Resume of Heshuang Dai

Basic Information

School :	School of Life and Health
Gender：	Female
Date of Birth：	198803
Title：	Lecturer
Education：	Ph.D of Science
Tutor：	Master Advisor
Interest of research:	Preparation of chiral fluorescent tunable nanomaterials for residue monitoring, pharmaceuticals, and environmental monitoring. Preparation of organic-inorganic composite polyurethane conductive materials. Preparation of antitumor nanodrug delivery formulations.

Academic Background

2006.09 - 2010.07: Bachelor in Pharmaceutical Engineering, School of Chemical Engineering and Pharmacy, Wuhan Institute of Technology
2012.09 - 2015.06: Master in Pharmaceutical Analysis, School of Pharmacy, Chongqing Medical University
2016.04 - 2017.03: Research Student, Institute for Catalysis, Hokkaido University, Laboratory of Polymer Function
2017.04 - 2020.03: Doctorate in Comprehensive Chemistry, Graduate School of Chemical Sciences and Engineering, Hokkaido University

Enrollment Information

1. Enrollment Discipline: Pharmacy；Materials Science；Chemistry
2. Research direction: Pharmaceutical development；materials chemistry
3. Enrollment Year: 2023-2024

Representative Projects

1. Doctoral Start-up Fund Project, Hubei University of Technology: Study on Structure-activity Relationship of Polyurethanes with Chiral Group-embedded Skeleton.
2. International Cooperation Research Fund for Young Scholars, '111' Base for Cell Regulation and Molecular Medicine, Hubei University of Technology:Application of Helical Polyurethane Gel in the Separation of Chiral Drugs
3. Undergraduate Innovation and Entrepreneurship Training Program:Application of Helical Polyurethane Gel in the Separation of Chiral Drugs.

Representative Articles

1. Synthesis and Characterization of BxPU-Liy: A Novel Polyurethane-based Solid Electrolyte with Disrupted Crystallinity for Enhanced Ion Transport, Chemical Engineering Journal, 2024, 479(148011)
2. Lysosome-Specific Coumarin-Based Fluorescent Bioprobes for in Vivo Polarity Sensing and Cancer Treatment, Bioconjugate Chemistry, 2023, 34(10): 1851-1860
3. Development and Evaluation of a Novel Pul-PHMB/GP Antibacterial Wound Dressing: A Cross-Linked, Hydrogel-Transition Solution for Advanced Wound Management and Infection Control.Polymers 2024, 16(10), 1352
4. Synthesis and Stereochemistry of Helical Polyurethanes Based on 2,2’-Dihydroxy-1,1’-binaphthyl and Diisocyanatobenzenes, Polymer Chemistry, 2020, 11(6): 1075-1252;