

ELECTRONIC SUPPLEMENTARY INFORMATION (ESI)

Ester-Substituted Cyclometallated Rhodium and Iridium Coordination Assemblies with π -Bonded Dioxolene ligand : Synthesis, Structures and Luminescent Properties

Aurelie Damas,^a Hugo Sesolis,^a Marie Noelle Rager,^b Lise Marie Chamoreau,^a
Maria Pia Gullo,^c Andrea Barbieri,^{*c} and Hani Amouri^{*a}

^a Institut Parisien de Chimie Moléculaire, IPCM UMR CNRS 7201; Université Pierre et Marie Curie, Paris 6, 4 place Jussieu, case 42, 75252 Paris Cedex 05, France. Fax: (33)1-44-27-38-41 E-mail: hani.amouri@upmc.fr. ^b NMR facilities of Ecole Nationale Supérieure de Chimie de Paris, 11 rue Pierre et Marie Curie, 75231 Paris Cedex 05, France. ^c Istituto per la Sintesi Organica e la Fotoreattività (ISOF), Consiglio Nazionale delle Ricerche (CNR), Via Gobetti 101, 40129 Bologna, Italy. E-mail: andrea.barbieri@isof.cnr.it

TABLE OF CONTENTS

Figure 1 SI. Normalised emission spectra of **3**, **5**, **7** in MeOH at rt; $\lambda_{exc} = 390$ nm.

Figure 2 SI. Normalised emission spectra of **7** in MeOH:EtOH (1:4) at 77 K at different concentrations ($c = 0.35\text{-}3.40 \times 10^{-5}$ M).

Figure 3 SI. Emission map of **7** in MeOH:EtOH (1:4) at 77 K at different excitation wavelengths (top) and intensity ratio of the low ($\lambda = 570$ nm) and high energy ($\lambda = 520$ nm) peaks as a function of the excitation wavelength.

Figure 4 SI. Comparison among arbitrarily scaled absorption spectrum in MeOH at rt (black line) and excitation spectra in MeOH:EtOH (1:4) at 77 K of **7**; $\lambda_{em} = 520$ nm (blue line) and 570 nm (red line).

Figure 5 SI. Normalised emission spectra of powder samples of **2-7** at 77 K; $\lambda_{exc} = 390$ nm.

Figure 6 SI. Decay Associated Spectra (DAS) of **2** (top) and **6** (bottom) in MeOH:EtOH (1:4) at 77 K of monomer (blue line), dimer (red line) and sum of the two components (black line).

Figure 7 SI. ¹H and ¹³C of complexes **2-7**

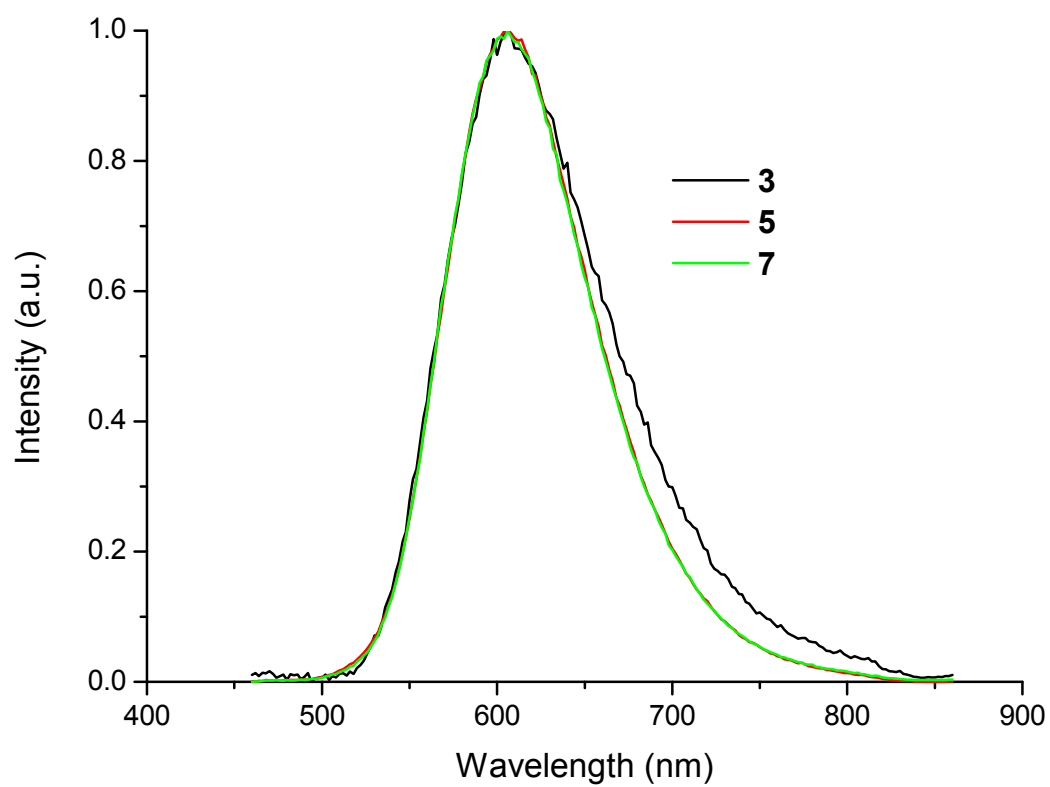


Figure 1 SI. Normalised emission spectra of **3**, **5**, **7** in MeOH at rt; $\lambda_{\text{exc}} = 390$ nm.

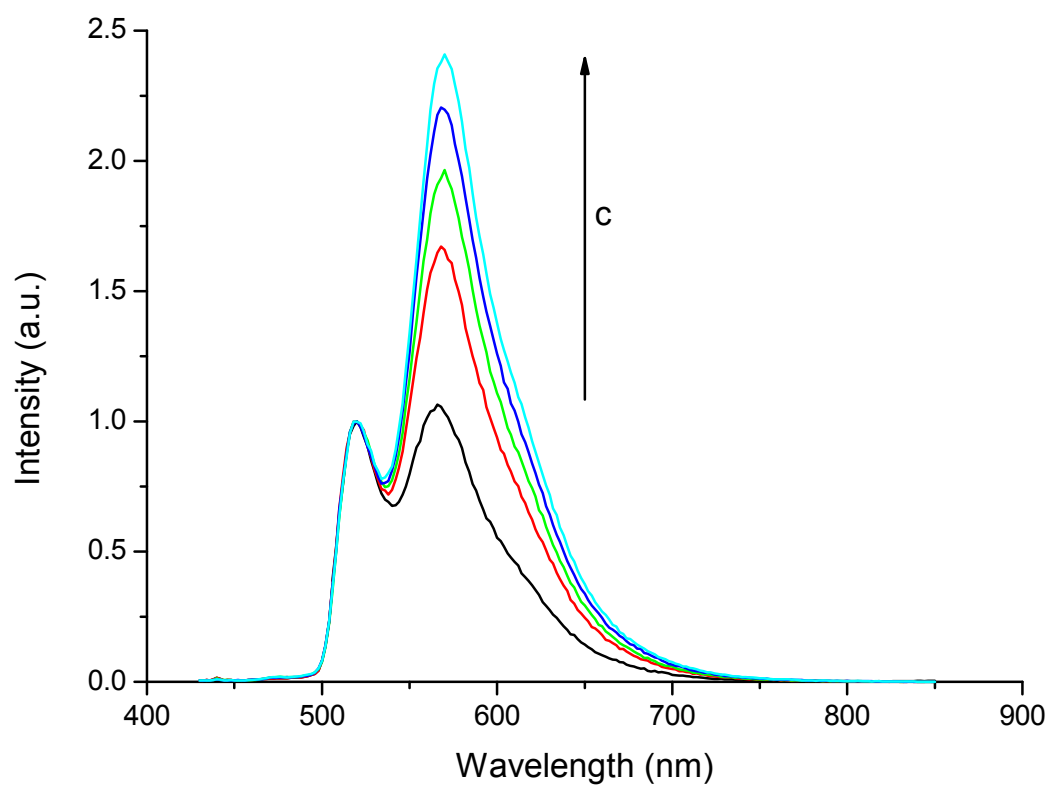


Figure 2 SI. Normalised emission spectra of **7** in MeOH:EtOH (1:4) at 77 K at different concentrations ($c = 0.35\text{-}3.40 \times 10^{-5}$ M).

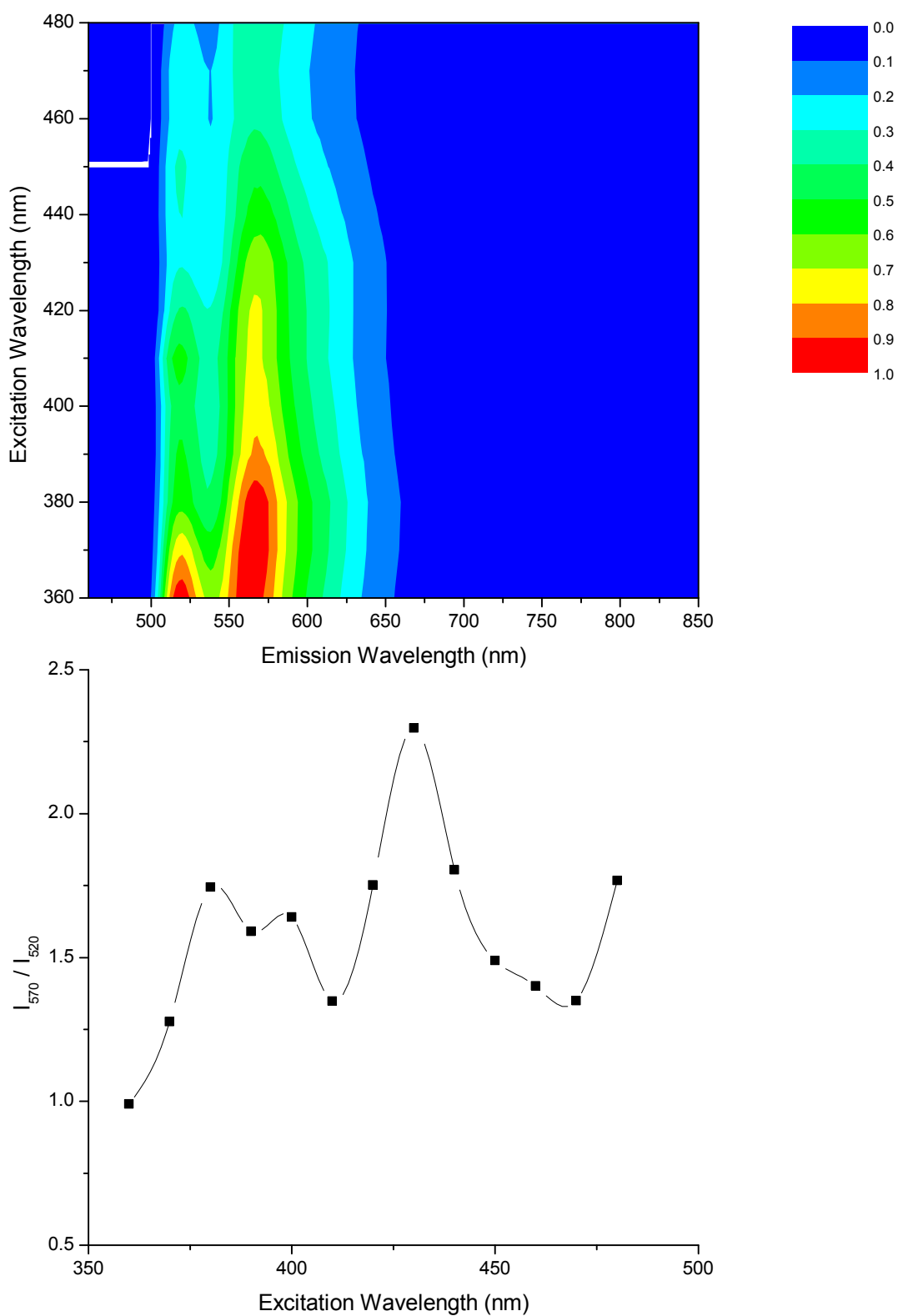


Figure 3 SI. Emission map of **7** in MeOH:EtOH (1:4) at 77 K at different excitation wavelengths (top) and intensity ratio of the low ($\lambda = 570$ nm) and high energy ($\lambda = 520$ nm) peaks as a function of the excitation wavelength.

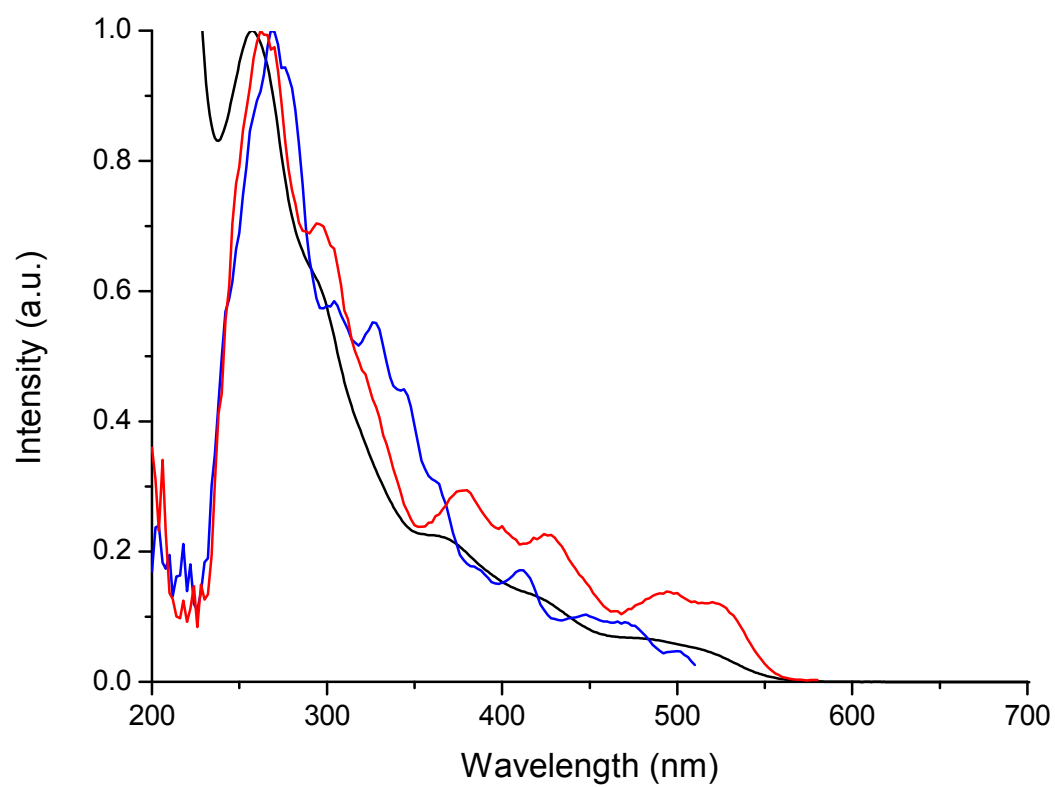


Figure 4 SI. Comparison among arbitrarily scaled absorption spectrum in MeOH at rt (black line) and excitation spectra in MeOH:EtOH (1:4) at 77 K of **7**; $\lambda_{em} = 520$ nm (blue line) and 570 nm (red line).

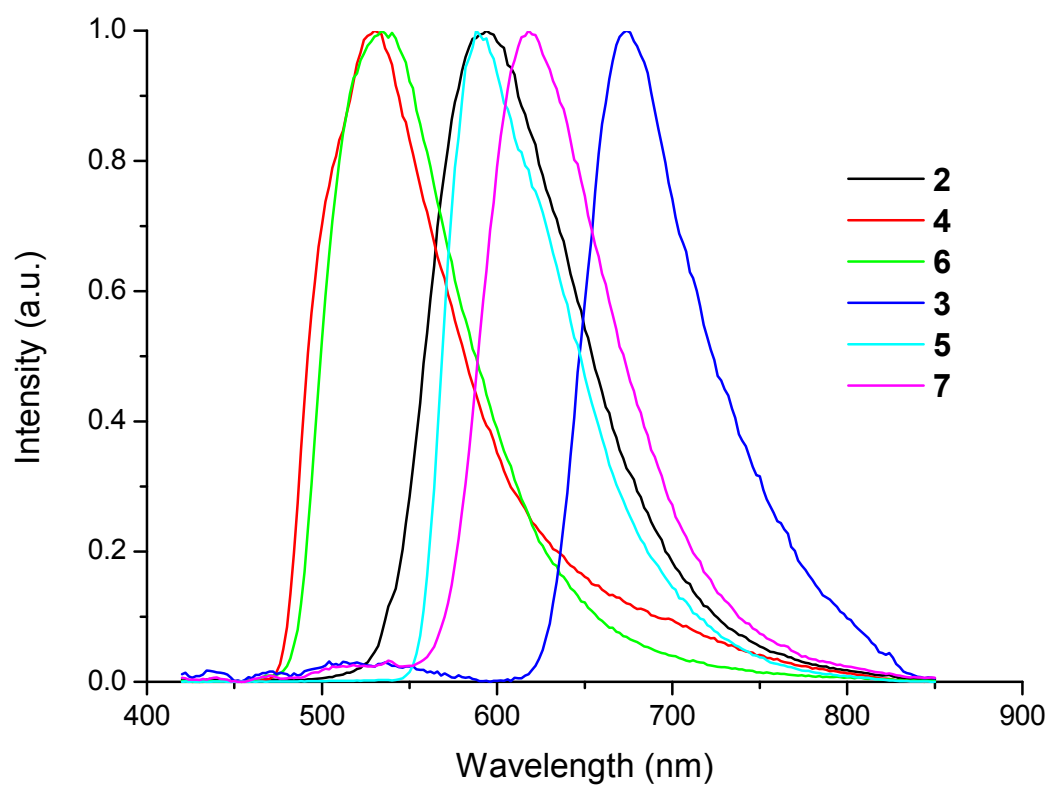


Figure 5 SI. Normalised emission spectra of powder samples of 2-7 at 77 K; $\lambda_{\text{exc}} = 390$ nm.

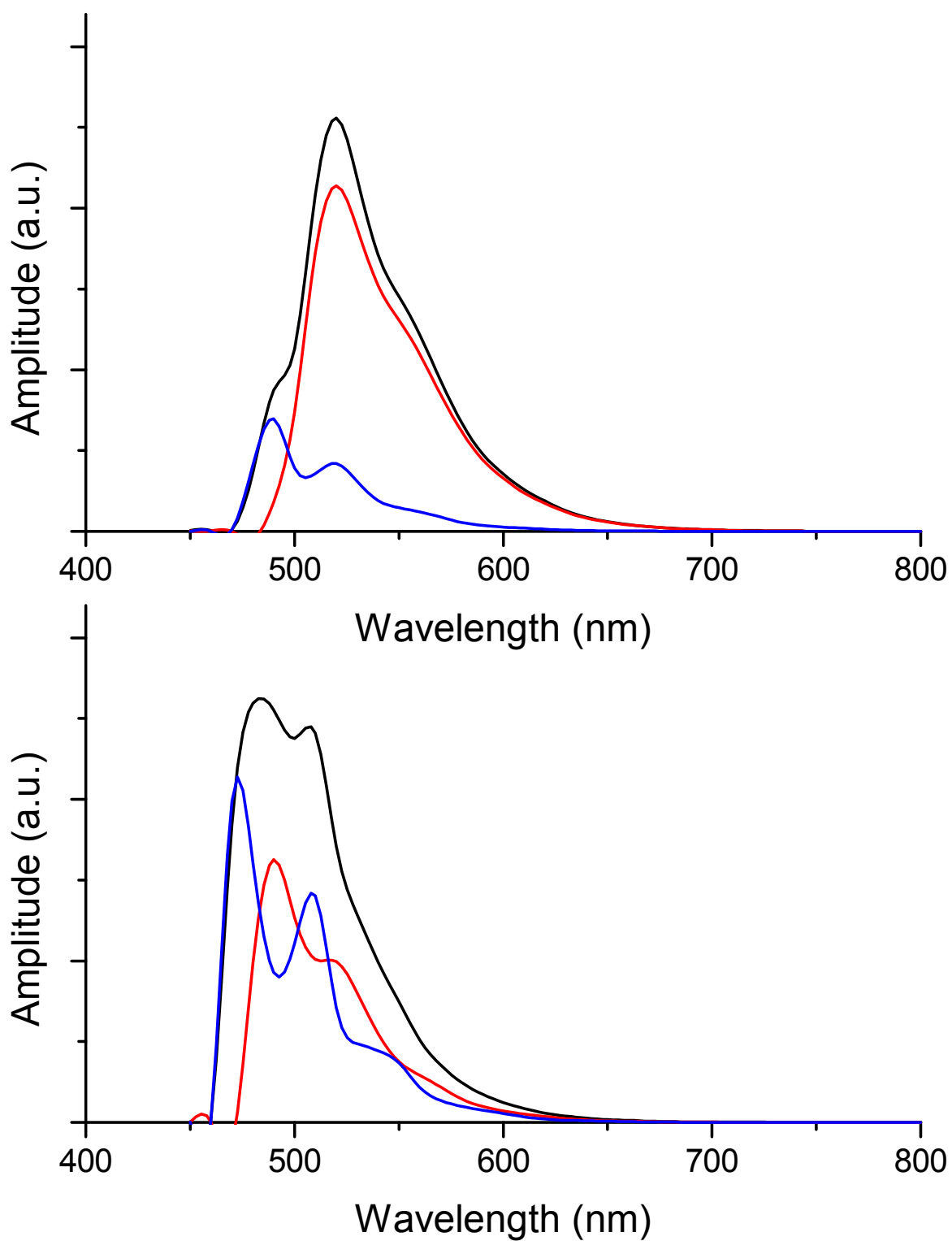


Figure 6 SI. Decay Associated Spectra (DAS) of **2** (top) and **6** (bottom) in MeOH:EtOH (1:4) at 77 K of monomer (blue line), dimer (red line) and sum of the two components (black line).

¹H and ¹³C of complexes 2-7

