

Korean scientist makes crude oil into fuel

August 7 2006

Korean scientists say they have created a new substance that can convert inexpensive intermediate crude oil into gasoline.

The team, led by Professor Ryoo Ryong of the Korea Advanced Institute of Science and Technology, says it has generated a new type of zeolite that can be a petrochemical catalyst dozens of times more effective than exists today, The Korea Times reported Monday.

"Zeolite is the most widely used catalyst now in the petrochemical industry," Ryoo told the newspaper. "It has many outstanding advantages, but the hitch is that its efficiency was mediocre due to its slow reaction rate. In comparison, our new-fangled zeolite shows a substantially advanced reaction rate, at 1.5 times to dozens of times better than the one currently available."

Zeolite refers to a group of minerals that have a porous structure. It makes extremely active catalysts by confining molecules in small spaces within its crystalline pores.

The research is to appear in an upcoming issue of the journal Nature Materials.

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Citation: Korean scientist makes crude oil into fuel (2006, August 7) retrieved 27 April 2024

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