CHUANJUN JIAO

EXPERIENCE

IKA Works, Inc., Product Manager BioProcessing Solutions

Aug 2023 - Present

- Providing electrosynthesis training, demonstration, and technical support to chemists from 50+ pharmaceutical companies.
- Hosted a 45-minute bioprocess upscaling strategy webinar and 25-minute virtual workshop on gravimetric feeding.
- Giving bioreactor training to 20+ people sales teams and 200+ customers.
- Managing the bioprocessing product line in North America and increased its yearly sales number by 50% in 2024.

IKA Works, Inc., Global Product Specialist/ The Scripps Research Institute, Research Assistant

Oct 2018 - Aug 2023

- Field-tested 3 electrosynthesis accessory prototypes, lead product launch, and advised marketing from scientific perspective.
- Implemented the condition translation from two synthetic electrochemical reactions to standardized electrosynthesis platform.
- Presented 60-minute lectures titled *E-Illuminating the Renaissance of Organic Synthesis* to chemists in biotechnology.

Mangan Inc., Associate Scientist/ Amgen, Senior Scientist

Jan 2018-Sep 2018

Performed a set of three cleanability studies on daily basis.

Southern California Gas Company, Engineering Intern

June 2017-Sep 2017

- Conducted research and analysis on the market and technology trends in the power industry.
- Participated in a power to gas (P2G) project.
- Compiled a technical & market quarterly report.

UCLA Chemical and Biomolecular Engineering Department, Teaching Assistant

Mar 2017-June 2017

- Guided a laboratory class of 24 undergraduate students with safe and correct experimental techniques.
- Took charge of laboratory safety including equipment operating safety, experimental safety, and emergency evacuation.
- Graded students' lab reports, quizzes, presentations.

UCLA Chemical and Biomolecular Engineering Department, Research Assistant

Sep 2015-Oct 2017

- Analyzed profits of the production process to justify the commercial value of proposed zero-emission power plant.
- Carried out within a Visual C++ platform heat and power integration of several power plant flowsheets.
- Used Python to manage stream data, including temperature, heat load.
- Developed and simulated a novel coal/natural gas power plant flowsheet within the UniSim platform.

College of Chemistry, Jilin University, China; Research Assistant

Aug 2013-May 2015

- Prepared novel organic luminescent materials as light-emitting diodes.
- Participated in the "National Innovative Project".

EDUCATION

Master of Science, Henry Samueli School of Engineering, UCLA

Oct 2017

- Thesis: "Coal power plants with enhanced profitability and no carbon dioxide emissions".
- Awards: University Fellowship (2016).

Bachelor of Science, Jilin University, China

Jun 2015

 Awards: Au-Chin Tang Special Scholarship, College of Chemistry (2015); Scientific Research Individual Awards, College of Chemistry (2014); Third University Scholarship (2014).

PUBLICATIONS

- The facile realization of RGB luminescence based on one yellow emissive four-coordinate organoboron material, Chem. Commun., 2015, 51, 7701.
- 2-(2-Hydroxyphenyl)benzimidazole-Based Four-Coordinate Boron-Containing Materials with Highly Efficient Deep-Blue Photoluminescene and Electroluminescence, Inorg. Chem., 2015, 54, 2652.
- Emission behaviors of unsymmetrical 1, 3-diaryl-β-diketones: A model perfectly disclosing the effect of molecular conformation on luminescence of organic solids, Sci. Rep., 2015, 5, 9140.

PRESENTATIONS

- "E"lluminating the Renaissance of Organic Synthesis, presented at Pacific Symposium on Radical Chemistry and to customers including EMD Serono Inc., Relay Therapeutics, University of Freiburg, University of Konstanz. (Recording is available at https://www.ika.com/zh/Products-Lab-Eq/Electrochemistry-Kit-csp-516/ElectraSyn-20-Package-Videos-cpvd-20008980/)
- Coal Power Plants with Enhanced Profitability and No Carbon Dioxide Emissions, Coal Conversion to Value-Added Chemicals and Power in Modular Systems, 2017 AIChE® Annual Meeting.
- Cogeneration of Electricity, Hydrogen and Carbon Containing Chemicals from Natural Gas-Coal Supplies, Environmental Division, 2016 AIChE® Annual Meeting.

SKILLS

- Electrochemical synthesis.
- Expertise in Data Analysis using Pandas, NumPy, and Matplotlib using python.
- Presentation and public speaking.