Wenxuan PU

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EDUCATION

Beihang University Beijing, China
MEng Energy and Power Engineering *09/2021-01/2024*
Cumulative Average Grade: 89.8/100

Awards: First Class Academic Scholarship (2021, 2022); Outstanding Postgraduate Students (2023)

Zhengzhou University **Zhengzhou**, China
BEng Metallurgical Engineering *09/2017-06/2021*
Cumulative Average Grade: 84.5/100
Awards: First Class Academic Scholarship (2020, 2021); Merit Student (2019, 2020)

RESEARCH EXPERIENCE

Experimental study on visualization of dual compensation chamber loop heat pipe under acceleration condition
XXX's Lab, Beihang University 06/*2022-05/2023*

- Conducted literature review and process research to develop an experimental plan for the dual reservoir loop heat pipe, including design concepts and methodology.
- Successfully designed and visualized components for the dual reservoir loop heat pipe, determined manufacturing processes, performed working fluid filling, and conducted performance testing under accelerated environmental conditions, both in steady-state and transient operations.
- Enhanced the design of the condenser visualization structure through iterative optimization, improving the overall performance and efficiency of the experimental setup.

Exploration of Composite Catalysts: Investigation of Hydrogen Evolution and Oxygen Evolution Performance of Nickel Hydroxide-Supported Pt and Defective β-Phase Nickel Iron Hydroxide Catalysts
XXX's Lab, Zhengzhou University 05/*2020-07/2021*

- Conducted literature and patent research to identify relevant information and innovative catalyst designs, contributing to the development of novel composite catalysts.
- Developed comprehensive experimental procedures for catalyst preparation and characterization, integrating thermodynamic calculations, XRD, SEM-EDS, and other analytical tools to analyze and interpret experimental findings effectively.

PROJECT EXPERIENCE

Research on convective active cooling temperature control technology for aircraft
China Academy of Launch Vehicle Technology, CALT *09/2022-11/2022*

- Designed and optimized microchannel liquid cooling plates, utilizing simulation and evaluation to assess cooling efficiency.
- Conducted research on convective active cooling and temperature control methods, providing valuable support for subsequent design proposals.
- Collaborated on researching and designing an active cooling and temperature control system for the internal cabin.
- Assisted in the research and design of an active cooling and temperature control system, enabling seamless preparation, design, simulation validation, and evaluation of the proposed solutions.

Design and experimental study on thermal simulation of a certain type of aircraft equipment
China Academy of Launch Vehicle Technology, CALT *09/2022-11/2022*

- Assisted in the design of thermal simulation components for a specific aircraft model, including tasks such as model simplification, graphical rendering, and prototype manufacturing.
- Collaborated in conducting numerical simulations to evaluate thermal components, ensuring the reliability of simulated results through experimental validation.
- Contributed to the successful completion of thermal simulation projects, demonstrating proficiency in design, analysis, and project coordination while maintaining clear and concise documentation.

Thermal analysis of electronic oxygen regulator, oxygen concentration detecting component and molecular-sieve oxygen generation system

xxx *09/2022-11/2022*

- Designed models using SolidWorks and perform thermal analyses using Icepak and FloTHERM, adhering to common requirements for simulation experiments.
- Conducted research on theories to understand the thermal characteristics of equipment in use scenarios, write comprehensive thermal analysis reports and provide optimization recommendations for product design.

Study on Operating Characteristics and Heat Transfer Mechanism of Loop Heat Pipes under Acceleration Fields

China Academy of Space Technology, CAST *09/2021-05/2022*

- Assisted in designing and constructing a performance testing rig for dual reservoir heat pipes, conducting experiments and handling data processing, and effectively visualized results using Origin software.

INTERNSHIP EXPERIENCE

HonorDoctor Nutrition Inc.

Operations Intern *12/2021-04/2023*

- Conducted comprehensive literature searches and synthesized findings on cutting-edge biomedical technologies and guidelines.
- Performed competitor price research and consolidated important news reports from various relevant fields.
- Independently produced 22 educational articles on biomedical topics, showcasing exceptional writing and project management skills with a total word count exceeding 100,000.

Yigu

Operations Intern *06/2021-08/2021*

- Conducted independent research in the nut baking industry and participated in an e-commerce rice product research project, successfully completing three sets of statistical data and research reports.
- Managed the official Amica WeChat account independently, creating and writing 21 articles during the internship period.
- Contributed to the planning and execution of online and offline marketing campaigns, effectively promoting company products across major platforms.

SKILLS & CERTIFICATES

Languages: Mandarin (Native), English (Fluent)
Software Skills: FloTHERM, Icepak, ANSYS Fluent, ICEM, Auto CAD, Solidworks, CATIA, Origin
Programming Language: MATLAB, LaTeX