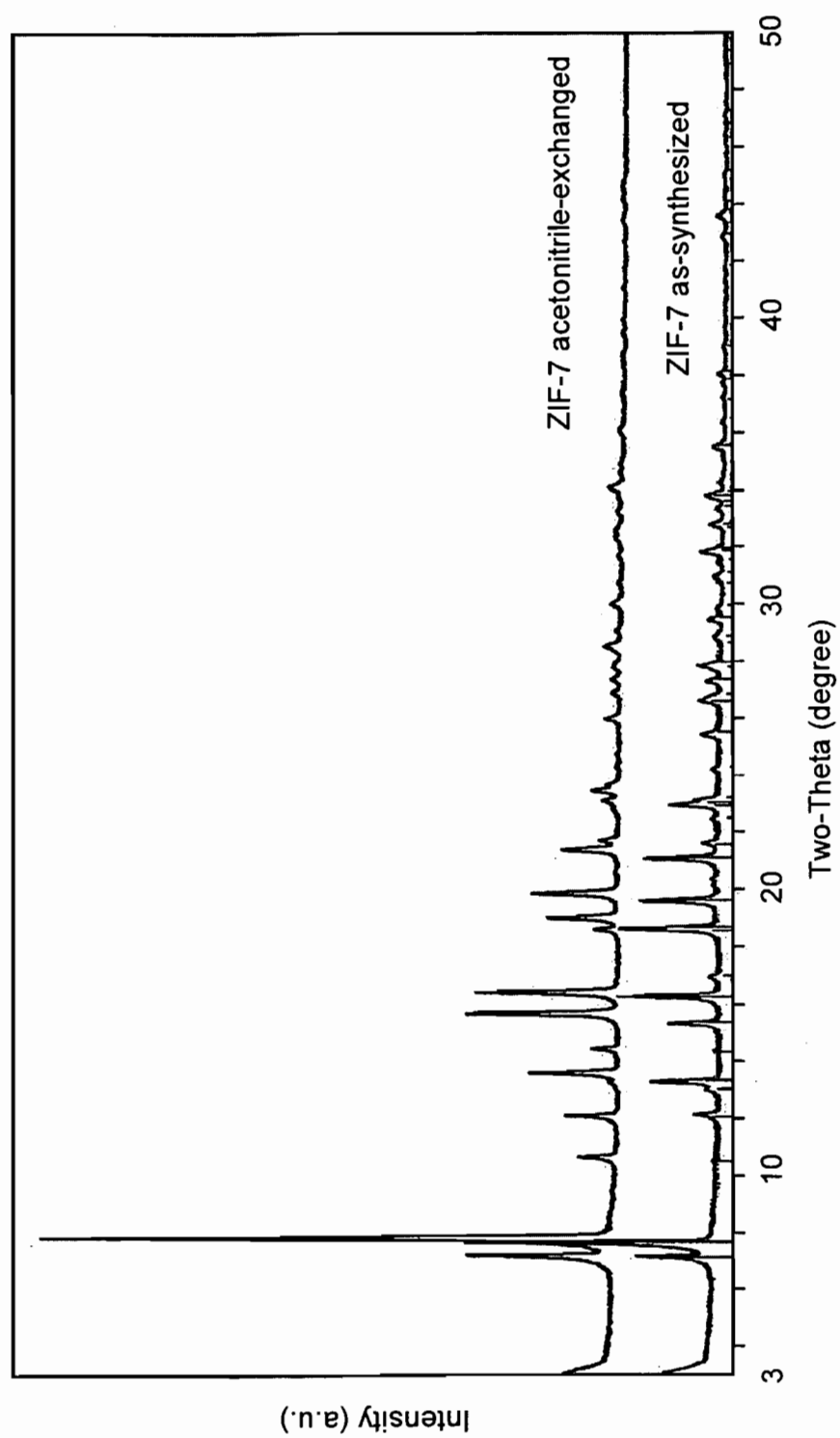


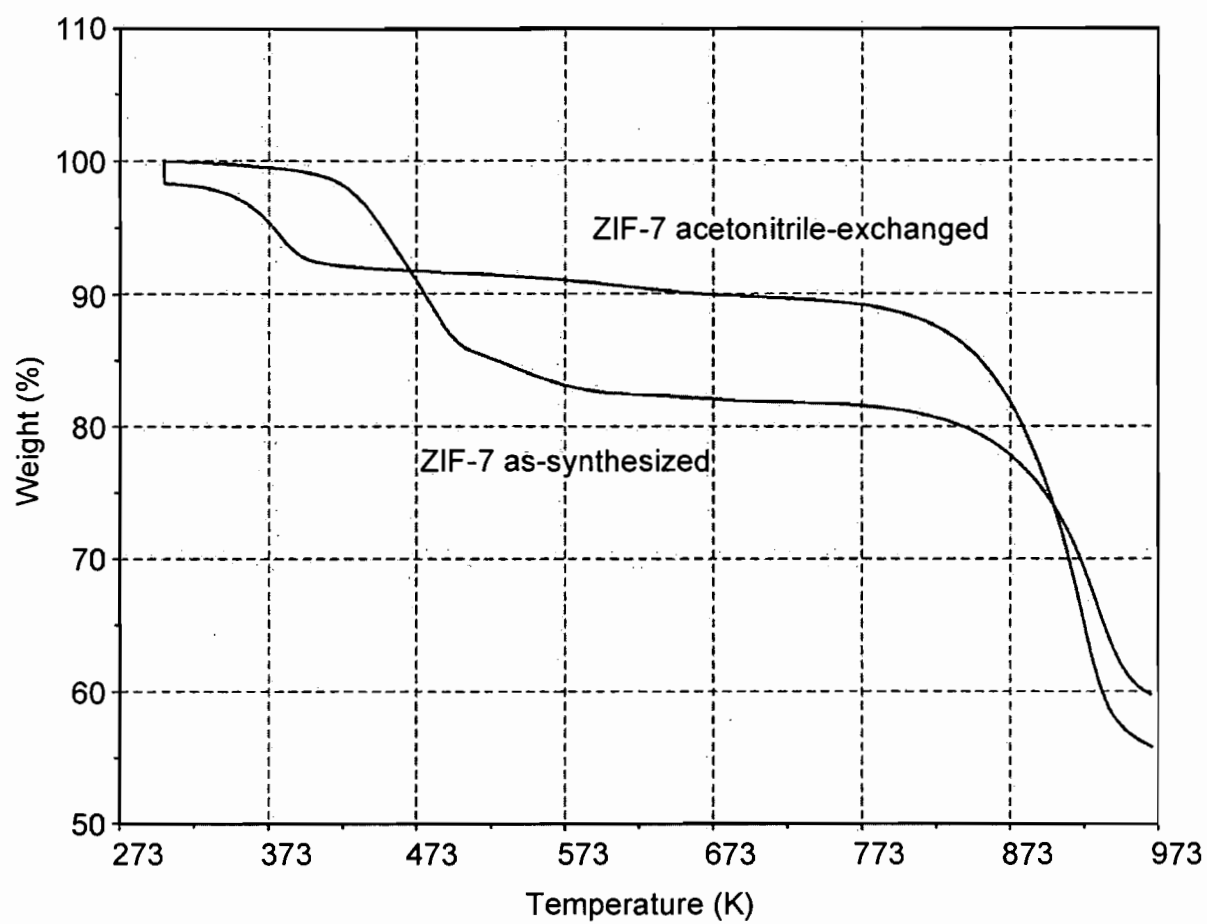
1 / 29



**Powder X-ray Diffraction Pattern of ZIF-7**

**FIG. 1**

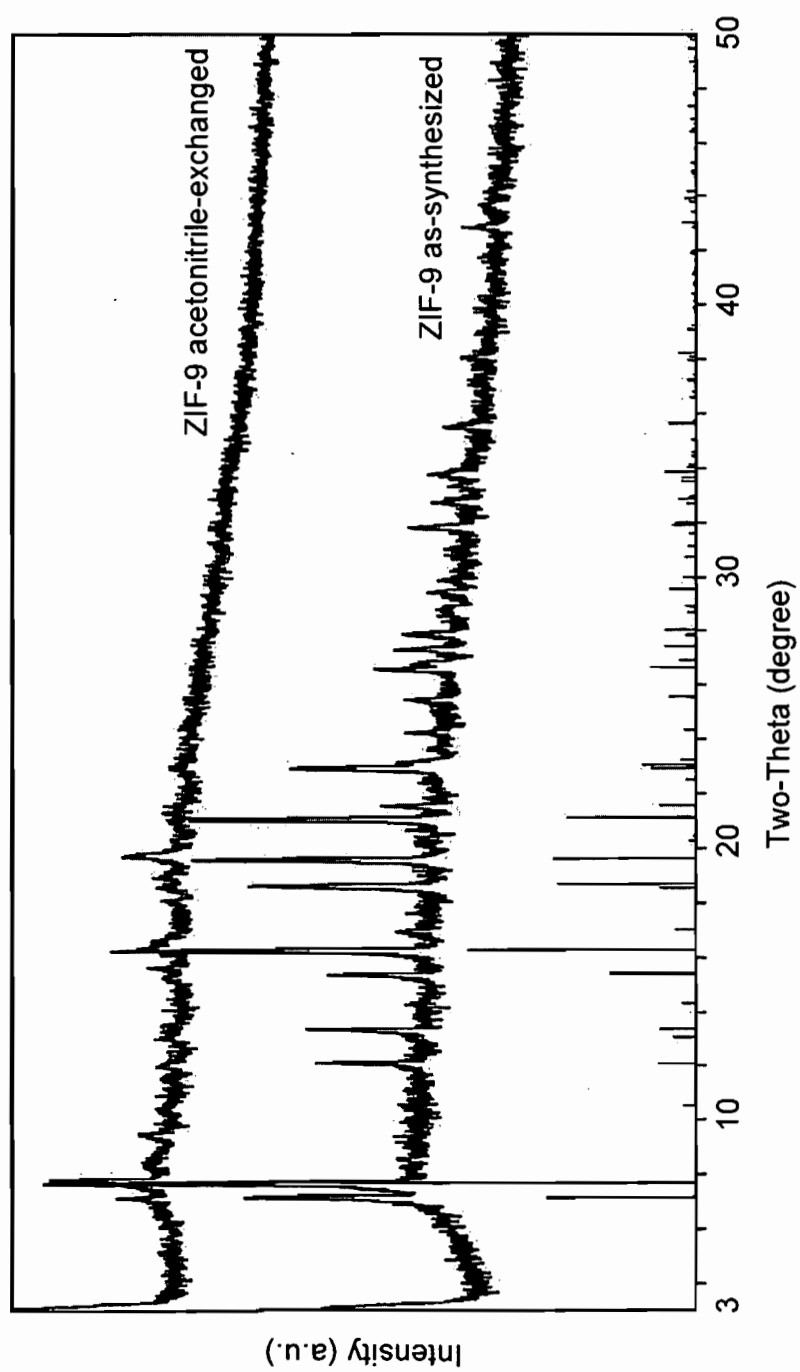
2 / 29



Thermogravimetric Analyses of ZIF-7

FIG. 2

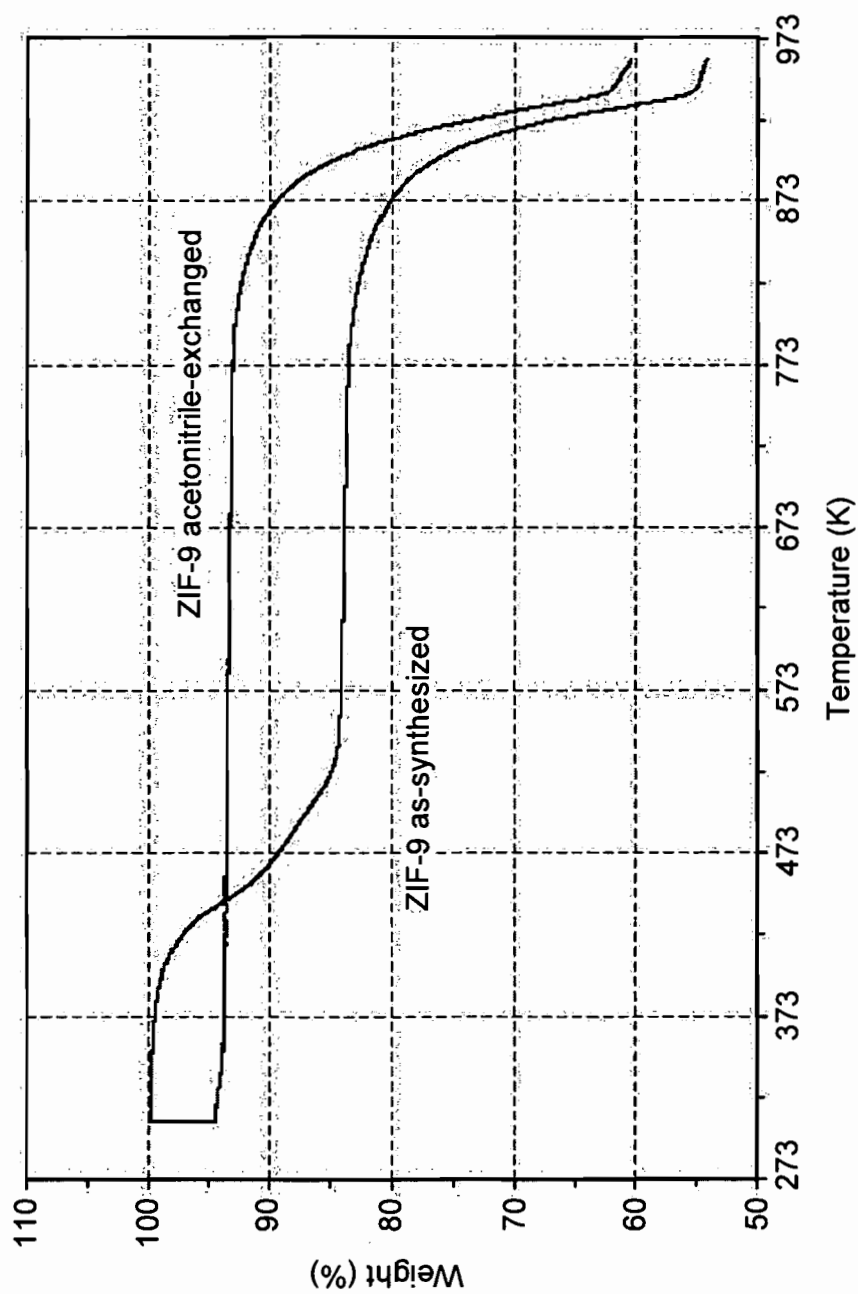
3 / 29



Powder X-ray Diffraction Pattern of ZIF-9

**FIG. 3**

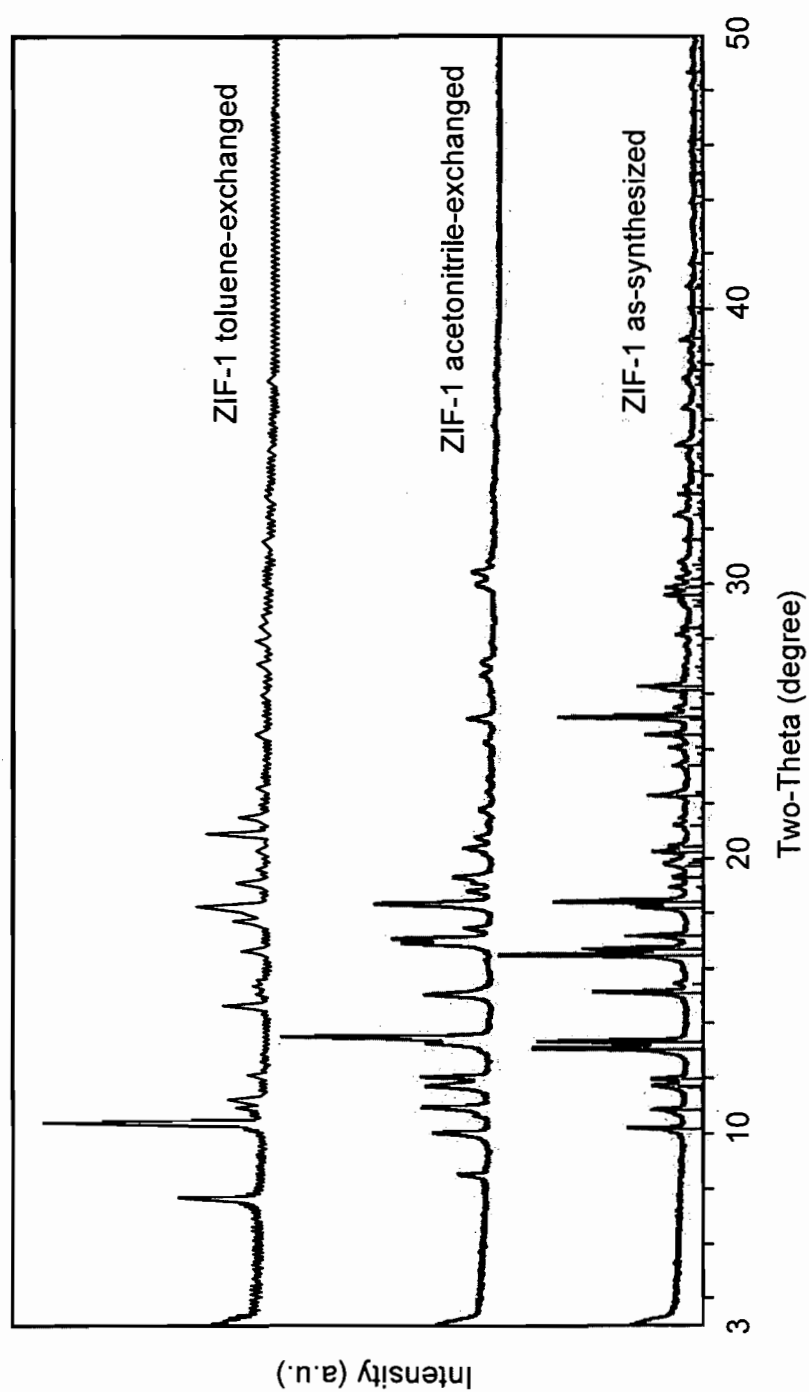
4 / 29



Thermogravimetric Analyses of ZIF-9

**FIG. 4**

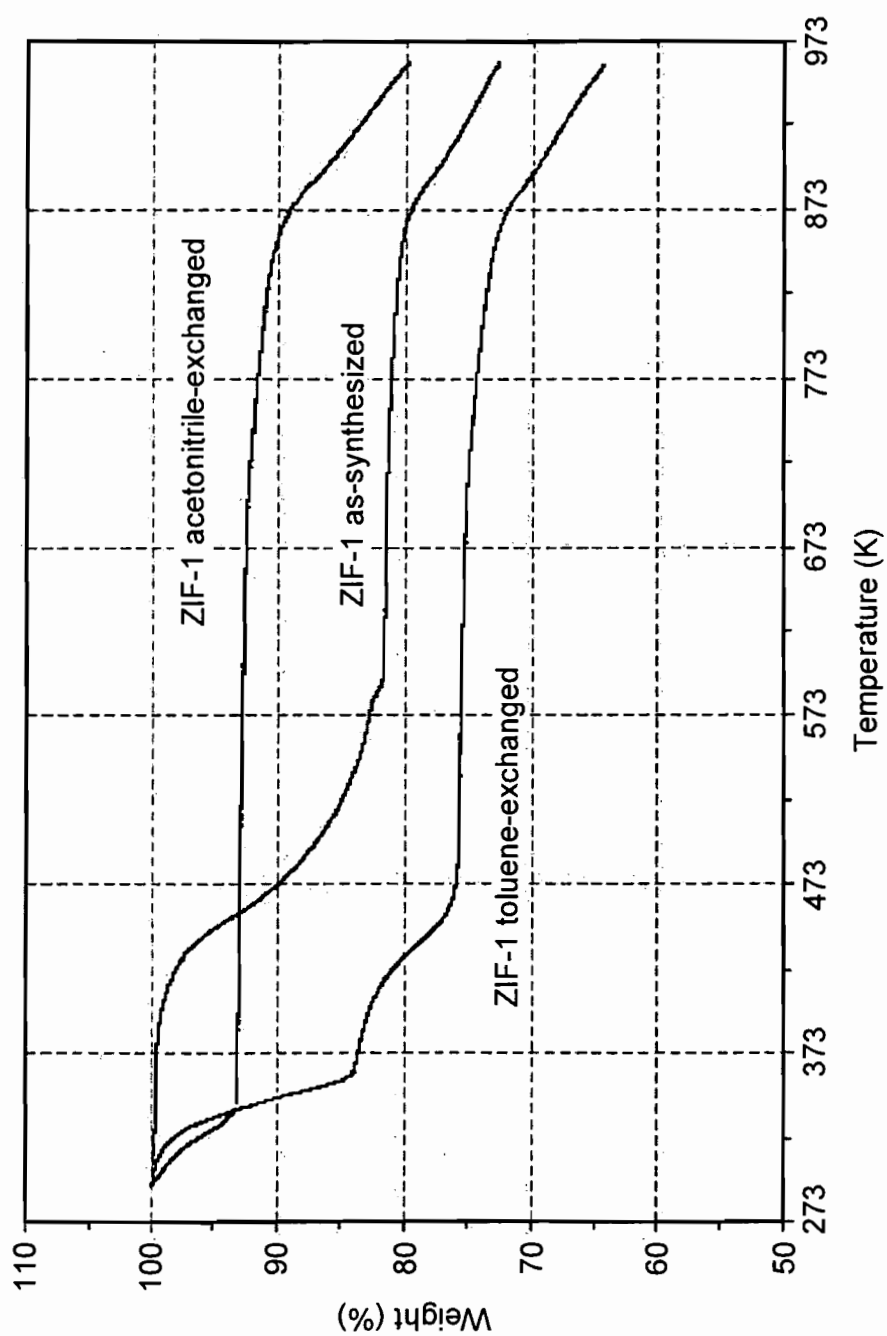
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Powder X-ray Diffraction Pattern of ZIF-1

**FIG. 5**

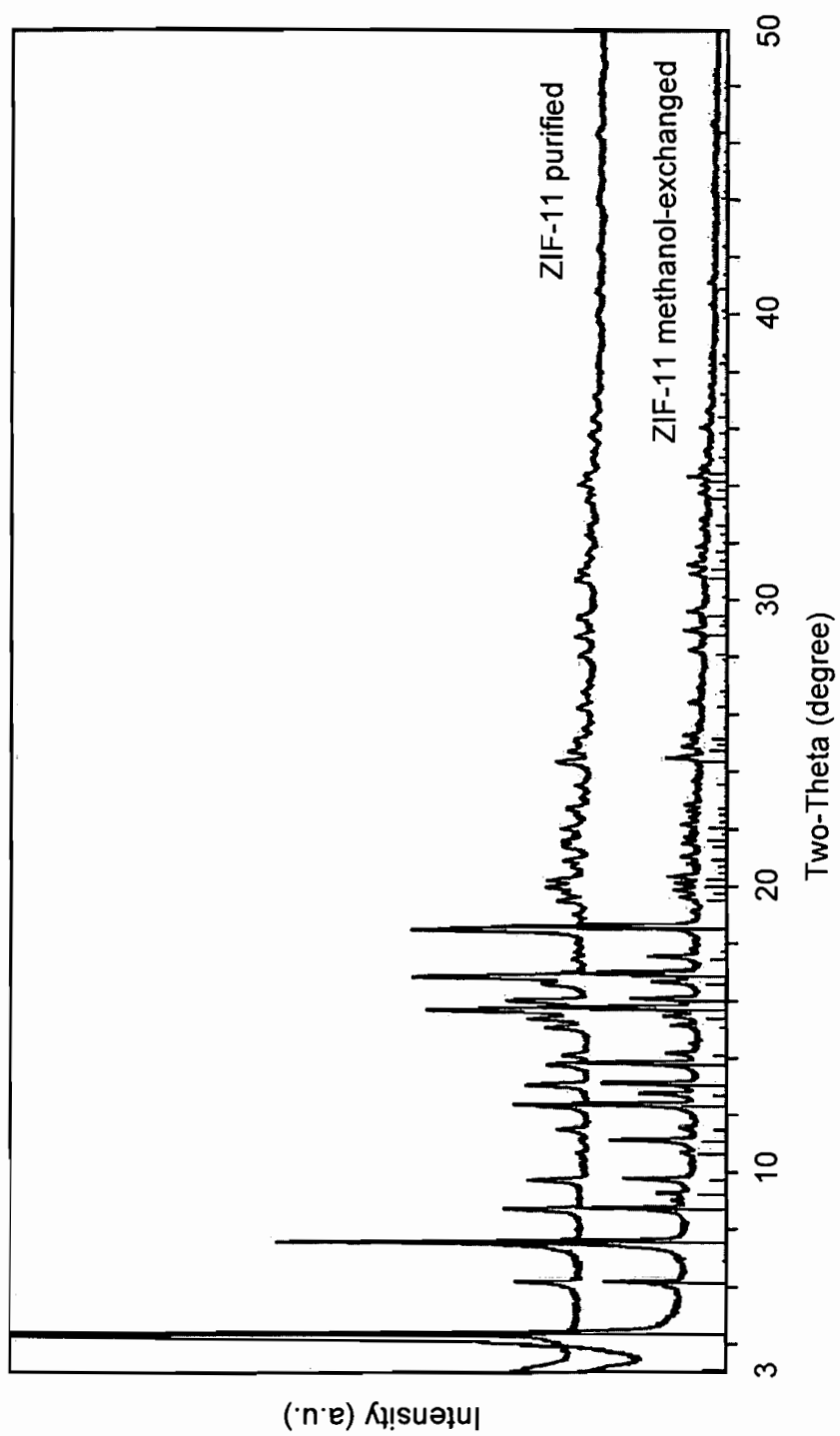
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Thermogravimetric Analyses of ZIF-1

**FIG. 6**

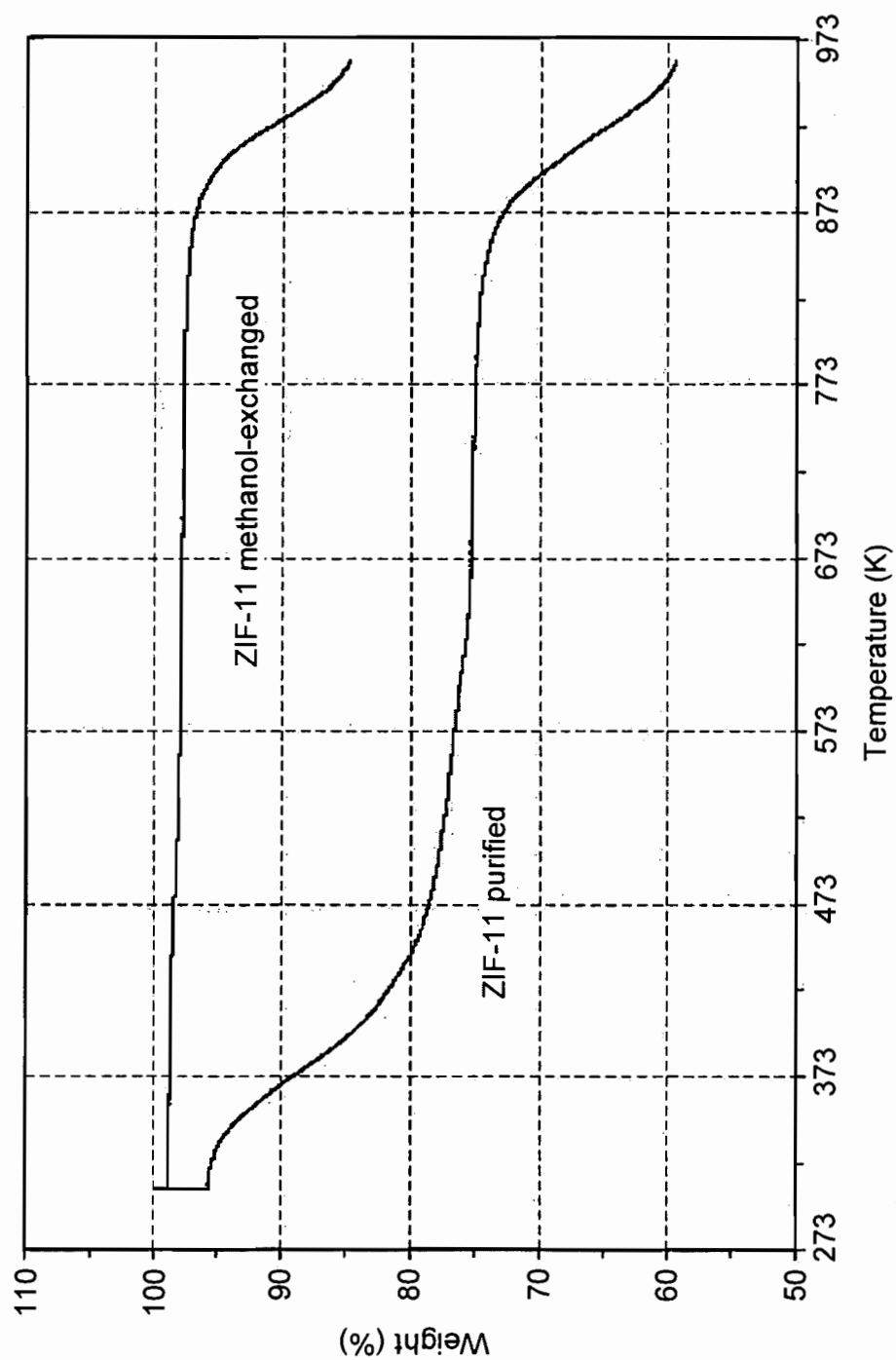
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**Powder X-ray Diffraction Pattern of ZIF-11**

**FIG. 7**

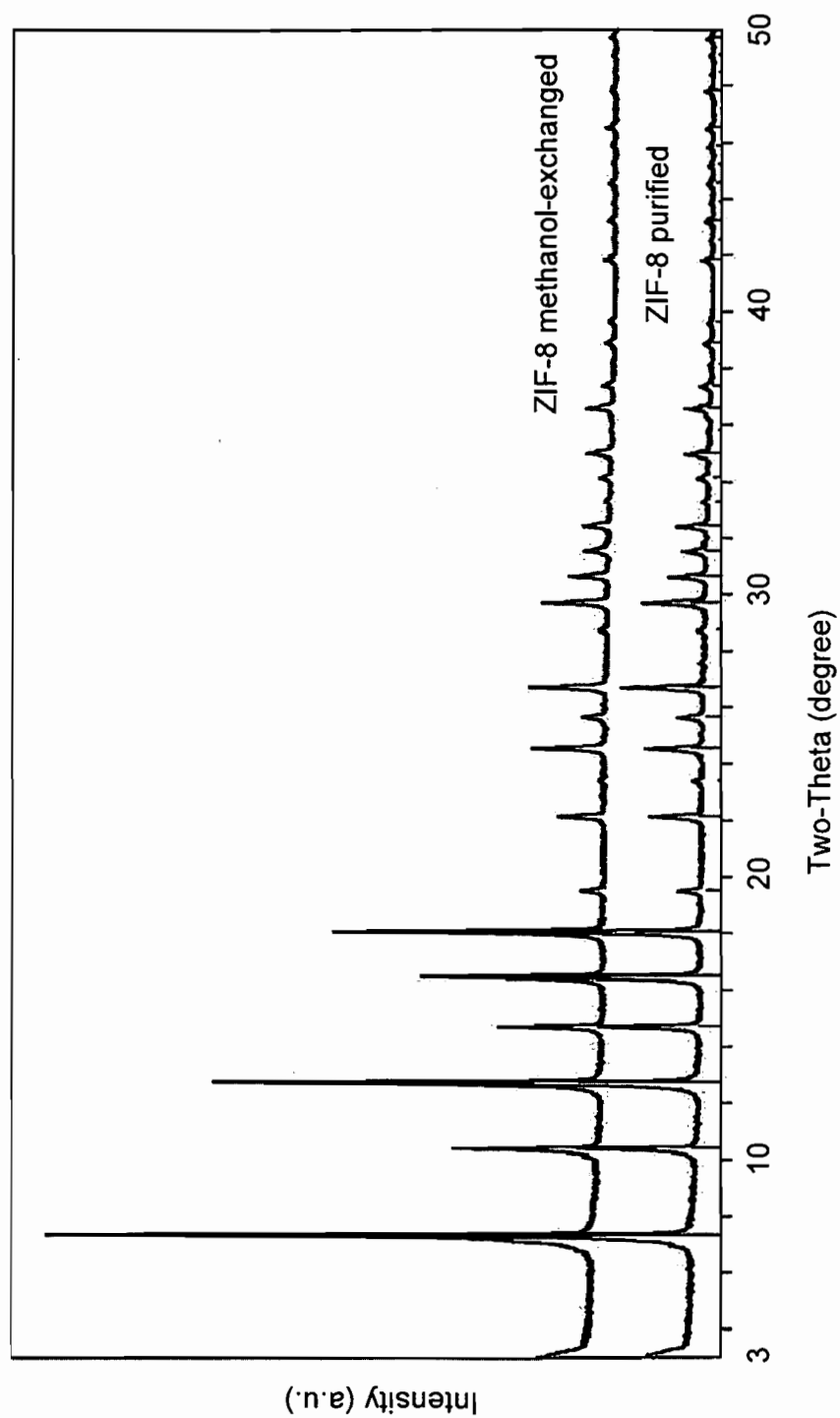
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Thermogravimetric Analyses of ZIF-11

FIG. 8

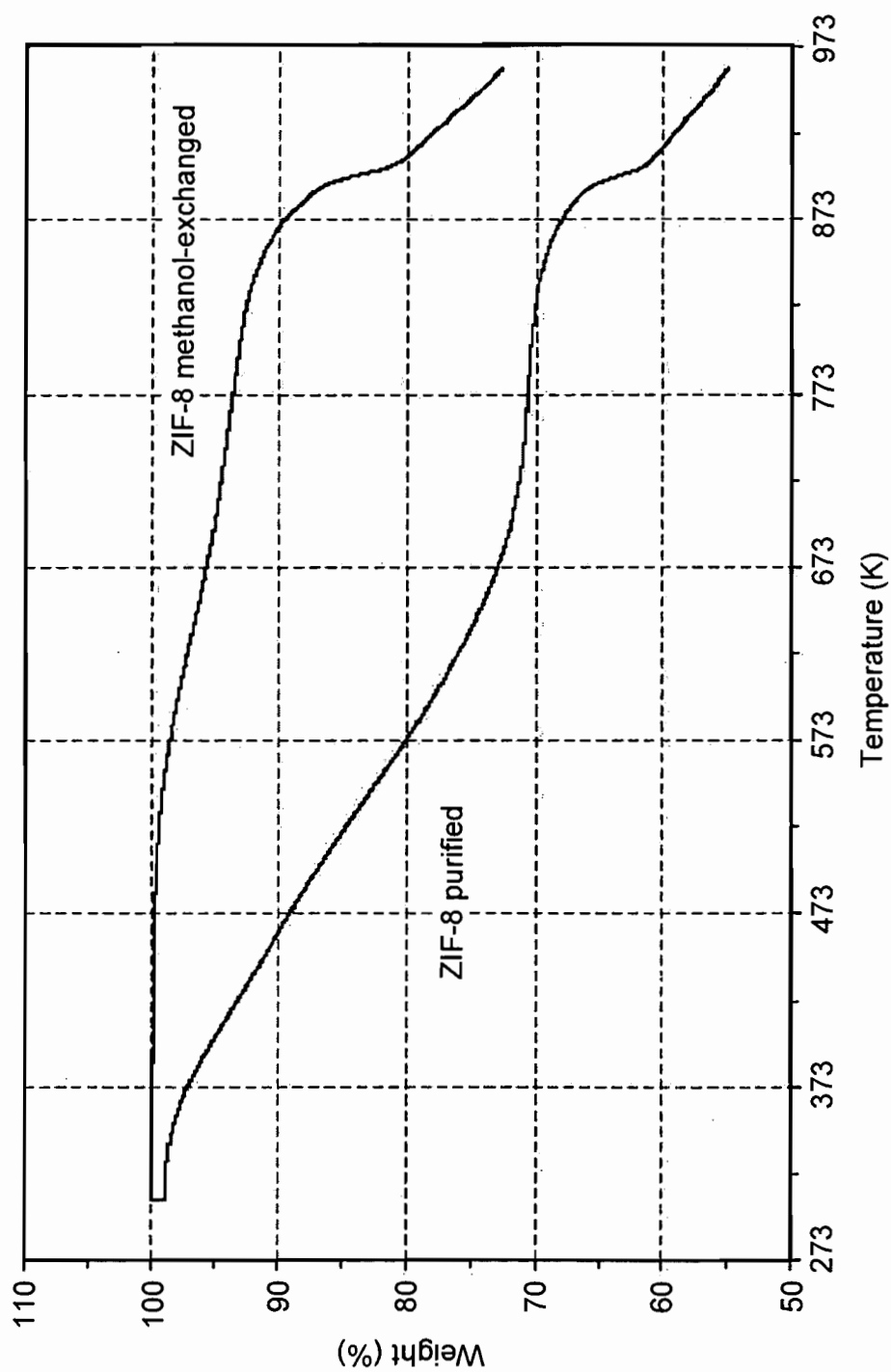
9 / 29



**Powder X-ray Diffraction Pattern of ZIF-8**

**FIG. 9**

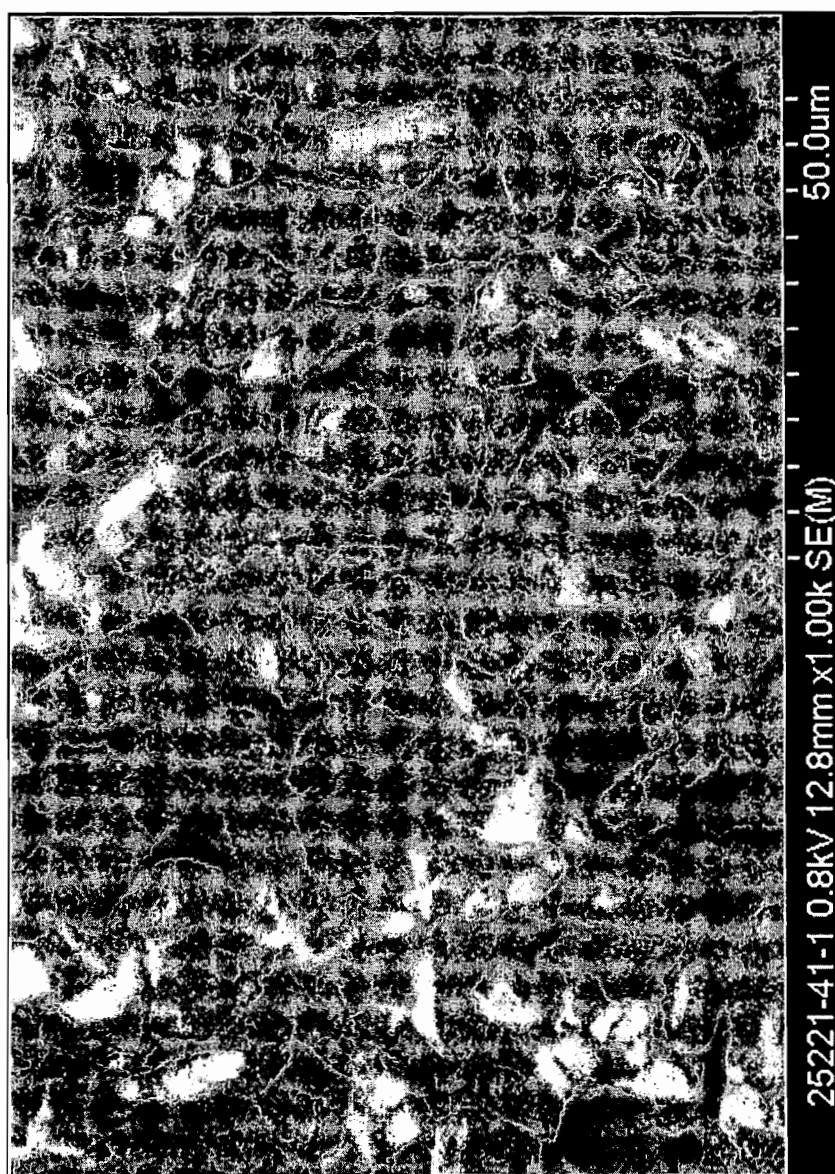
10 / 29



Thermogravimetric Analyses of ZIF-8

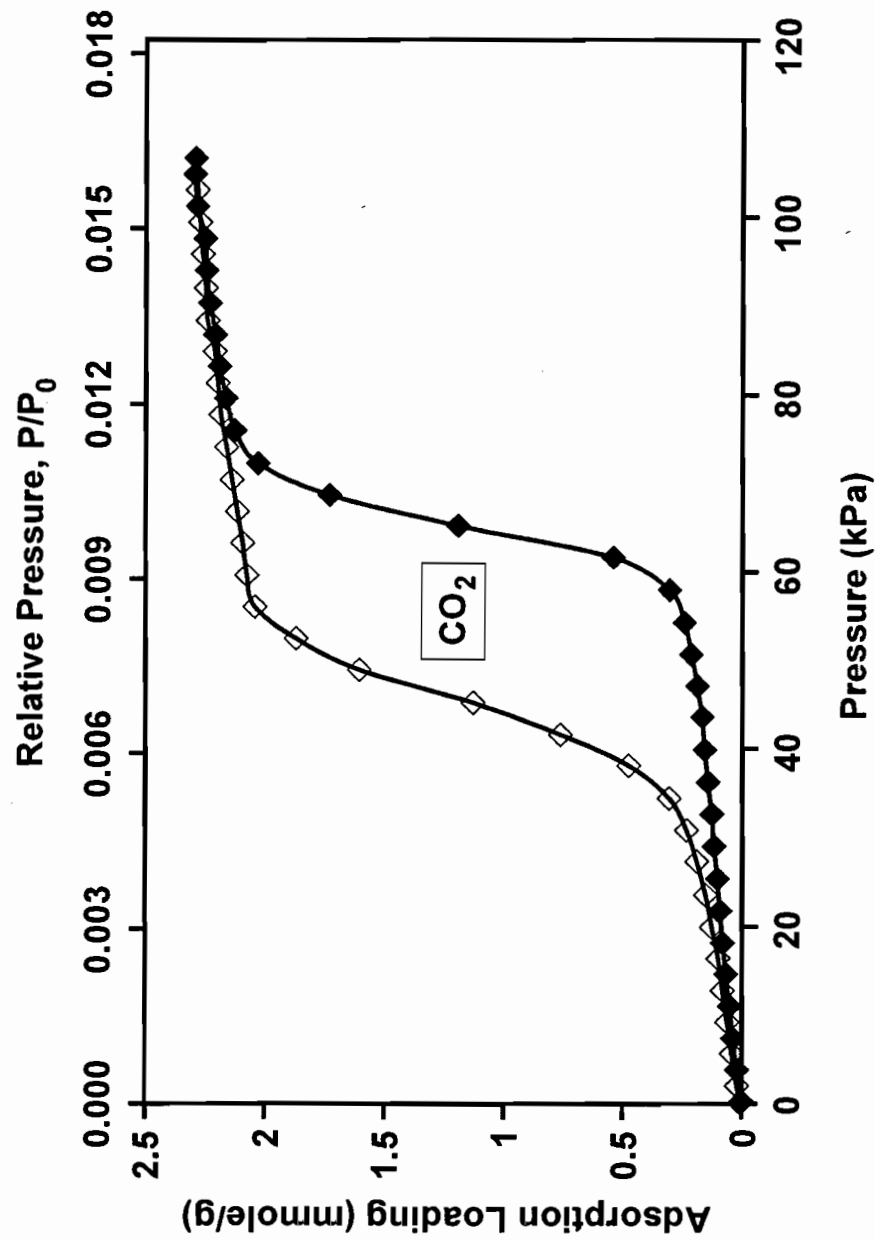
FIG. 10

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Scanning Electron Microscopy Image of ZIF-7

**FIG. 11**



ZIF-7 Isotherm for CO<sub>2</sub> @ 301 K

FIG. 12

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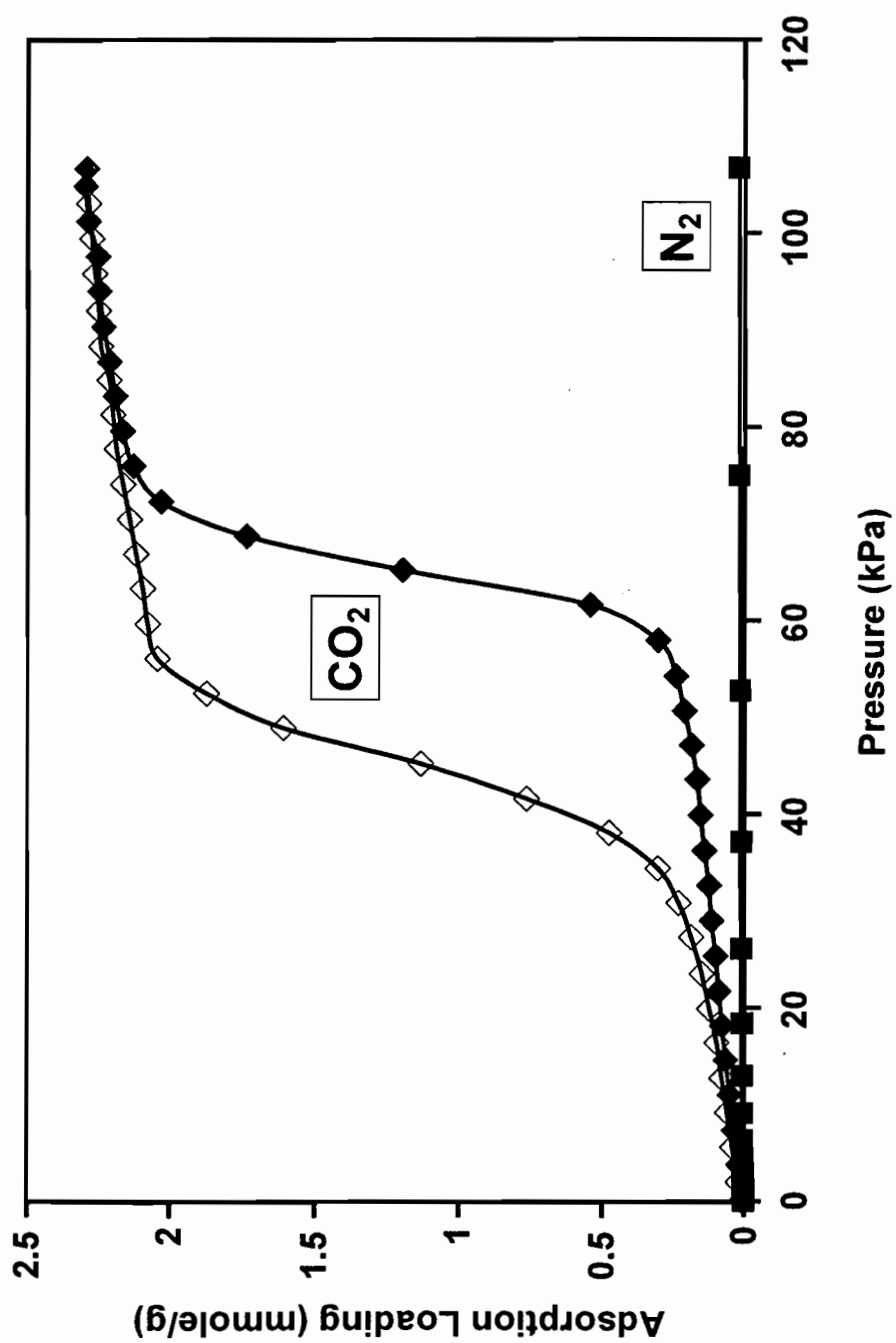
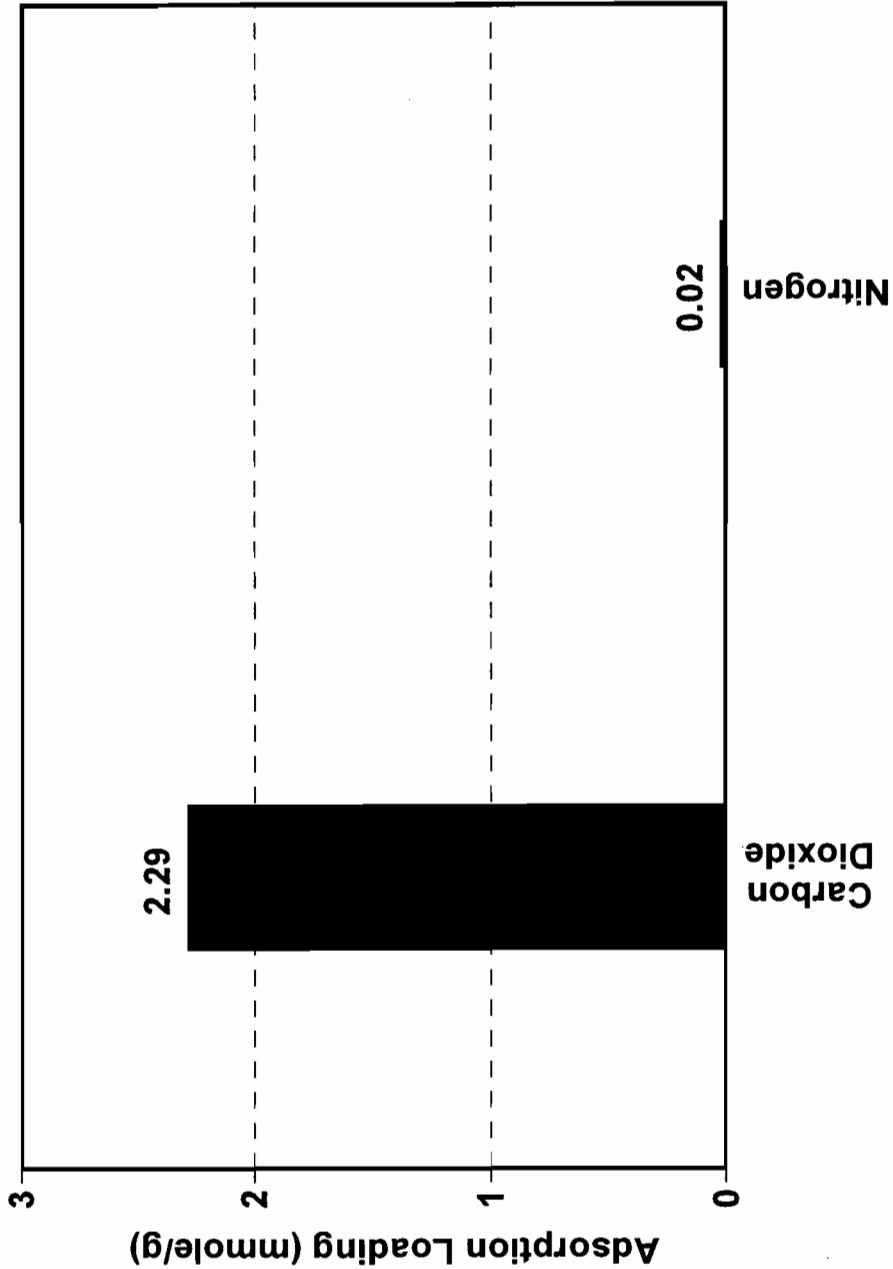
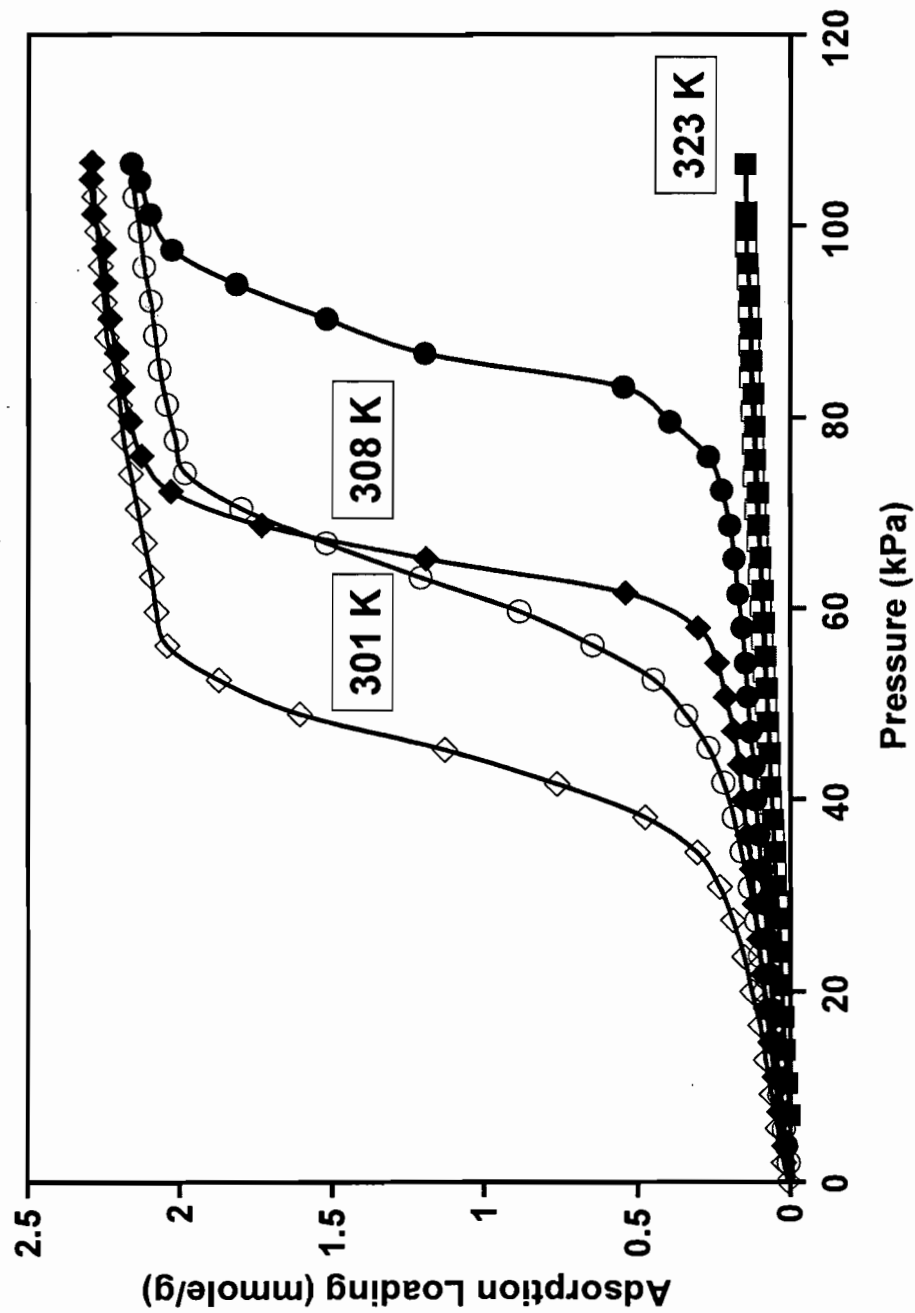
ZIF-7 Isotherms for CO<sub>2</sub> AND N<sub>2</sub> @ 301 K

FIG. 13



ZIF-7 Adsorption Loading for CO<sub>2</sub> and N<sub>2</sub>  
@ 301 K and 106.6 kPa

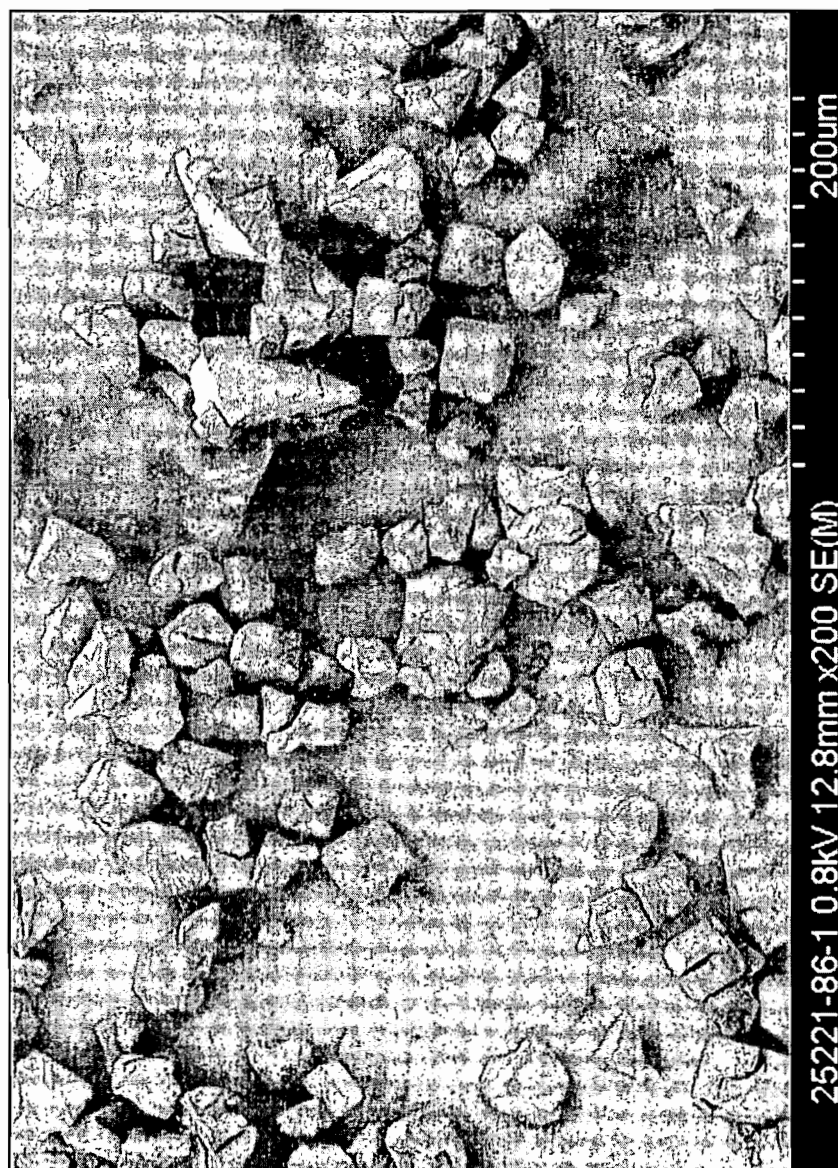
FIG. 14



ZIF-7 Isotherms for CO<sub>2</sub> @ 301 K, @ 308 K and @ 323 K

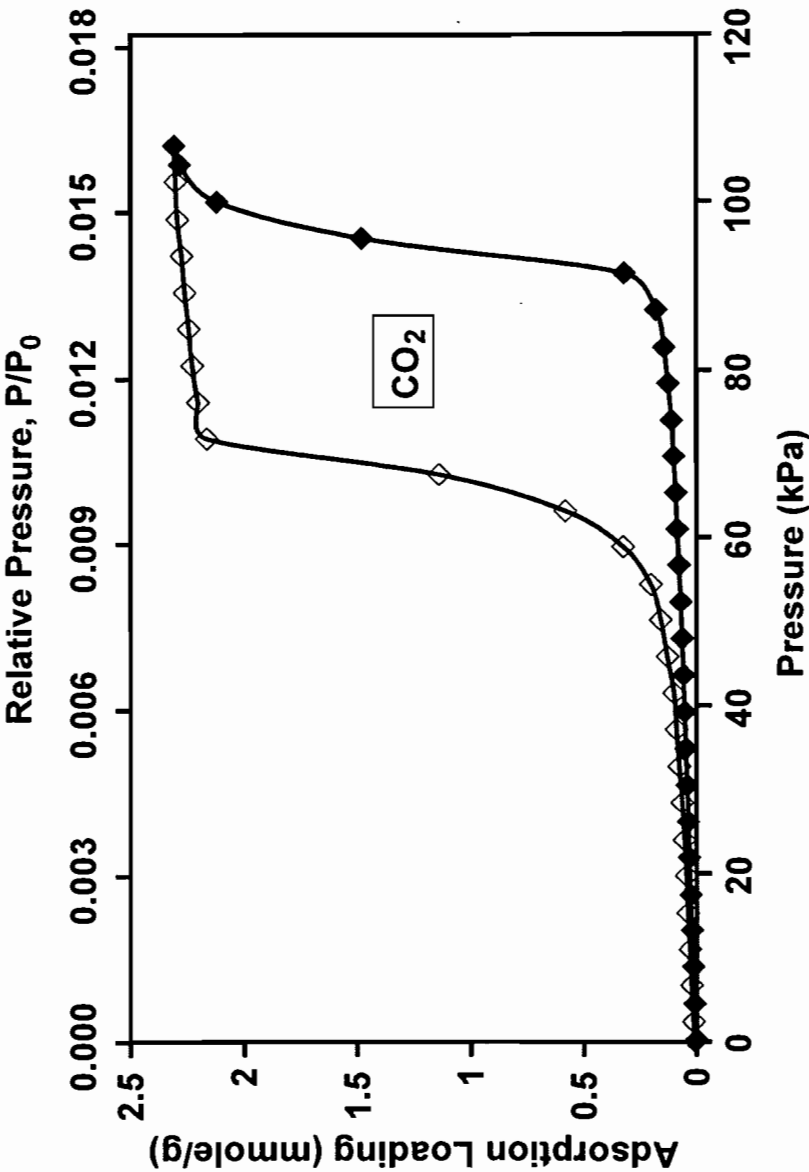
FIG. 15

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Scanning Electron Microscopy Image of ZIF-9

**FIG. 16**



ZIF-9 Isotherm for CO<sub>2</sub> @ 301 K

FIG. 17

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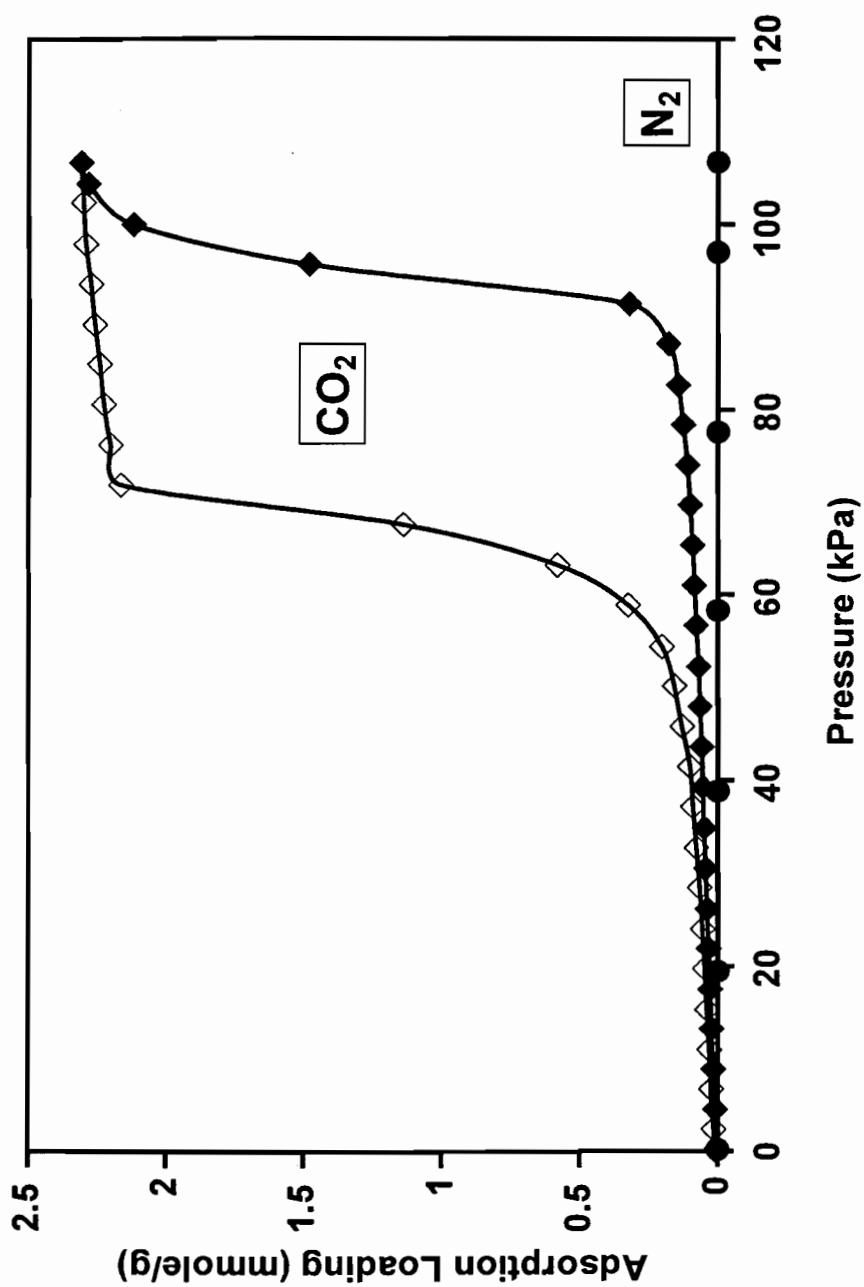
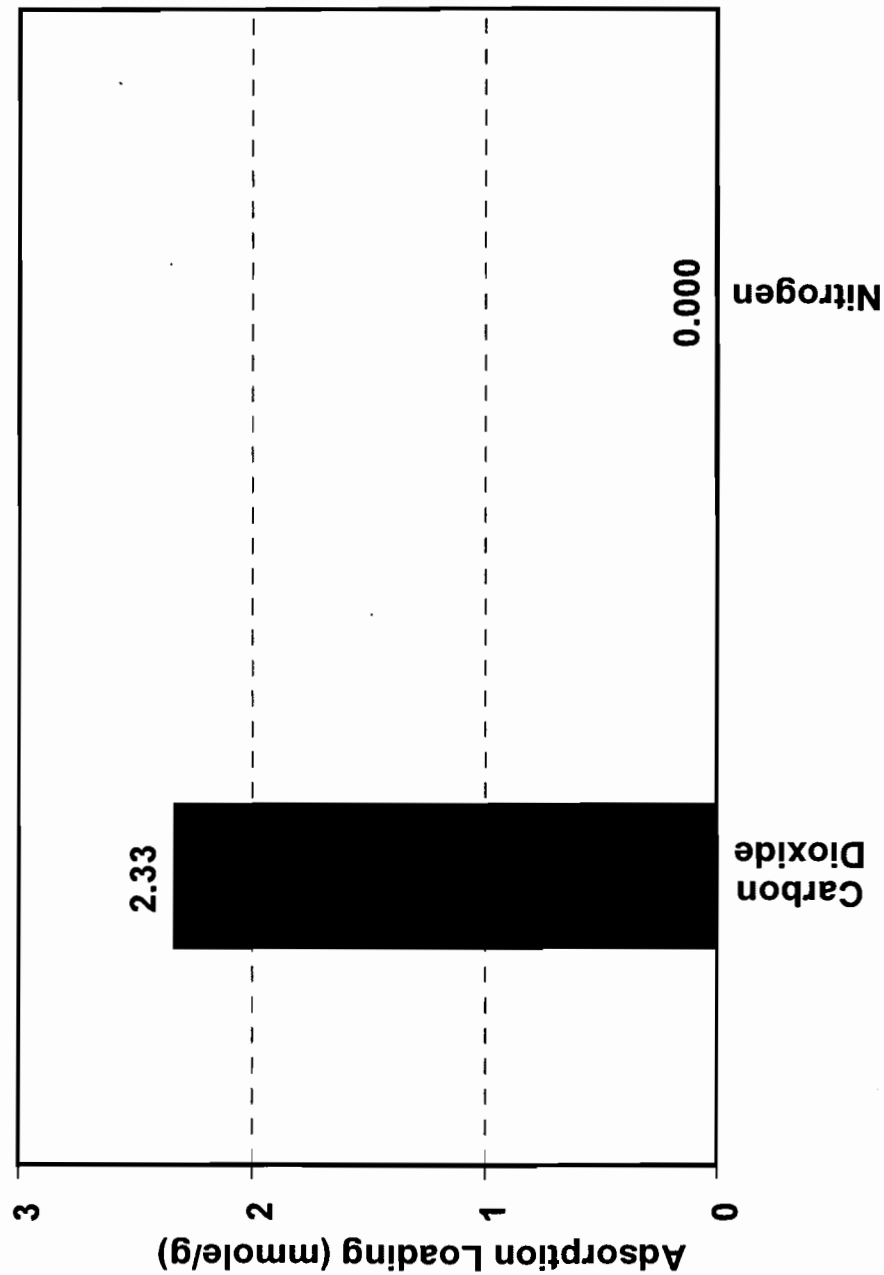
ZIF-9 Isotherms for CO<sub>2</sub> and N<sub>2</sub> @ 301 K

FIG. 18



ZIF-9 Adsorption Loading for CO<sub>2</sub> and N<sub>2</sub>  
@ 301 K and 106.6 kPa

FIG. 19

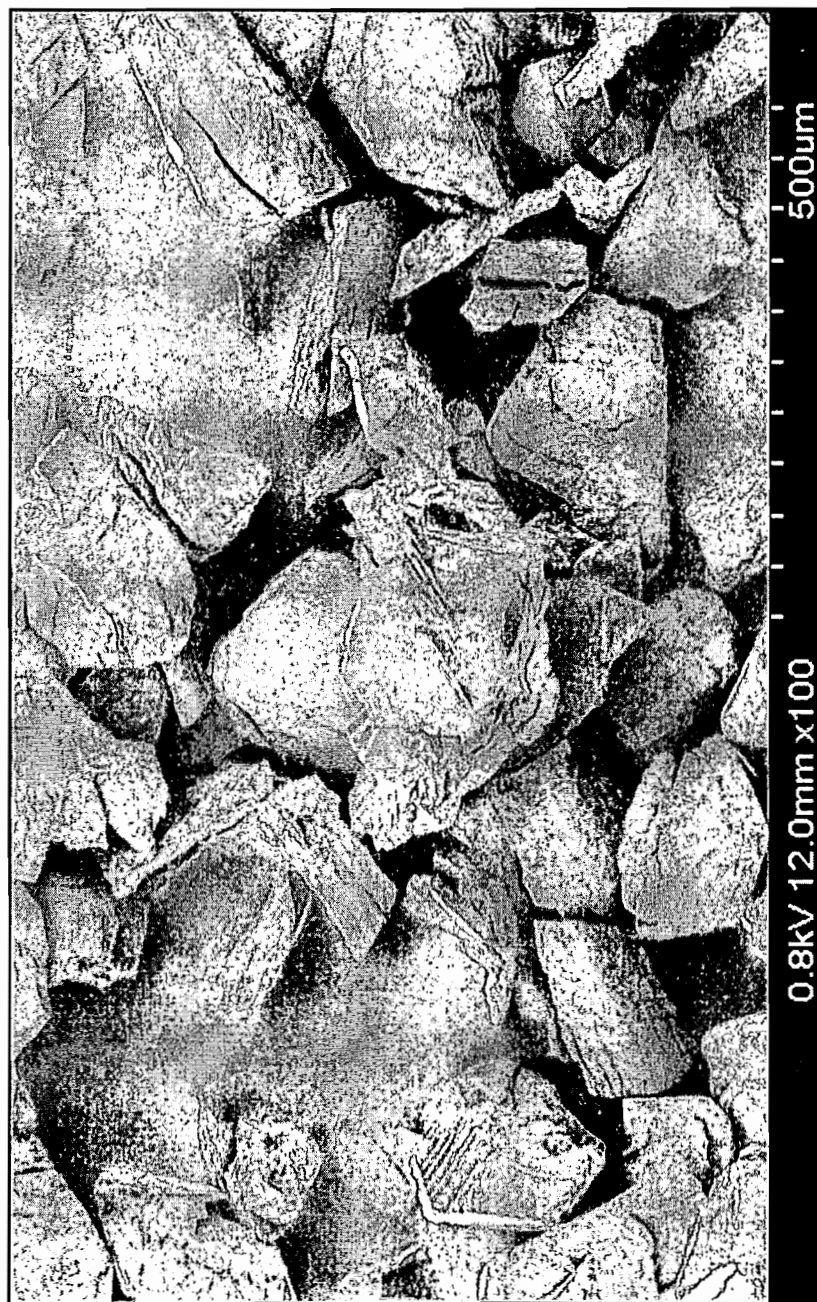
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Scanning Electron Microscopy Image of ZIF-1 (acetonitrile-exchanged)

**FIG. 20**

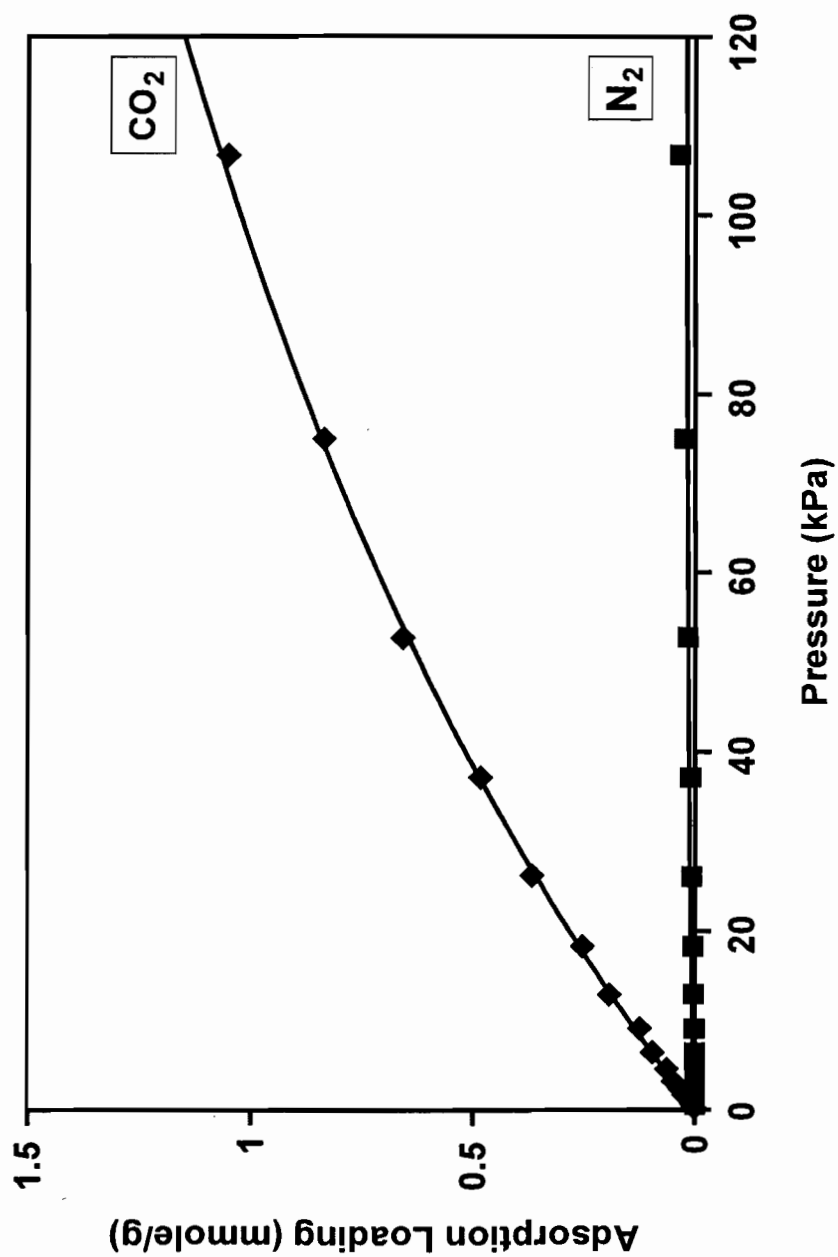
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Scanning Electron Microscopy Image of ZIF-1 (toluene-exchanged)

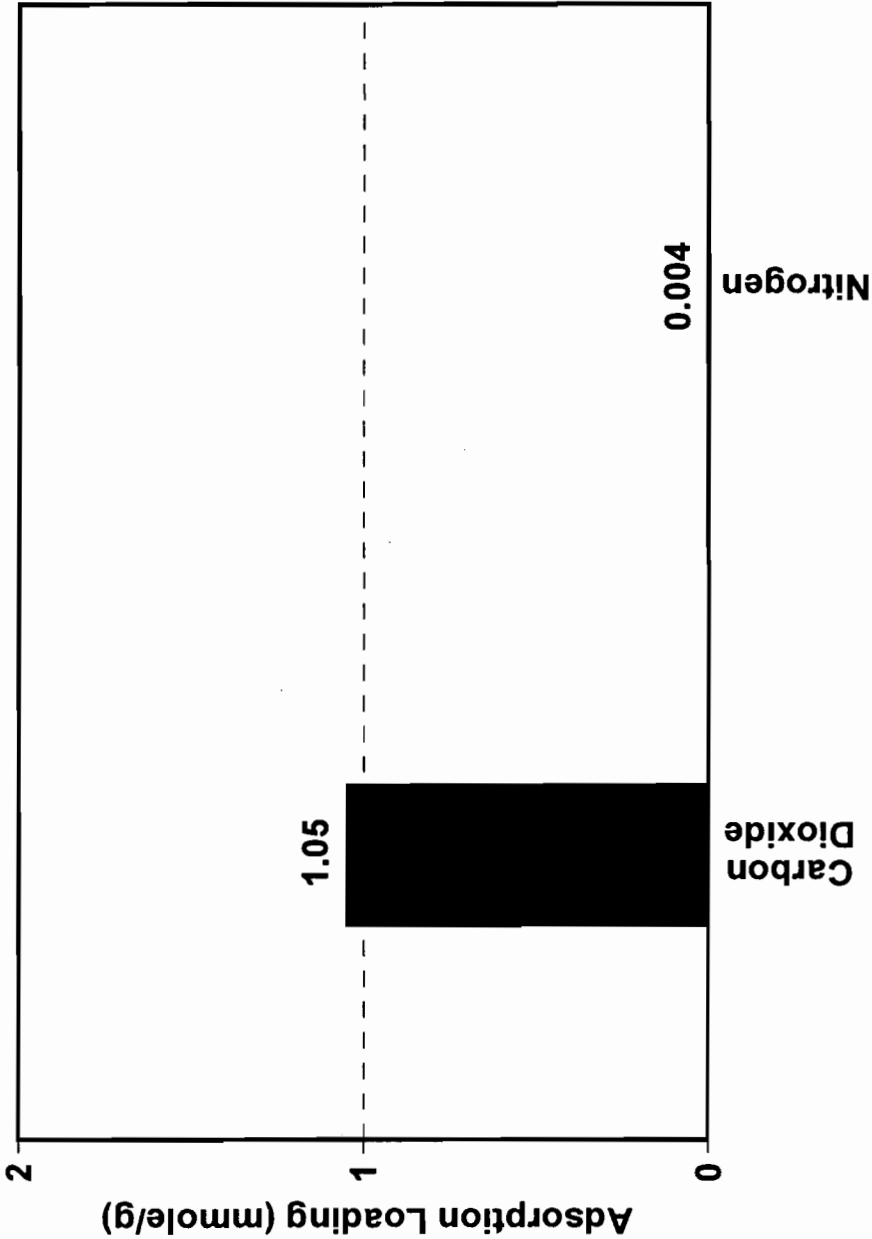
**FIG. 21**

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ZIF-1 (acetonitrile-exchanged) Isotherms for  
CO<sub>2</sub> and N<sub>2</sub> @ 301 K

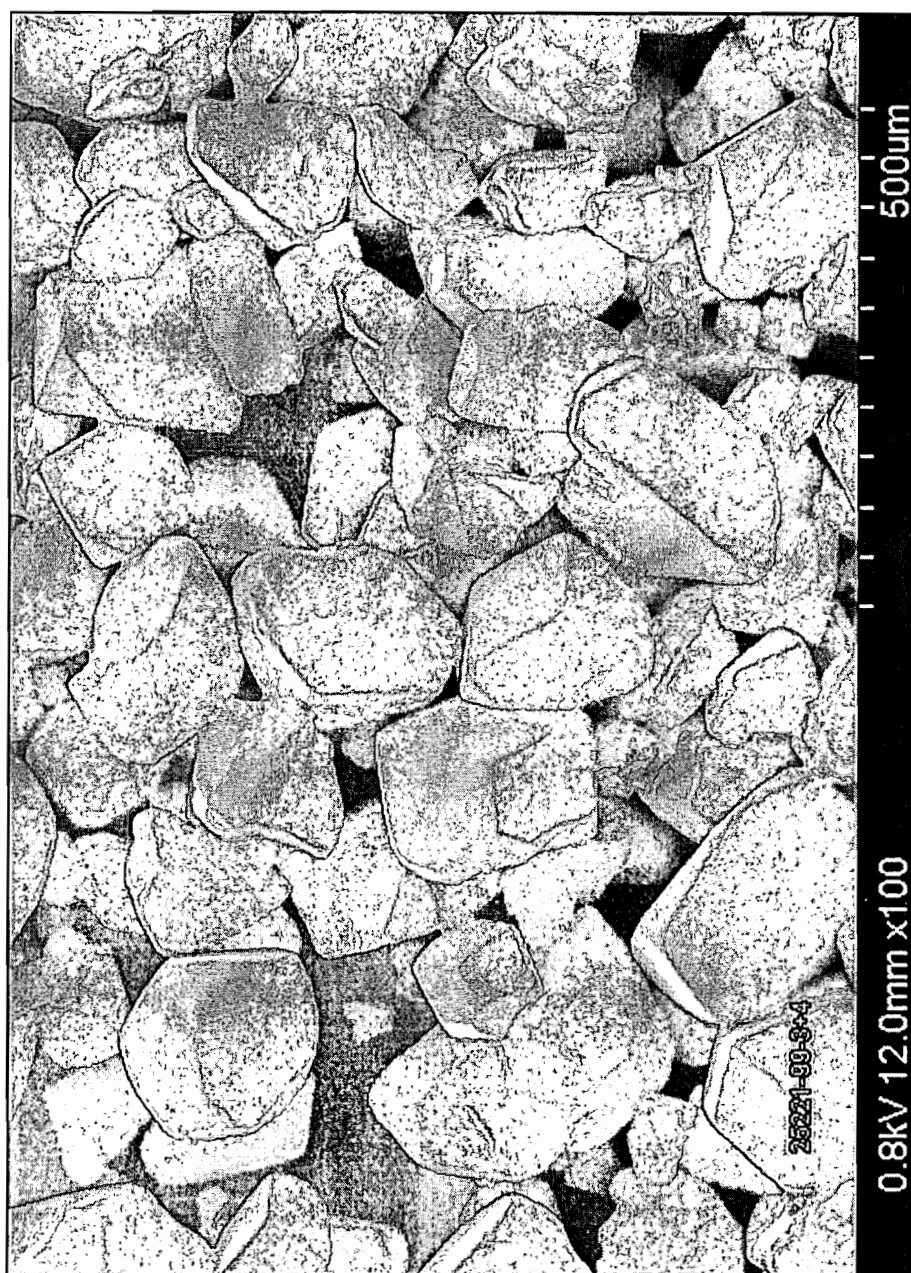
FIG. 22



ZIF-1 (acetonitrile-exchanged) Adsorption Loading  
for CO<sub>2</sub> and N<sub>2</sub>@ 301 K and 106.6 kPa

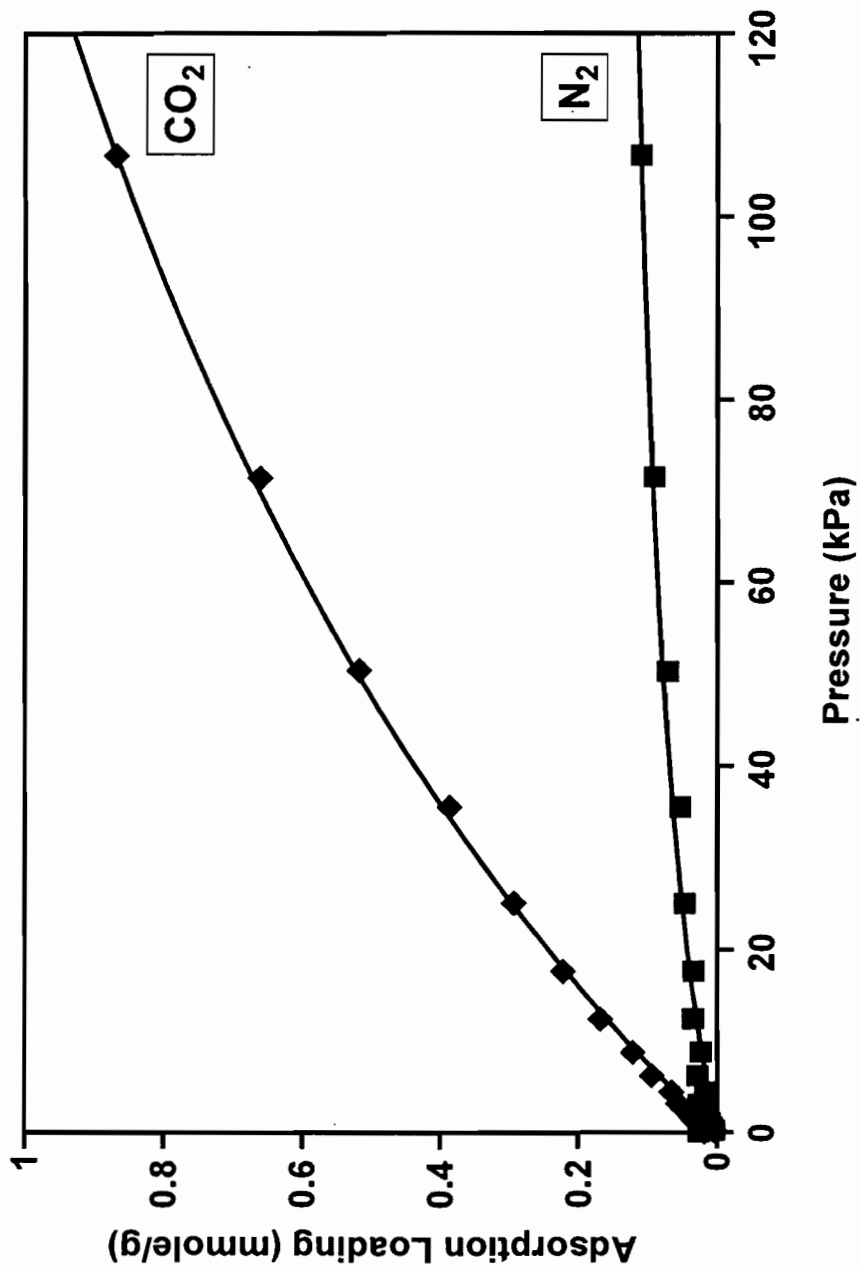
FIG. 23

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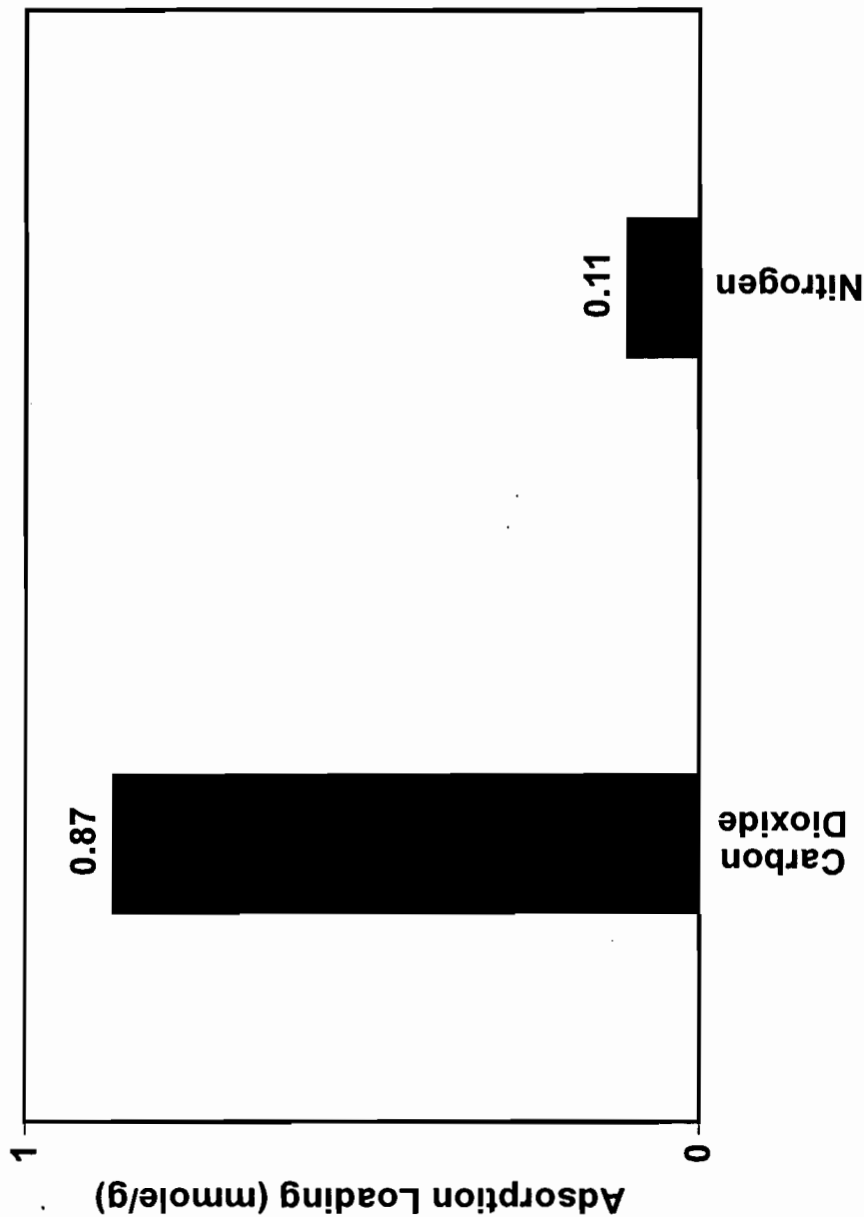
Scanning Electron Microscopy Image of ZIF-11

**FIG. 24**



ZIF-11 Isotherms for CO<sub>2</sub> and N<sub>2</sub> @ 301 K

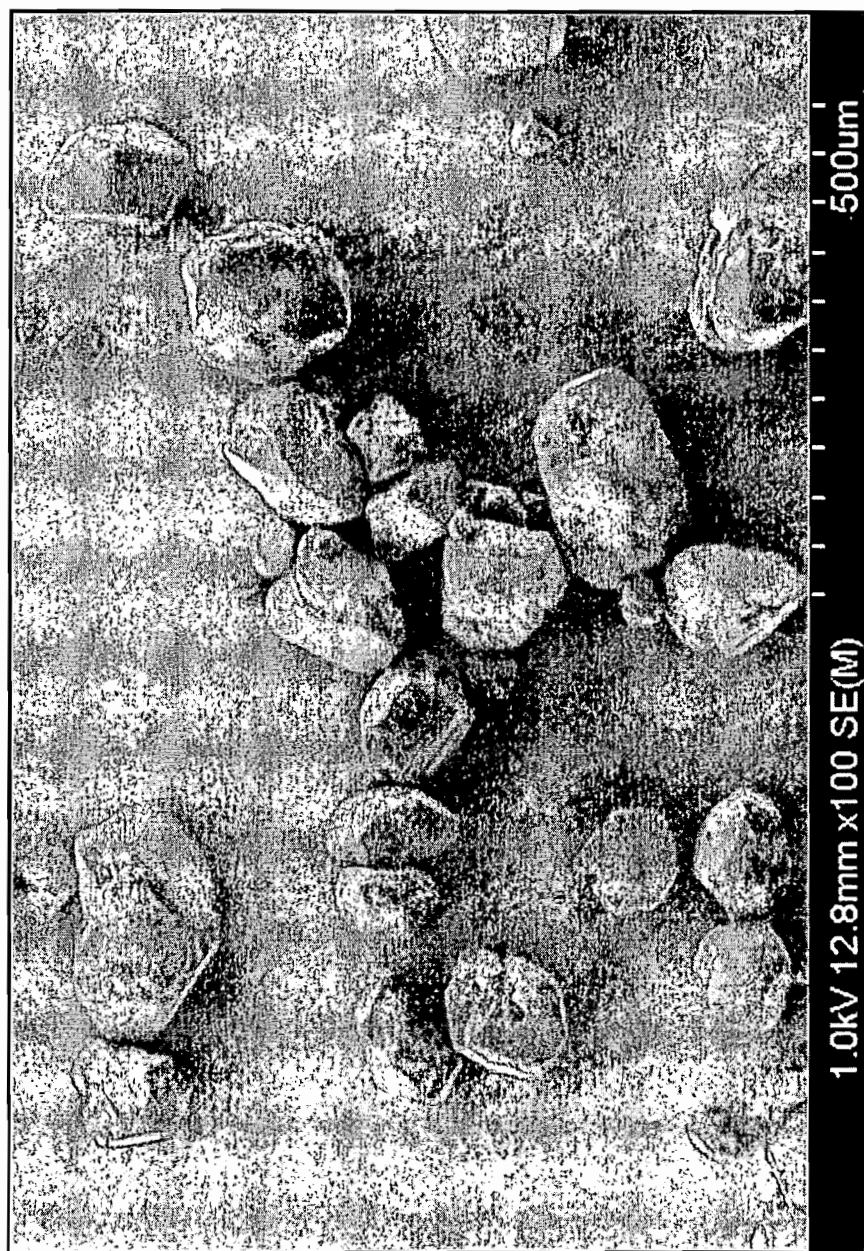
FIG. 25



ZIF-11 Adsorption Loading for CO<sub>2</sub> and N<sub>2</sub>  
@ 301 K and 106.6 kPa

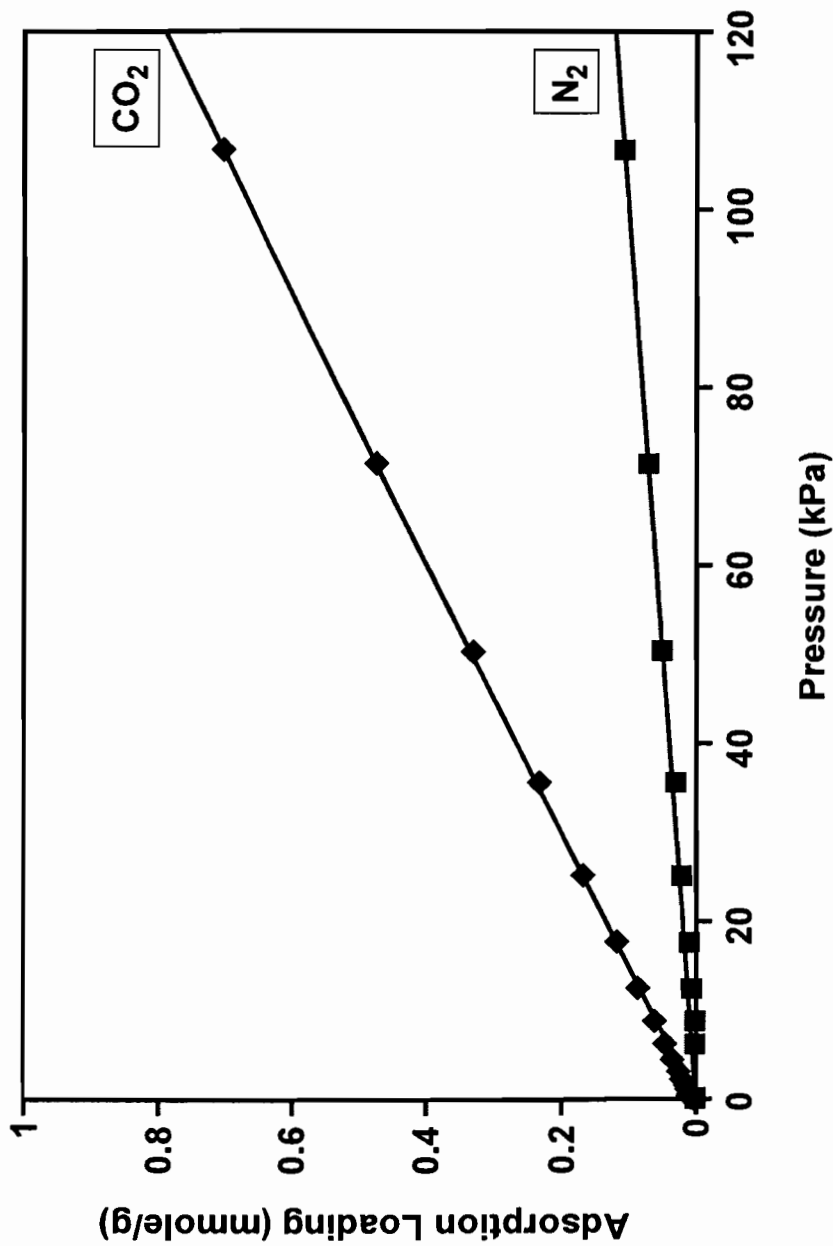
FIG. 26

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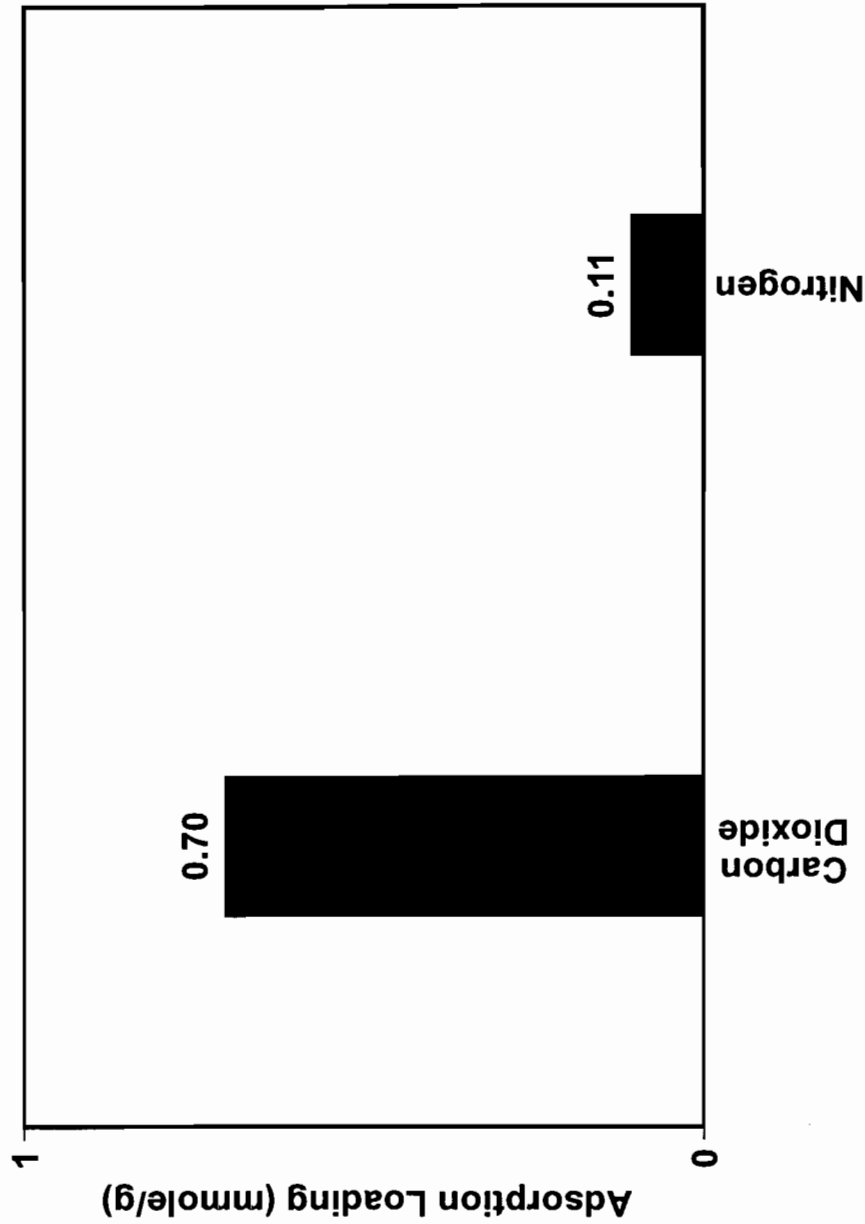
Scanning Electron Microscopy Image of ZIF-8

**FIG. 27**



ZIF-8 Isotherms for CO<sub>2</sub> and N<sub>2</sub> @ 301 K

FIG. 28



ZIF-8 Adsorption Loading for CO<sub>2</sub> and N<sub>2</sub>  
@ 301 K and 106.6 kPa

FIG. 29