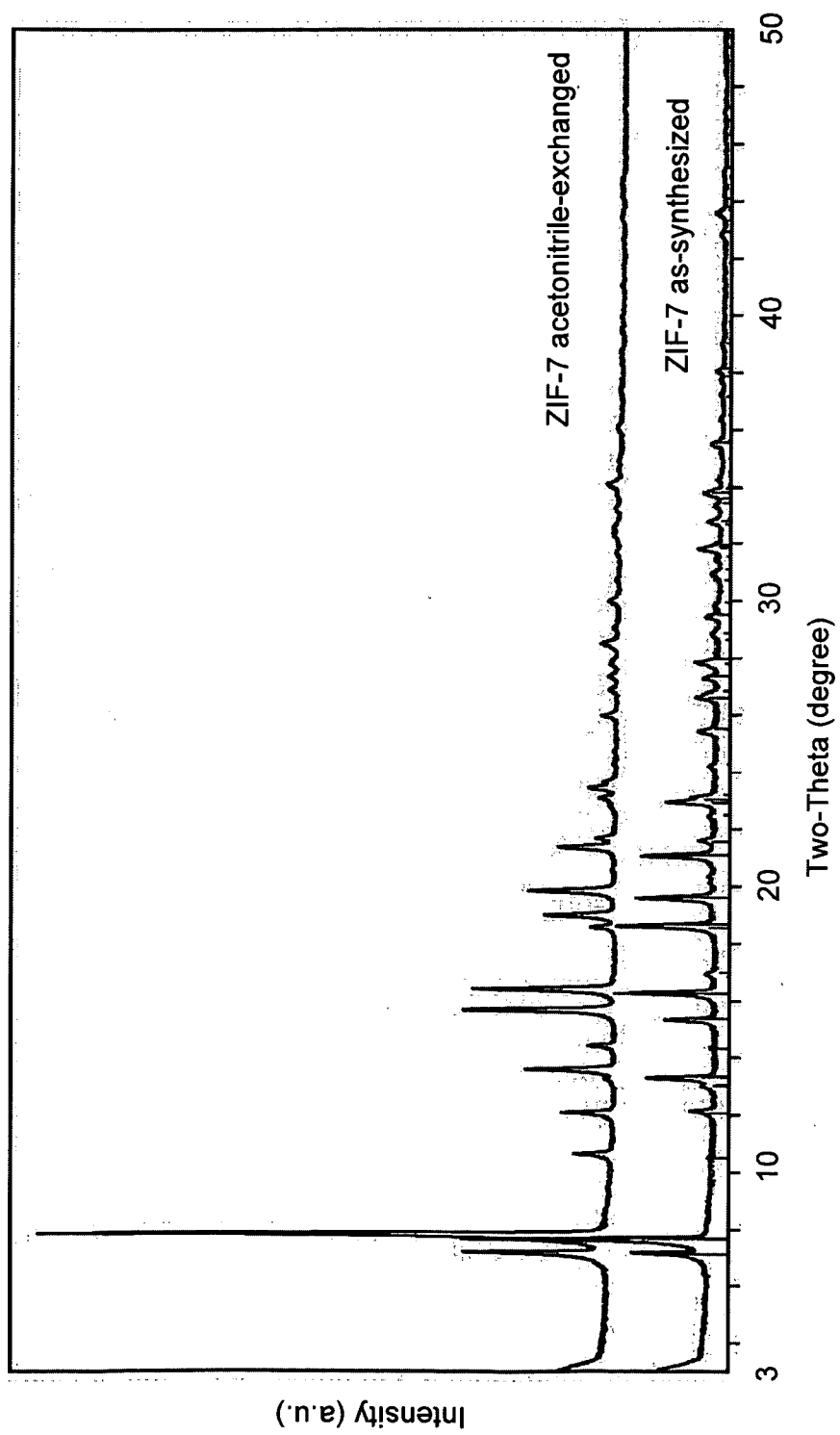


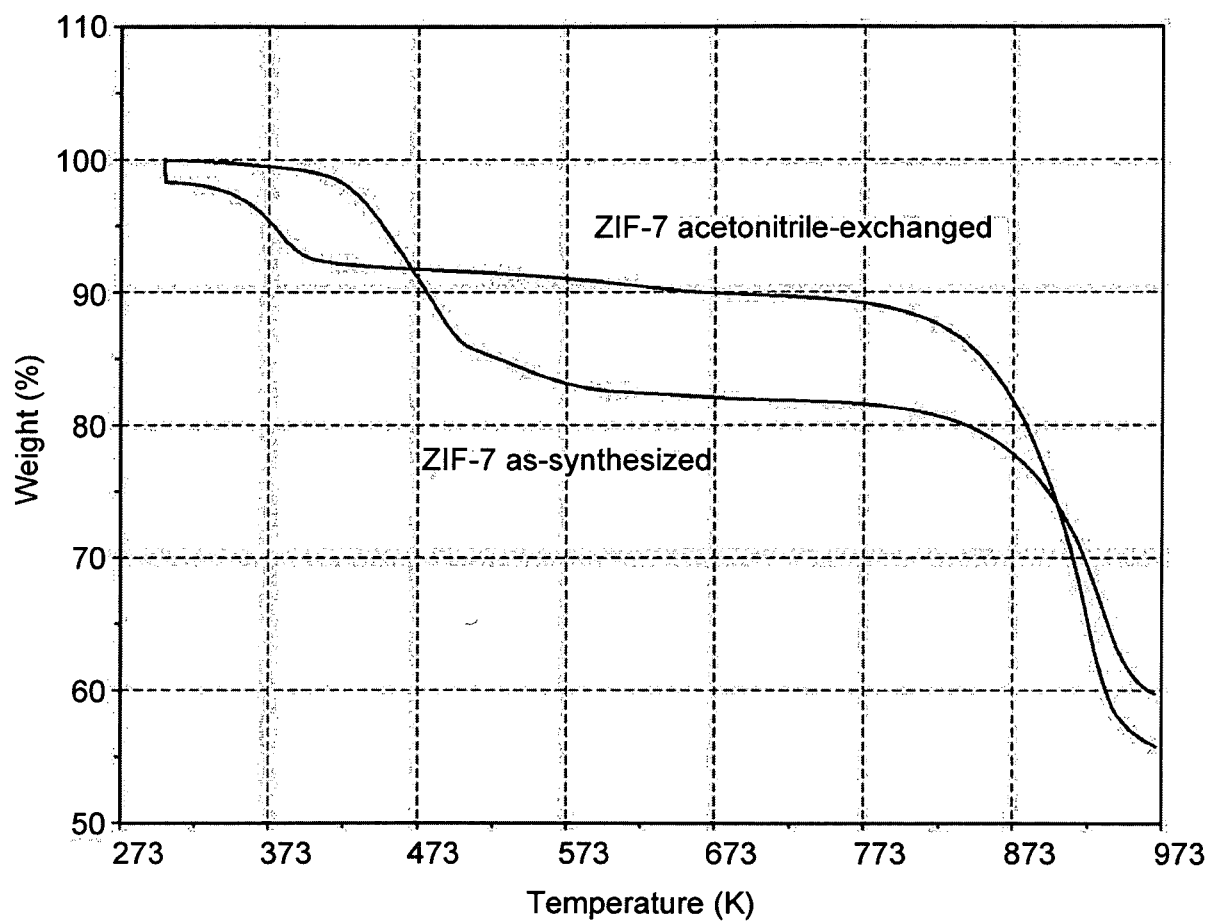
1 / 29



Powder X-ray Diffraction Pattern of ZIF-7

FIG. 1

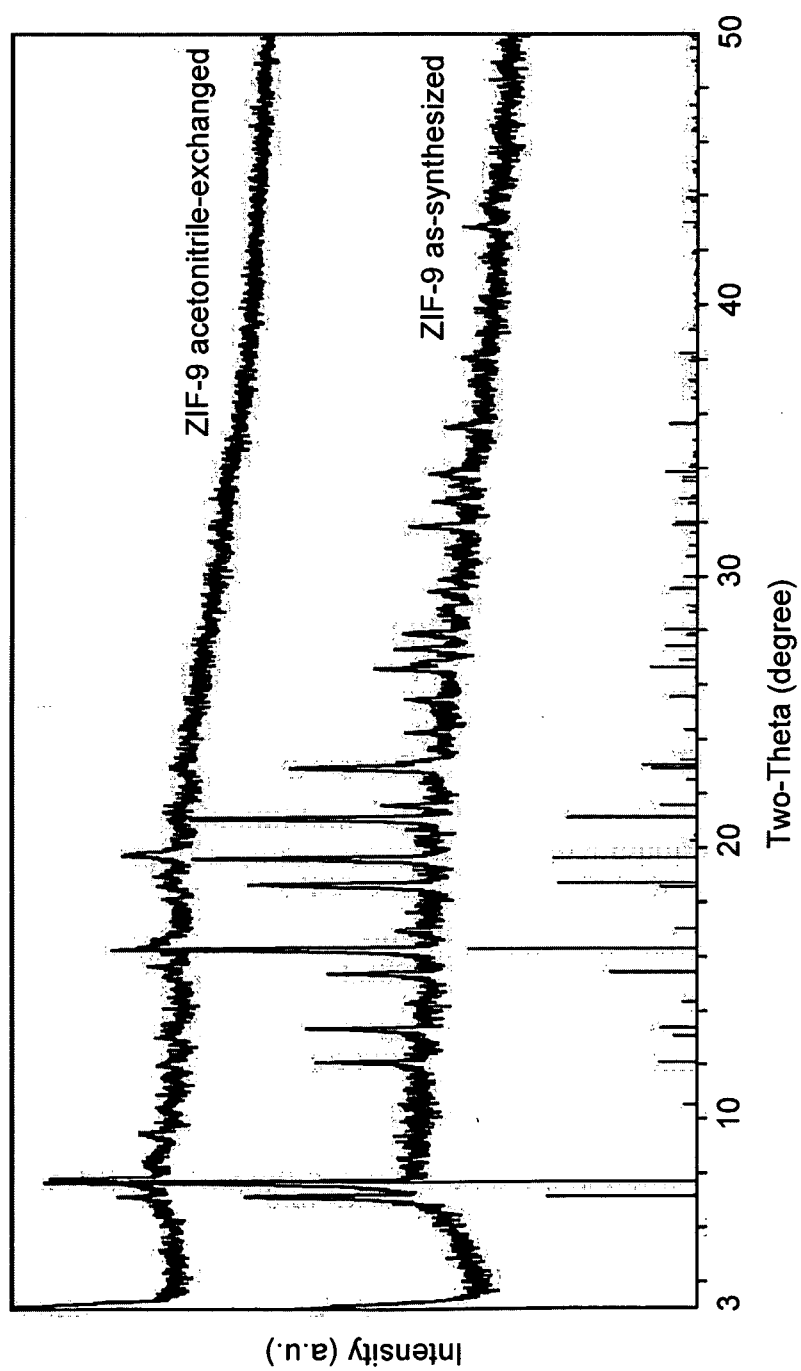
2 / 29



Thermogravimetric Analyses of ZIF-7

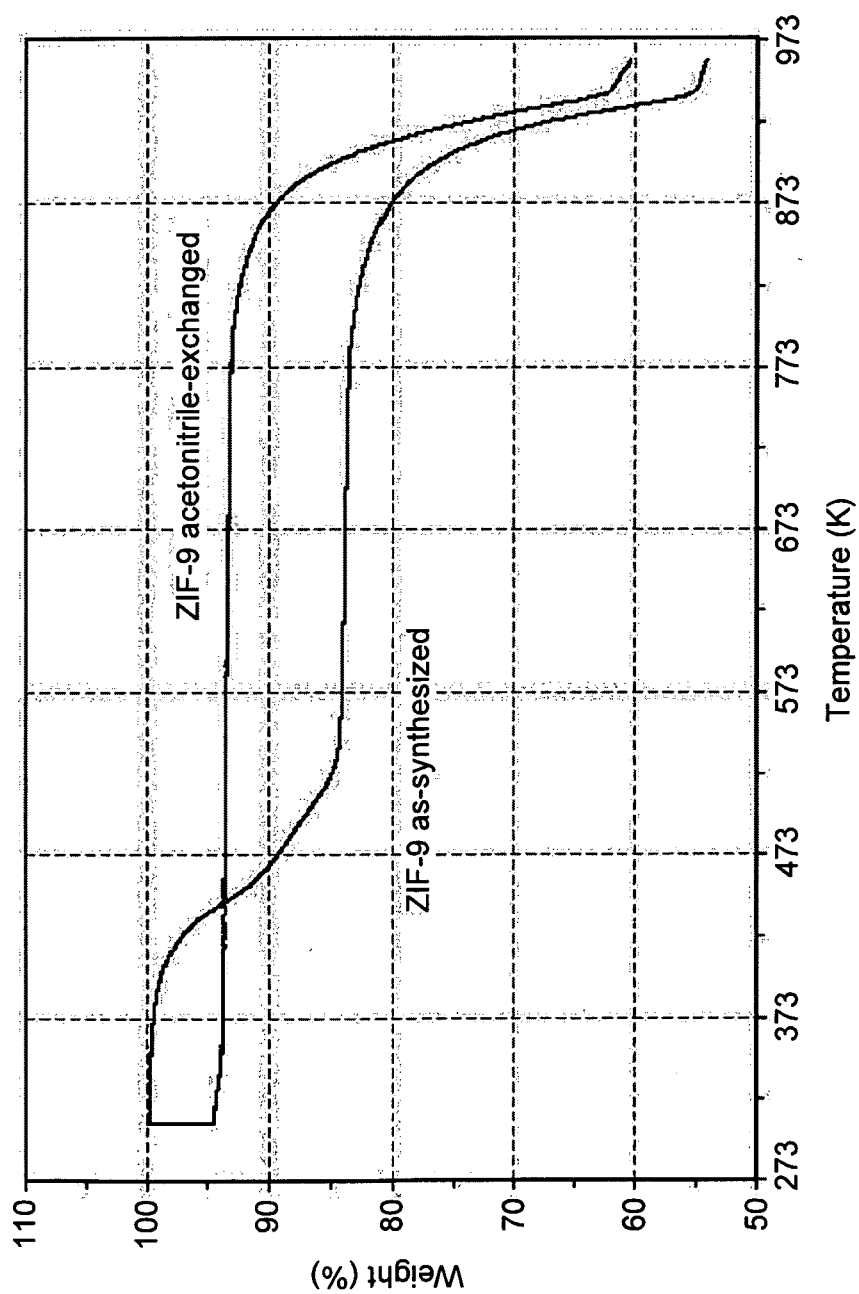
FIG. 2

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Powder X-ray Diffraction Pattern of ZIF-9

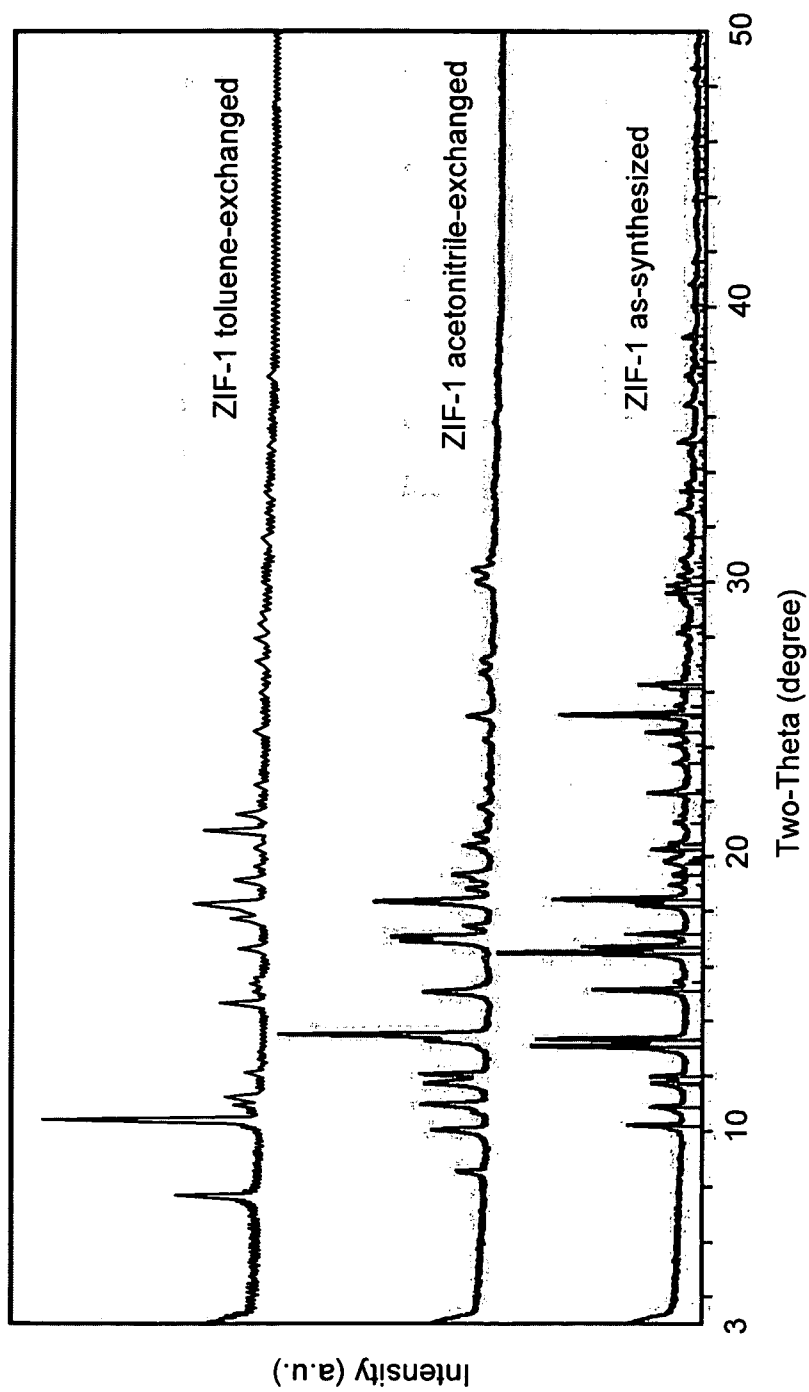
FIG. 3



Thermogravimetric Analyses of ZIF-9

FIG. 4

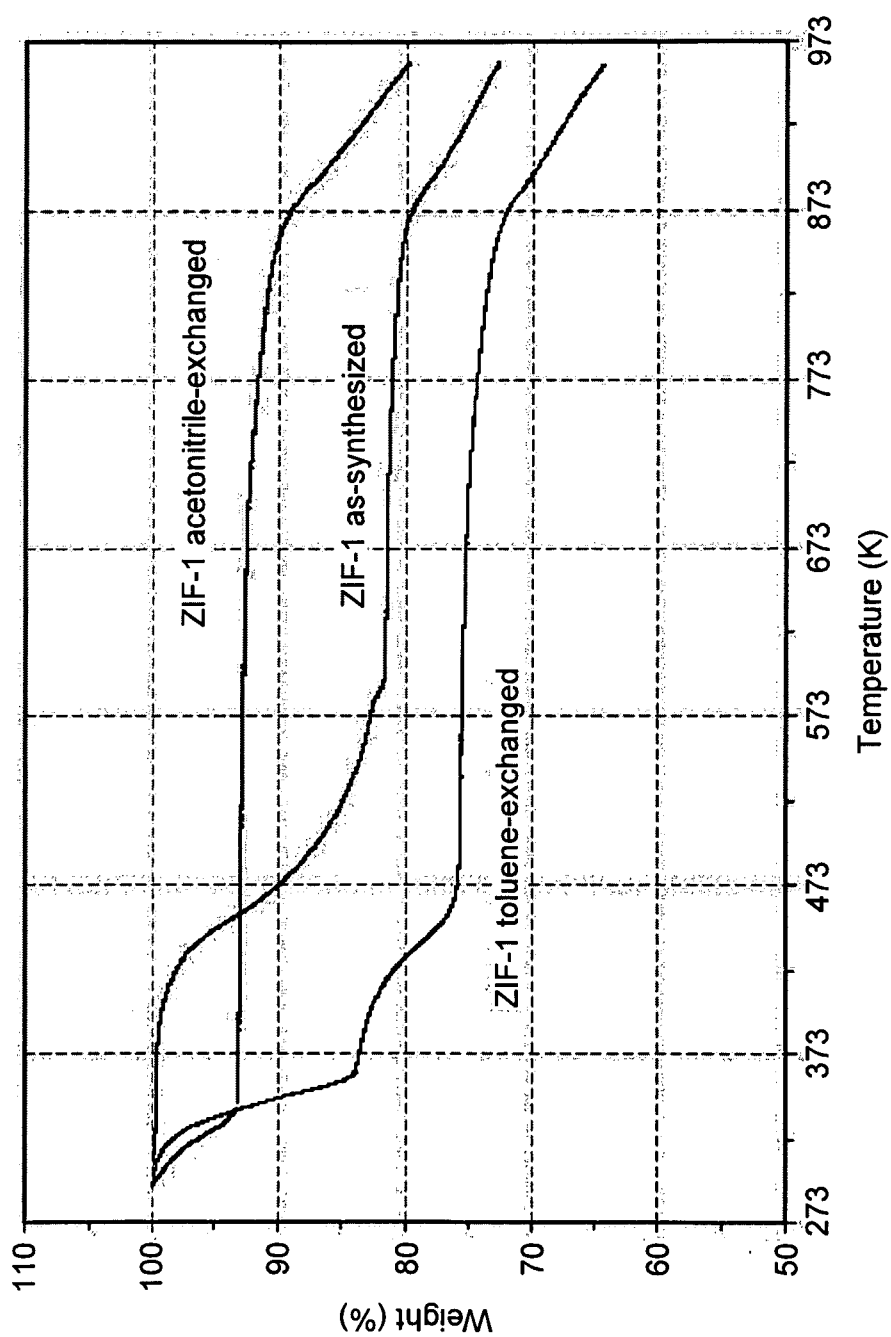
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Powder X-ray Diffraction Pattern of ZIF-1

FIG. 5

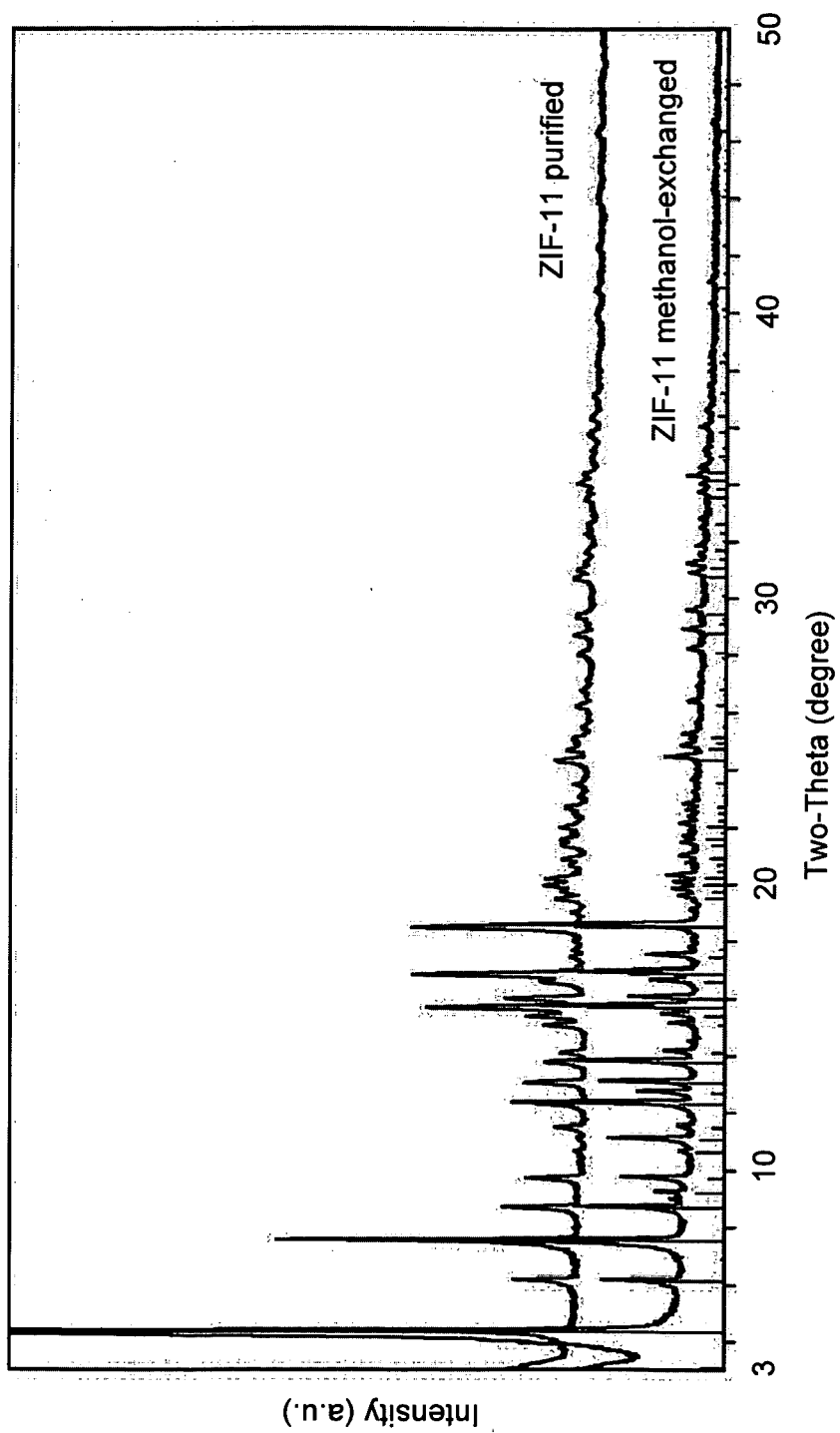
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Thermogravimetric Analyses of ZIF-1

FIG. 6

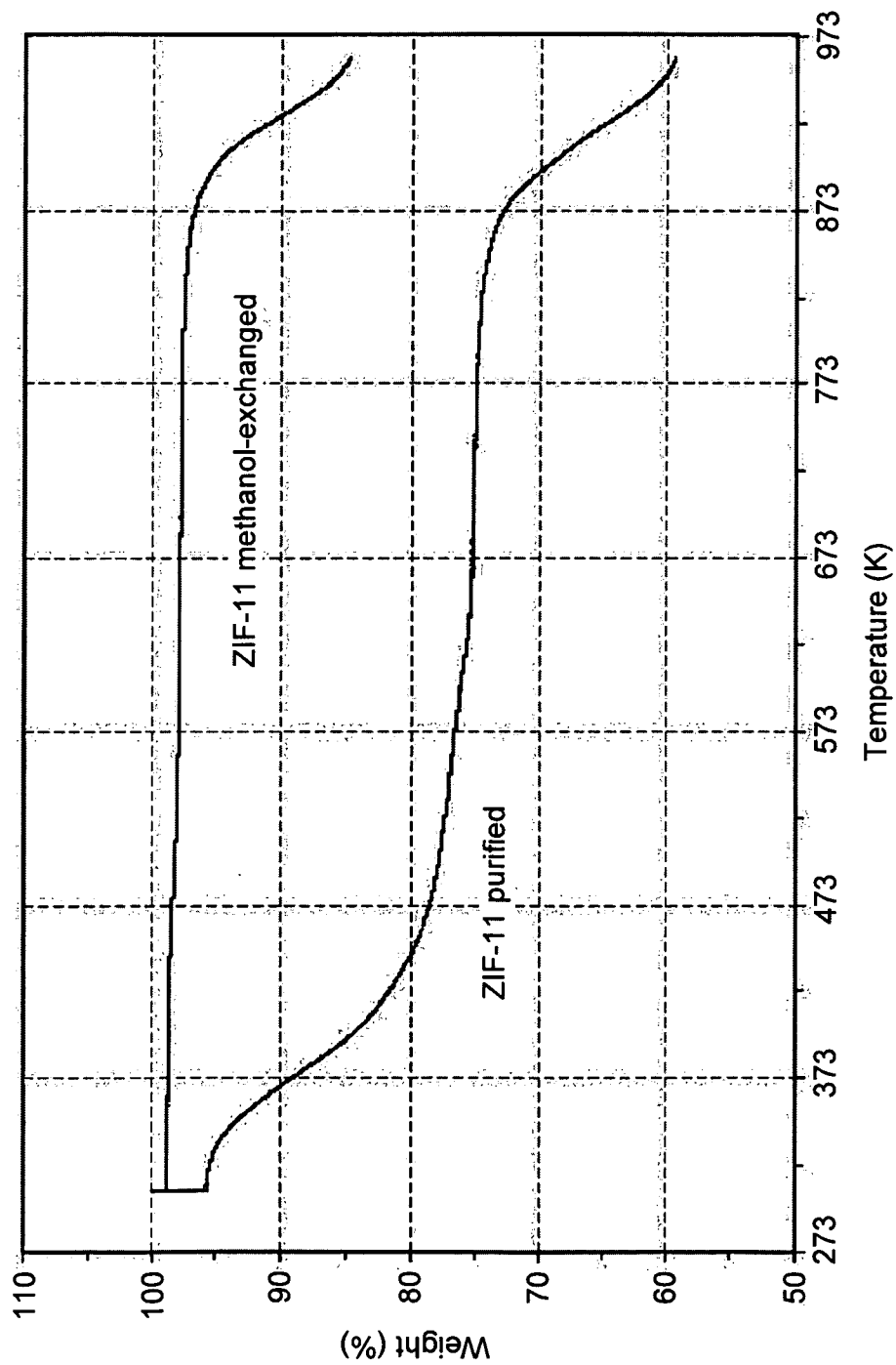
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Powder X-ray Diffraction Pattern of ZIF-11

FIG. 7

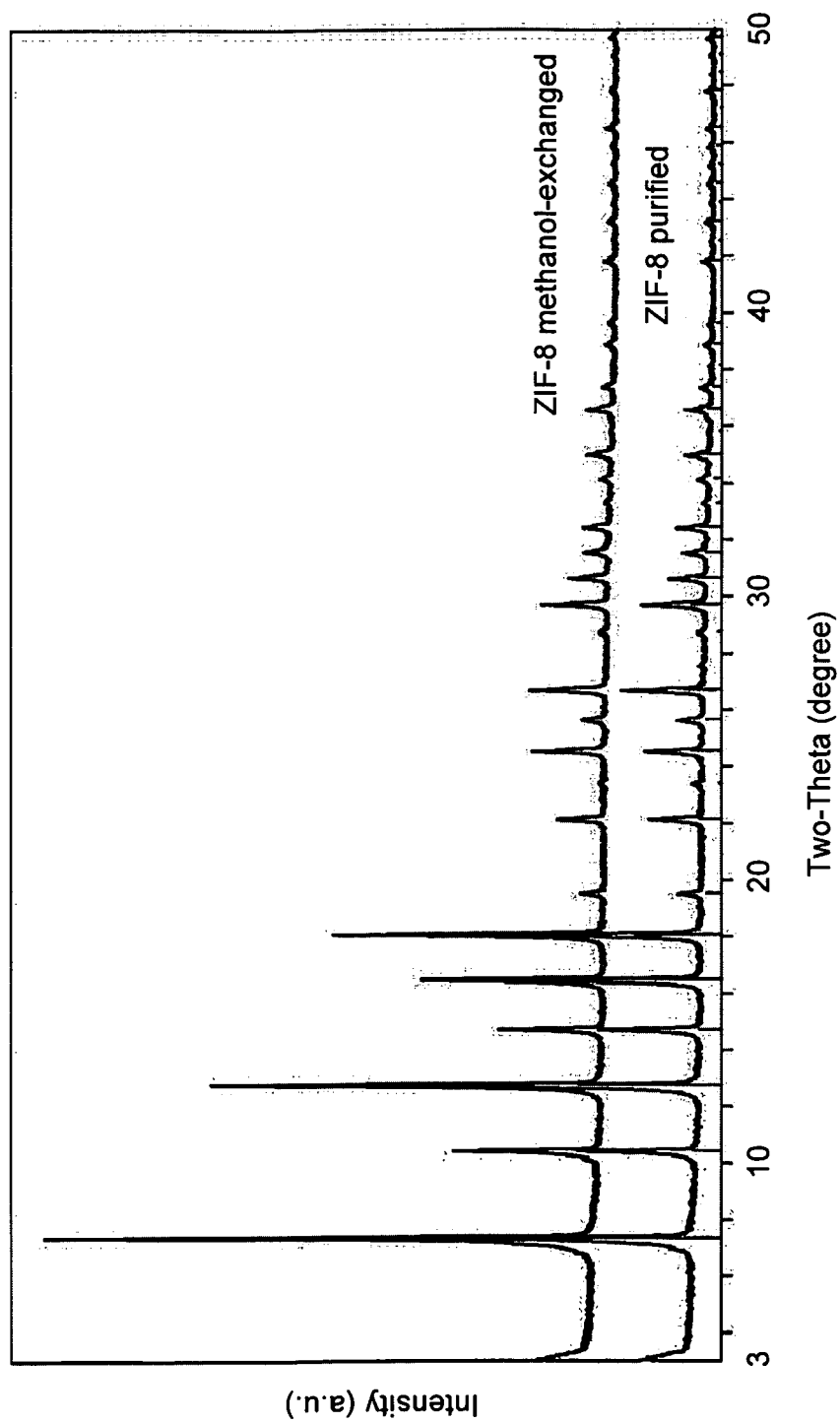
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Thermogravimetric Analyses of ZIF-11

FIG. 8

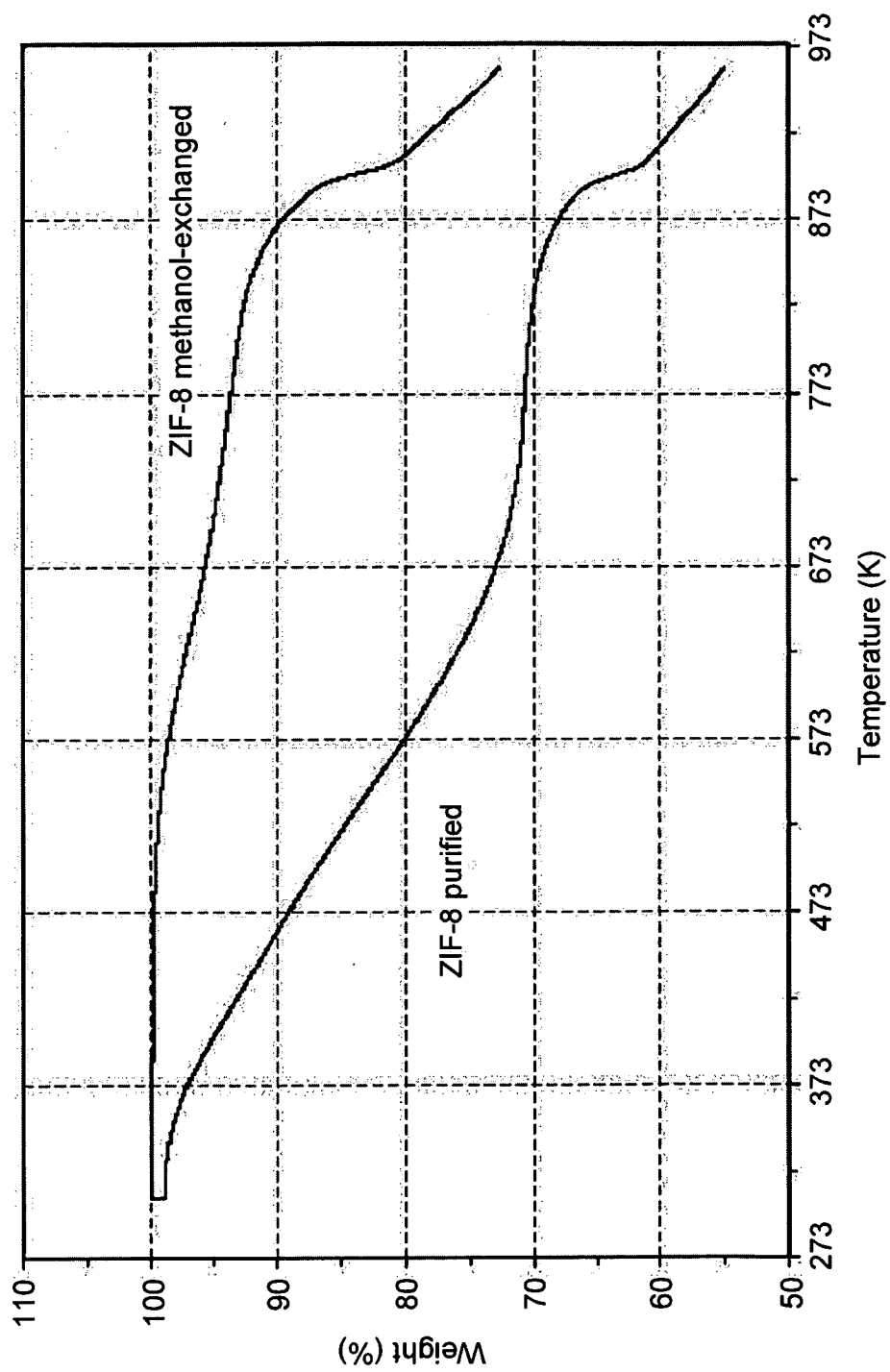
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Powder X-ray Diffraction Pattern of ZIF-8

FIG. 9

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Thermogravimetric Analyses of ZIF-8

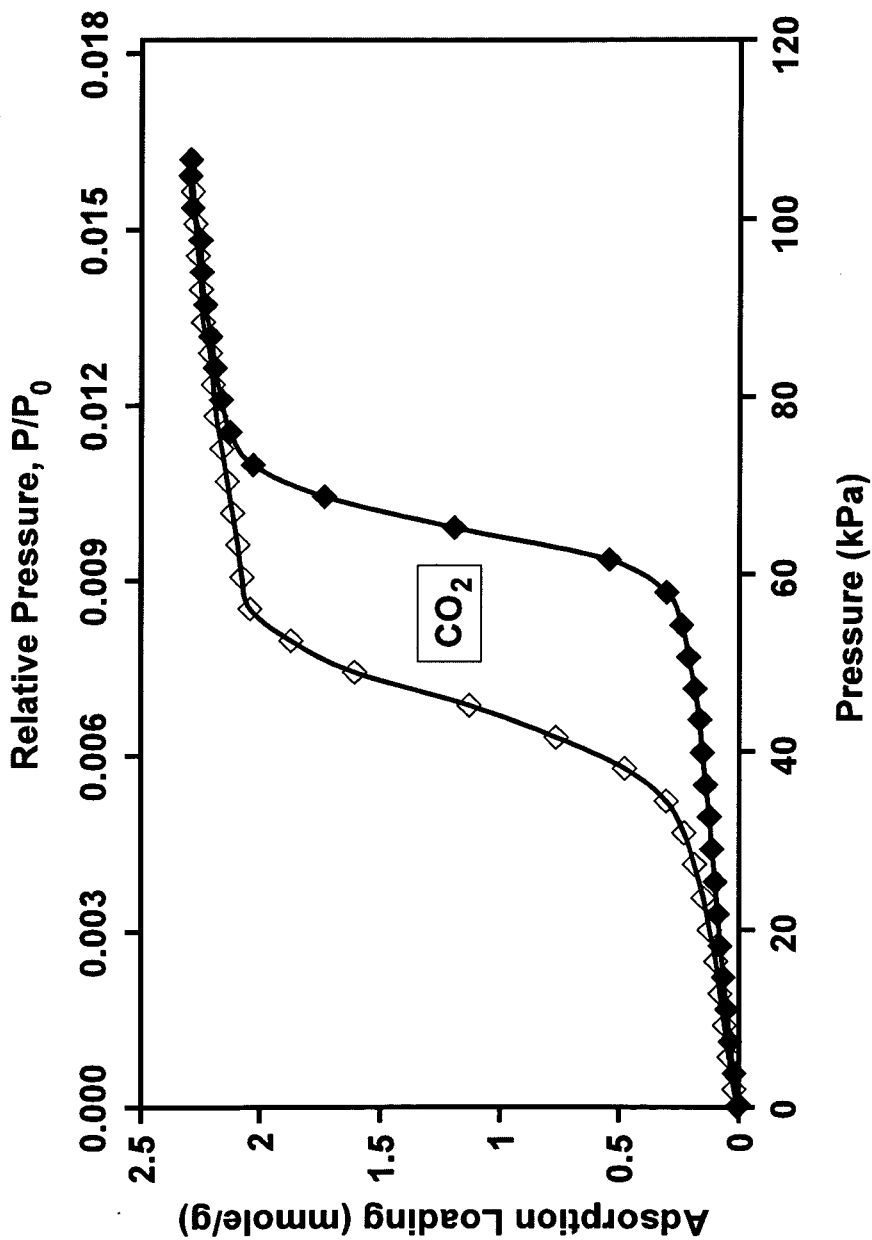
FIG. 10

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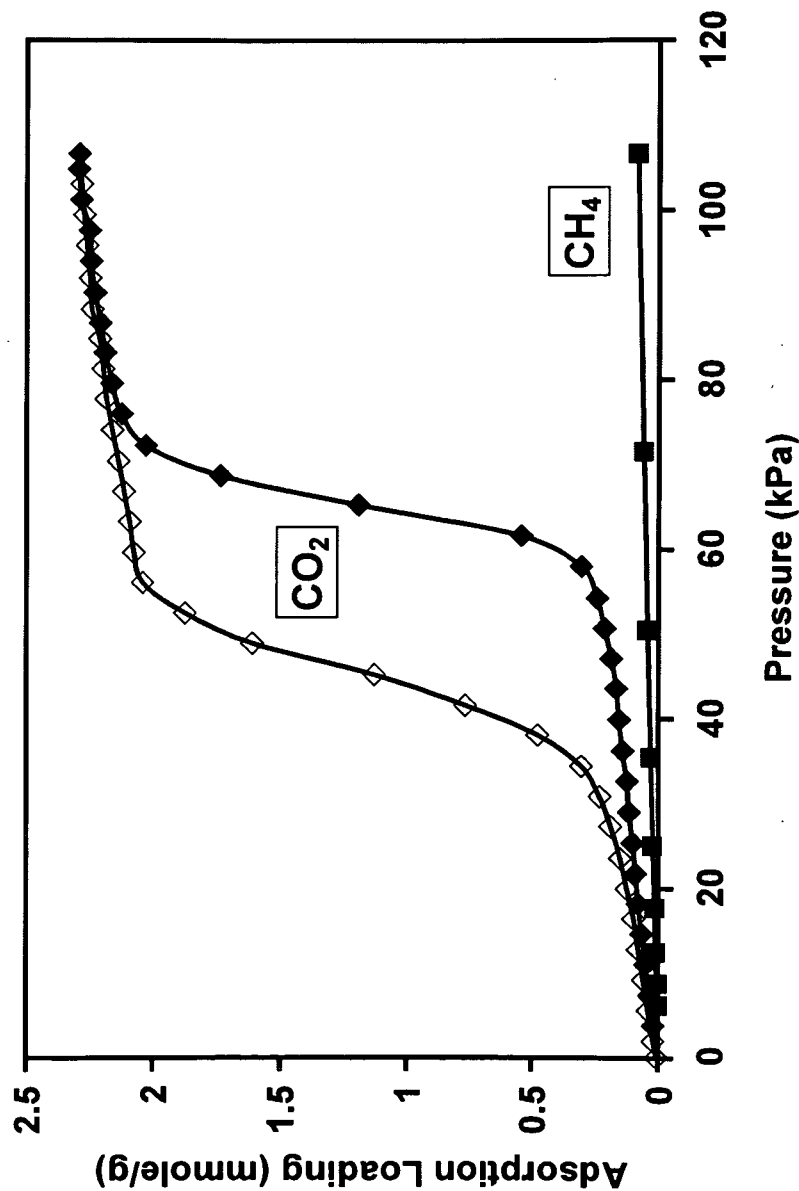
Scanning Electron Microscopy Image of ZIF-7

FIG. 11

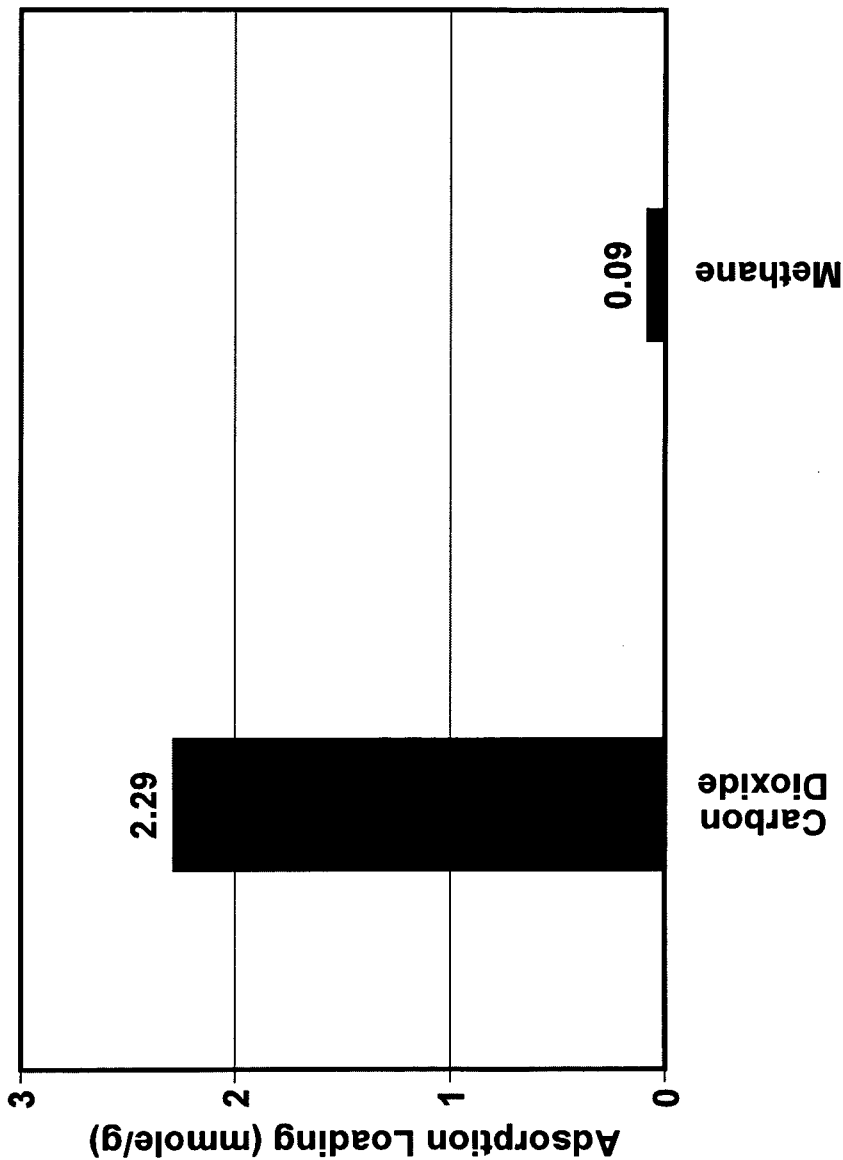


ZIF-7 Isotherm for CO₂ @ 301 K

FIG. 12

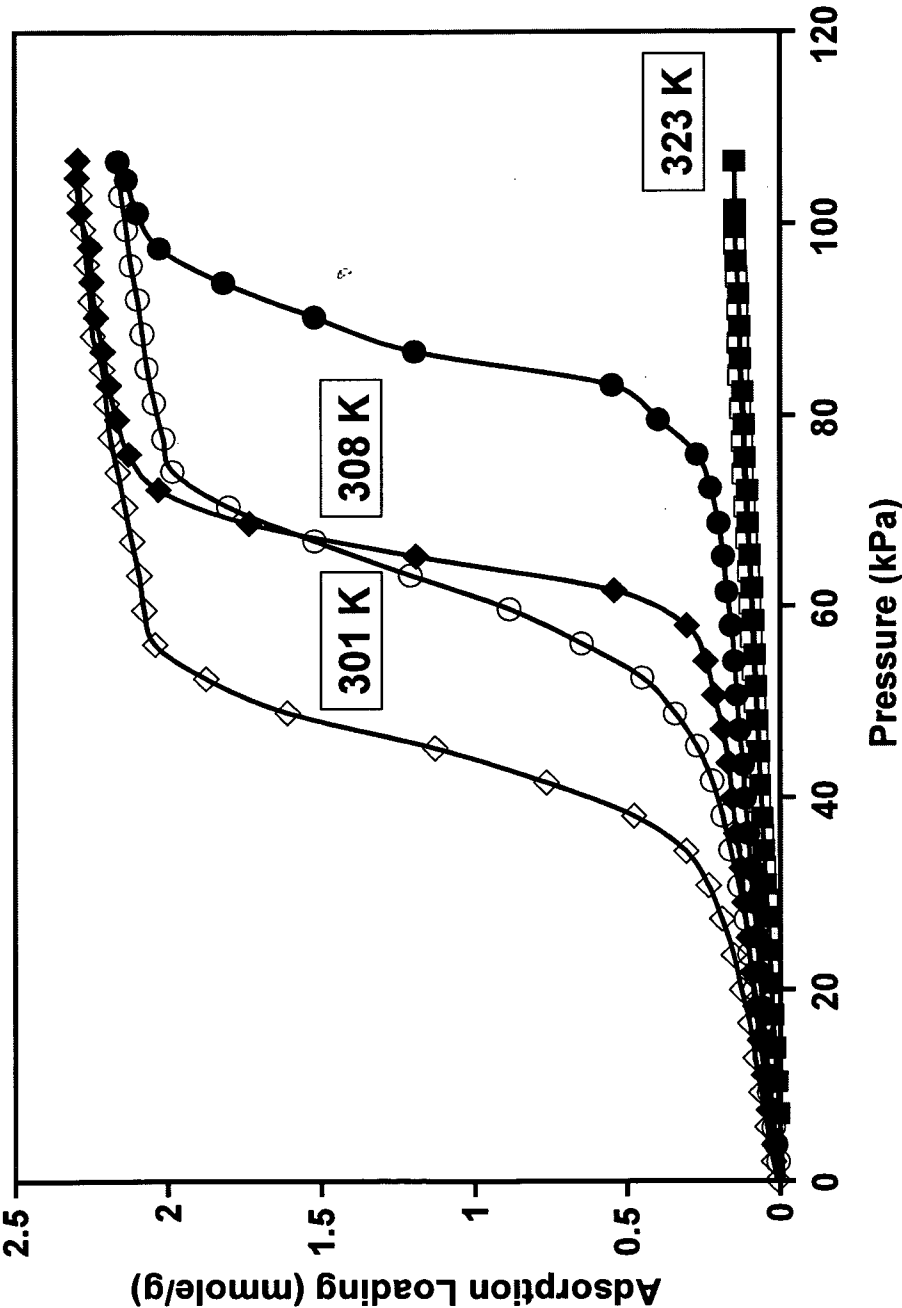


ZIF-7 Isotherms for CO₂ AND CH₄ @ 301 K
FIG. 13



ZIF-7 Adsorption Loading for CO₂ and CH₄
@ 301 K and 106.6 kPa

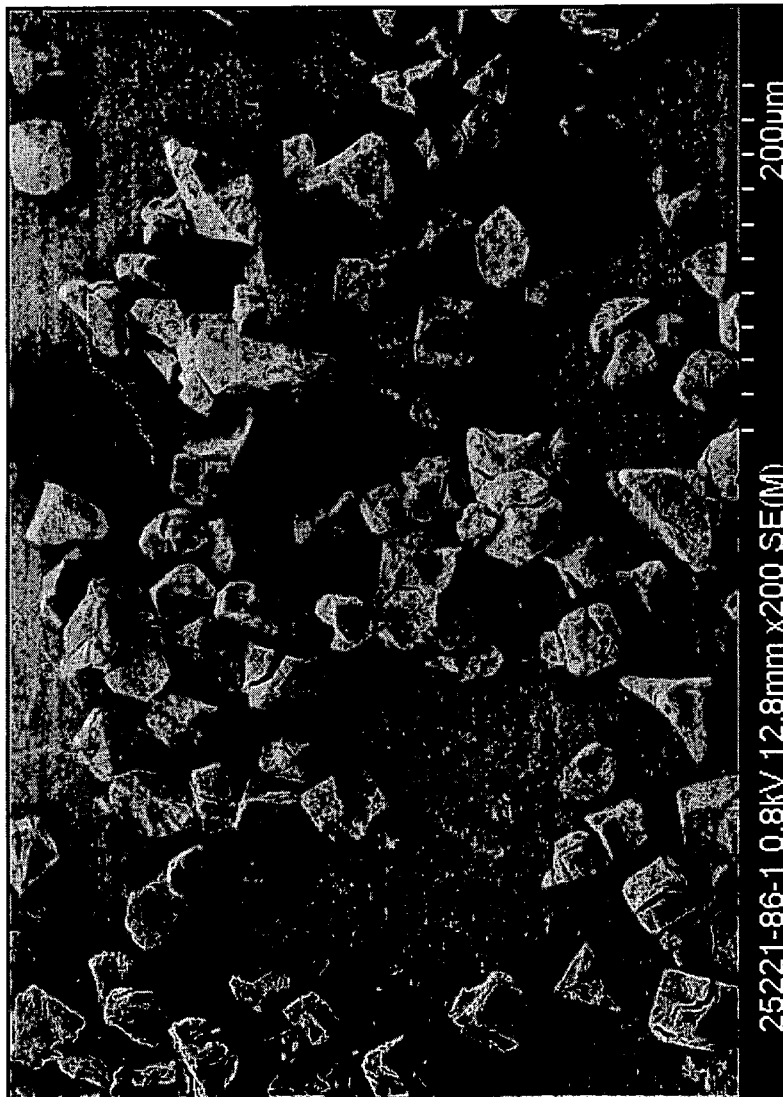
FIG. 14



ZIF-7 Isotherms for CO₂ @ 301 K, @ 308 K and @ 323 K

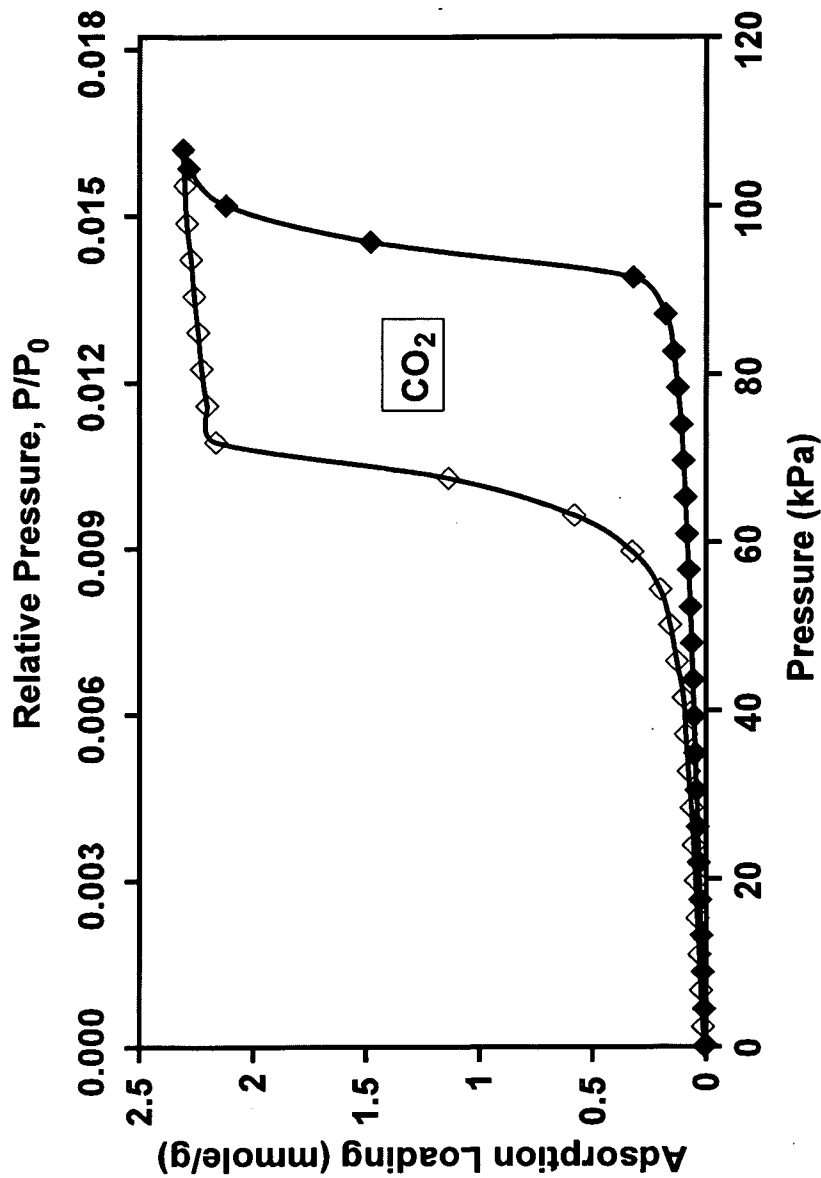
FIG. 15

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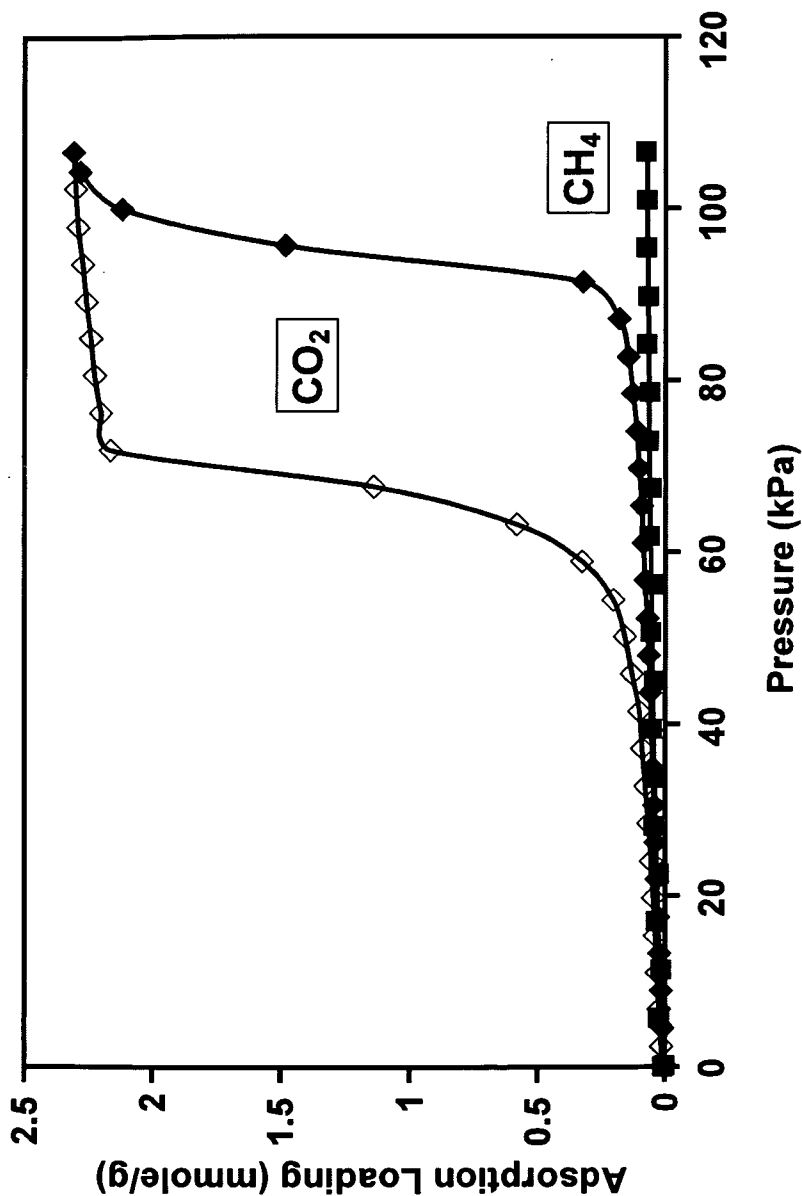
Scanning Electron Microscopy Image of ZIF-9

FIG. 16



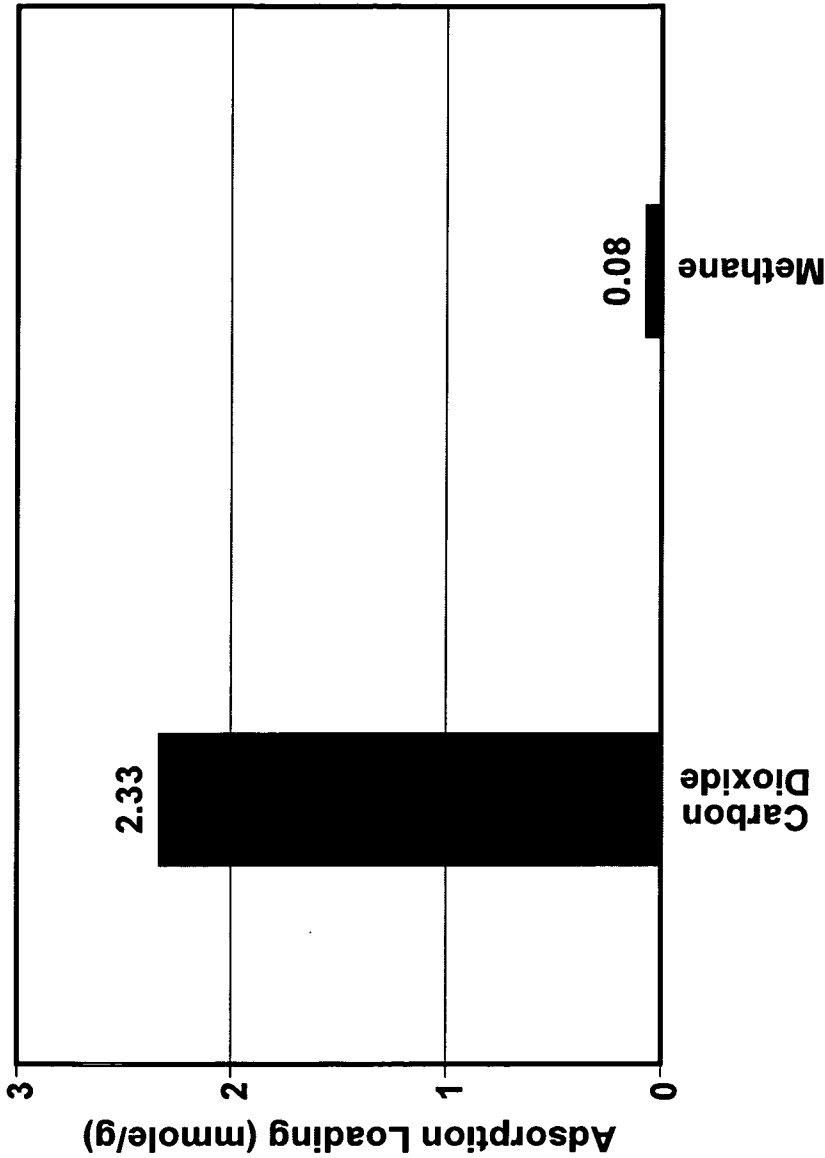
ZIF-9 Isotherm for CO₂ @ 301 K

FIG. 17



ZIF-9 Isotherms for CO₂ and CH₄ @ 301 K

FIG. 18



ZIF-9 Adsorption Loading for CO₂ and CH₄
@ 301 K and 106.6 kPa

FIG. 19

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

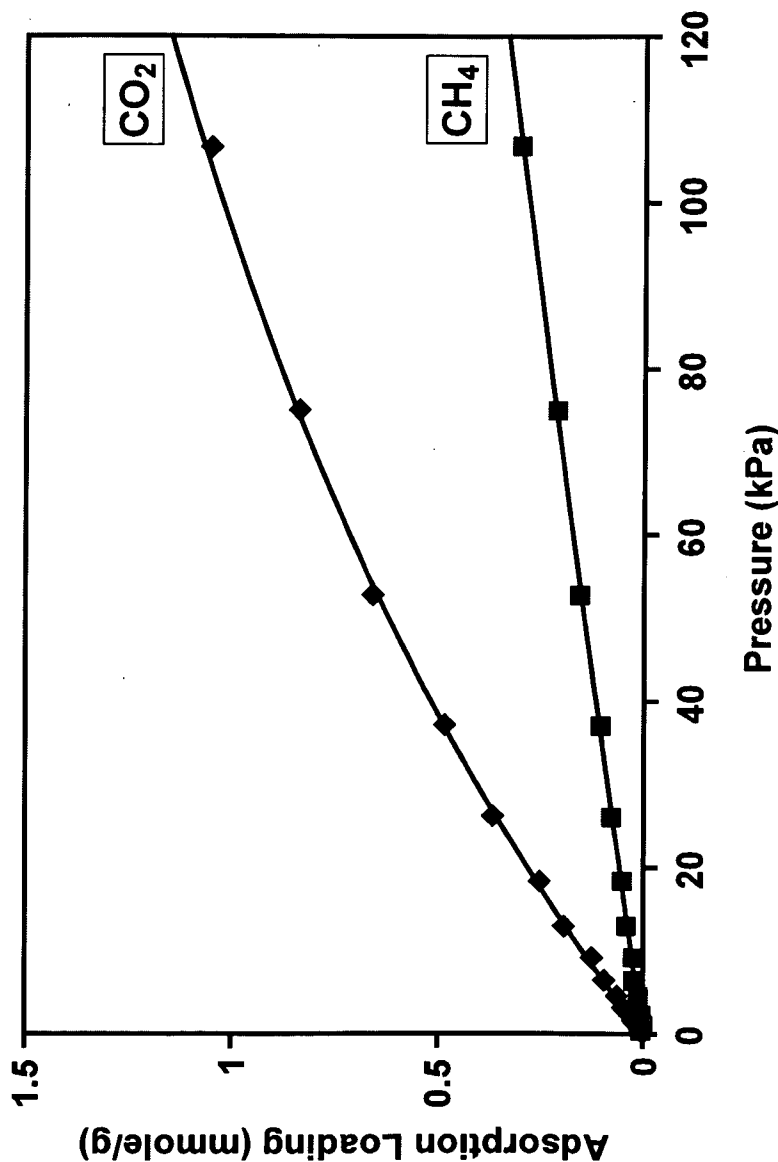
FIG. 20

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

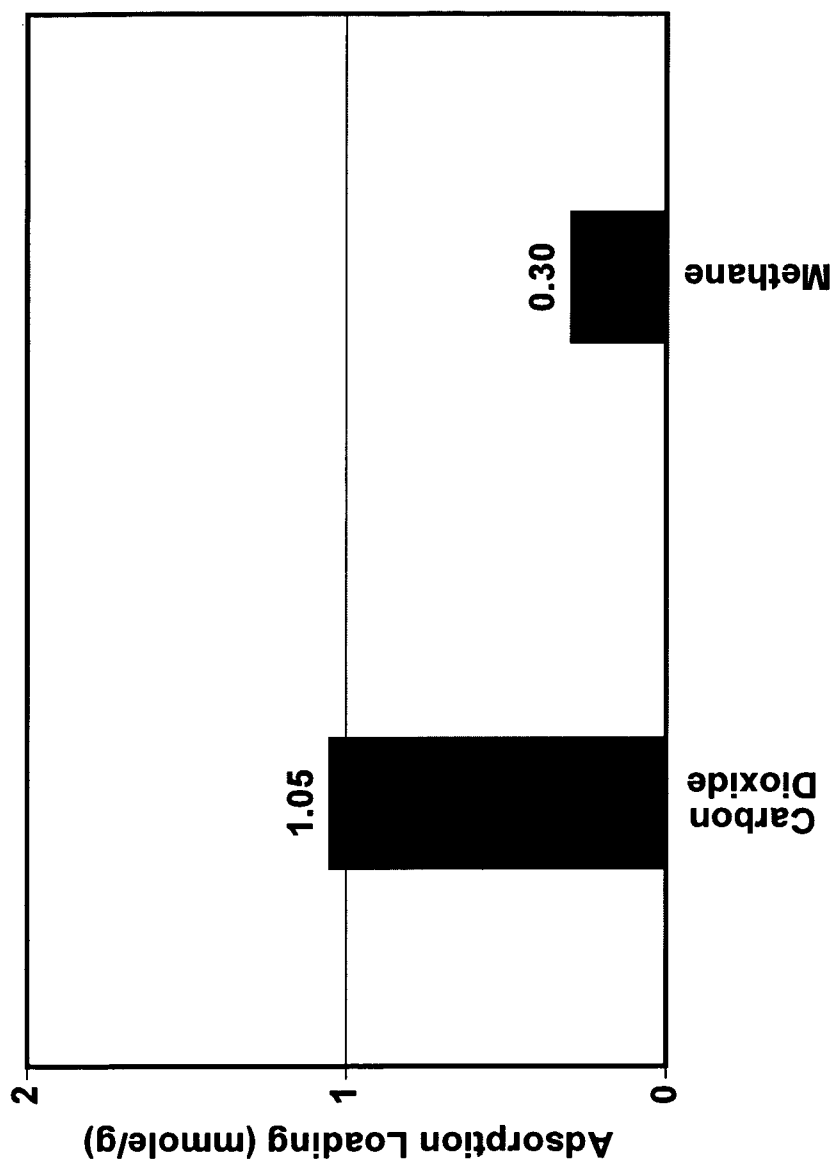
FIG. 21



ZIF-1 (acetonitrile-exchanged) Isotherms for
CO₂ and CH₄ @ 301 K

FIG. 22

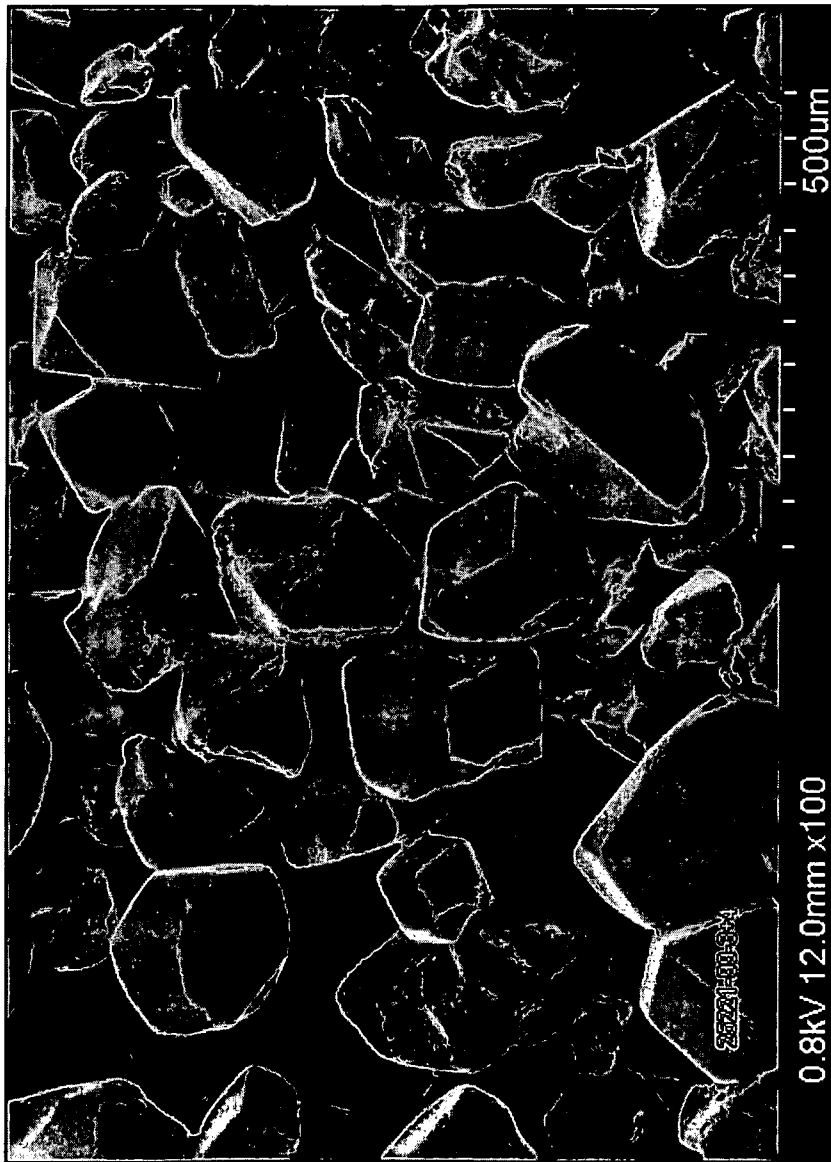
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ZIF-1 (acetonitrile-exchanged) Adsorption Loading
for CO₂ and CH₄ @ 301 K and 106.6 kPa

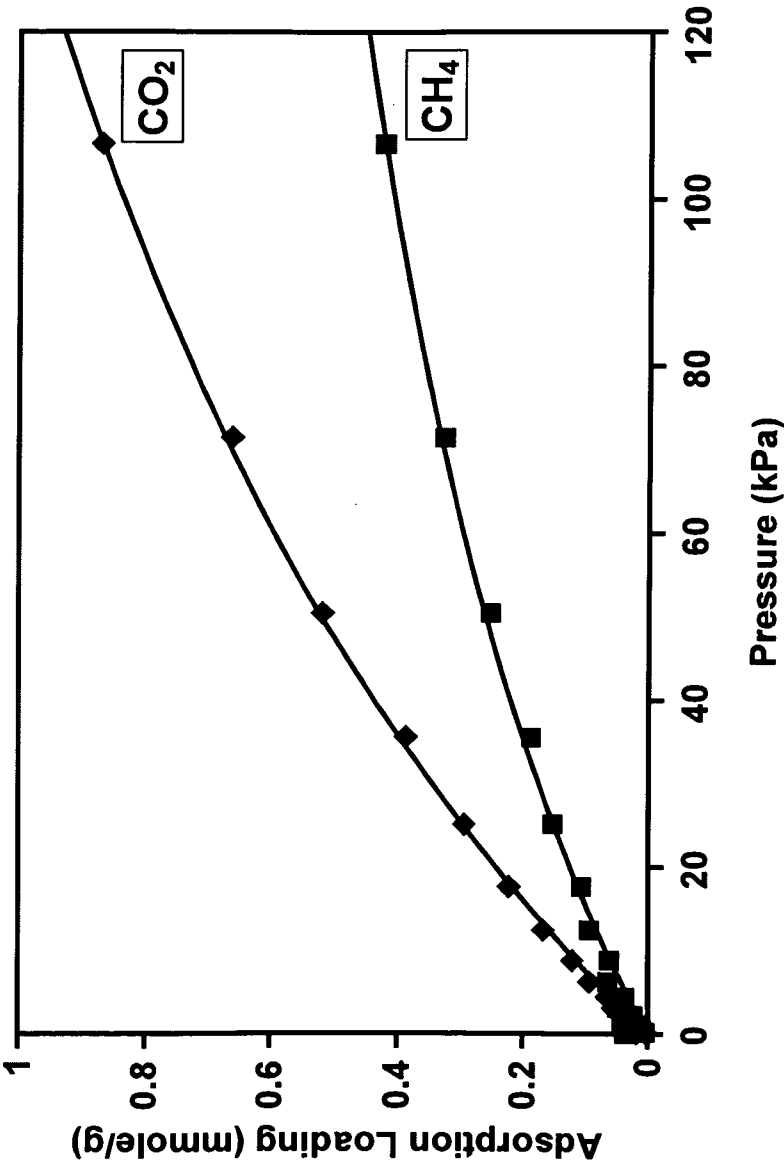
FIG. 23

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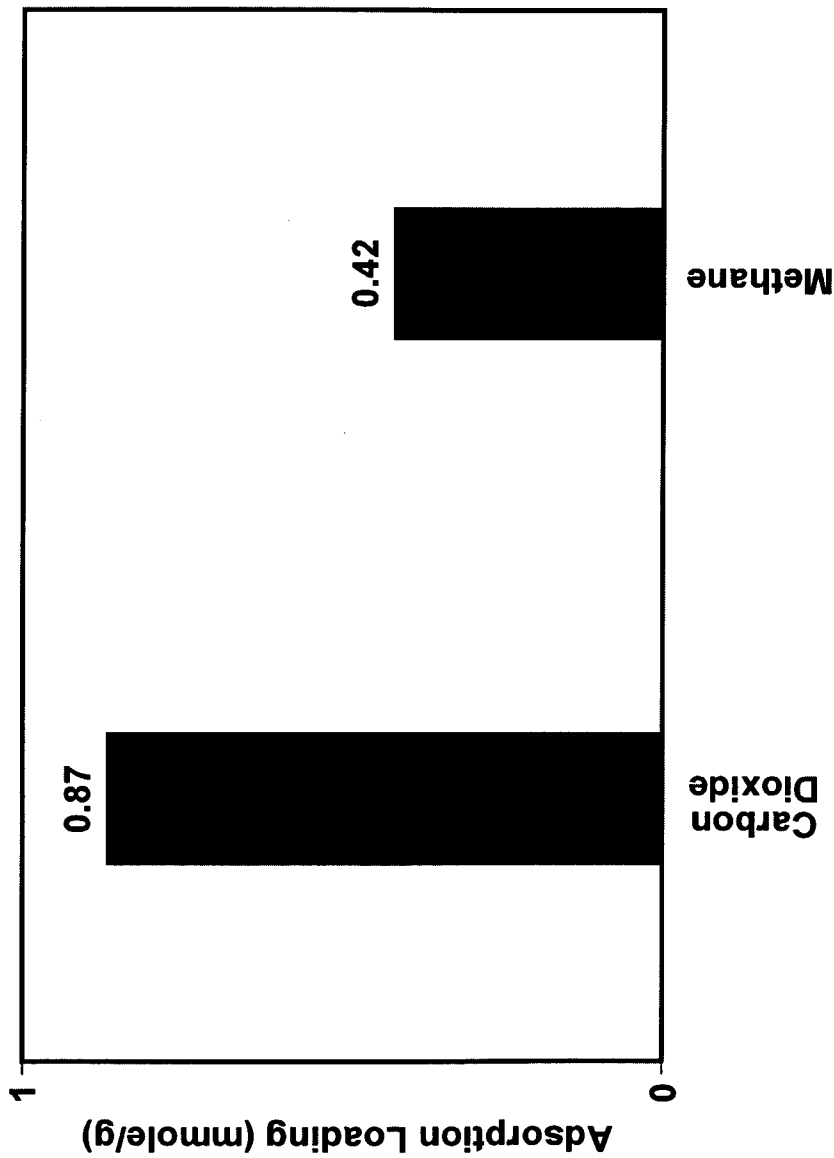


Scanning Electron Microscopy Image of ZIF-11

FIG. 24



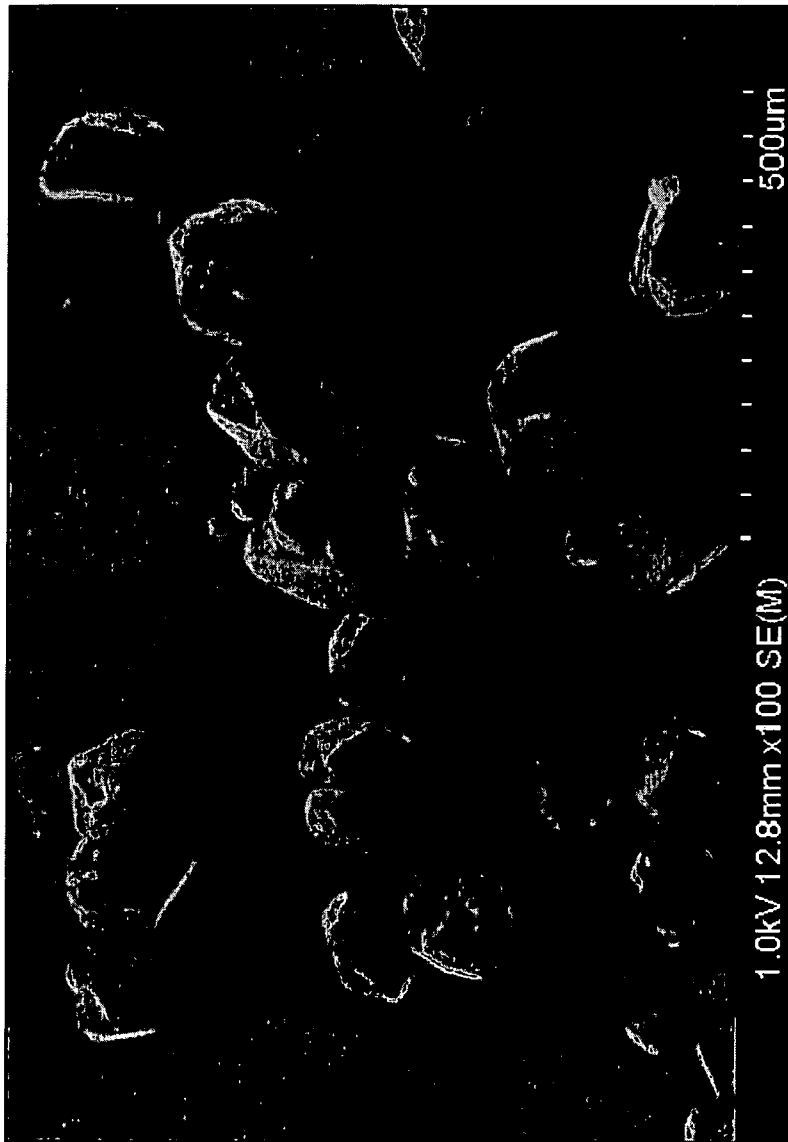
ZIF-11 Isotherms for CO₂ and CH₄ @ 301 K
FIG. 25



ZIF-11 Adsorption Loading for CO₂ and CH₄
@ 301 K and 106.6 kPa

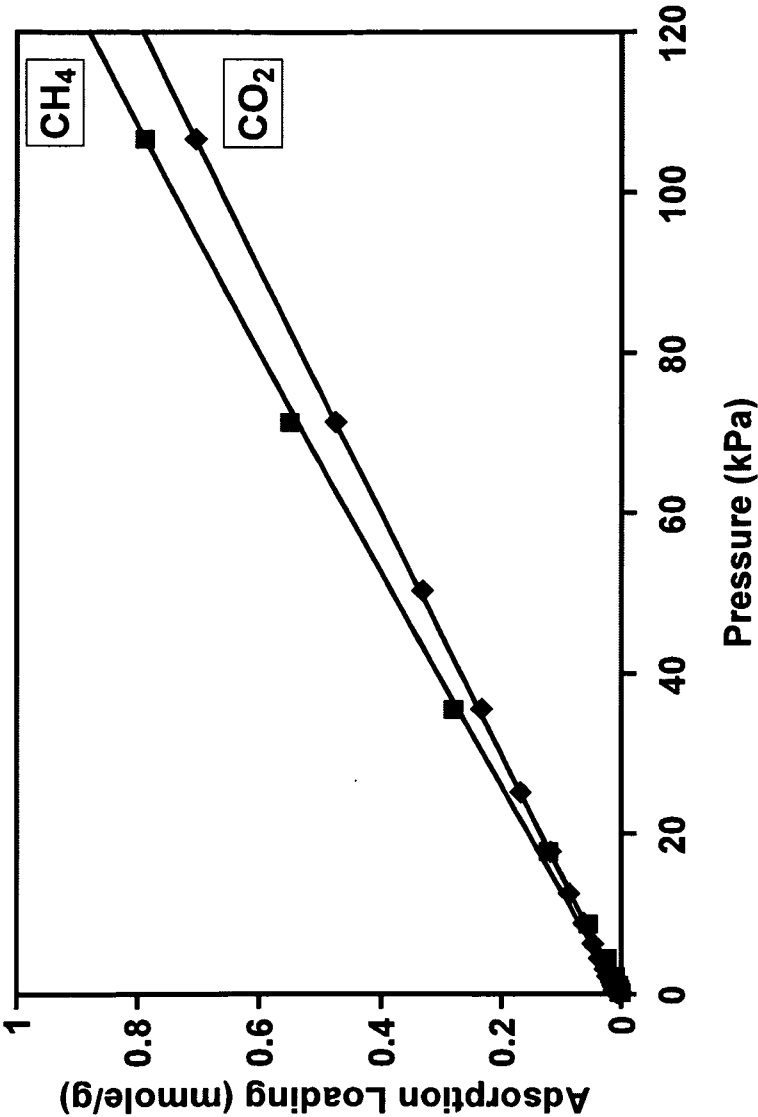
FIG. 26

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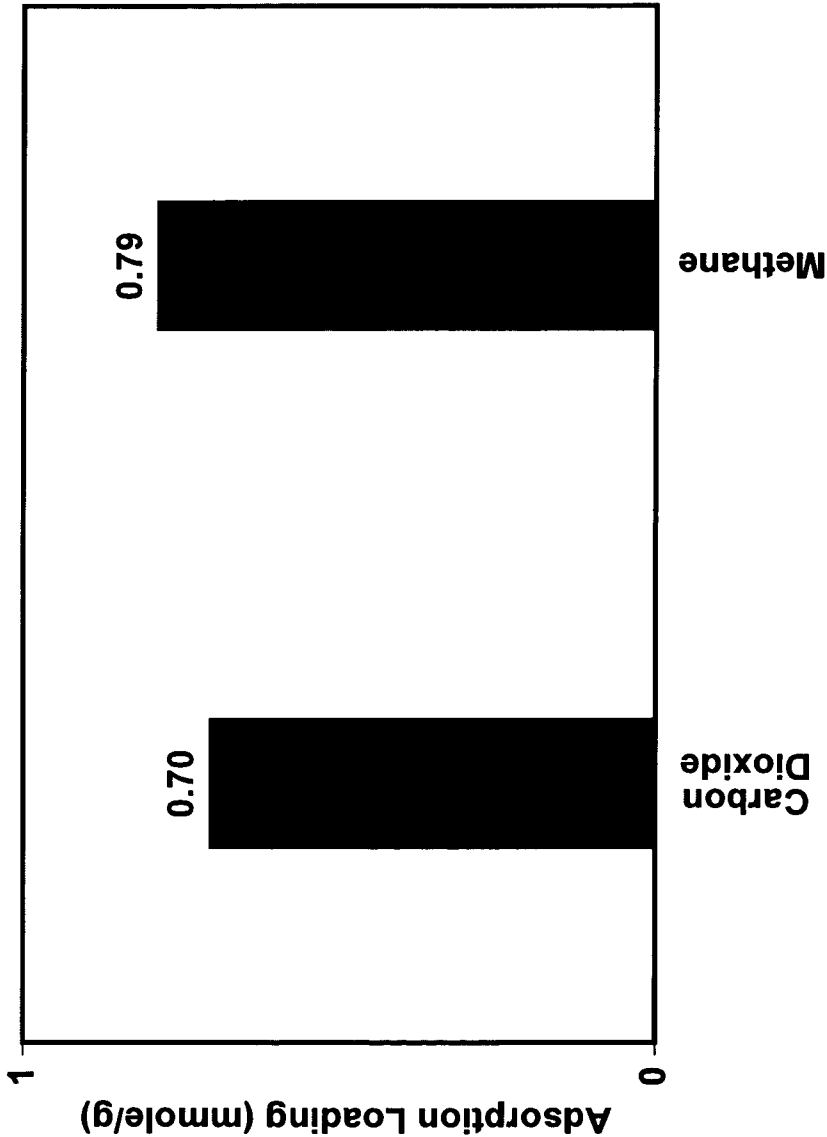
Scanning Electron Microscopy Image of ZIF-8

FIG. 27



ZIF-8 Isotherms for CO₂ and CH₄ @ 301 K

FIG. 28



ZIF-8 Adsorption Loading for CO₂ and CH₄
@ 301 K and 106.6 kPa

FIG. 29