

## **ABSTRACT**

### **SUPPORTED PALLADIUM-GOLD CATALYSTS AND PREPARATION OF VINYL ACETATE THEREWITH**

Disclosed is a catalyst. The catalyst comprises palladium, gold, and a support comprising titanium dioxide and tungsten trioxide. The support preferably comprises from 75 wt% to 99 wt% of titanium dioxide and from 1 wt% to 25 wt% of tungsten trioxide. A method for preparing the catalyst is also disclosed. The method comprises impregnating the support with a palladium compound and a gold compound, calcining the impregnated support, and then reducing the calcined support. Further disclosed is a method for preparing vinyl acetate with the catalyst. The catalyst exhibits improved catalytic activity and selectivity.