

Corn yields useful industrial chemical

Researchers at the University of Wisconsin-Madison, the United States, have developed a catalytic process to transform lactic acid, a compound derived from corn, into the chemical polypropylene glycol. The industrial chemical is used in antifreeze, de-icing fluids and liquid detergents. A series of steps is involved in the transition of corn into polypropylene glycol. First, corn-derived sugar glucose is fermented to yield lactic acid. Following separation and purification of the acid, it is converted into polypropylene glycol in the presence of a copper catalyst. This approach is more cost-efficient than previous methods. Furthermore, it exhibits 100 per cent conversion efficiency with fewer unwanted by-products. *Contact: Mr. Randy Cortright, University of Wisconsin-Madison, the United States. Tel: +1 (608) 2659 026; Or Mr. James Dumesic, University of Wisconsin-Madison, the United States. Tel: +1 (608) 2621 095. (Website: www.globaltechnoscan.com)*