

Electronic Supplementary Information for

Non-isothermal cold crystallization of liquid crystalline porphyrins

Alec L. Dorfner, Diana P. Locoteta, Caleb D. Messinger, Michael R. Ramsey, Nathaniel Y. Kim,
Elene Sadzaglishvili, Joshua C. Kranick, Joseph S. Kuehner, Collin J. Timony, Michelle Langton,
Jeffrey E. Winklerek, Lucas J. Tucker, Jodi L. O'Donnell*

*Siena College, Department of Chemistry and Biochemistry, 515 Loudon Road, Loudonville NY,
12211, USA*

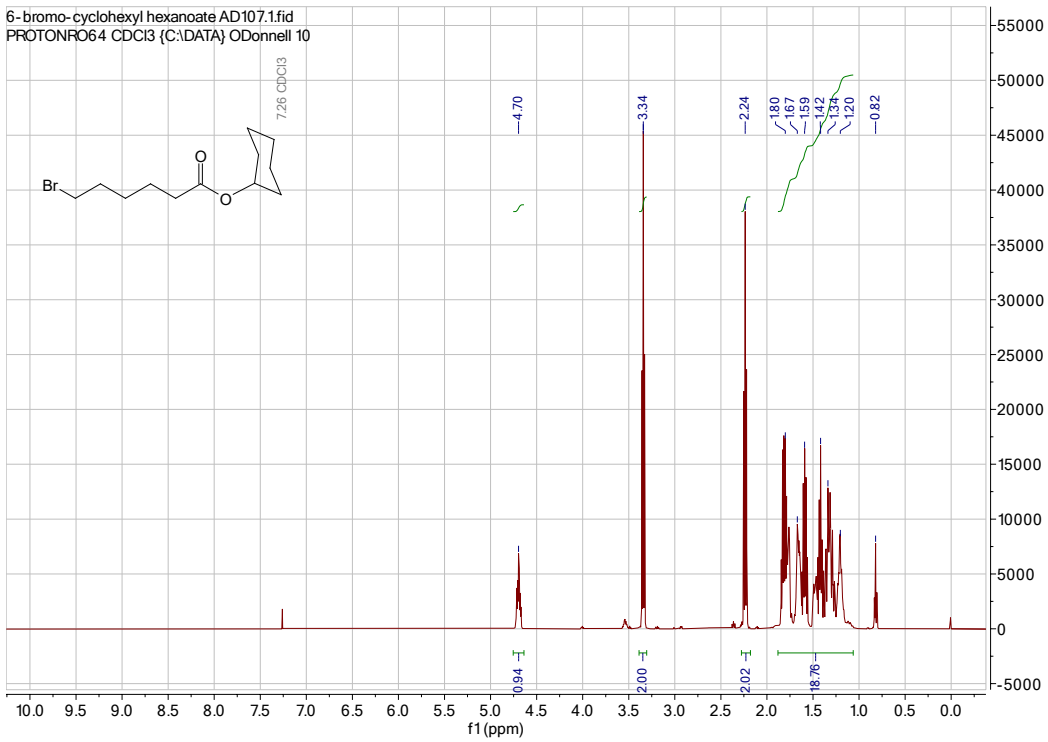


Fig. S1 ^1H NMR of cyclohexyl 6-bromohexanoate.

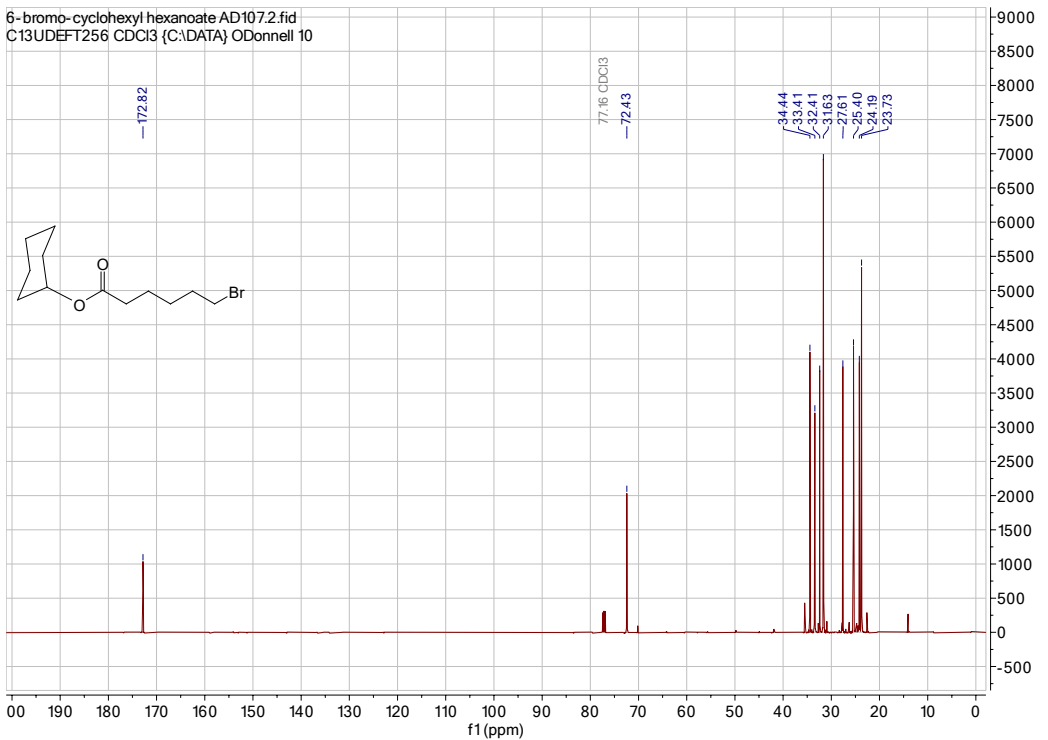


Fig. S2 ^{13}C NMR of cyclohexyl 6-bromohexanoate.

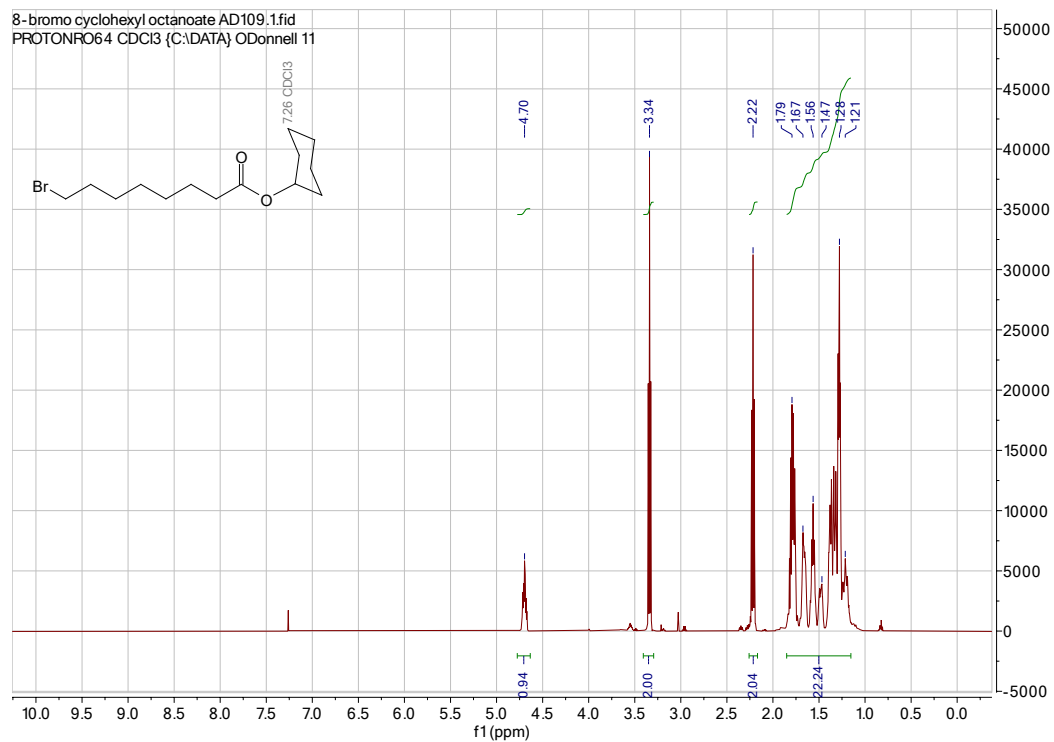


Fig. S3 ¹H NMR of cyclohexyl 8-bromooctanoate.

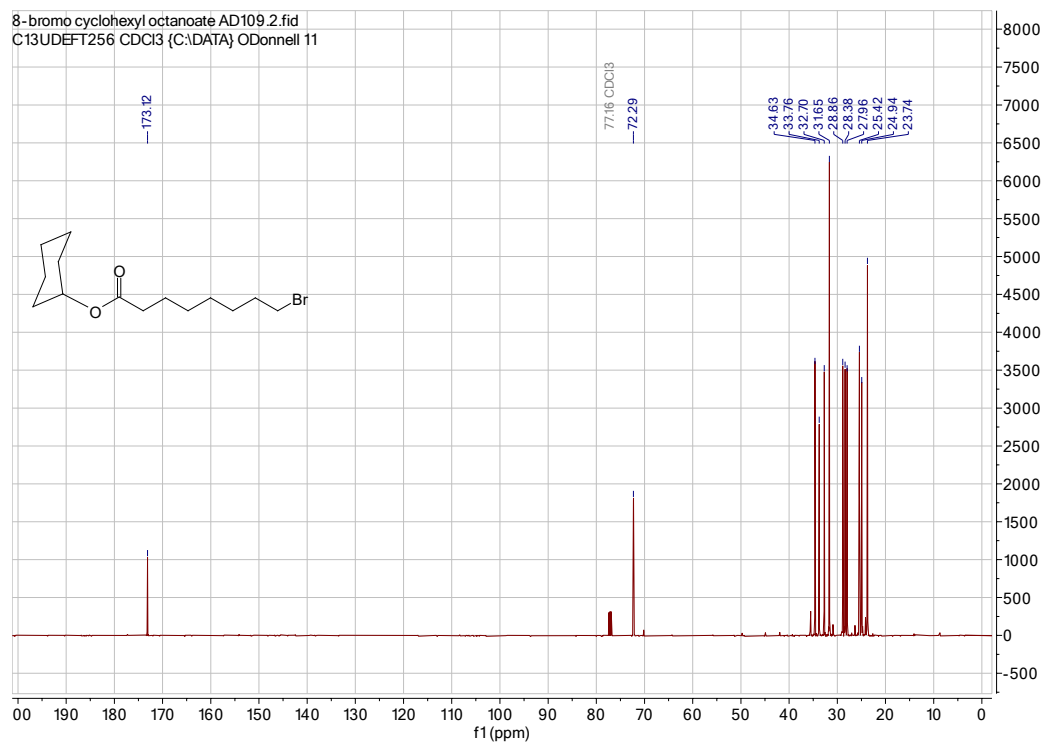


Fig. S4 ¹³C NMR of cyclohexyl 8-bromooctanoate.

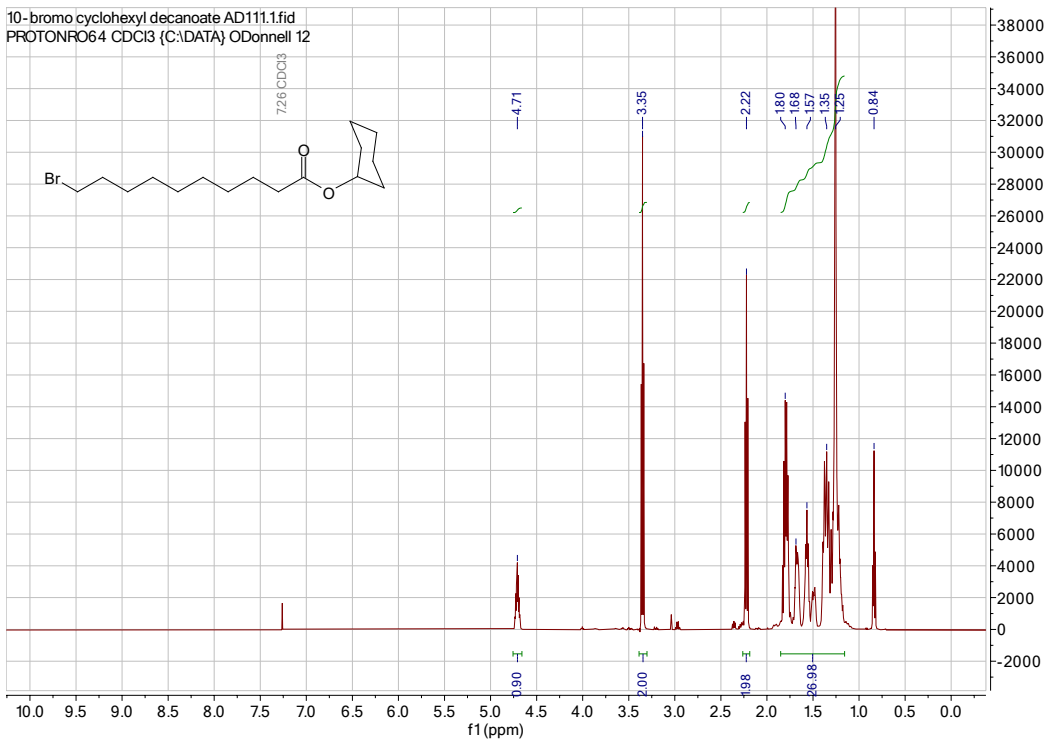


Fig. S5 ¹H NMR of cyclohexyl 10-bromodecanoate.

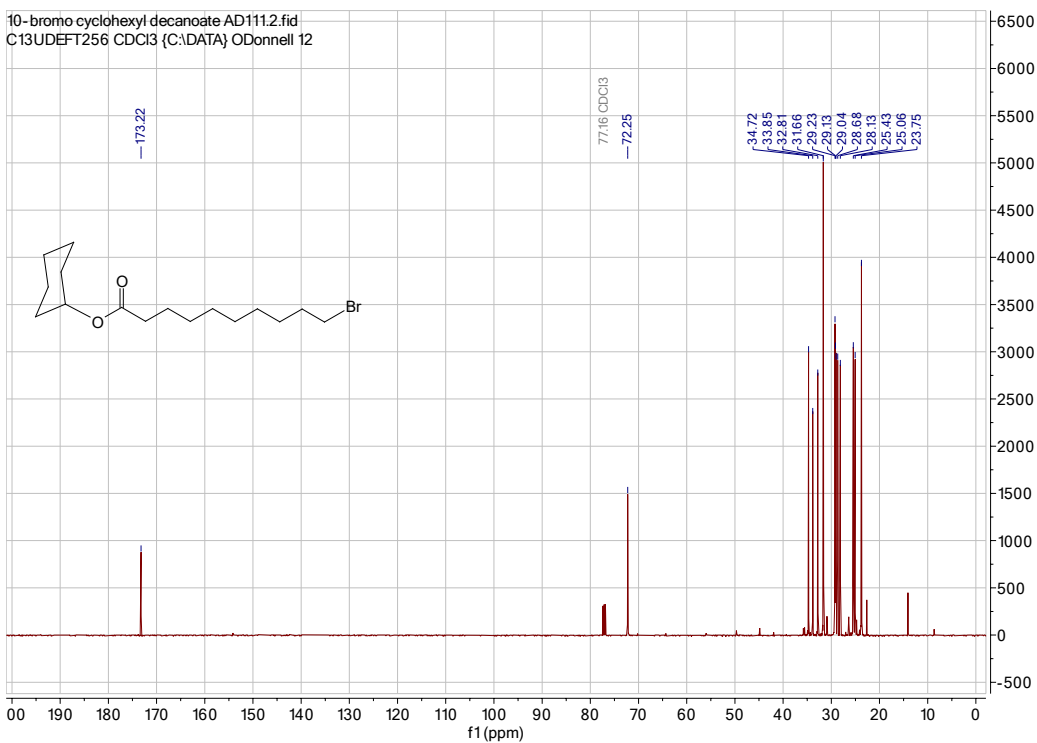


Fig. S6 ¹³C NMR of cyclohexyl 10-bromodecanoate.

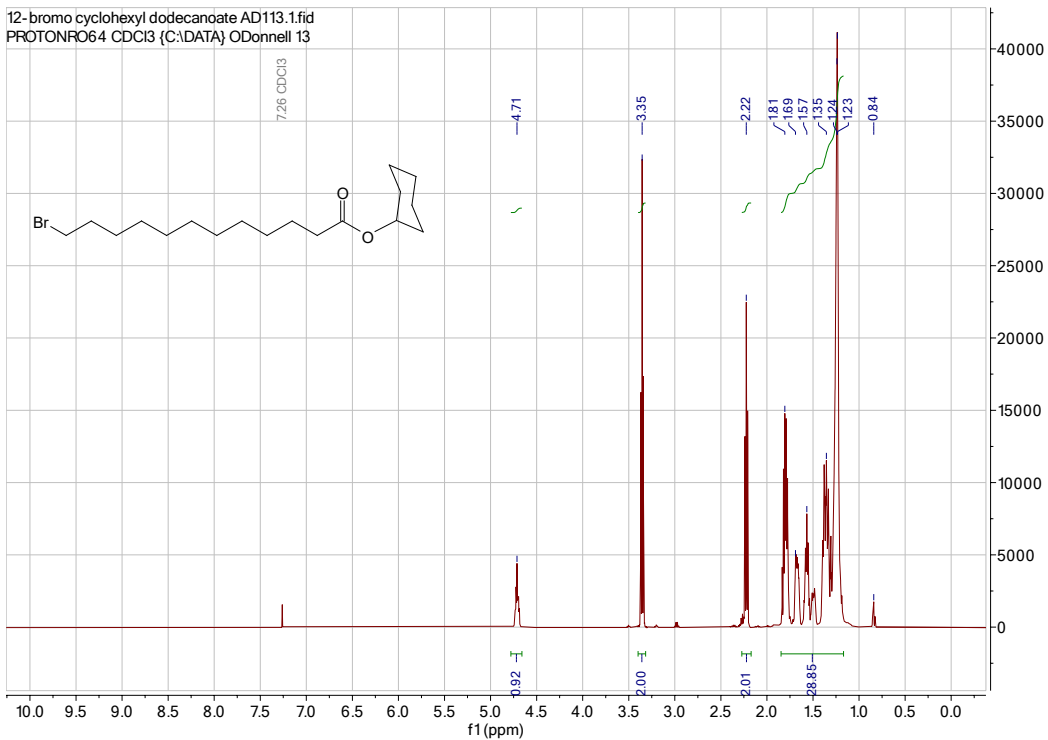


Fig. S7 ¹H NMR of cyclohexyl 12-bromododecanoate.

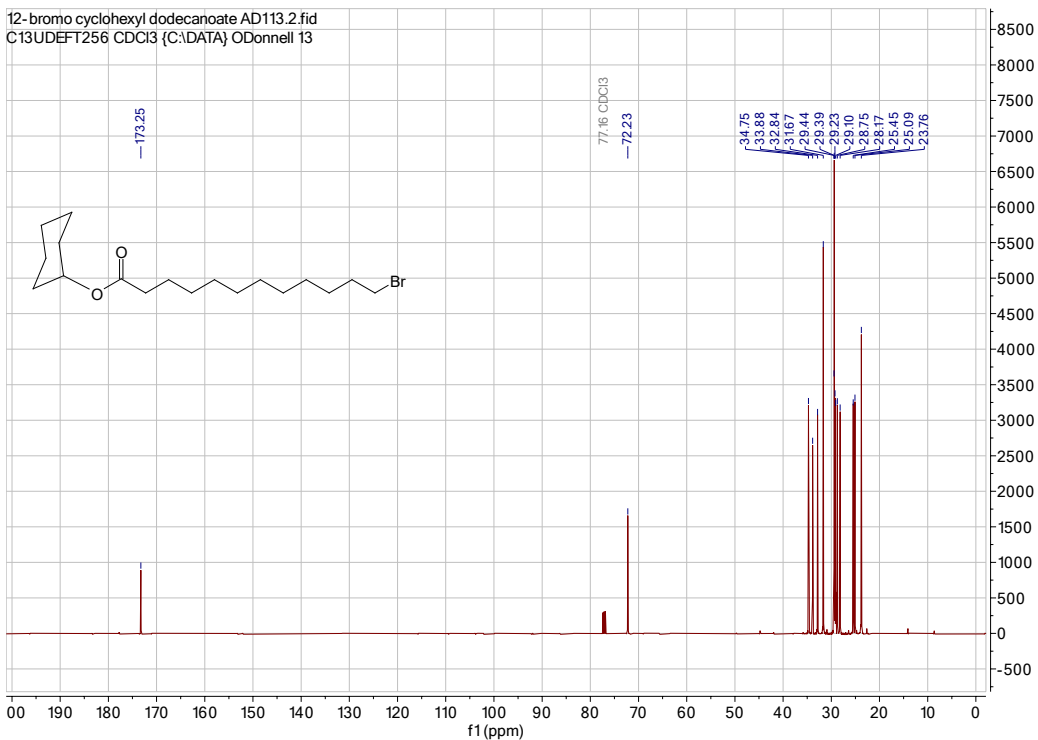


Fig. S8 ¹³C NMR of cyclohexyl 12-bromododecanoate.

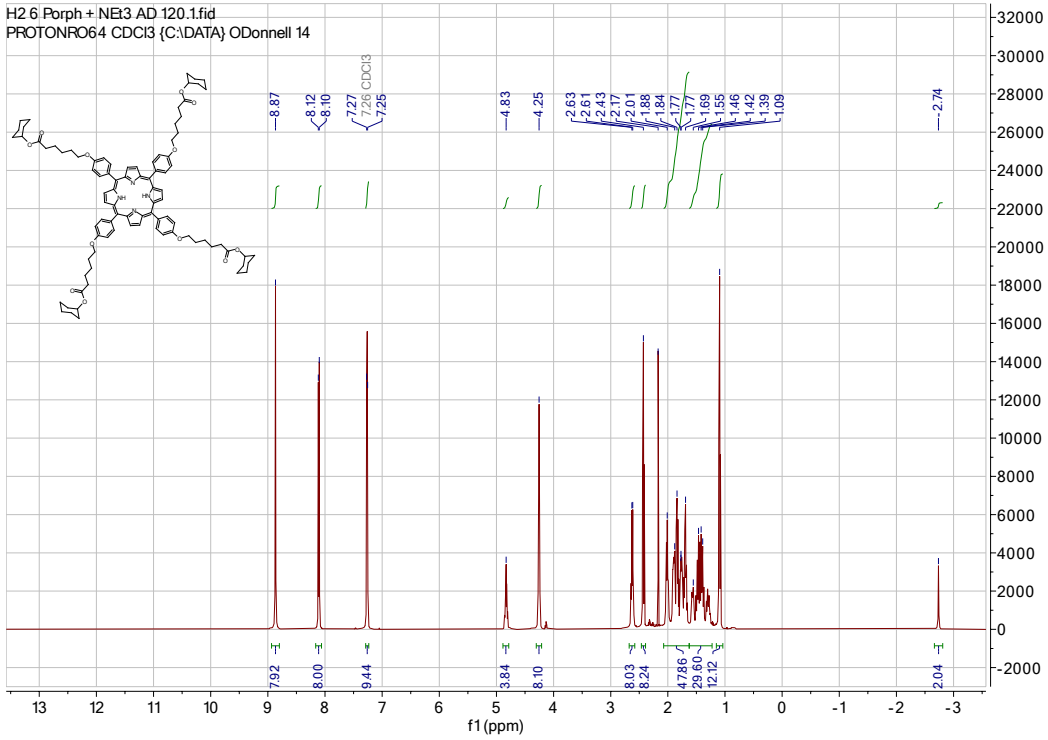


Fig. S9 ^1H NMR of 1.

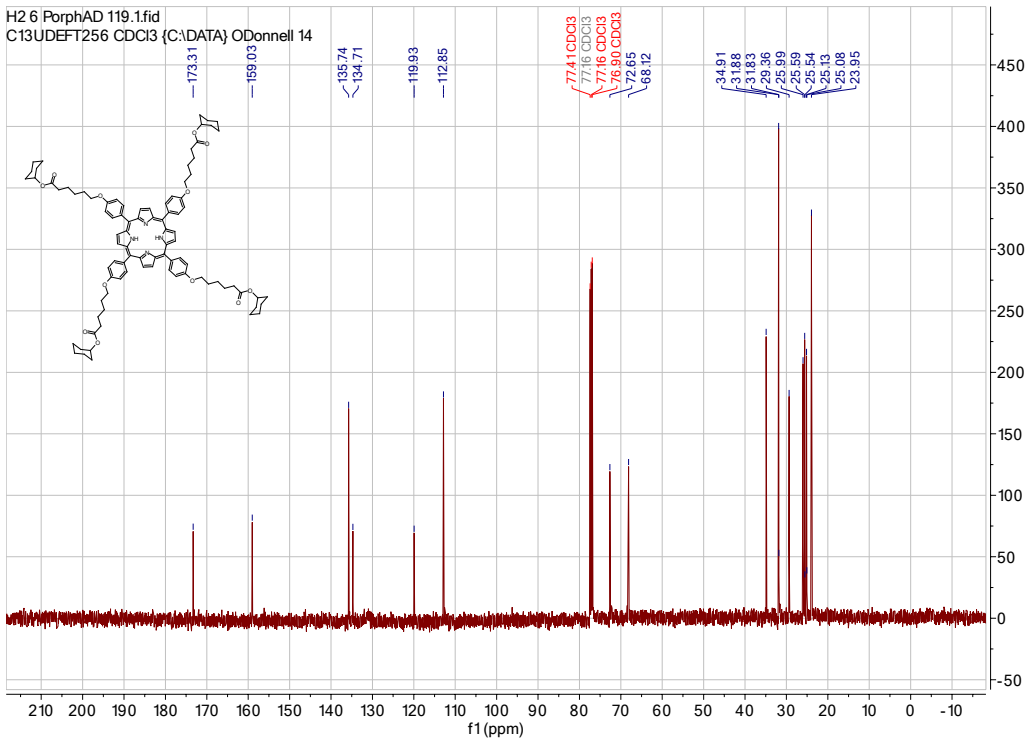


Fig. S10 ^{13}C NMR of 1.

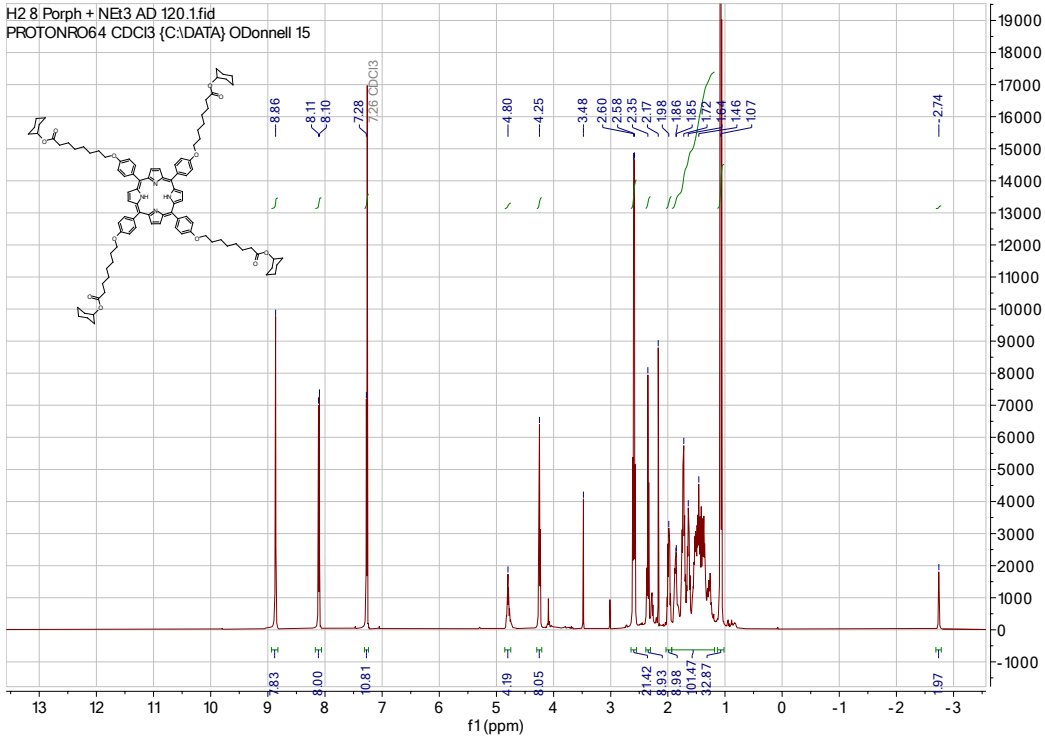


Fig. S11 ¹H NMR of 2.

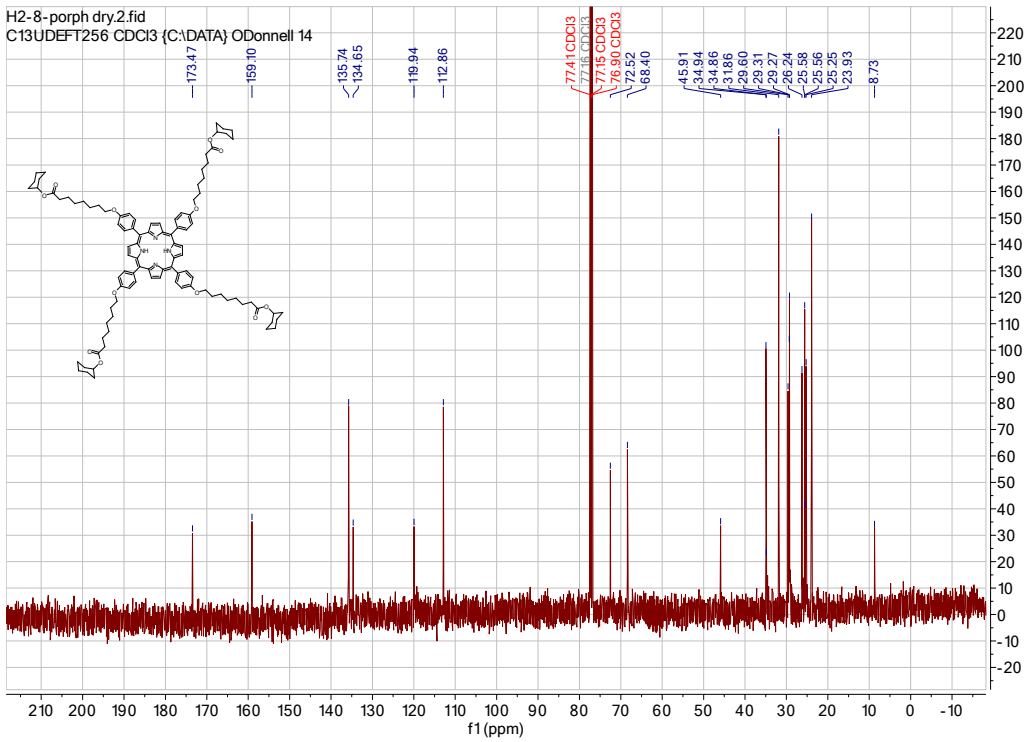


Fig. S12 ¹³C NMR of 2.

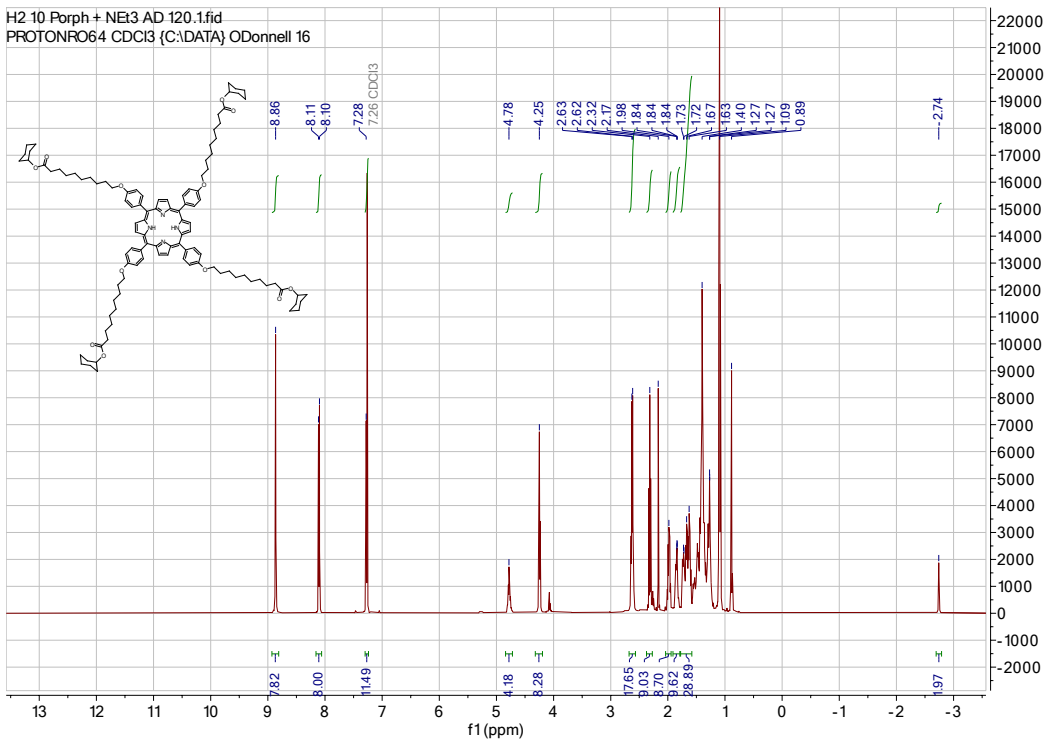


Fig. S13 ¹H NMR of 3.

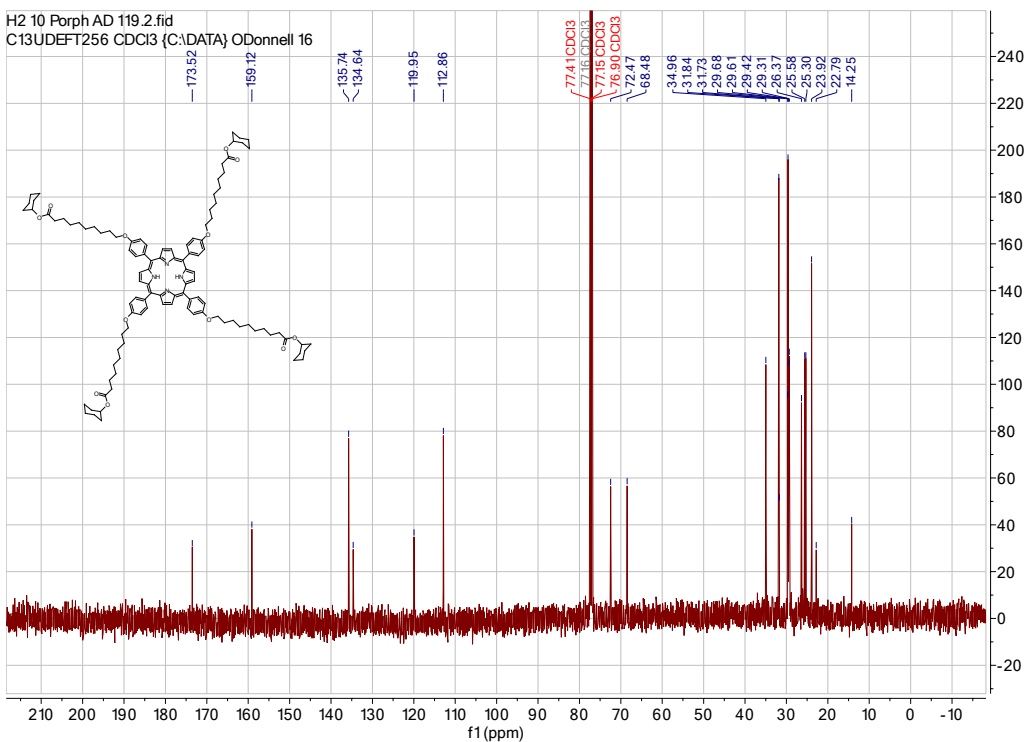


Fig. S14 ¹³C NMR of 3.

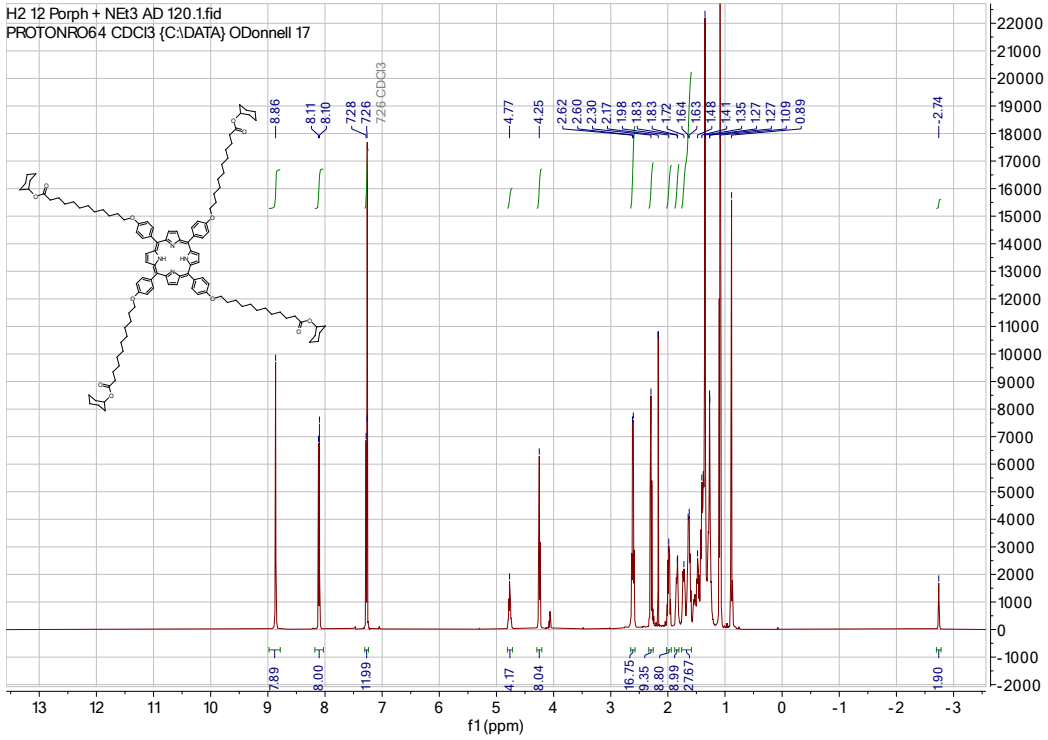


Fig. S15 ¹H NMR of 4.

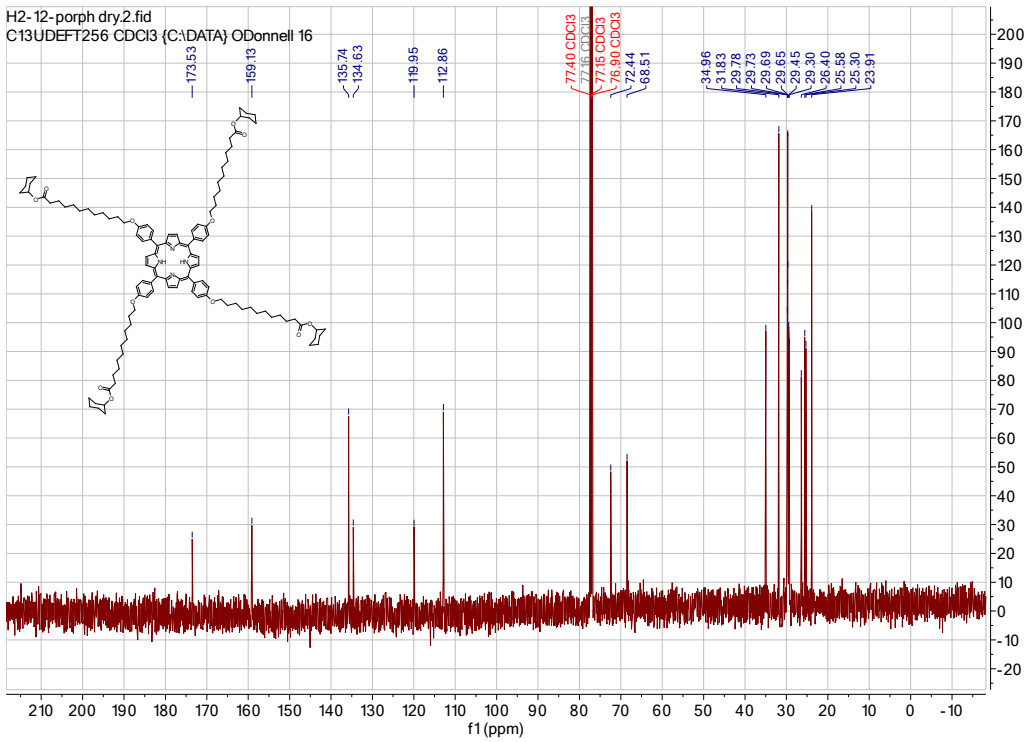


Fig. S16 ¹³C NMR of 4.

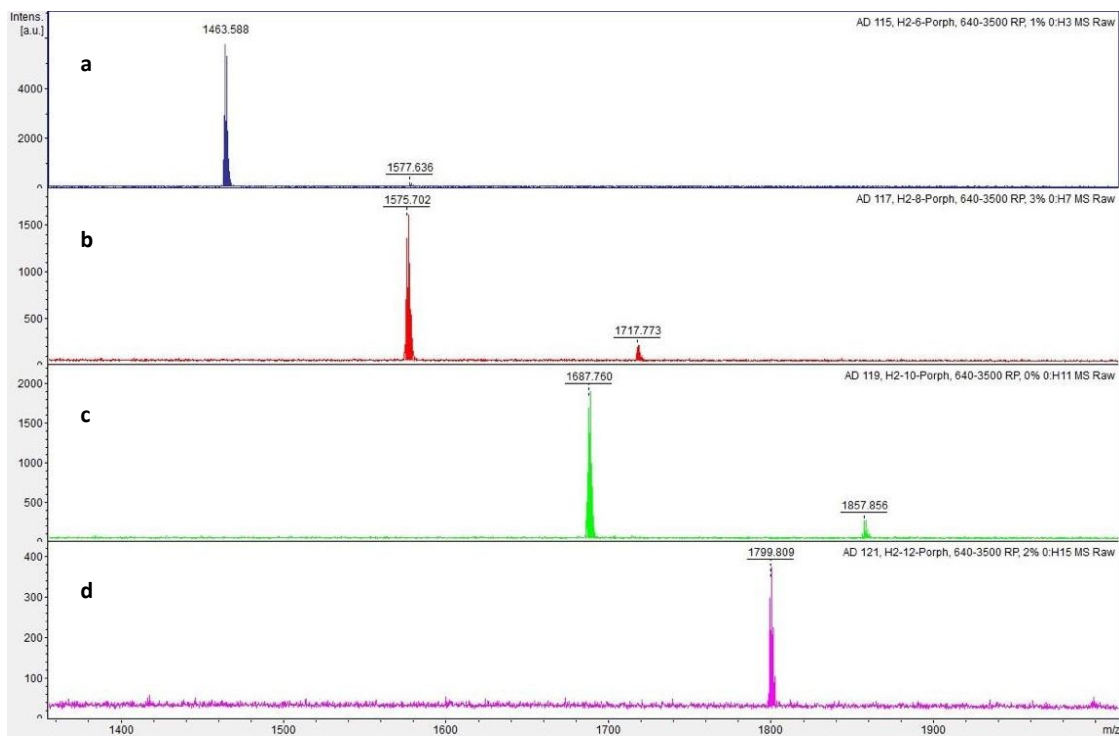


Fig. S17 MALDI-TOF MS of **1** – **4**, panels a – d, respectively.

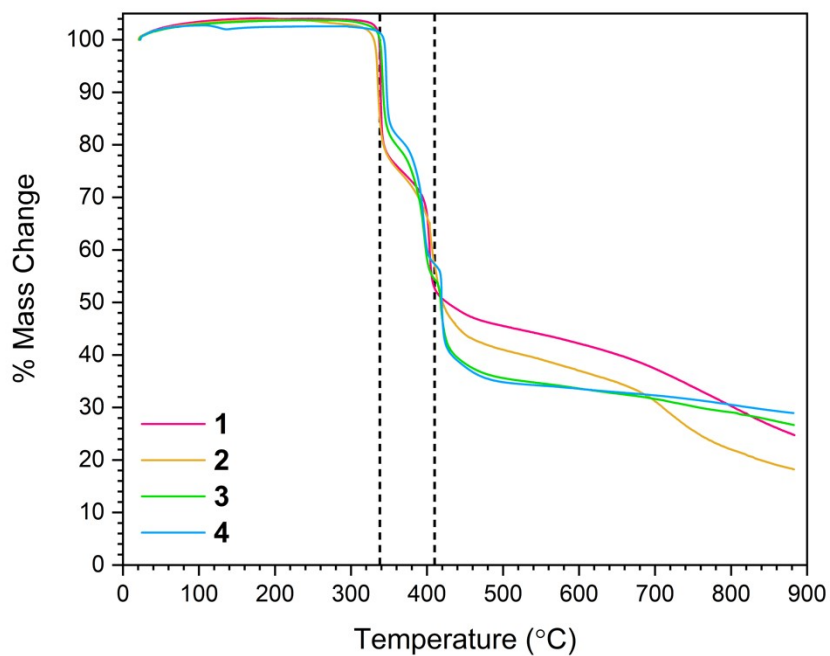


Fig. S18 TGA of all four molecules showing loss of cyclohexanol at 338 °C and alkanolic acid at 410 °C.

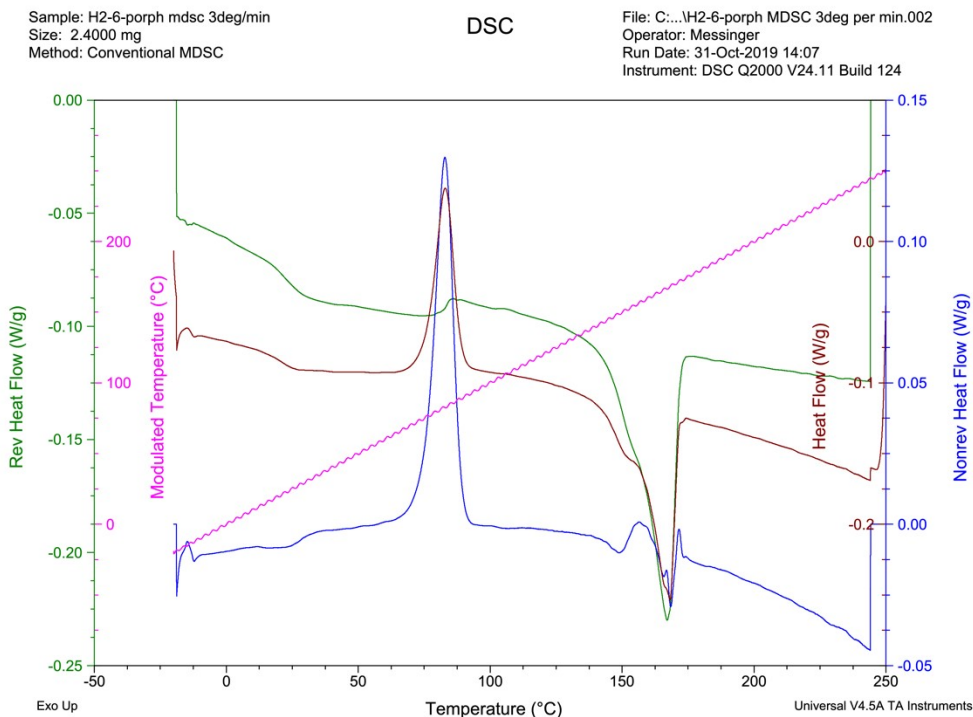


Fig. S19 MDSC of **1** showing modulated temperature (magenta), total heat flow (maroon), reversing heat flow for thermal events (green), and non-reversing heat flow for kinetic events (blue).

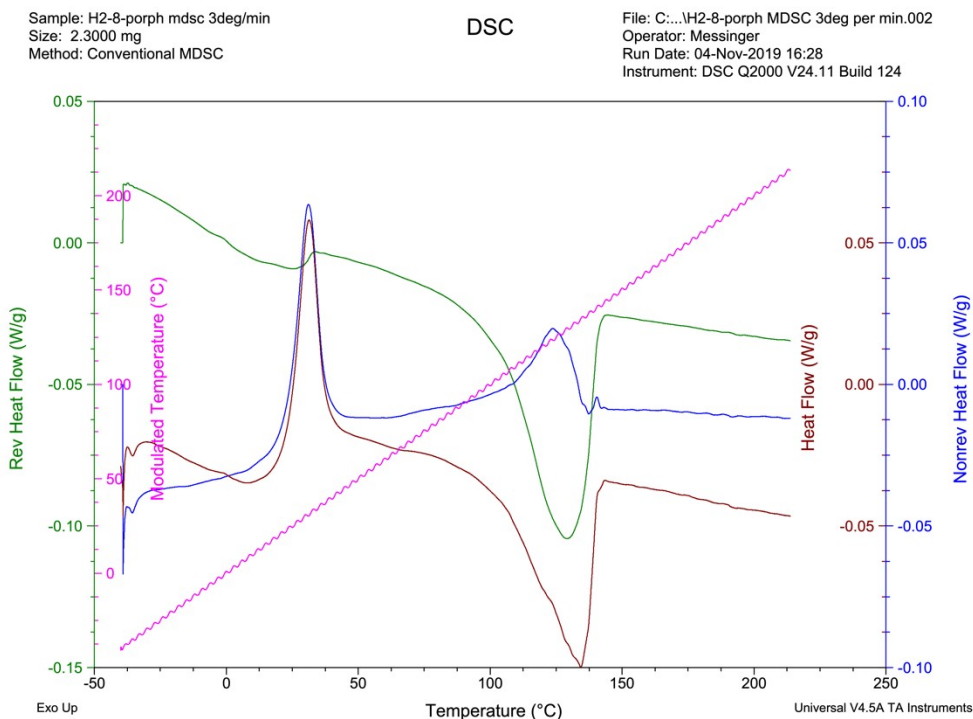


Fig. S20 MDSC of **2** showing modulated temperature (magenta), total heat flow (maroon), reversing heat flow for thermal events (green), and non-reversing heat flow for kinetic events (blue).

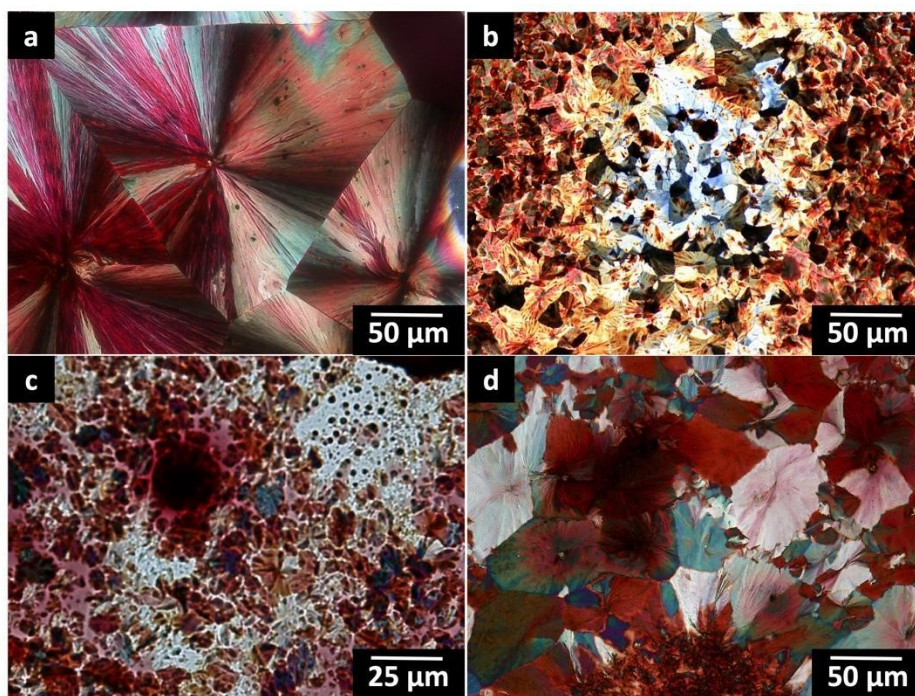


Fig. S21 1 – 4 cooling from isotropic transition: (a) 1 cooled for 30 min, (b) 2 cooled for 90 min, (c) 3 cooled for 1 min, 4 cooled for 3 min.

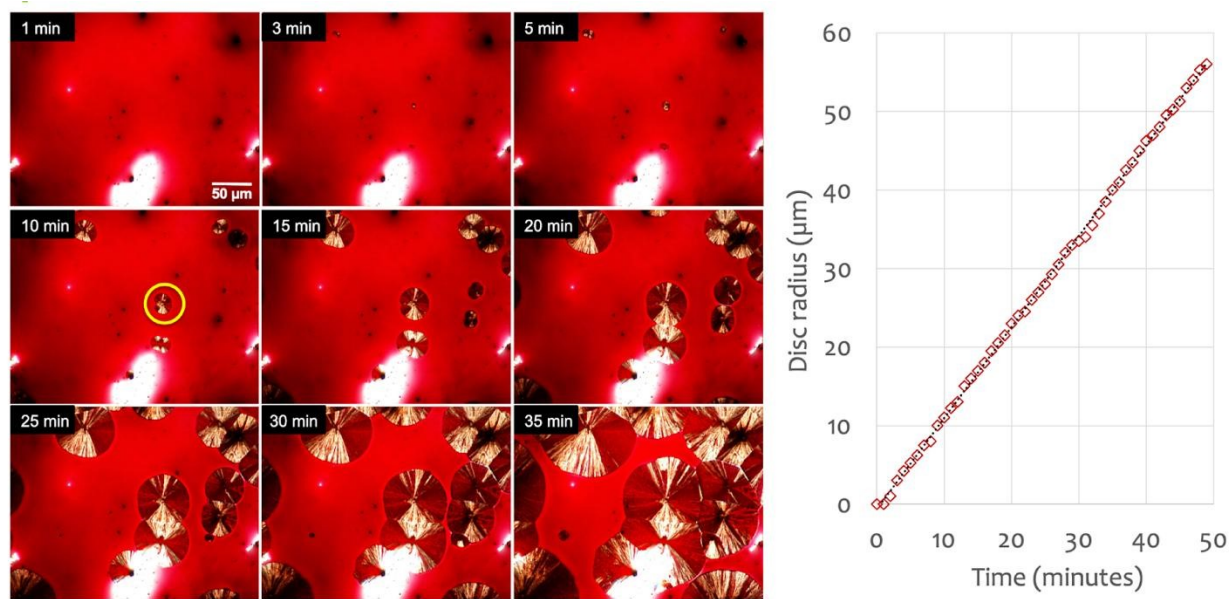


Fig. S22 (Left) HS-POM of isothermal cold crystallization of 1 at 90 °C. (Right) Disc radius vs. time for one disc (circled in 10 min micrograph); $y = 1.1583 - 0.6329x$, $R^2 = 0.9994$.

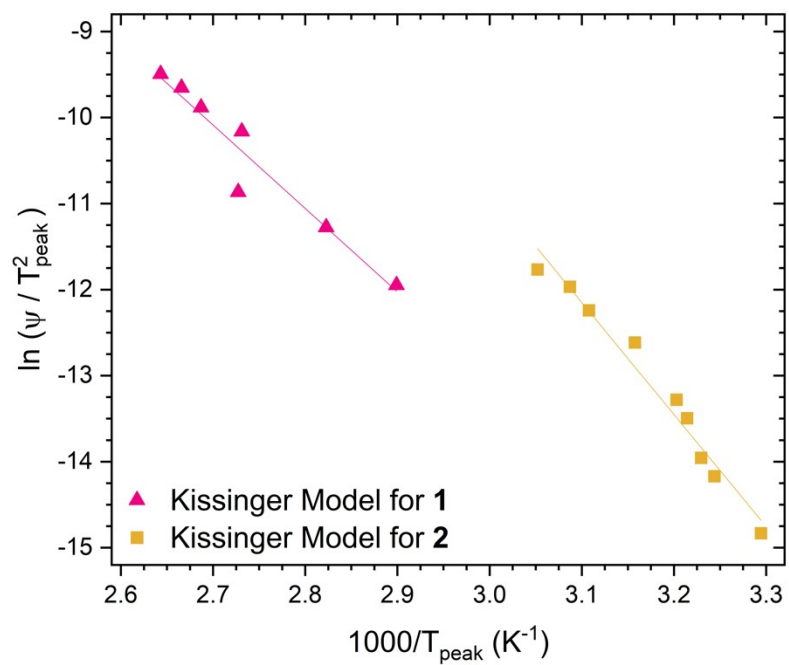


Fig. S23. Kissinger plots: $E_a \text{ 1} = 81 \pm 10 \text{ kJ/mol}$ ($R^2 = 0.92$), $E_a \text{ 2} = 108 \pm 7 \text{ kJ/mol}$ ($R^2 = 0.97$).