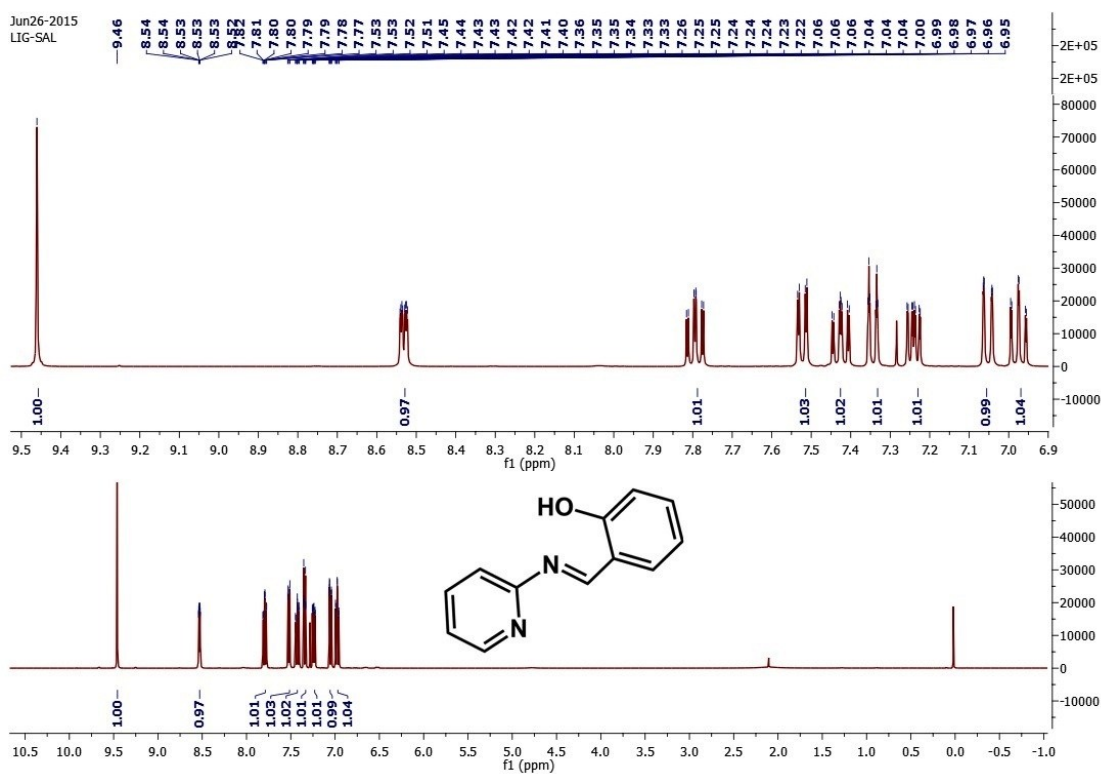


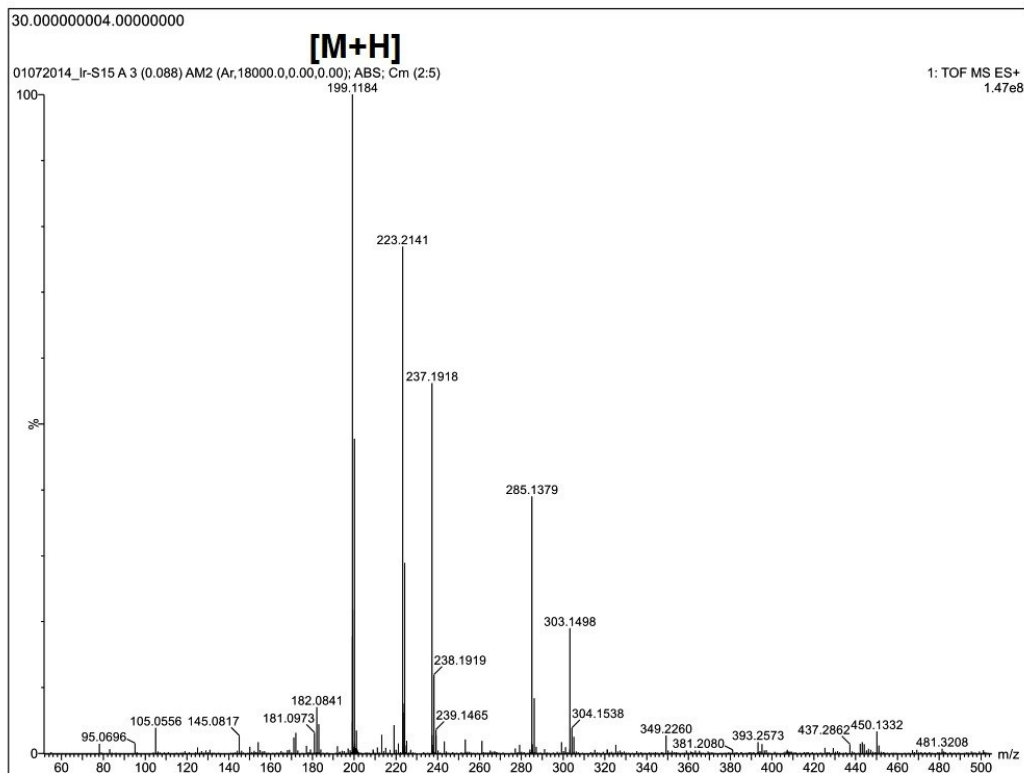
'Aggregation Induced Emission' Active Iridium(III) Complexes with Applications in Mitochondrial Staining

Parvej Alam^a, Subhra Dash^b, Claudia Climent^c, Gurpreet Kaur^d, Angshuman Roy Choudhury^d, David Casanova^c, Pere Alemany^c, Rajdeep Chowdhury^{*b}, Inamur Rahaman Laskar^{*a}

^aDepartment of Chemistry, Birla Institute of Technology and Science, Pilani Campus, Pilani, Rajasthan, India, ir_laskar@bits-pilani.ac.in;
^bDepartment of Biology, Birla Institute of Technology and Science, Pilani Campus, Pilani, Rajasthan, India, rajdeep.chowdhury@pilani.bits-pilani.ac.in; ^cDepartament de Ciència de Materials i Química Física and Institut de Química Teòrica i Computacional (IQTCUB), Universitat de Barcelona, Martí i Franquès 1-11, Barcelona 08028, Spain, p.alemany@ub.edu; ^dDepartment of Chemical Sciences, Indian Institute of Science Education and Research (IISER), Mohali, Sector 81, S. A. S. Nagar, Manauli PO, Mohali, Punjab, 140306, India, angshurc@iisermohali.ac.in; ^{*}Kimika Fakultatea, Euskal Herriko Unibertsitatea (UPV/EHU), Donostia International Physics Center, Paseo Manuel de Lardiazabal, 4, Donostia 20018, Euskadi, Spain.

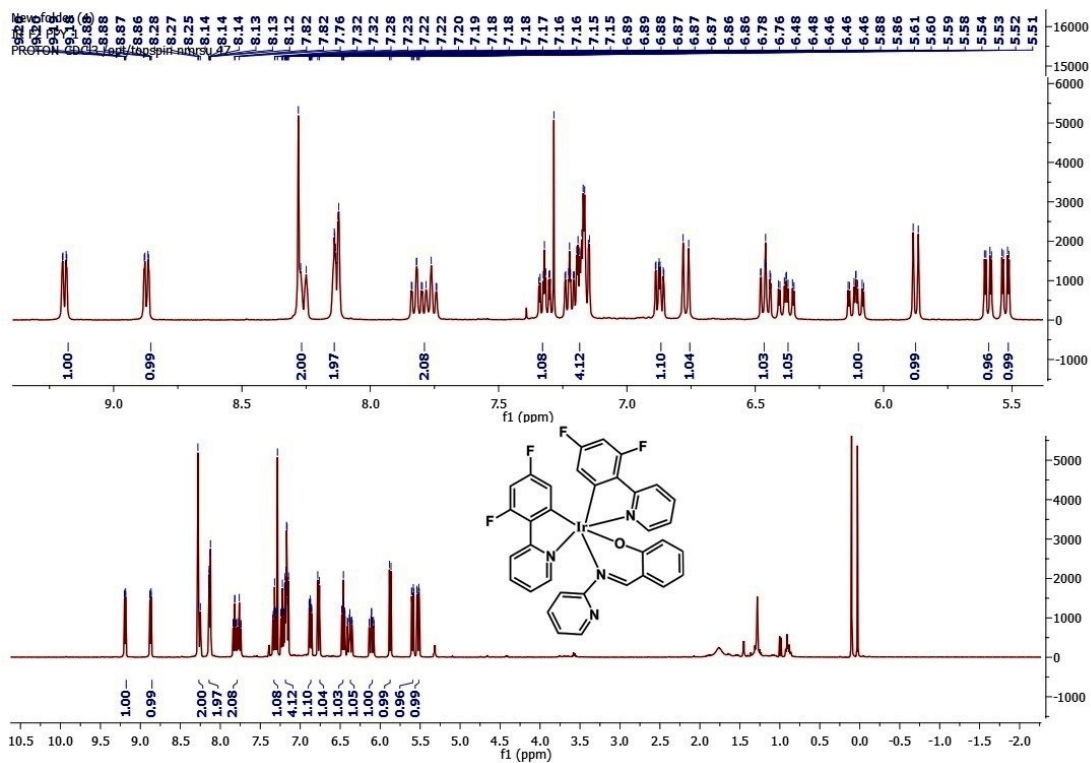


(a)

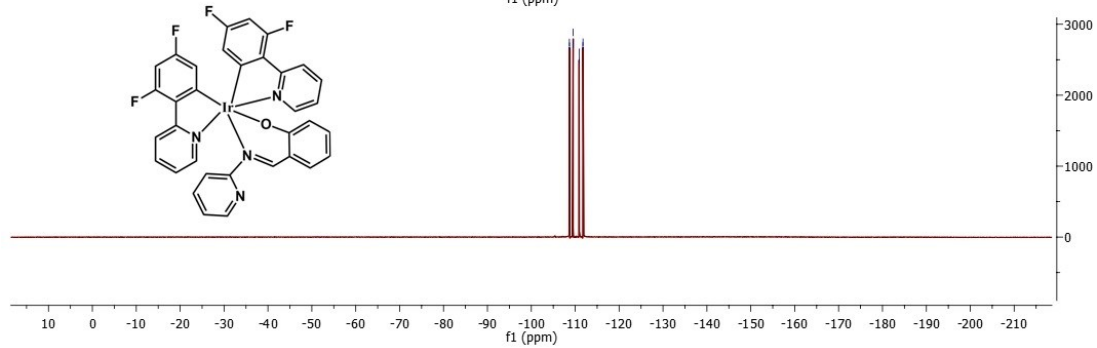
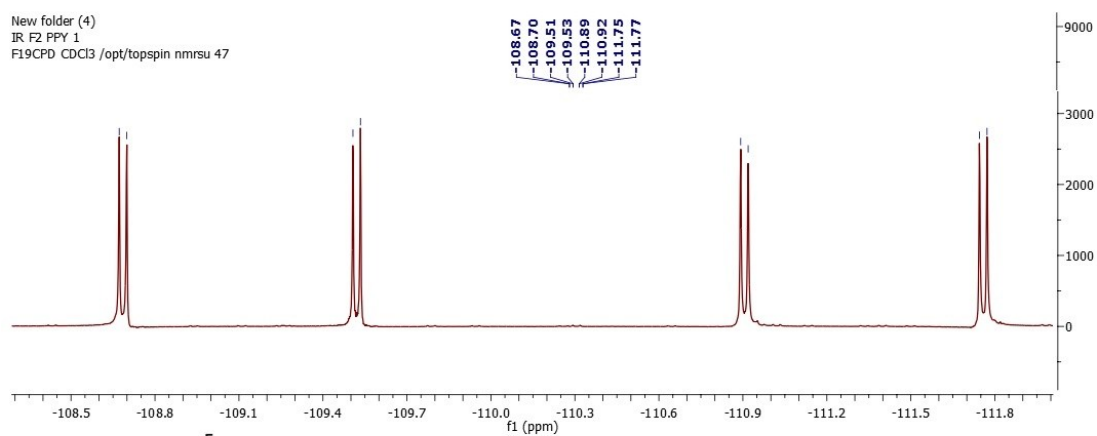


(b)

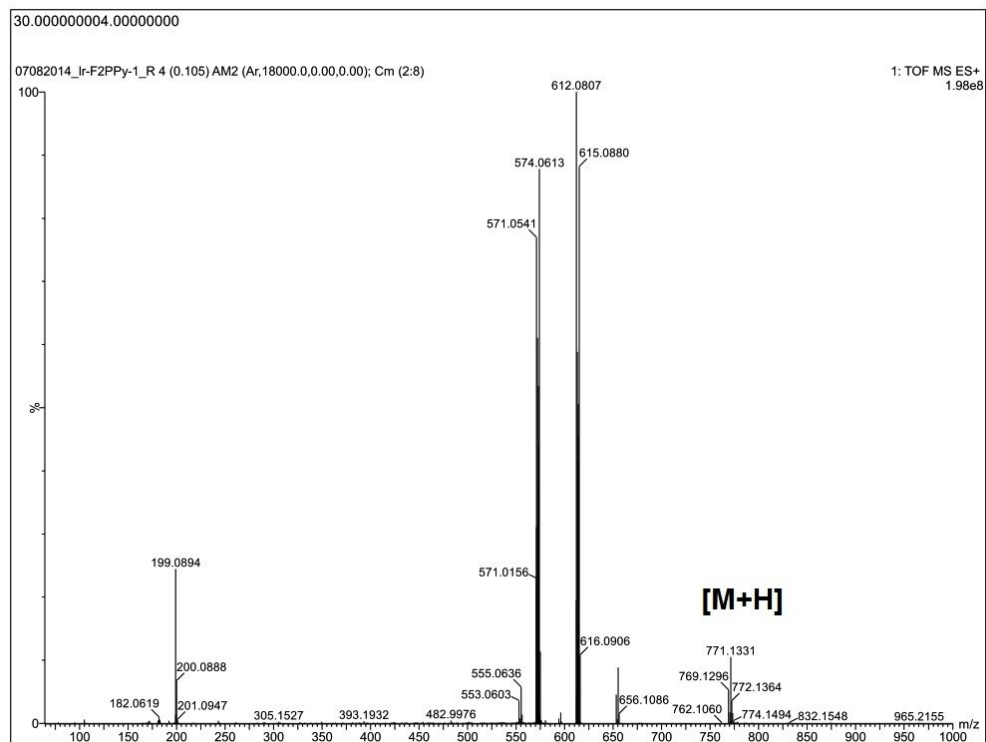
Fig.S1: ^1H , NMR spectra and HRMS (a and b), respectively for **L**.



(a)

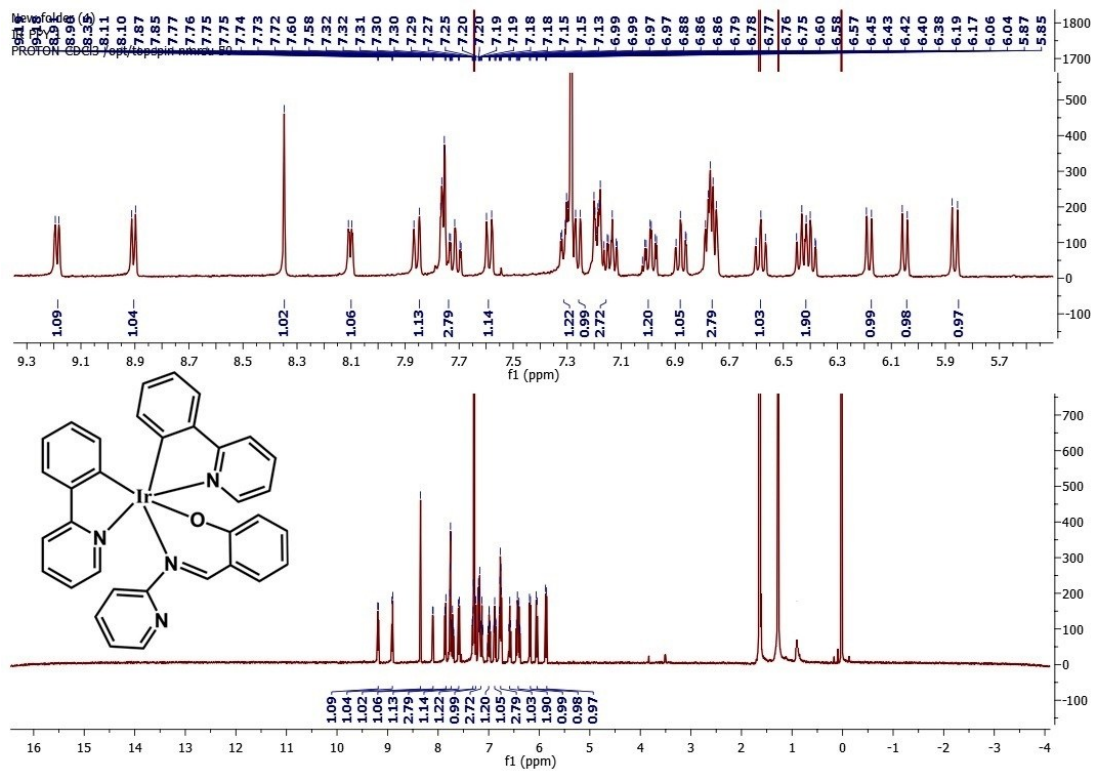


(b)

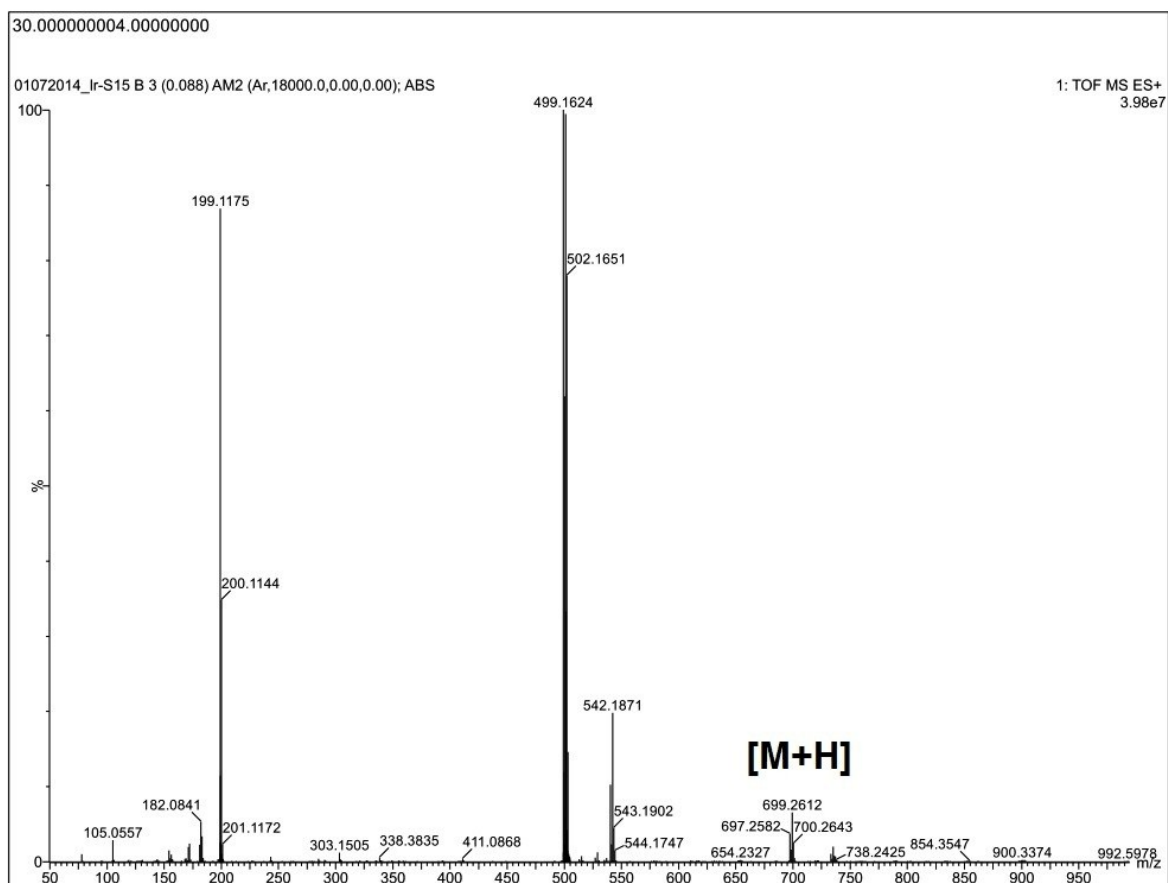


(c)

Fig.S2: (^1H , ^{19}F) NMR spectra and HRMS (a, b and c), respectively for **1**.



(a)



(b)

Fig.S3: ^1H NMR spectra and HRMS (a and b), respectively for 2.

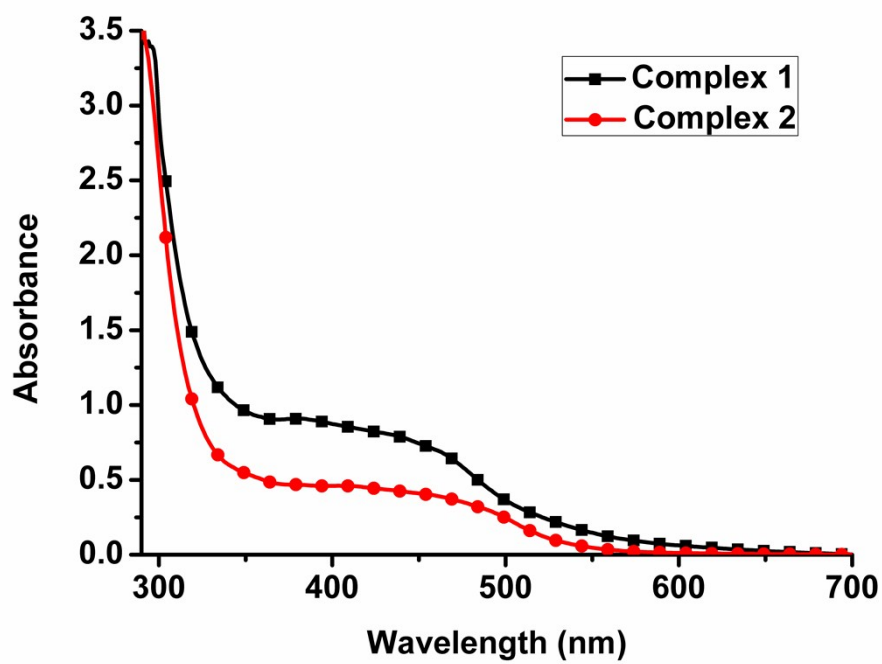


Fig.S4: Solid state absorption spectra of the complexes **1** and **2** .

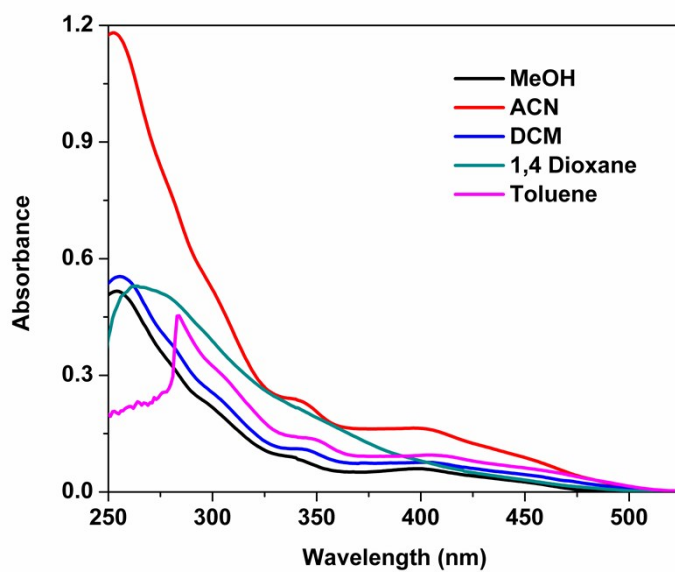


Fig.S5: Absorption spectra of the complex **2** in different organic solvents; $c=1 \times 10^{-5} \text{M}$.

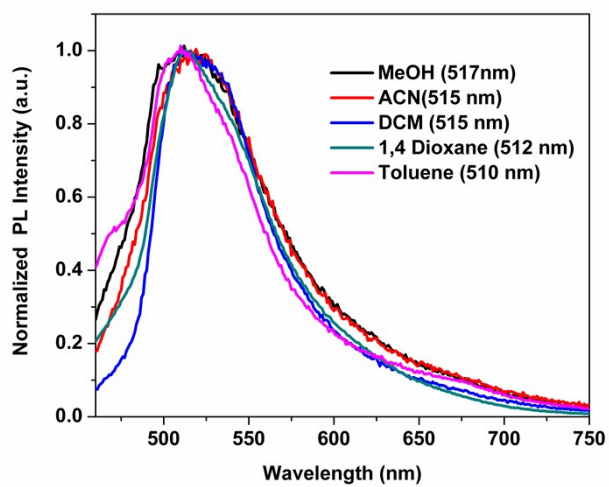


Fig.S6: Normalized emission spectra of the complex **2** in different organic solvents; $c=1 \times 10^{-5} \text{M}$.

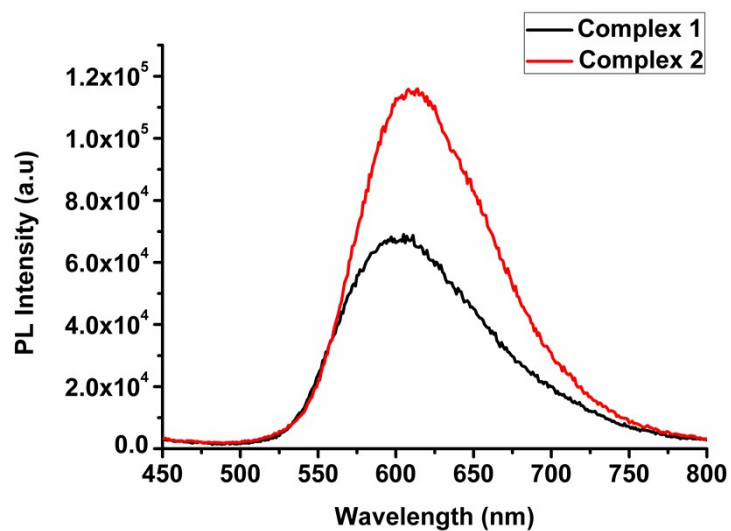
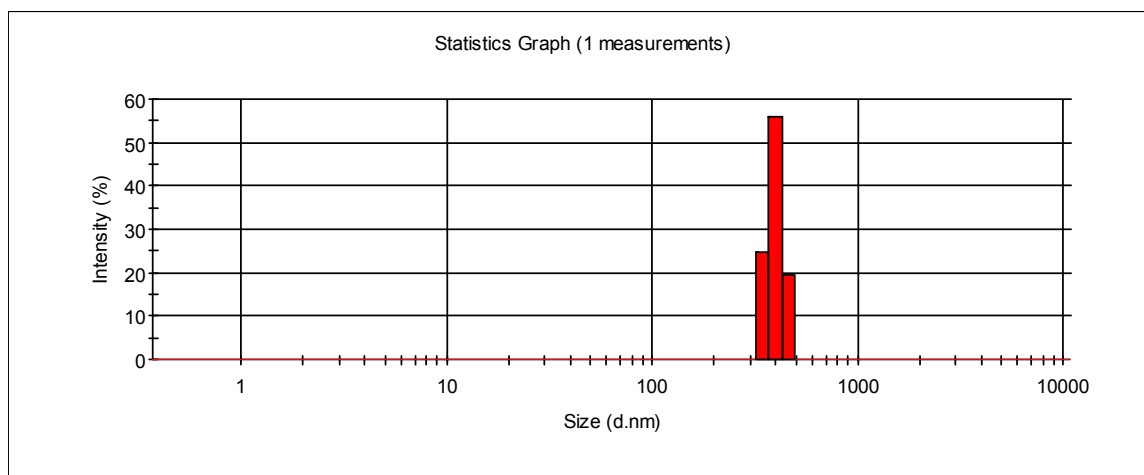
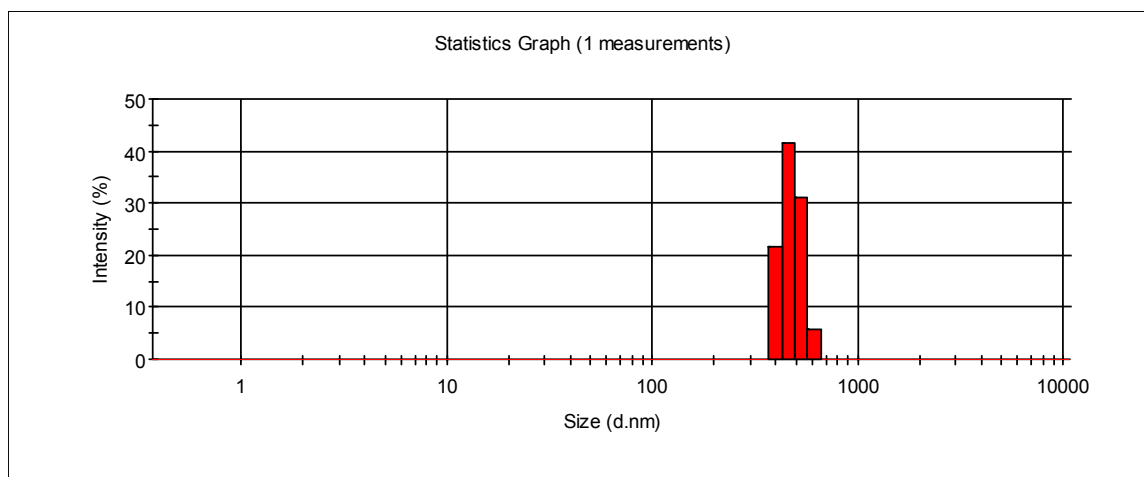


Fig.S7: Solid state emission of the complexes 1 and 2 .



(a)



(b)

Fig.S8: Particle size distribution of nano-aggregates of (a) complex 1 and (b) complex 2 formed in a MeOH / water mixture with a 90% water fraction.

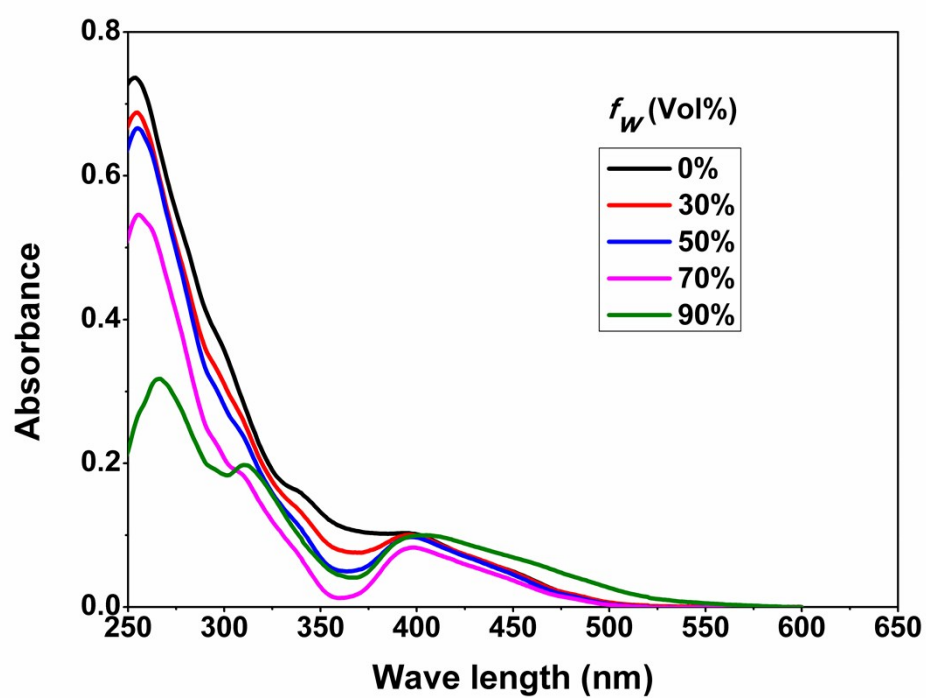


Fig.S9: Absorption spectra of the complex 2 in different water fractions (f_w); $c = 1 \times 10^{-5} \text{ M}$.

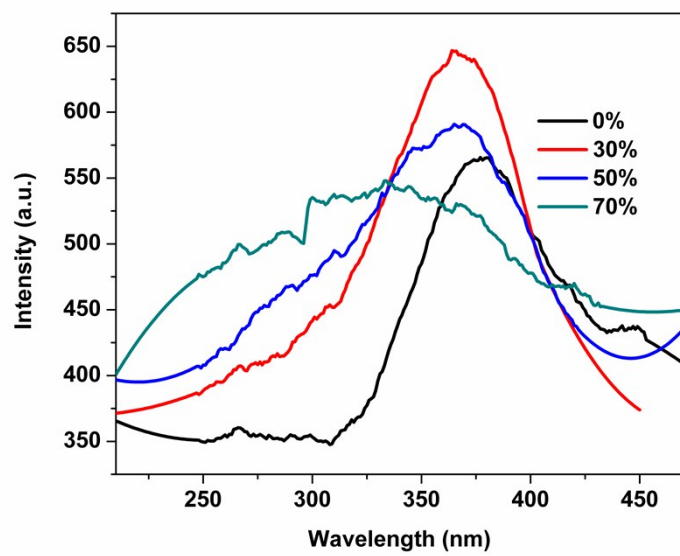


Fig.S10: Excitation spectra of the complex 2 in different water fractions (f_w); $c=1 \times 10^{-5} \text{M}$.