LIGAND-MODIFIED METAL CLUSTERS FOR GAS SEPARATION AND PURIFICATION

Tech ID: 23274 / UC Case 2013-152-0

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,575,042	02/21/2017	2013-152

BRIEF DESCRIPTION

This invention is an organic ligand-bound metal surface that selects one gaseous species over another. The species can be closely sized molecular species having less than 1 angstrom difference in kinetic diameter. The species can comprise of carbon monoxide and ethylene,

Such organic ligand-bound metal surfaces can be successfully used in gas phase separations or purifications, sensing and in catalysis.

SUGGESTED USES

Gas phase separations, purifications, sensing and catalysis

ADVANTAGES

Creates metal clusters for exquiste levels of specificity to reacting substrate molecules.

RELATED MATERIALS

CONTACT

Craig K. Kennedy
craig.kennedy@berkeley.edu
tel: .

INVENTORS

» Katz, Alexander S.

OTHER INFORMATION

KEYWORDS

catalysis

CATEGORIZED AS

» **Materials & Chemicals**

» Chemicals

RELATED CASES

2013-152-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

▶ Delamination Of Layered Zeolite Precursors Under Mild Condition