



Contribution ID: 189

Type: not specified

## **Identifying the active sites and their kinetics for butadiene synthesis from ethanol for ZnO/SiO<sub>2</sub>, ZrO<sub>2</sub>/SiO<sub>2</sub>, and ZnO-ZrO<sub>2</sub>/SiO<sub>2</sub> Catalysts by modulation excitation infrared spectroscopy**

**Presenter:** Prof. WACHS, Israel (Lehigh University)

**Session Classification:** Contributed presentations