Accepted Manuscript

Two-photon absorption properties of four new pentacoordinated diorganotin complexes derived from Schiff bases with fluorene

Alejandro Enríquez-Cabrera, Alberto Vega-Peñaloza, Violeta Álvarez-Venicio, Margarita Romero-Avila, Pascal G. Lacroix, Gabriel Ramos-Ortiz, Rosa Santillan, Norberto Farfán

PII: S0022-328X(17)30699-X

DOI: 10.1016/j.jorganchem.2017.12.014

Reference: JOM 20209

To appear in: Journal of Organometallic Chemistry

Received Date: 4 October 2017
Revised Date: 8 December 2017
Accepted Date: 9 December 2017

Please cite this article as: A. Enríquez-Cabrera, A. Vega-Peñaloza, V. Álvarez-Venicio, M. Romero-Avila, P.G. Lacroix, G. Ramos-Ortiz, R. Santillan, N. Farfán, Two-photon absorption properties of four new pentacoordinated diorganotin complexes derived from Schiff bases with fluorene, *Journal of Organometallic Chemistry* (2018), doi: 10.1016/j.jorganchem.2017.12.014.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Two-photon absorption properties of four new pentacoordinated diorganotin complexes derived from Schiff bases with fluorene.

Alejandro Enríquez-Cabrera, ^a Alberto Vega-Peñaloza, ^a Violeta Álvarez-Venicio, ^{†a,b} Margarita Romero-Avila, ^a Pascal G. Lacroix, ^c Gabriel Ramos-Ortiz, ^b Rosa Santillan, ^d Norberto Farfán^{a*}

- ^a Facultad de Química, Departamento de Química Orgánica, Universidad Nacional Autónoma de México, Cd. Universitaria, Ciudad de México No. 04510, México. E-mail: norberto.farfan@gmail.com
- ^b Centro de Investigaciones en Óptica, CIO, Apdo., Postal 1-948, 37000 Leon Gto, México
- ^c Laboratoire de Chimie de Coordination du CNRS, 205 route de Narbonne, F-31077 Toulouse, France
- d Departamento de Química, Centro de Investigación y de Estudios Avanzados del IPN, CINVESTAV, Apdo., Postal 14-740, Ciudad de México, 07000, México
- † From February 01, 2013 to January 31, 2015 V.A.-V. had a postdoctoral fellowship at UNAM and from February 01, 2015 to July 31, 2016 at CIO

ABSTRACT

In this paper we report the synthesis and characterization of four novel pentacoordinated diorganotin complexes, obtained through a methodology that involves a multicomponent reaction of 4-([9H-fluorene-2-yl]ethynyl)-2-hydroxybenzaldehyde, 2-amino-5-nitrophenol and diphenyl or dibutyl-tin oxides. Diorganotin complexes **8-11** were obtained in high yields (70-80%) and were fully characterized by solution NMR (1 H, 13 C and 119 Sn), high resolution mass spectrometry (ESI-TOF) and ATR-FTIR. The optical properties were investigated by UV/Vis spectroscopy and Two-Photon Excitation Fluorescence (TPEF). The One-Photon Absorption (OPA) spectra shows two bands located around 400 and 500 nm, additionally, in the Two-Photon Absorption (TPA) spectra there is one main band located around 750 nm characterized by maximum values of TPA cross section (σ_{TPA}) in

Download English Version:

https://daneshyari.com/en/article/7756295

Download Persian Version:

https://daneshyari.com/article/7756295

<u>Daneshyari.com</u>