

### **Novelty of the work**

- Tuning of acidic properties of silicotungstates and application of anchored silicotungstates for biodiesel synthesis has been demonstrated *for the first time*.
- We are able to carry out both esterification and transesterification *simultaneously*.
- *Industrial process* for Biodiesel production has also been proposed.
- Further the present catalytic system has been used for sustainable *valorization of glycerol* to synthesize the value added products like dioxolane and glycerol carbonates leading to *cost minimization* of biodiesel synthesis as well as *value addition* of glycerol by-product.