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**A nickel complexes with bis(diphosphine) ligands as an molecular catalysts for PEM fuel cell**

Hydrogen seems to be the most promising fuel in the future and fuel cells are electrochemical devices that utilize hydrogen as fuel with one of the best efficiency. But fuel cells use Pt as the catalyst that are both expensive and rare. Here we report a series of mononuclear nickel(II)bis(diphosphine) complexes that have been tested as catalysts in H2/O2 fuel cell.