



# Library Indian Institute of Science Education and Research Mohali



**DSpace@IISERMohali (/jspui/)**

**/ Thesis & Dissertation (/jspui/handle/123456789/1)**

**/ Master of Science (/jspui/handle/123456789/2)**

**/ MS-09 (/jspui/handle/123456789/393)**

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/437>

Title: New Hexadentate Ancillary Ligands and Their Metal Organic Coordination Networks

Authors: Verma, Gaurav (/jspui/browse?type=author&value=Verma%2C+Gaurav)

Keywords: Chemistry

Issue Date: 3-Sep-2014

Publisher: IISER M

Abstract: Two new hexadentate ligands, N, N', N'', N'''-tetrakis-(4-pyridylmethyl)-1,4-diaminobutane (4-pytpbn) and N,N''-bis-(2-pyridylmethyl)-N',N'''-bis-(4-pyridylmethyl)-1,4-diaminobutane (2,4-pytpbn) have been synthesized and structurally characterized. Complexes of 4-pytpbn of the 2+ 2+ 2+ 2+ 2+ 2+ - -general formula [M(4-pytpbn)X<sub>2</sub>], where M = Co (1, 2, 5), Cd (3), Cu (4); X = NO<sub>3</sub>, Cl, - 2+ 2+ 2+ 2+ 2+ 2- 2- 2-CIO<sub>4</sub>, and [M<sub>2</sub>A<sub>2</sub>(4-pytpbn)], where M = Zn (6), Cd (7) and Ni (8, 9), A = adc, fum, succ<sup>2-</sup>, have been synthesized. All these complexes have been characterized by elemental analysis, FTIR spectroscopy, thermogravimetric analysis and powder X-ray diffractometry. Single crystal X-ray analysis of the ligands and preliminary results of 1 and 2 that establish the presence of expected pores in these are also reported.

URI: <http://hdl.handle.net/123456789/437> (<http://hdl.handle.net/123456789/437>)

Appears in MS-09 (/jspui/handle/123456789/393)  
Collections:

## Files in This Item:

File	Description	Size	Format	
MS-09053.pdf (/jspui/bitstream/123456789/437/3/MS-09053.pdf)		2.56 MB	Adobe PDF	<a href="#">View/Open (/jspui/bitstream/123456789/437/3/MS-09053.pdf)</a>

[Show full item record \(/jspui/handle/123456789/437?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/437/statistics\)](#)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.