

## AppendixRecordD-9: Student Participation in Projects and Awards

**TableD-9-1Near3Year Undergraduate Student Practical Innovation  
Training Program Project Overview**

Serial number	Project Name	Supervisor's name	Time	Level
1	Study on the mechanism of humic substance-enhanced microbial reduction and remediation of hexavalent chromium pollution in water	Li Yuanping	2023-2025	National level
2	Experimental study on the preparation of Fe-Ca-Al composite oxide particles using biological template method for treating sulfate wastewater	Li Hao Wang Aihe	2021-2023	National level
3	Research on the degradation of persistent organic pollutants using carbon nanofiber catalysts regulated by built-in and polarized electric fields	Wang Caiwen	2023-2025	provincial level
4	Diatomaceous earth/NdTiO <sub>2</sub> Optimization of preparation and performance study of photocatalytic degradation of tetracycline	Shu Jinkai	2022-2024	provincial level
5	Magnetic biochar activated persulfate degradation of diclofenac in water	Wang Yang	2022-2024	provincial level
6	Preparation of composite photocatalyst BiOI/rGO and its performance in photocatalytic degradation of Rhodamine B wastewater	Shu Jinkai	2021-2023	provincial level
7	Study on the degradation of tetrabromobisphenol ether by sludge-based biochar combined with microorganisms	Li Yuanping	2021-2023	provincial level
8	Energy recovery device for wastewater treatment plants based on carbon peak and carbon neutrality	Chi Nianping	2021-2023	provincial level

9	Study on the effectiveness of three-dimensional electrolytic fixed bed with composite modified fillers for treating catering wastewater	Zhou Jun Li Hao	2020-2022	provincial level
10	Experimental study on chitosan-Fe <sub>3</sub> O <sub>4</sub> @Ca-Fe-La composite adsorbent for treating fluoride-containing wastewater	Wang Aihe Shu Jinkai	2020-2022	provincial level
11	Photocatalytic powder - ceramic membrane coupled degradation of sulfamethoxazole in surface water experimental study	Chi Nianping	2023-2025	provincial level
12	Activation of kaolin with persulfate for the degradation of PPCPs	Jiang Haiyan	2020-2022	School level
13	Research and Application of Integrated Composite Three-Dimensional Electrolytic Bed Device	Zhou Jun	2023-2024	School level

**TableD-9-2Overview of Student Participation in Various Competition Projects**

Serial number	Award-winning project	Organizer	year	level	Guidance teacher
1	The third "Beijing Enterprises Water Group Cup" team second prize for national university students' municipal environmental innovation practice ability	Harbin Institute of Technology	2021	National level	Li Hao Jiang Haiyan
2	Third Prize in the Third "Beijing Enterprises Water Group Cup" Competition for Innovation and Practice Ability in Municipal Environmental Science for College Students	Harbin Institute of Technology	2021	National level	Li Hao Jiang Haiyan
3	Third Prize in the Third "Beijing Enterprises Water Group Cup" Competition for Innovation and Practice Ability in Municipal Environmental Science for College Students	Harbin Institute of Technology	2021	National level	Li Hao Jiang Haiyan
4	Third Prize in the Third "Beijing Enterprises Water Group Cup" Competition for Innovation and	Harbin Institute of Technology	2021	National level	Li Hao Jiang Haiyan

	Practice Ability in Municipal Environmental Science for College Students				
5	First Prize in the Third "Beijing Enterprises Water Group Cup" Virtual Competition for National College Students' Municipal Environmental Innovation Practice Ability	Harbin Institute of Technology	2021	National level	Li Hao Jiang Haiyan
6	First Prize in the Third "Beijing Enterprises Water Group Cup" Virtual Competition for National College Students' Municipal Environmental Innovation Practice Ability	Harbin Institute of Technology	2021	National level	Li Hao Jiang Haiyan
7	First Prize in the Third "Beijing Enterprises Water Group Cup" Virtual Competition for National College Students' Municipal Environmental Innovation Practice Ability	Harbin Institute of Technology	2021	National level	Li Hao Jiang Haiyan
8	Second Prize in the Third National College Student Municipal Environmental Innovation Practice Ability "Beikong Water Cup" Virtual Competition	Harbin Institute of Technology	2021	National level	Li Yuanping Zhang Chun
9	First Prize in the Third "Beijing Enterprises Water Group Cup" Virtual Competition for National College Students' Municipal Environmental Innovation Practice Ability	Harbin Institute of Technology	2021	National level	Li Yuanping Zhang Chun
10	First Prize in the Third "Beijing Enterprises Water Group Cup" Virtual Competition for National College Students' Municipal Environmental Innovation Practice Ability	Harbin Institute of Technology	2021	National level	Li Yuanping Zhang Chun
11	Third Prize in the Third "Beijing Enterprises Water Group Cup" Competition for Innovation and Practice Ability in Municipal	Harbin Institute of Technology	2021	National level	Li Yuanping Zhang Chun

	Environmental Science for College Students				
12	Third Prize in the Third "Beijing Enterprises Water Group Cup" Competition for Innovation and Practice Ability in Municipal Environmental Science for College Students	Harbin Institute of Technology	2021	National level	Li Yuanping Zhang Chun
13	First Prize in the National College Student English Vocabulary Challenge	English Weekly Newspaper Agency	2022	National level	
14	Third Prize in the Hunan Province College Students' Energy Conservation and Emission Reduction Social Practice and Technology Competition: An Efficient Electro-Promoted Advanced Oxidation Process for Purifying Dye Wastewater	Hunan Provincial Department of Education	2023	provincial	Chi Nianping
15	Third Prize of the 2nd College Electrical and Electronic Engineering Innovation Competition	China Electrotechnical Society	2023	National level	Huang Zhiliang
16	Third Prize in the National College Student English Competition	Higher Education Foreign Language Teaching Research Association	2023	National level	Chi Nianping, Wang Ping
17	First Prize in the Hunan Province Surveying and Mapping Comprehensive Skills Competition Mapping Contest	Hunan Provincial Department of Education	2024	provincial	Shu Jinkai, Wang Aihe
18	Second Prize in the Hunan Province Second College Student Energy Conservation and Emission Reduction Social Practice and Technology Competition for Scientific Works	Hunan Provincial Department of Education	2024	school level	Shu Jinkai, Chi Nianping
19	Second Prize in the Hunan Province Second College Student Energy Conservation and Emission	Hunan Provincial Department	2024	school level	Shu Jinkai, Zhang Wei

	Reduction Social Practice and Technology Competition for Scientific Works	of Education			
20	Third Prize in the Hunan Province Second College Student Energy Conservation and Emission Reduction Social Practice and Technology Competition	Hunan Provincial Department of Education	2024	provincial	Chi Nianping
21	Third Prize in the Hunan Province Second College Student Energy Conservation and Emission Reduction Social Practice and Technology Competition	Hunan Provincial Department of Education	2024	provincial	Chi Nianping
22	Third Prize of the 10th National College BIM Graduation Design Innovation Competition	Hunan Provincial Department of Education	2024	National level	Shu Jinkai
23	The 6th "Beijing Enterprises Water Group Cup" East China Division of the National College Student Municipal Environmental Innovation Practice Ability Competition  Third Prize in the Laboratory Test Competition	Harbin Institute of Technology	2024	National level	Chi Nianping, Wang Ping