

PRESS RELEASE

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WORLD GOLD COUNCIL WELCOMES USE OF GOLD NANOCOATINGS IN FUEL CELLS

World Gold Council "WGC" has today welcomed the development of Au Nanoclad™, a gold based coating developed by Ford Motor Company, for use in fuel cells. This metallic bipolar plate technology uses thin gold-coated stainless steel and has the potential to improve electrical conductivity and corrosion resistance in fuel cell separator plates. It will be presented at the upcoming conference Fuel Cells Durability & Performance 2009¹ in Alexandria, Virginia, USA.

For commercial applications, separator plates in fuel cells must be resistant to corrosion, be durable and have low resistance. The US Department of Energy (DOE) has set targets in these areas that manufacturers must meet by 2010, and according to research published in *Energy & Environmental Science*² earlier this year, gold coated stainless steel is the only material that can meet these targets.

Ford Motor Company is using a nanometer range gold coating, to provide low resistance and high durability, with the least impact on cost. The Au Nanoclad™, technology is a good example of how modern techniques can allow only the necessary amount of gold to be used by engineers, making it a cost effective solution.

Richard Holliday, Director, Industrial, at World Gold Council, said:

"This is further evidence that the unique properties of gold make it the best material for use in a growing number of industrial applications, and, importantly, that gold can be used cost-effectively. We are pleased that automotive companies have recognised gold's inherent advantage in this application. World Gold Council would be interested in hearing from organisations interested in collaborating to bring other innovative technologies using gold to market."

Companies interested in collaborating with World Gold Council are invited to make contact.

For further information,

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Notes to Editors:

¹ [://www.knowledgefoundation.com/viewevents.php?event_id=189&act=evt](http://www.knowledgefoundation.com/viewevents.php?event_id=189&act=evt)

² De las Heras, N., Roberts, E.P.L., Langton, R. and Hodgson, D.R. (2009) 'A review of metal separator plate materials suitable for automotive PEM fuel cells', *Energy & Environmental Science*, **2**, 206-214.

World Gold Council

World Gold Council's mission is to stimulate and sustain the demand for gold and to create enduring value for its stakeholders. It is funded by the world's leading gold mining companies. For further information visit www.gold.org

