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.

Kamrul Hasan, Loïc Donato, Yulong Shen, Jason Slinker* and Eli Zysman-Colman*

Département de Chimie, Université de Sherbrooke, 2500 Boul. de l’Université, Sherbrooke, QC, Canada, J1K 2R1

Present address: Institut de Science et Ingenierie Supramoleculaires (ISIS - UMR 7006) Université de Strasbourg, CNRS, 8 Rue Gaspard Monge, 67000 Strasbourg (France).

Department of Physics, The University of Texas at Dallas, 800 W. Campbell Rd., Richardson, TX, 75080, USA

EaStCHEM School of Chemistry, University of St Andrews, St Andrews, Fife, UK, KY16 9ST, Fax: +44-1334 463808; Tel: +44-1334 463826; E-mail: ezc@st-andrews.ac.uk; URL: http://www.zysman-colman.com

SUPPORTING INFORMATION

Table of contents:

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

S1
Figure S1. $^1$H NMR spectrum of 2,5-di(pyridin-2-yl)pyrazine (2,5-dpp) in DMSO-$d_6$
Figure S2. $^{13}$C NMR spectrum of 2,5-di(pyridin-2-yl)pyrazine (2,5-dpp) in DMSO-$d_6$
Figure S3. $^1$H NMR spectrum of 2,5-di(pyridin-2-yl)pyridine (2,5-tpy) in Chloroform-$d$. 

[Image of the NMR spectrum with labeled peaks and chemical shifts]
Figure S4. $^{13}$C NMR spectrum of 2,5-di(pyridin-2-yl)pyridine (2,5-tpy) in Chloroform-$d$
Figure S5. $^1$H NMR spectrum of [(ppy)$_2$Ir(2,5-dpp)](PF$_6$)$_1$a in Acetonitrile-$d_3$. 
Figure S6. $^{13}$C NMR spectrum of [(ppy)$_2$Ir(2,5-dpp)]$^+$(PF$_6$)$_2$ 1a in Acetonitrile-$d_3$
Figure S7. $^1$H NMR spectrum of [(2,4-dF-5-Meppy)$_2$Ir(2,5-dpp)](PF$_6$) 1b in Acetonitrile-$d_3$
Figure S8. $^{13}$C NMR spectrum of [(2,4-dF-5-Meppy)$_2$Ir(2,5-dpp)](PF$_6$) 1b in Acetonitrile-$d_3$
Figure S9. $^{19}$F NMR spectrum of of $[(2,4$-dF-5-Meppy)$_2$Ir(2,5-dpp)]\((\text{PF}_6)\) 1b in Acetonitrile-$d_3$
Figure S10. $^1$H NMR spectrum of [(ppy)$_2$Ir(2,5-tpy)](PF$_6$)$_2$ a in Acetonitrile-$d_3$
Figure S11. $^{13}$C NMR spectrum of [(ppy)$_2$Ir(2,5-tpy)](PF$_6$)$_2$ in Acetonitrile-$d_3$
Figure S12. $^1$H NMR spectrum of [(2,4-dF-5-Meppy)$_2$Ir(2,5-tpy)](PF$_6$)$_2$ b in Acetonitrile-$d_3$
Figure S13. $^{13}$C NMR spectrum of [(2,4-dF-5-Meppy)$_2$Ir(2,5-tpy)](PF$_6$)$_2$ in Acetonitrile-$d_3$
Figure S14. $^{19}\text{F}$ NMR spectrum of $[(2,4\text{-dF-5-Meppy})_2\text{Ir(2,5-tpy)}](\text{PF}_6)$ 2b in Acetonitrile-$d_3$