

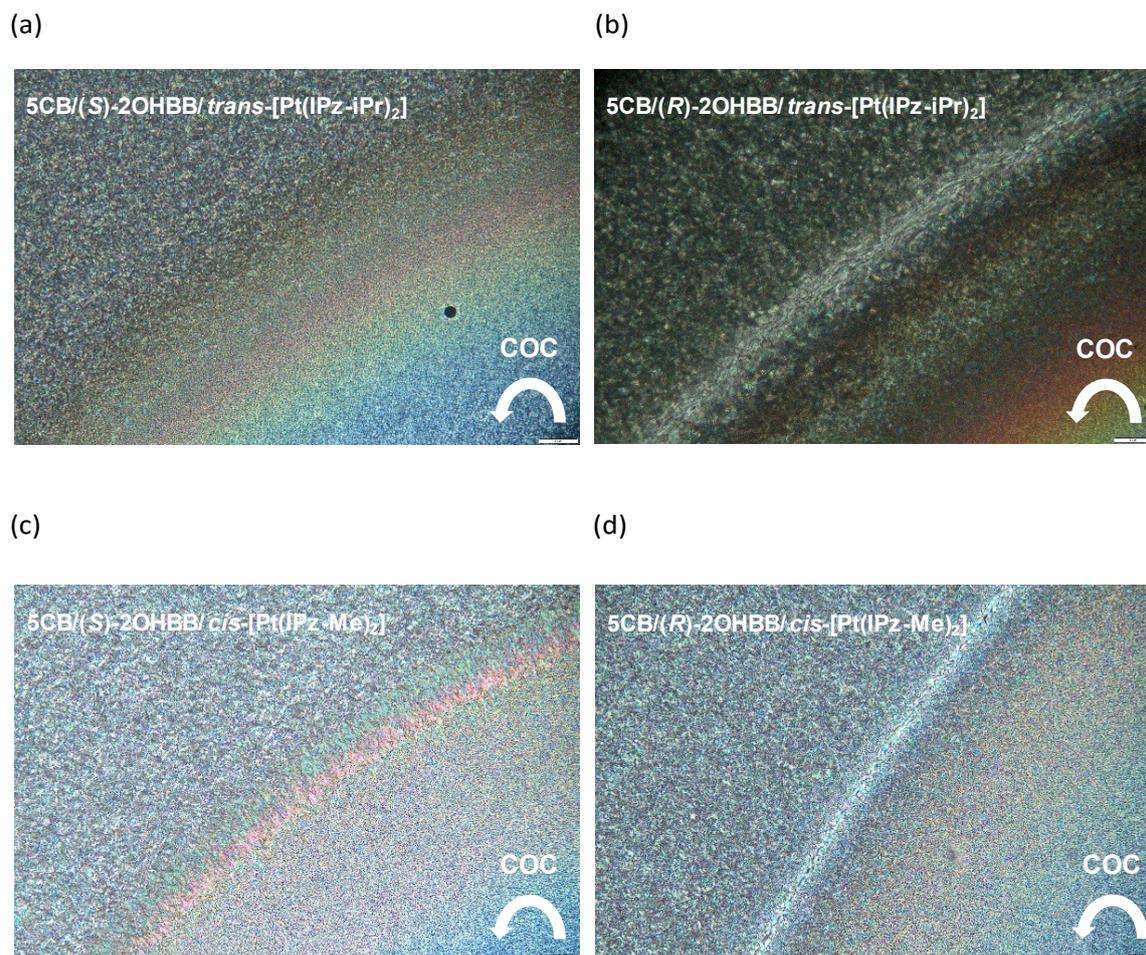
## Electric-Field-Induced Switching of Circularly Polarized Luminescence in a Multicomponent Emissive Liquid-Crystal System

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**Figure S1.** Polarized optical microscopy (POM) images obtained for (a)  $N^*\text{-LC-}5CB/(S)\text{-}2OHBB/trans\text{-}[Pt(IPz\text{-}iPr)_2]$ , (b)  $N^*\text{-LC-}5CB/(R)\text{-}2OHBB/trans\text{-}[Pt(IPz\text{-}iPr)_2]$ , (c)  $N^*\text{-LC-}5CB/(S)\text{-}2OHBB/cis\text{-}[Pt(IPz\text{-}Me)_2]$ , and (d)  $N^*\text{-LC-}5CB/(R)\text{-}2OHBB/cis\text{-}[Pt(IPz\text{-}Me)_2]$  in contact experiments using cholesteryl oleyl carbonate (COC).

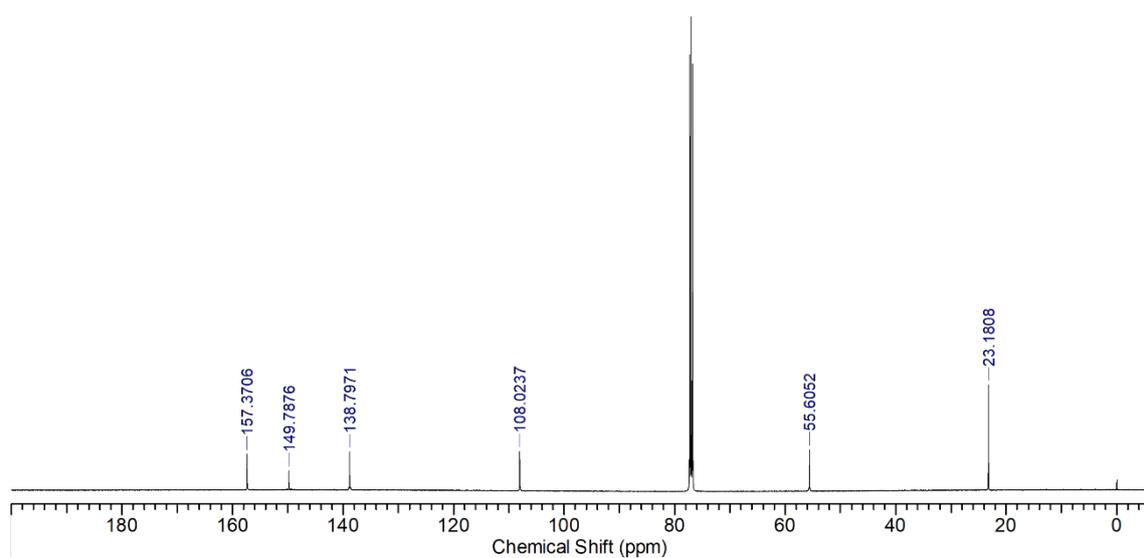
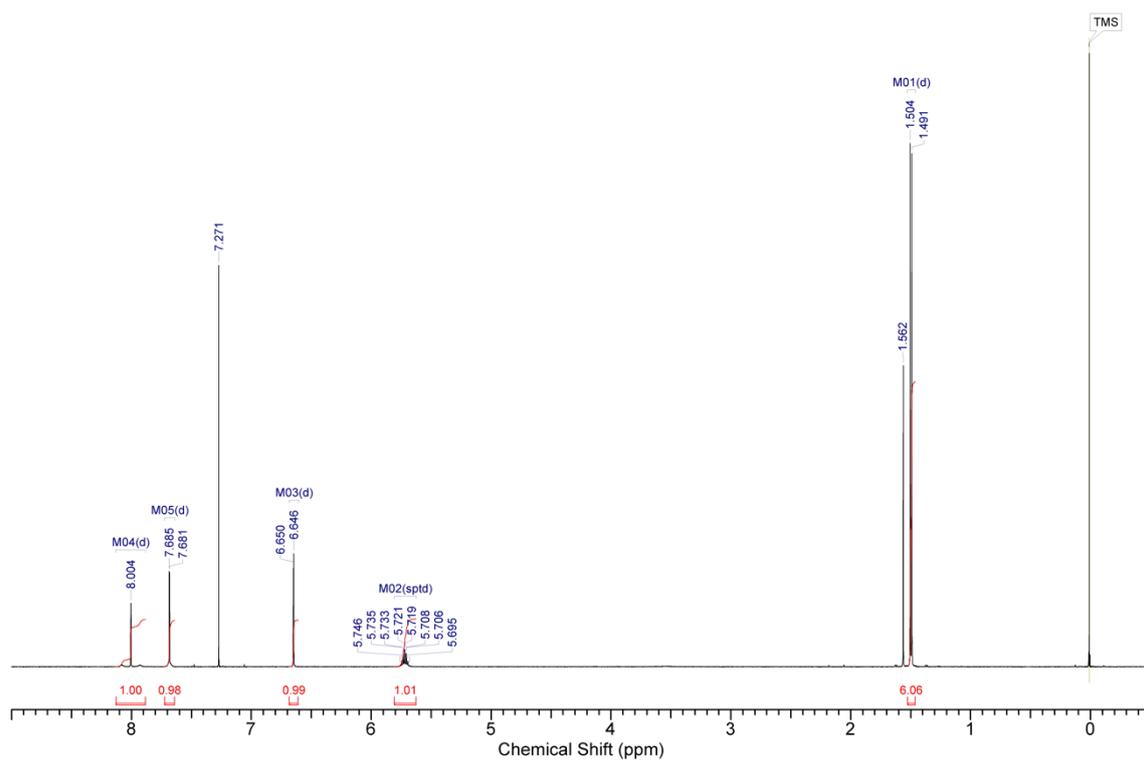
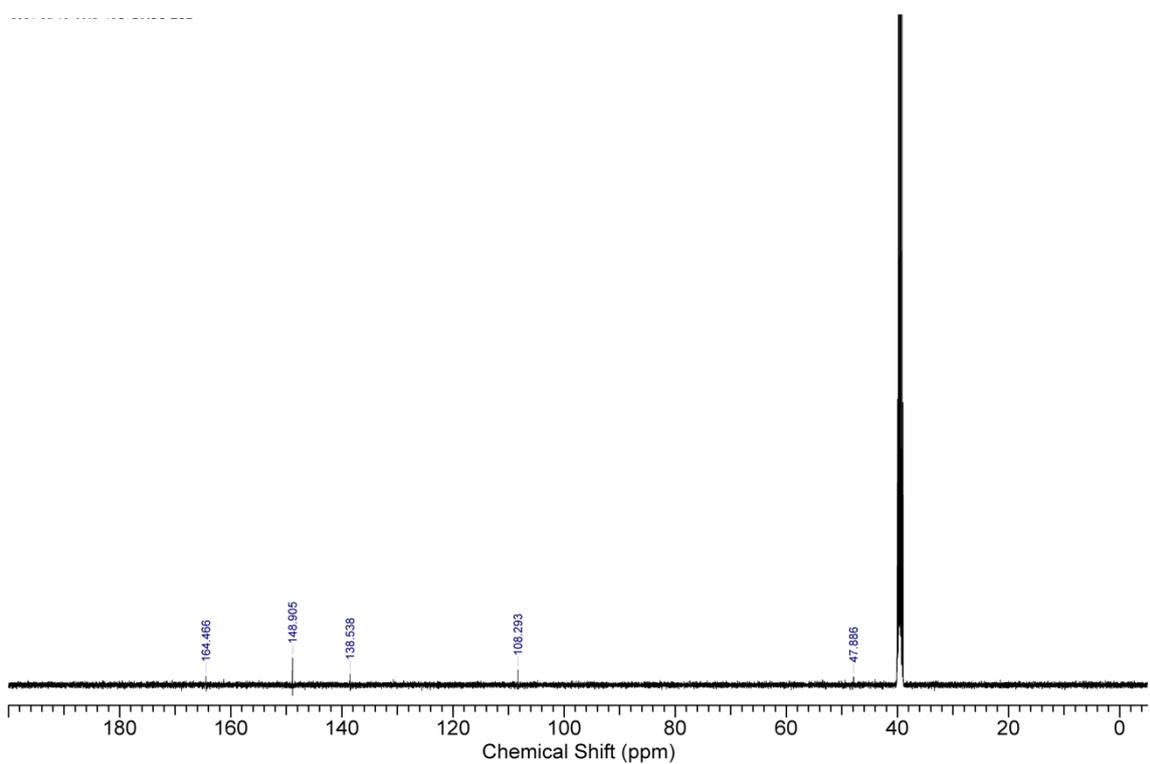
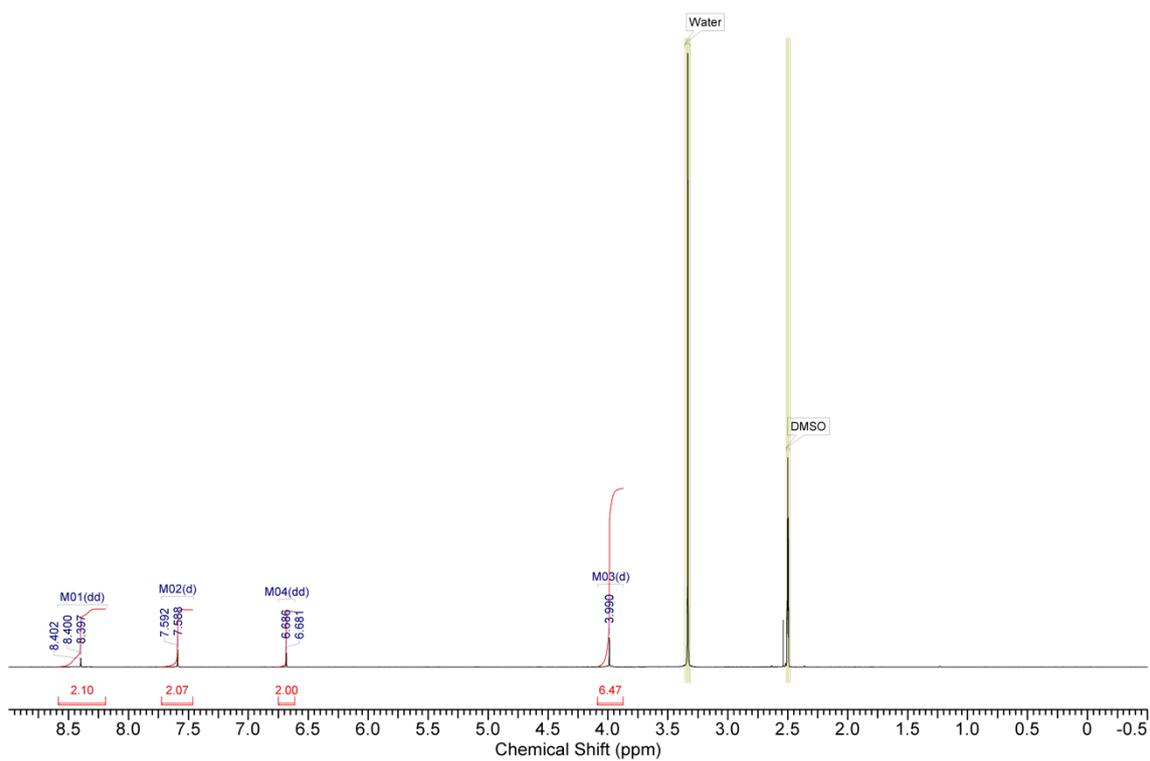
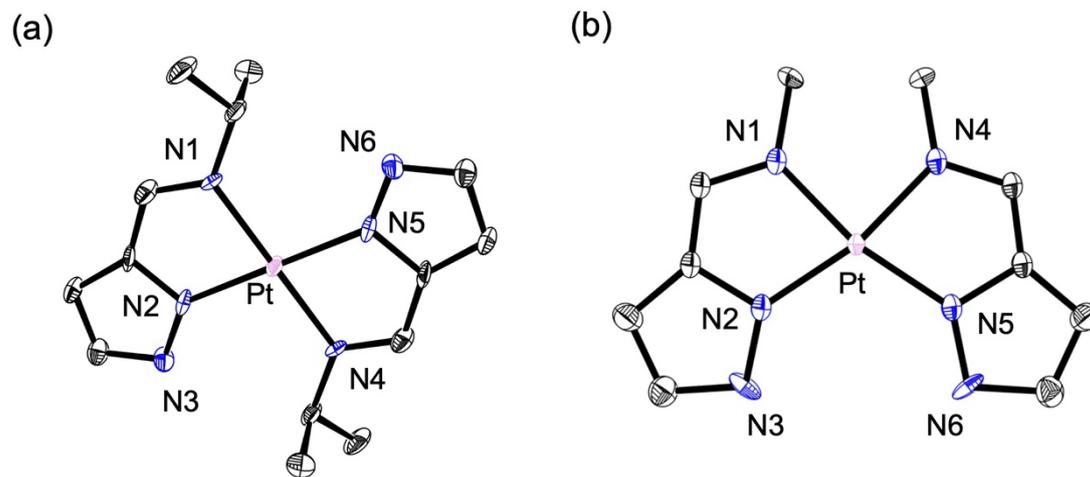


Figure S2. <sup>1</sup>H (500 MHz) and <sup>13</sup>C NMR spectra (125 MHz) of *trans*-[Pt(IPz-*i*Pr)<sub>2</sub>] in CDCl<sub>3</sub>.



**Figure S3.** <sup>1</sup>H (500 MHz) and <sup>13</sup>C NMR spectra (125 MHz) of *cis*-[Pt(IPz-Me)<sub>2</sub>] in DMSO-*d*<sub>6</sub>.



**Figure S4.** ORTEP drawings of complexes: (a) *trans*-[Pt(IPz-*i*Pr)<sub>2</sub>] and (b) *cis*-[Pt(IPz-Me)<sub>2</sub>] with 50% probability ellipsoids.

**Table S1.** Crystallographic data.

	<i>trans</i> -[Pt(IPz- <i>i</i> Pr) <sub>2</sub> ]	<i>cis</i> -[Pt(IPz-Me) <sub>2</sub> ]
formula	C <sub>14</sub> H <sub>20</sub> N <sub>6</sub> Pt	C <sub>10</sub> H <sub>12</sub> N <sub>6</sub> Pt
<i>M<sub>r</sub></i>	467.44	411.33
<i>T</i> /K	113	113
crystal colour habit	yellow, block	red, chip
crystal size/mm	0.40×0.40×0.10	0.10×0.05×0.01
crystal system	monoclinic	monoclinic
space group	<i>P</i> 2 <sub>1</sub> / <i>n</i> (#14)	<i>C</i> 2 (#5)
<i>a</i> /Å	9.2250(19)	19.768(5)
<i>b</i> /Å	9.6548(17)	8.651(2)
<i>c</i> /Å	9.715(2)	3.2781(8)
<i>α</i> /°	90	90
<i>β</i> /°	116.551(4)	92.343(6)
<i>γ</i> /°	90	90
<i>V</i> /Å <sup>3</sup>	774.0(3)	560.1 (2)
<i>Z</i>	2	2
<i>ρ</i> <sub>calcd</sub> /g·cm <sup>-3</sup>	2.006	2.273
<i>μ</i> (MoK <sub>α</sub> )/cm <sup>-1</sup>	9.031	12.448
<i>F</i> (000)	448	356
2 $\theta$ <sub>max</sub> /°	54.96	55.04
No. of reflns measd	7311	2801
No. of obsd reflns	1207	1238
No. of variables	97	61
<i>R</i> <sub>1</sub> ( <i>I</i> > 2σ( <i>I</i> )) <sup>[a]</sup>	0.05	0.0467
<i>wR</i> <sub>2</sub> (all reflns) <sup>[b]</sup>	0.1353	0.1148
Goodness-of-fit	0.933	1.070

<sup>[a]</sup>  $R_1 = \Sigma(|F_o| - |F_c|) / \Sigma(|F_o|)$ . <sup>[b]</sup>  $wR_2 = [\Sigma[w(F_o^2 - F_c^2)^2] / \Sigma w(F_o^2)^2]^{1/2}$ .