*(**Abstract Sample,** Font: 12 point of Times New Roman or the similar, Single spacing)*

DESIGN OF CO TOLERANT ANODE CATALYSTS FOR POLYMER ELECTROLYTE FUEL CELLS

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It is desirable to op lls (PEFCs) with reformed fuels from methanol or other fuels in for electric vehicle (EV) applications. However, the performanc electrocatalyst is seriously depressed by carbon monoxide pois poisoned by only 10 PPM CO,[2] while the content of CO in refor uch a problem, we have challenged to develop both of new cata of CO in reformats [3,4] and new anode catalysts tolerant to the re PM CO levels. We will introduce the latter here, which have b of platinum with most non-precious elements available in the p

Each alloy electrode as prepared on a glass disk (1-cm diameter) by simultaneou lements under the controlled speeds. Titanium thin film was sp between the glass and the alloy. The composition of each alloy h experimental error less than several percent.....
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We have found several extremely promising alloy combinations and the optimum compositions. A clear difference has also been found in the electrochemical and physical properties between the combinations showed such a synergistic action and others. These results convinced us well how the vacant pair-sites can be prepared.

References

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2. H. Igarashi, T. Fujino, and M. Watanabe, *J. Electroanal. Chem.*, **391**, 119(1995).
3. M. Watanabe, H. Uchida, H. Igarashi, and M. Suzuki, *Chem. Lett.*, **1995**, 25.
4. H. Igarashi, H. Uchida, M. Suzuki, Y. Sasaki and M. Watanabe, *Applied Catalysis*, in press.