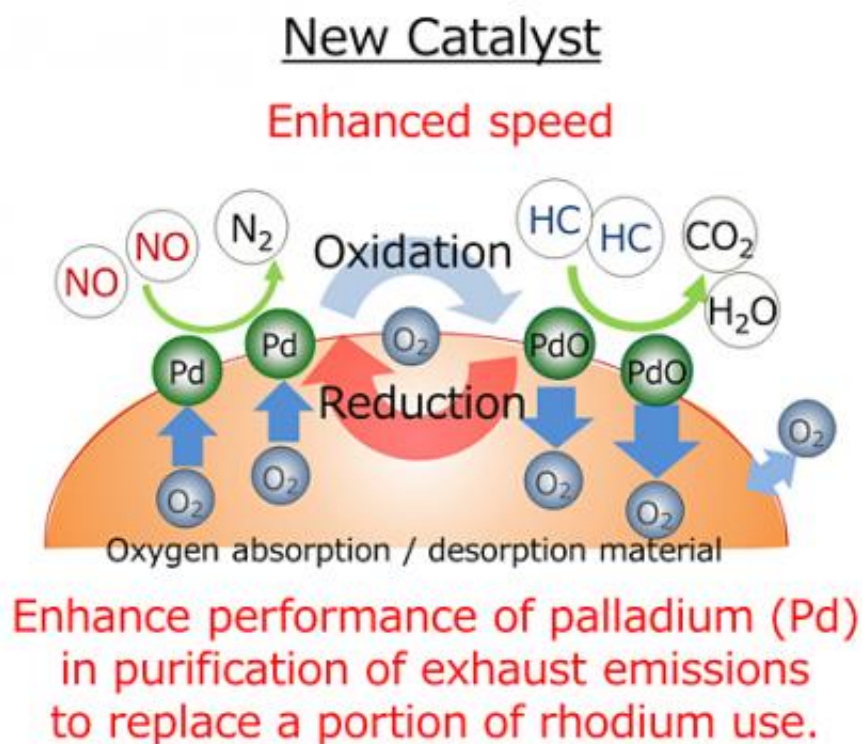


New catalyst to significantly reduce use of precious metals

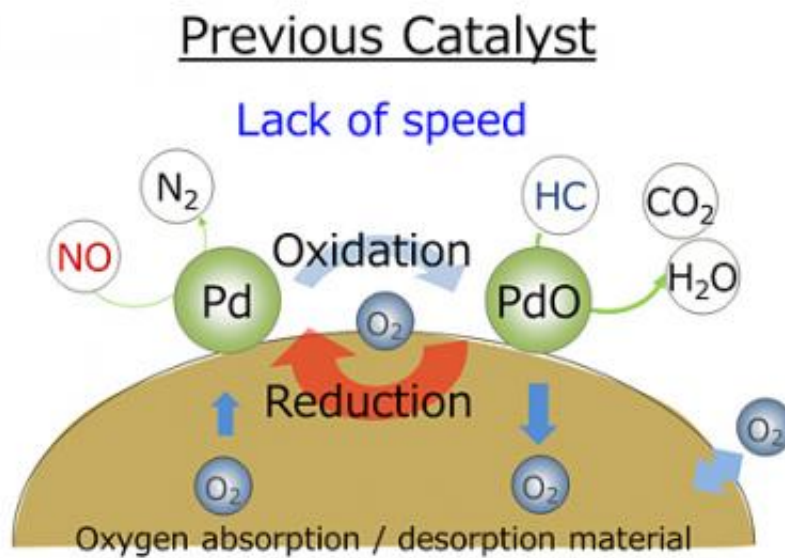
September 6 2012



Honda Motor today announced the development of a new catalyst which reduces by 50% the use of rhodium, one of the precious metals used in a catalyst. Honda will adopt this new catalyst first to the North American version of the all-new 2013 Accord, which will go on sale in the United States on September 19, 2012, and will continue to adopt it sequentially

to other models.

With the backdrop of the increasing volume of global [automobile production](#) and the global trend of strengthening emission regulations, the demand for precious metals used for catalyst, including platinum, [rhodium](#) and palladium, is expected to continue to increase in the future. Honda has been committed to the effort to reduce the use of precious metals for its catalysts, and has successfully applied a catalyst that does not contain any platinum into practical use with the current model of the North American Accord.



Since palladium(Pd) lacks performance in purification of exhaust emissions, rhodium is needed to complete this process.

The newly developed catalyst allows palladium to speed up the process

of absorption and desorption of oxygen, therefore enabling reduced use of rhodium in the purification of [exhaust emissions](#). The adoption of this new catalyst will reduce overall use of [precious metals](#) by 22% (including a 50% reduction in rhodium) compared to the current model of Accord. Moreover, the development of the new catalyst has reduced the cost by 37% while complying with the California state standards in SULEV category of the LEV II regulation, which is one of the strictest emissions regulation in the world.

Source: Honda

Citation: New catalyst to significantly reduce use of precious metals (2012, September 6) retrieved 11 May 2024 from <https://phys.org/news/2012-09-catalyst-significantly-precious-metals.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.