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
Cobalt Impregnated Alumina: Nitrogen Adsorption Study at 77 K

Riaz QADEER<sup>1</sup>, Sumeera IKRAM<sup>2</sup>

<sup>1</sup>Pakistan Atomic Energy Commission, P.O. Box 1611, Islamabad-PAKISTAN

e-mail: drriazqadeer@yahoo.com

<sup>2</sup>NESCOM, P.O. Box 2216, Islamabad-PAKISTAN

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 [Authors](#)

**Abstract:** Alumina powder is impregnated with cobalt in the concentration range 5% to 20% (w/v) and is characterized by nitrogen adsorption at 77 K by continuous flow method using the Quantasorb sorption system. It was observed that cobalt metal on impregnation does not contribute any extra surface to alumina. Values of BET surface area determined from nitrogen adsorption data follow the sequence Co (20% w/v) - Al<sub>2</sub>O<sub>3</sub> < Co (10% w/v) - Al<sub>2</sub>O<sub>3</sub> < Co (5% w/v) - Al<sub>2</sub>O<sub>3</sub> < Pure Al<sub>2</sub>O<sub>3</sub>. Pore size distribution curves demonstrate the mesoporous nature of cobalt impregnated alumina.



[chem@tubitak.gov.tr](mailto:chem@tubitak.gov.tr)

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