SUPPLEMENTARY MATERIAL

2-Chloro-4,6-*bis*{(*E*)-3-methoxy-4-[(4-methoxybenzyl)oxy]styryl}pyrimidine: Synthesis, Spectroscopic, and Computational Evaluation

Otávio Augusto Chaves¹, Vitor Sueth-Santiago^{2,3,§}, Douglas Chaves de Alcântara Pinto², José Carlos Netto-Ferreira^{2,4}, Debora Decote-Ricardo⁵ and Marco Edilson Freire Lima^{2,*}

¹ Departamento de Química, Centro de Química de Coimbra (CQC), Universidade de Coimbra, Rua Larga, 3004-545, Coimbra, Portugal; otavioaugustochaves@gmail.com (O.A.C.)

² Instituto de Química, Departamento de Química Orgânica, Universidade Federal Rural do Rio de Janeiro, 23890-000, Seropédica, Brazil; vitor_sueth@hotmail.co.uk (V.S.-S.); douglasdoti@hotmail.com (D.C.A.P.); jcnetto@ufrrj.br (J.C.N.F.)

³ Instituto Federal de Educação, Ciência e Tecnologia do Rio de Janeiro, Campus São Gonçalo, Rua José Augusto Pereira dos Santos, 24425-004, São Gonçalo, Brazil

⁴ Instituto de Química, Departamento de Química Orgânica, Universidade Federal do Rio de Janeiro, Centro de Tecnologia, Bloco A, Cidade Universitária, 21941-909, Rio de Janeiro, Brazil

⁵ Instituto de Veterinária, Departamento de Microbiologia e Imunologia Veterinária, Universidade Federal Rural do Rio de Janeiro, 23890-000, Seropédica, Brazil; decotericardo@ufrrj.br (D.D.-R.)

§ This work is dedicated to the memory of the honorable Brazilian scientist, teacher, friend, and human being Dr. Vitor Sueth-Santiago (1987–2021). A victim from Covid-19.

*Correspondence: marcoedilson@gmail.com (M.E.F.L.)

INDEX

Figure S1. The ¹H-NMR spectra for the compound **7**. (A) Experimental and (B) Theoretical (DFT). p.2

Figure S2. The ¹³C-NMR spectra for the compound **7**. (A) Experimental (DEPTQ) and (B) Theoretical (DFT).

Table S1. Comparison between experimental and theoretical (calculated - DFT) signals (δ) for ¹H- and ¹³C-NMR to the compound **7**. p.4



Figure S1. The ¹H-NMR spectra for the compound **7**. (A) Experimental and (B) Theoretical (DFT).



Figure S2. The 13 C-NMR spectra for the compound 7. (A) Experimental (DEPTQ) and (B) Theoretical (DFT).

Table S1. Comparison between experimental and theoretical (calculated - DFT) signals (δ) for ¹H- and ¹³C-NMR to the compound **7**.

Position	δH(exp)	$\delta_{H(calc)}$	δc(exp)	$\delta_{C(calc)}$
1	7.61	7.66	111.00	112.90
2	-	-	160.82	161.00
3	7.19	6.98	123.13	125.20
4	7.87	7.87	138.72	139.90
5	-	-	129.12	130.60
6	7.41	7.45	114.94	117.00
7	-	-	149.81	149.90
8	-	-	150.11	151.00
9	7.12	6.93	113.78	115.50
10	7.27	7.24	122.63	123.00
1′	5.07	4.86	70.11	75.80
2′	-	-	128.69	129.80
3′	7.40	7.43	130.18	131.30
4'	6.96	6.89	114.30	116.50
5′	-	-	159.57	160.10
1''	-	-	166.28	167.00
C7-OCH3	3.85	3.85	56.09	54.50
C5′-OCH3	3.77	3.67	55.58	54.00