Global Summer School

Chasing Future Chemistry Leading the Future, Intelligence Creating the Applications

July 13–17, 2026

Harbin Institute of Technology, Harbin, P.R. China

Contact Information

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General Information

The theme of this international summer school is "Chemistry Leading the Future, Intelligence Creating the Applications ". In the context of current technological development, knowledge related to applied chemistry has empowered various fields such as aerospace, energy, environment, and life health, providing strong support for scientific and technological innovation in multiple domains and playing a crucial role in the progress and sustainable development of society. The content of this summer school focuses on the cutting-edge topics in each relevant field. Through a series of courses and thematic lectures by international and domestic leading scholars, students can understand the knowledge foundation of applied chemistry in the technological progress of related fields and how the discipline keeps pace with the times and plays an important role in scientific research efforts. Through this program, students will recognize that foundational knowledge is essential for technological advancement and gain a deeper understanding of interdisciplinary integrations such as "Applied Chemistry + Aerospace", "Applied Chemistry + Energy", and "Applied Chemistry + Environment". It includes both theoretical organization of basic research and the latest research trends and frontier achievements, broadening the research thinking and academic vision of graduate students, and enhancing their research capabilities and innovation consciousness.

Attendance Requirements

The program is open to undergraduate and graduate students with a background in aerospace energy, aerospace materials, energy materials, or related fields. Proficiency in English is required.

Lectures and Talks (Tentative)

The summer school offers six lectures and four courses. Lecturers and speakers are invited from top institutions, including University of Texas at San Antonio, University of North Carolina at Chapel Hill, Northwestern Polytechnical University, Harbin Institute of Technology, Wuhan University of Technology, and Jilin University.

Topic (preliminary)	Units (50 mins/unit)
Crystal Structures and Their Magnetic Properties	2 (lecture)
Optoelectronic Materials and Supramolecular Chemistry	4 (course)
Light Induced Electron and Energy Transfer Processes	4 (course)
Photogenerated Charges in Photocatalytic System	2 (course)
3D Micro-Nano Processing Method	2 (course)
Design and Development of Catalytic Materials	2 (lecture)
Stabilization of Micro-Nano Multifunctional Materials	2 (lecture)
Dynamics of Thermal Decomposition and Catalytic Combustion Mechanism of Propellants	2 (lecture)
Creation of Molecules of Novel Energetic Materials	2 (lecture)
Biomass Conversion and Selective Catalytic Oxidation	2 (lecture)

Students are required to attend all the courses and lectures. They may choose to participate in one of the innovation experiments.

Program Dates and Times

Date	M (8:00-11:30)	A (2:00-5:30)
7.12 Sun	Registration	
7.13 Mon	Opening Ceremony	Courses 1 & 2
7.14 Tue	Courses 1 & 2	Innovative Experiments 1 & 2
7.15 Wed	Lectures 1 & 2	Innovative Experiments 1 & 2
7.16 Thur	Lectures 3 & 4	Lectures 5 & 6
7.17 Fri	Courses 3 & 4	Closing Ceremony

Please note that the program schedule is subject to change based on actual circumstances.