



Synthesis, crystal structure, characterization of zinc(II), cadmium(II) complexes with 3-thiophene aldehyde thiosemicarbazone (3TTSCH). Biological activities of 3TTSCH and its complexes

Submitted by Emmanuel Lemoine on Wed, 12/04/2013 - 16:28

Titre	Synthesis, crystal structure, characterization of zinc(II), cadmium(II) complexes with 3-thiophene aldehyde thiosemicarbazone (3TTSCH). Biological activities of 3TTSCH and its complexes
Type de publication	Article de revue
Auteur	Alomar, Kusai [1], Landreau, Anne [2], Kempf, Marie [3], Khan, Mustayeen Ahmed [4], Allain, Magali [5], Bouet, Gilles [6]
Editeur	Elsevier
Type	Article scientifique dans une revue à comité de lecture
Année	2010
Langue	Anglais
Date	2010/04
Numéro	4
Pagination	397 - 404
Volume	104
Titre de la revue	Journal of Inorganic Biochemistry
ISSN	0162-0134
Mots-clés	3-Thiophene aldehyde [7], Biological activity [8], Crystal structure [9], Metal complexes [10], Thiosemicarbazone [11]
Résumé en anglais	<p>The reaction of zinc(II) chloride, cadmium(II) chloride and bromide with 3-thiophene aldehyde thiosemicarbazone leads to the formation of a series of new complexes. They have been characterized by spectroscopic studies: infrared, ¹H NMR, and electronic spectra. The crystal structures of the compound [ZnCl₂(3TTSCH)₂] and [CdBr₂(3TTSCH)₂] have been determined by X-ray diffraction methods. For the complexes [ZnCl₂(3TTSCH)₂] and [CdBr₂(3TTSCH)₂], the central ion is coordinated through the sulfur, and for the complexes [CdCl₂(3TTSCH)], [CdBr₂(3TTSCH)] the ion is coordinated through the sulfur as well as azomethine nitrogen atom of the thiosemicarbazone. In addition, fungistatic and bacteriostatic activities of both ligand and complexes have been evaluated. Cadmium(II) complexes have shown the most significant activities.</p>
URL de la notice	http://okina.univ-angers.fr/publications/ua57 [12]
DOI	10.1016/j.jinorgbio.2009.11.012 [13]
Lien vers le document	http://dx.doi.org/10.1016/j.jinorgbio.2009.11.012 [13]

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