Supporting Information

Synthesis and Investigation on Liquid Crystal and Optical Properties of Dyads Based on Triphenylene and Perylene

Xiangfei Kong,^a Liting Xia,^a Haifeng Zhang,^a Shengping Dai, Caili Yu,^a Zheng Liu,^a Linping Mu,^b Guixia Wang^{*a} and Zhiqun He^{*c}

a College of Chemistry and Bioengineering, Guangxi Key Laboratory of Electrochemical and Magnetochemical Functional Materials, Guilin

University of Technology, Guilin 541004, China. E-mail: 2010033@glut.edu.cn

^c Key Laboratory of Luminescence and Optical Information, Ministry of Education, Institute of Optoelectronic Technology, Beijing Jiaotong University, Beijing 100044, China. E-mail: zhqhe@bjtu.edu.cn

^{b.} School of Physics and Information Engineering, Shanxi Normal University, Linfen 041004, China.



S1¹H NMR of Compound 3



S2 IR of Compound 3



S3 ¹H NMR of Compound 4



S4 IR of Compound 4



S5¹H NMR of DC₂A



S6 ¹³C NMR of DC₂A



S7 IR of DC₂A



S8 MS of DC₂A



S9¹H NMR of DC₆A



S10¹³C NMR of DC₆A



S11 IR of DC₆A







S13 ¹H NMR of DC₁₀A

S14 ¹³C NMR of DC₁₀A

S15 IR of DC10A

S16 MS of $DC_{10}A$

S17 $^1\mathrm{H}$ NMR of DC12A

S18 $^{13}\mathrm{C}$ NMR of DC12A

S19 IR of $DC_{12}A$

S20 MS of $DC_{12}A$

S21 Uv/vis of DC₆A in DCM solution (concn.= 5×10^{-6} mol·L⁻¹)