JiazhenChen

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EDUCATION

Tsinghua University Beijing, China

• Research Assistant | 02.2023—Present

Wuhan University of Technology Wuhan, China

• Bachelor of Marine Engineering | 09.2019-06.2023

• Bachelor of Law (minor degree) | 09.2021-06.2023

PUBLICATIONS AND PATENT

• **Journal Articles:**

Chen, J., Liang, X., Guo, Z., Li, X., & Yuan, C. (2023). Insight into the wear properties of fiber fabric surface-enhanced composite under water lubrication. Tribology International, 108714.(if 6.2)
https://doi.org/10.1016/j.triboint.2023.108714

Chen, J., Guo, Z., Li, X., & Yuan, C. (2022). Development of gradient structural composite for improving tribological performance of PU material in water-lubricated bearings. Tribology International, 176, 107876.
https://doi.org/10.1016/j.triboint.2022.107876

• **Chinese Patents:**

Guo, Z, Li, X, **Chen, J,** et al. The invention relates to a modified fiber cloth interface reinforced composite material for water-lubricated bearing and a preparation method thereof: CN202310517621.6 (in Substantive Examination Process)

Guo, Z, Li, X, **Chen, J,** et al. Functional gradient lining, preparation method and water-lubricated bearing based on the lining: ZL202210225891.5. 2023-3-24. (Authorized)

RESEARCH EXPERIENCE

Tsinghua University (02. 2023 - present):

• Joined the research group of Professor Dan Guo at the State Key Laboratory for Tribology to investigate the mechanisms of transfer film evolution of PTFE coatings on textured mating surfaces, sponsored by Mitsubishi Heavy Industries.

Wuhan University of Technology (09.2020 – 06. 2023):

• Joined the research group of Professor Zhiwei Guo at the Institute of Reliability Engineering to conduct research on water-lubricated bearings.

• As a primary researcher, independently designed and completed sample preparation, mold manufacturing, frictional experiments, and sample characterization. Utilized software such as Abaqus and ANSYS for mechanism analysis.

• Participated in the design of a high-temperature and high-pressure cylinder liner piston ring experimental machine in 11. 2022. Collaborated as a team member in designing the structure of the experimental machine, addressing challenges associated with controlling precise internal movements under high pressure.

TECHNICAL SKILLS

Scientific software: ANSYS, ABAQUS, Origin, AutoCAD, Texgen.

characterization technique: scanning electron microscope(SEM), surface profiler, White-light interferometer.

AWARDS AND HONORS

Outstanding graduate of Wuhan university of technology（2023）

outstanding dissertation of Wuhan university of technology（2023）

Academic competition award（2022）