## Cationic Iridium (III) Complexes Bearing Ancillary 2,5-dipyridyl(pyrazine) (2,5-dpp) and 2,2':5',2''terpyridine (2,5-tpy) ligands: Synthesis, Optoelectronic Characterization and Light-Emitting Electrochemical Cells.

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## **SUPPORTING INFORMATION**

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<sup>1</sup>H, <sup>13</sup>C NMR and <sup>19</sup>F spectrum of individual compounds and S2-S15 complexes



Figure S1. <sup>1</sup>H NMR spectrum of 2,5-di(pyridin-2-yl)pyrazine (2,5-dpp) in DMSO- $d_6$ 



Figure S2. <sup>13</sup>C NMR spectrum of 2,5-di(pyridin-2-yl)pyrazine (2,5-dpp) in DMSO- $d_6$ 



Figure S3. <sup>1</sup>H NMR spectrum of 2,5-di(pyridin-2-yl)pyridine (2,5-tpy) in Chloroform-d



Figure S4. <sup>13</sup>C NMR spectrum of 2,5-di(pyridin-2-yl)pyridine (2,5-tpy) in Chloroform-d



Figure S5. <sup>1</sup>H NMR spectrum of [(ppy)<sub>2</sub>Ir(2,5-dpp)](PF<sub>6</sub>) 1a in Acetonitrile-d<sub>3</sub>



Figure S6. <sup>13</sup>C NMR spectrum of of  $[(ppy)_2Ir(2,5-dpp)](PF_6)$  1a in Acetonitrile- $d_3$ 



Figure S7. <sup>1</sup>H NMR spectrum of [(2,4-dF-5-Meppy)<sub>2</sub>Ir(2,5-dpp)](PF<sub>6</sub>) 1b in Acetonitrile-d<sub>3</sub>



Figure S8. <sup>13</sup>C NMR spectrum of [(2,4-dF-5-Meppy)<sub>2</sub>Ir(2,5-dpp)](PF<sub>6</sub>) 1b in Acetonitrile-d<sub>3</sub>



Figure S9. <sup>19</sup>F NMR spectrum of of [(2,4-dF-5-Meppy)<sub>2</sub>Ir(2,5-dpp)](PF<sub>6</sub>) 1b in Acetonitrile-d<sub>3</sub>



Figure S10. <sup>1</sup>H NMR spectrum of [(ppy)<sub>2</sub>Ir(2,5-tpy)](PF<sub>6</sub>) 2a in Acetonitrile-d<sub>3</sub>



Figure S11. <sup>13</sup>C NMR spectrum of  $[(ppy)_2Ir(2,5-tpy)](PF_6)$  2a in Acetonitrile- $d_3$ 



Figure S12.<sup>1</sup>H NMR spectrum of [(2,4-dF-5-Meppy)<sub>2</sub>Ir(2,5-tpy)](PF<sub>6</sub>) 2b in Acetonitrile-d<sub>3</sub>



Figure S13. <sup>13</sup>C NMR spectrum of [(2,4-dF-5-Meppy)<sub>2</sub>Ir(2,5-tpy)](PF<sub>6</sub>) 2b in Acetonitrile-d<sub>3</sub>



Figure S14. <sup>19</sup>F NMR spectrum of [(2,4-dF-5-Meppy)<sub>2</sub>Ir(2,5-tpy)](PF<sub>6</sub>) 2b in Acetonitrile-d<sub>3</sub>