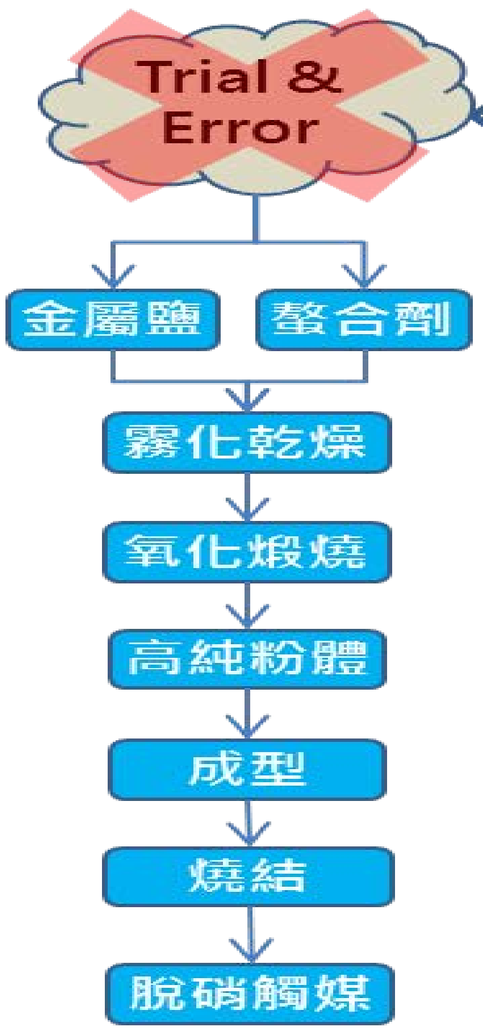
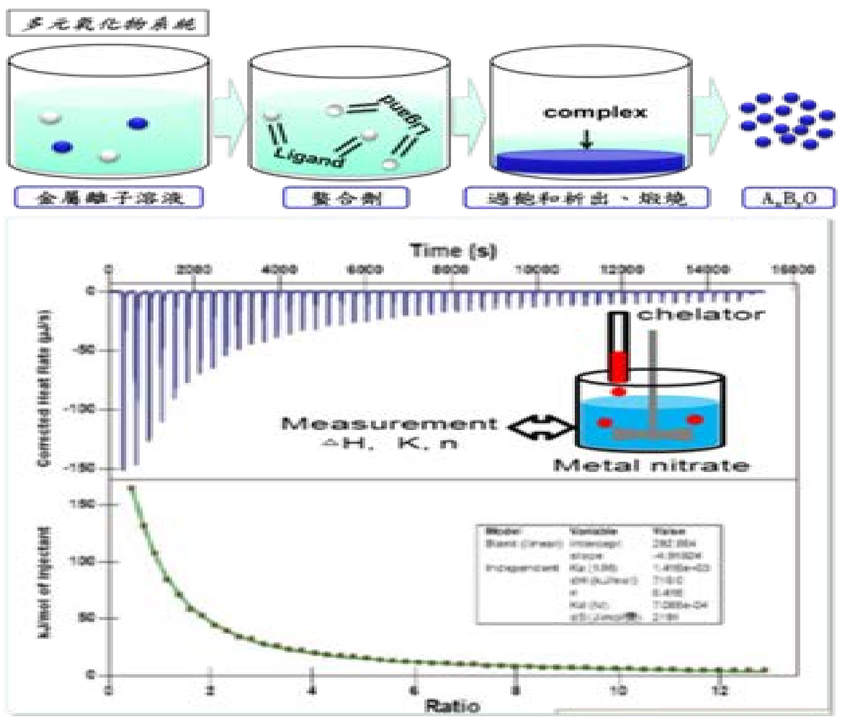
NOx氣體淨化材料與系統

□簡介

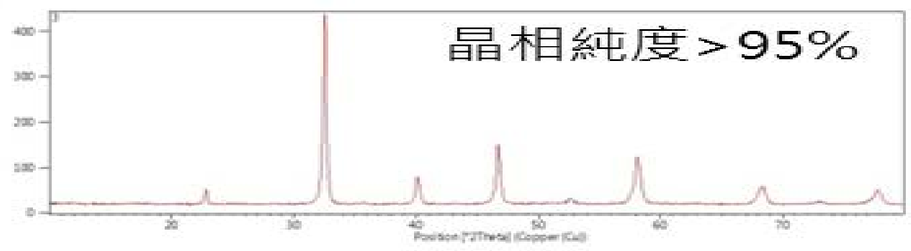
石化工業及燃料動力車輛產業如何降低排放尾氣中NOx、SOx、VOCs、CO等之氣體濃度已是未來趨勢，傳統貴金屬觸媒價格昂貴且有毒化之問題，**工業基礎技術團隊投入多元金屬氧化物粉體精煉之開發**，以**Perovskite-type 金屬氧化物觸媒為載具**，建立**多元金屬氧化物粉體合成技術**，可有效取代昂貴之貴金屬觸媒並將低50%原料成本。

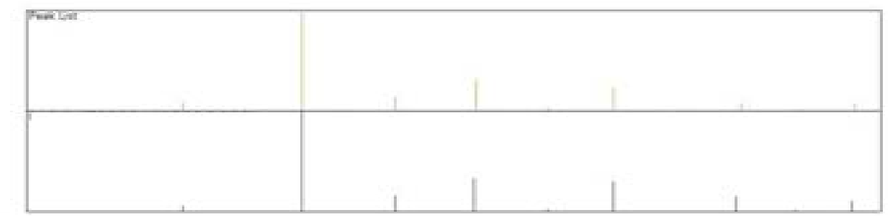
□特色

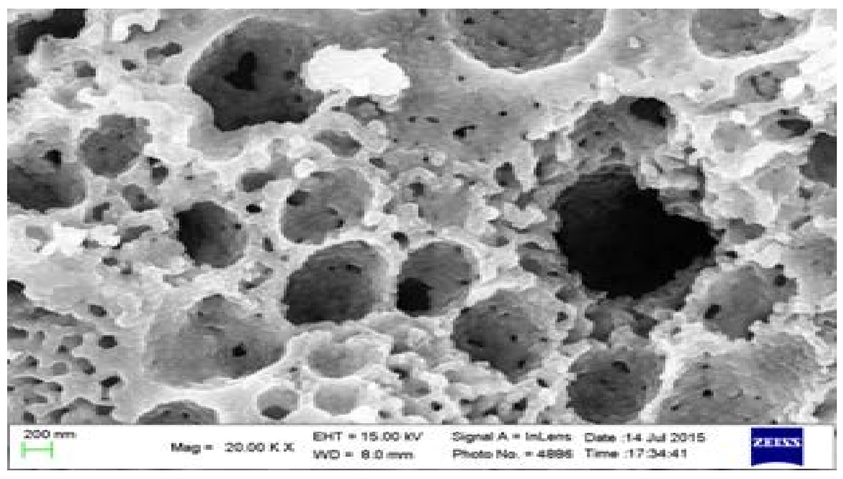




- 提高多元金屬螯合率
- 減少非預期相之生成



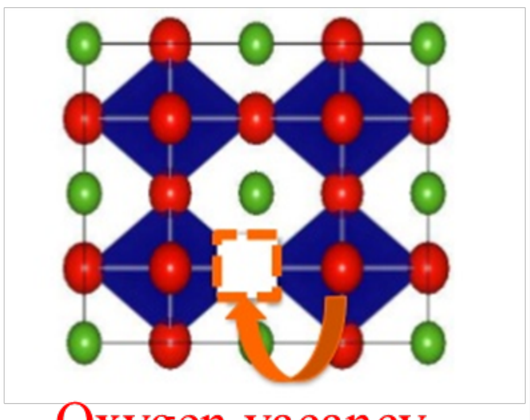




氧化物觸媒顯微型態

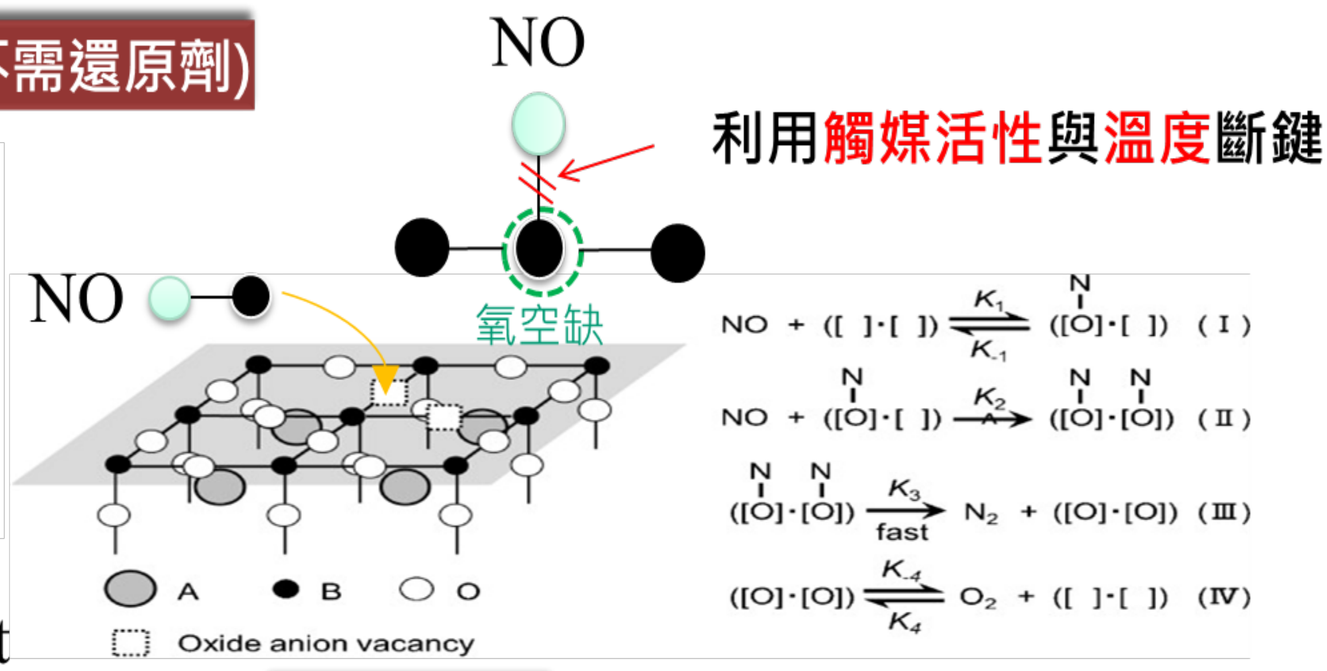
□成果

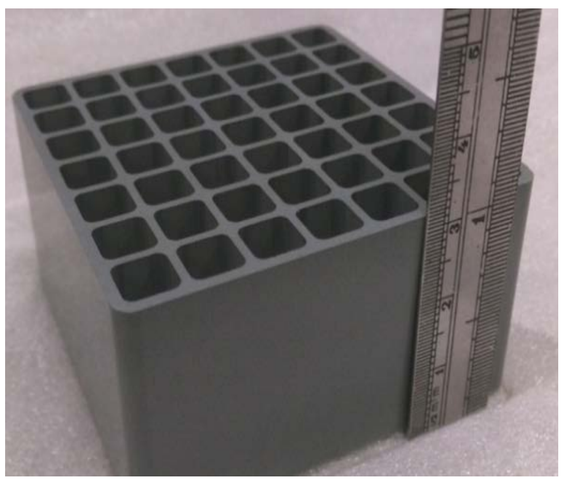
直接脫硝觸媒技術(不需還原劑)



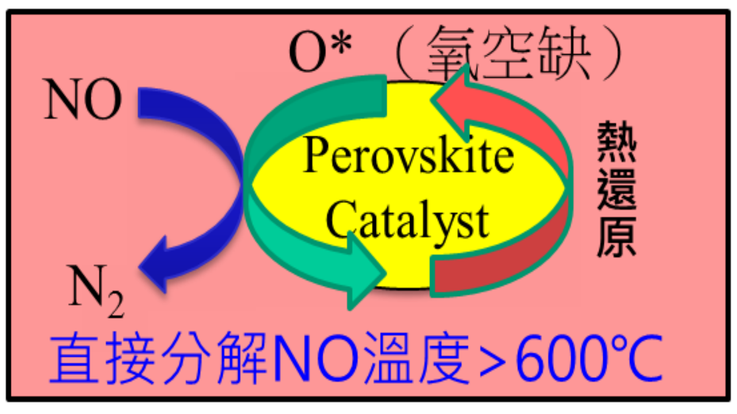
Oxygen vacancy

Perovskite Catalyst





多元金屬氧化物觸媒

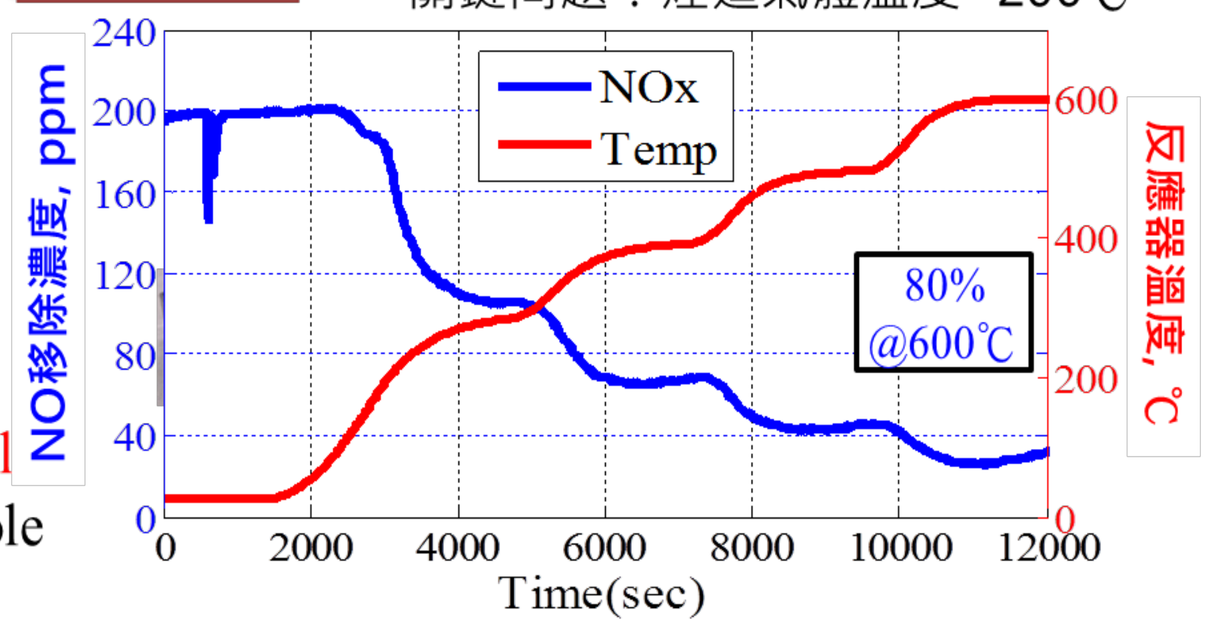


*NO de-bond energy: 607 KJ/mol

**O_2 de-bond energy: 495 KJ/mole

技術現況

*關鍵問題：煙道氣體溫度~200℃



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