



化学系

学科进展报告

题目: **Spectroscopic Characterization of Several Perfluorinated Carboxylic Acids and Their Hydrates**

报告人: **Associate Prof. Wei Lin (林伟)**

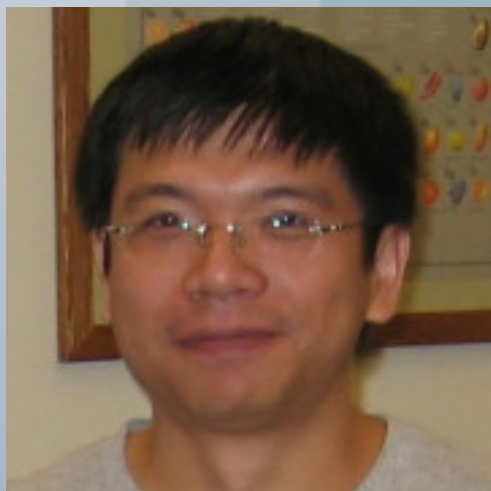
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时间: **2015年6月19日(星期五) 10:00-11:00**

地点: **化学西楼一楼多功能厅**

报告摘要

Perfluorinated acids are highly soluble in water and molecules of environmental importance. Rotational spectra of these acids and their hydrates were studied using a broadband chirped pulse and a narrow band cavity based Fourier transform microwave spectrometers and high level *ab initio* calculations. Extensive conformational search was performed for both the acids and their hydrates at the various levels of theory. Based on the spectra obtained, one can confidently conclude that only one dominate conformer exists in each case. Comparison among the perfluorinated acids, and their hydrates, was made to elucidate the general trend in their conformational preference and binding topologies.



报告人简历

Prof. Wei Lin received his Ph.D. from Wesleyan University in 2005 and was then an postdoctoral fellow at University of California, Berkeley. From 2009, he became a faculty member in the Department of Chemistry and Environmental Sciences, University of Texas at Brownsville and currently a tenured associate professor of chemistry in the newly established University of Texas Rio Grande Valley. His research interests include pure rotational and vibration-rotation-tunneling spectra of environmentally important species, including neutral clusters, charged clusters, and radicals.