentation at the 2025 SCELSE Summer Course as an invited speaker

PetroChina International Pte.Ltd. (Singapore) 2023.05 - 2023.08

Refining Department Intern

- Involvement with Biofuels/Biodiesel project, Solar power project and Waste Water Treatment project in terms of coordination, preparation & research
- Revising an ESG report analysis for Singapore's oil industry

SOLV8 Technology Pte. Ltd. (Singapore) 2023.01 - 2023.08

Product Development Intern

- Assist in the production of membrane separators and test membrane samples.
- Simulate system performances and energy savings to achieve the highest solvent separation rate.

China Anneng Group （China） 2021.07 - 2021.09

Project Management Department intern

- Use CAD software to map and sort out the rain and sewage pipe network, and complete the pipe network inspection report
- Participate in and be responsible for the cost part of China Resources Power Construction Project

Beijing Tairuite Testing Technology Service Co. Ltd （China） 2020.06 - 2020.08

Chemical Inspector

- Detect the components of the split electronic product, analyze the chemical element content, use RoHS testing to determine whether the product is qualified, and complete the product inspection report

RESEARCH EXPERIENCE

NUS ESE5004 Research Project 2022.08 - 2023.12

Primary project manager

- Assess the increased AMR (Antimicrobial resistance) of *Klebsiella pneumoniae* due to the accelerated use of QACs (Quaternary ammonium compounds) during the recent COVID-19 pandemic
- Monitor the concentrations of QACs in environmental samples collected from the groundwater systems in NUS
- A risk assessment framework was developed for a set of QACs

Dalian University of Technology Innovation & Entrepreneurship training program 2020.03 - 2022.06

Captain

- Screened a single strain with the ability to degrade crude oil, identified its species, and named it LJX
- Studied the degradation and emulsification ability of the strain LJX to petroleum hydrocarbons under different conditions and determined the most suitable degradation condition
- Authored the paper, “Isolation and characteristics of a bacterial strain for biodegradation of crude oil”

SKILL

- **Lab Skills:** Microbial Isolation and Cultivation, Molecular biology experiments, Microscopy (Raman, FTIR, SEM, Confocal) experiments, GC-MS, LC-MS, Bioinformatics (Genome annotation, Functional profiling, and Statistical analysis)
- **Computational Skills:** Statistical Analysis (Origin, GraphPad Prism), Design (AutoCAD), Programming (R language, Python)
- **Certification and Awards:** The Interdisciplinary Graduate Programme Academic Excellence Award (Year 1) Winner; 2022 Mathematical Contest in Modeling / Interdisciplinary Contest in Modeling (MCM/ICM) SP winner; Third Prize, “Excellence Cup” Entrepreneurship Contest (2019), Dalian University of Technology; Fifth National College Students Environmental Protection Knowledge Contest Excellence Award (2021); National Level II Table Tennis Athlete; Amateur Piano Grade 8; Varsity Table Tennis Athlete at Nanyang Technological University and Dalian University of Technology, etc.
- **Languages:** Mandarin: Native; English: Fluent (IELTS: 7.5)
- **Others:** Time Management, Project Management, Communication, Team Cooperation