



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)
/ Publications of IISER Mohali (/jspui/handle/123456789/4)
/ Research Articles (/jspui/handle/123456789/9)

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/2138>

Title:	Tyrosinase and catecholase-like activities of a dinuclear Cu(II) complex
Authors:	Yadav, H.R. (/jspui/browse?type=author&value=Yadav%2C+H.R.) Choudhury, A.R. (/jspui/browse?type=author&value=Choudhury%2C+A.R.) Ali, Anzar (/jspui/browse?type=author&value=Ali%2C+Anzar) Singh, Yogesh (/jspui/browse?type=author&value=Singh%2C+Yogesh)
Keywords:	Copper(II) Schiff base Tyrosinase activity Catecholase activity
Issue Date:	2018
Publisher:	Elsevier B.V.
Citation:	Polyhedron, 141, pp. 140-146
Abstract:	A dinuclear Cu(II) complex was synthesized and crystallographically characterized. The compound was found to have antiferromagnetic interaction in between the Cu(II) centres in the molecule. It had weak intermolecular ferromagnetic interaction. The compound was found to be tyrosinase and catecholase active. In case of tyrosinase activity, the diphenol formed was isolated using thin layer chromatography (TLC) and characterized through ¹ H NMR as well as mass spectrometry. The o-quinone derivative formed in this reaction was characterized using GC-MS. The latter activity was monitored spectrophotometrically and the product o-quinone derivative was isolated (in MeOH and MeCN) column chromatographically and characterized using melting point determination. These were followed by Michealis-Menten kinetics with turnover numbers 4.95×10^3 and $1.58 \times 10^3 \text{ h}^{-1}$ in MeOH and MeCN, respectively.
Description:	Only IISERM authors are available in the record.
URI:	https://www.sciencedirect.com/science/article/pii/S0277538717307684?via%3Dihub (https://www.sciencedirect.com/science/article/pii/S0277538717307684?via%3Dihub) http://hdl.handle.net/123456789/2138 (http://hdl.handle.net/123456789/2138)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format
Need to add pdf.odt (/jspui/bitstream/123456789/2138/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text

[View/Open \(/jspui/bitstream/123456789/2138/1/Need%20to%20add%20pdf.odt\)](#)

[Show full item record \(/jspui/handle/123456789/2138?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/2138/statistics\)](#)

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