



# 摩擦学研究所

INSTITUTE OF TRIBOLOGY

English



概况

科学研究

科技服务

人才培养

资源链接

联系方式



胡献国 教授、博士生导师、合肥工业大学摩擦学研究所副所长

通信地址：安徽省合肥市屯溪路193号合肥工业大学摩擦学研究所

电话：0551-62901756-2731

E-mail: 2902956@163.com

## ▪ 教育经历：

2002.06 匈牙利圣伊斯特万大学，工学博士

1988.07 合肥工业大学，工学硕士

1985.07 合肥工业大学，工学学士

## ▪ 研究领域：

- 先进材料摩擦与磨损：纳米二硫化钼，插层二硫化钼，纳米复合自润滑材料，纳米复合涂层，含油聚甲醛，热障（散热）功能梯度材料。
- 特种润滑剂与工艺润滑：热轧乳化液，极压防锈磨削乳化液，线切割乳化液，拉丝乳化液，合成磨削液，磨削微液，超硬材料磨削液（玻璃镜片、陶瓷、硬质合金、金刚石），高温润滑剂。
- 摩擦学环境设计：废油再生，可生物降解润滑剂，油-水分离技术与装备，极端环境条件下的摩擦学设计，生物材料的腐蚀与磨损。

## ▪ 在研项目：

1.教育部高等学校骨干教师资助计划项目 <<内燃机油中醇类化合物的摩擦化学作用及其抗磨减摩机理>> (批准号: GG-10359-1853)

2.安徽省自然科学基金资助项目 <<超细润滑级二硫化钼的制备及其摩擦学特性的研究>> (批准号:00046103)

3.科技部国际科技合作项目<<机械和食品工业含油废水的膜分离特性研究>>(批准号: CHN33:17)

4.教育部留学回国人员科研启动基金资助项目《含油废水-微乳液的膜分离特性研究》(批准号: 030207B2)

5.公司委托项目《H68黄铜热轧乳化润滑液研制》(批准号: 03-94)

6.合肥工业大学中青年科技创新群体计划《纳米结构与功能纳米材料》 (批准号: 103-037016)

7.国家自然科学基金资助项目 <<金属-塑料滑动轴承的超润滑设计与延寿技术>> (批准号:50475071)

8. 固体润滑国家重点实验室开放课题 <<纳米MoS<sub>2</sub>复合涂层的腐蚀摩擦学特性研究>> (批准号:0401)

9. 公司委托项目《白铜线材拉丝拉拔润滑工艺研发》(批准号: 05-37)

10. 公司委托项目《超硬材料磨削液研制》

11. 公司委托项目《熔铸铜合金高温润滑材料与润滑工艺研究》

12. 公司委托项目《线切割乳化液研制》

13. 公司委托项目《新型环保高水基切削液的研制》

■ 部分论文 (EI SCI 收录) :

1. Hu X -G, Xiang F., The study and application of an anti-adhesive wear lubricant for use in deep drawing, Lubrication Science, 1994, 7(1):39-48

2. Hu Xian-Guo, Yuan G, Jiang L., Effect of 2-ethylhexanol on properties of zinc dialkyldithiophosphate, Chemische Technik, 1996, 48(6):334-337

3. X. -G. Hu, E Bekassy-Molnar, Gy Vatai, L Meiszel, J. Olal, Removal of water from oil-emulsion by ultrafiltration membrane, Hungarian Journal of Industrial Chemistry, 1996, 24(2):241-246

4. Hu X., Jiang L., Preparation and characterization of oil-containing POM/PU blends, Journal of Synthetic Lubrication, 1998, 15(1):19-29

5. Hu X -G, Bekassy-Molnar E, Vatai Gy, Meiszel L, Olah J., The study of oil/water separation in emulsion by ultrafiltr membranes, Chemische Technik, 1998, 50(3): 119-123

6. Hu X -G, Jiao M, Yuan G., On the thermal degradation and antiwear performance of zinc dialkyldithiophosphate, Chemische Technik, 1998, 50(5):246-248

7. X. Hu, Tribological behaviour of modified polyacetal against MC nylon without lubrication, Tribology Letters, 1998, 5 (4):313-317

8. Hu X -G,Yuan G, Zhou Z.,Synthesis and characterization of high effective additive, N-containing, zinc diaryldialkyldithiophosphate by Mannich reaction, Lubrication Science, 1999,11(2):165-174

9. Xianguo Hu, Friction and wear behaviors of toughened polyoxymethylene blend under water lubrication, Polymer-Plastics Technology & Engineering,2000,39(1): 137-150

10. Hu X -G and Wang L., Wear resistance of steel bonded WC hardfacing layer prepared by plasma arc technique, Surface Engineering, 2000, 16(3):201-204

11. 尹延国, 胡献国, 崔德密等. 水工混凝土小角度冲蚀磨损特性研究.摩擦学学报,2001,21(2): 126-130

12. Hu Xianguo and Wo Hengzhou, On the role of ketone in the tribological behaviour of zinc dialkyldithiophosphate, Science in China Series A-Mathematics Physics Astronomy,Suppl.S AUG 200144:171-176

13. Hu X -G, Study of friction and wear performance of zinc dialkyldithiophosphate in the presence of trace ketone, Tribology Letters, 2002, 12(1): 67-74

14. Hu Xianguo, Bekassy-Molnar Erika and Vatai Gyula, Characterization of gel concentration in ultrafiltration of oil-in-water emulsion, Hungarian Journal of Industrial Chemistry, 2002, 30(1): 47-52

15. Hu Xianguo, Bekassy-Molnar Erika and Vatai Gyula, Study of ultrafiltration behaviour of emulsified metalworking fl Desalination, 2002, 149(1-3): 191-197

16. Hu Xianguo, Momber A. W. and Yin Y., Hydro-abrasive erosion of steel-fiber reinforced hydraulic concrete,Wear,2002,253(7-8):848-854

17. Hu Xianguo, Bekassy-Molnar E. and Vatai Gy., Analysis and characterization of membrane fouling of ultrafiltration separation for oil-in-water emulsion, Chemical Papers, 2003, 57(1):16-20

18. Hu Xianguo, Wo Hengzhou, Hang Guopei and Lu Yaling, Tribocochemical effect of impurity of zinc dialkyldithiophosphorus in engine oil, Lubrication Science, 2003, 15(4):351-360
19. 沃恒洲, 胡坤宏, 胡献国。纳米二硫化钼作为机械油添加剂的摩擦学特性研究, 摩擦学学报, 2004, 24(1): 33-37
20. Hu Xianguo, Bekassy-Molnar Erika, Koris Andras, Study of modelling transmembrane pressure and gel resistance ultrafiltration of oily emulsion, Desalination, 2004, 163:355-360
21. Hu Xianguo, Momber A. W. and Yin Y., et al, High-speed hydrodynamic wear of steel-fibre reinforced hydraulic concrete, Wear, 2004, 257(5-6):441-450
22. Hu Xianguo, Zhan Song and Zheng Shousen, Study of gray relational grade identification for ferrography based on characteristic analysis of wear debris, Tribotest journal, 2004, 11(1): 57-67
23. Hu Xianguo, Hu Shuli and Zhao Yesong, Synthesis of nanometer molybdenum disulfide particles and its evaluation of friction & wear property, Lubrication Science, 2005, 17(3), 295-308