



Supplementary material: Synthesis and characterization of original fluorinated bis-cyclic carbonates and xanthates from a fluorinated epoxide

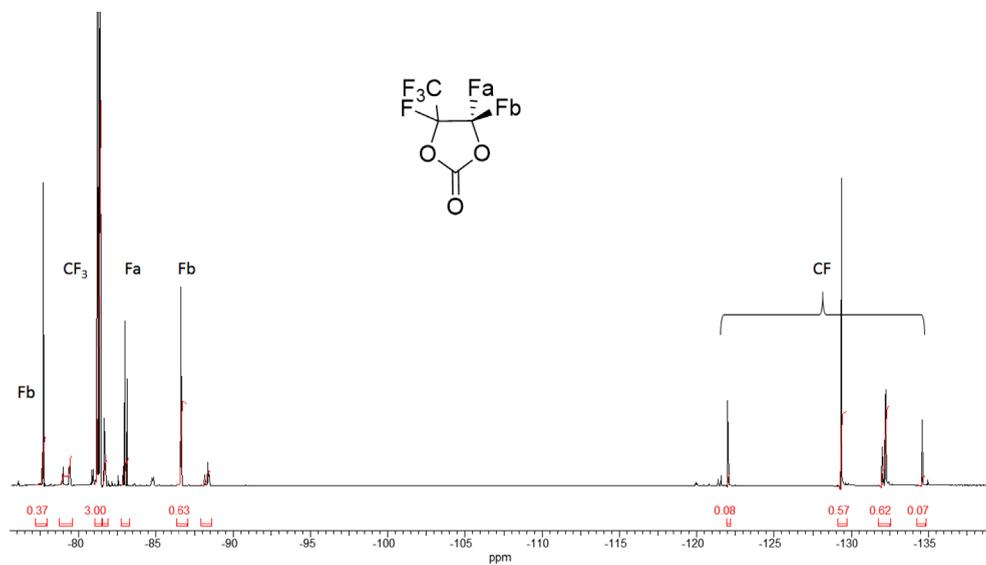
Ali Alaaeddine^{*,a}, Vincent Ladmiral^{®a}, Wassim El Malti^{®b}, Lolwa Haydar^a,
Sylvain Caillol^{®a} and Bruno Améduri^{®a}

^a ICGM, Univ Montpellier, CNRS, ENSCM, Montpellier, France

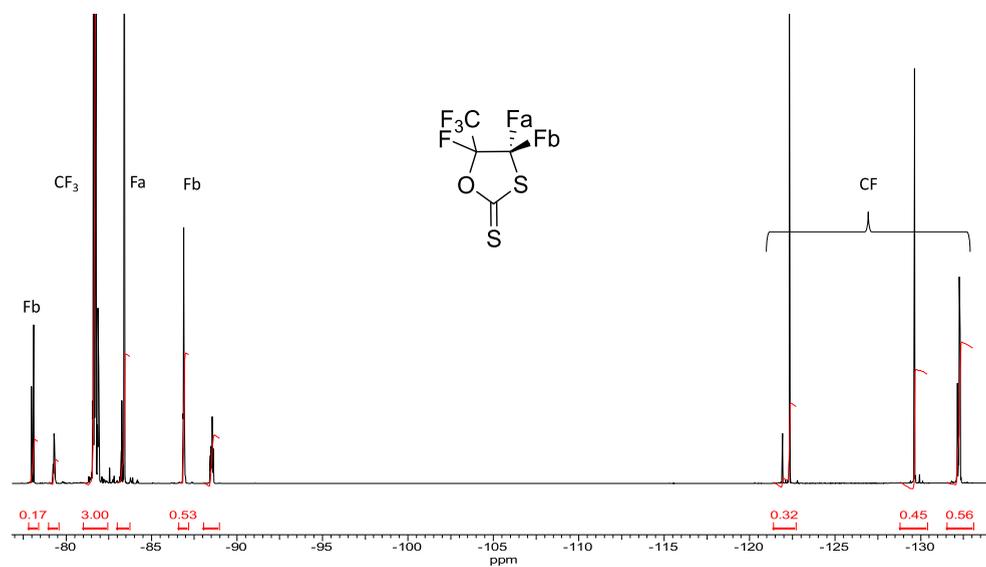
^b College of Engineering and Technology, American University of the Middle East,
Kuwait

E-mails: alikassem.alaaeddine@ul.edu.lb (A. Alaaeddine), vincent.ladmiral@enscm.fr
(V. Ladmiral), wassim.elmalti@aum.edu.kw (W. El Malti), lolwa.haydar13@gmail.com
(L. Haydar), sylvain.caillol@enscm.fr (S. Caillol), bruno.ameduri@enscm.fr
(B. Améduri)

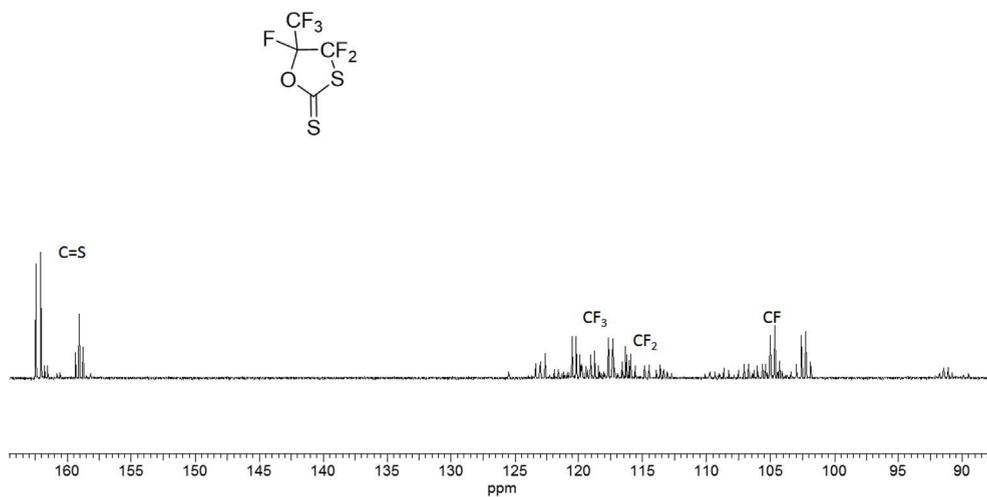
* Corresponding author.



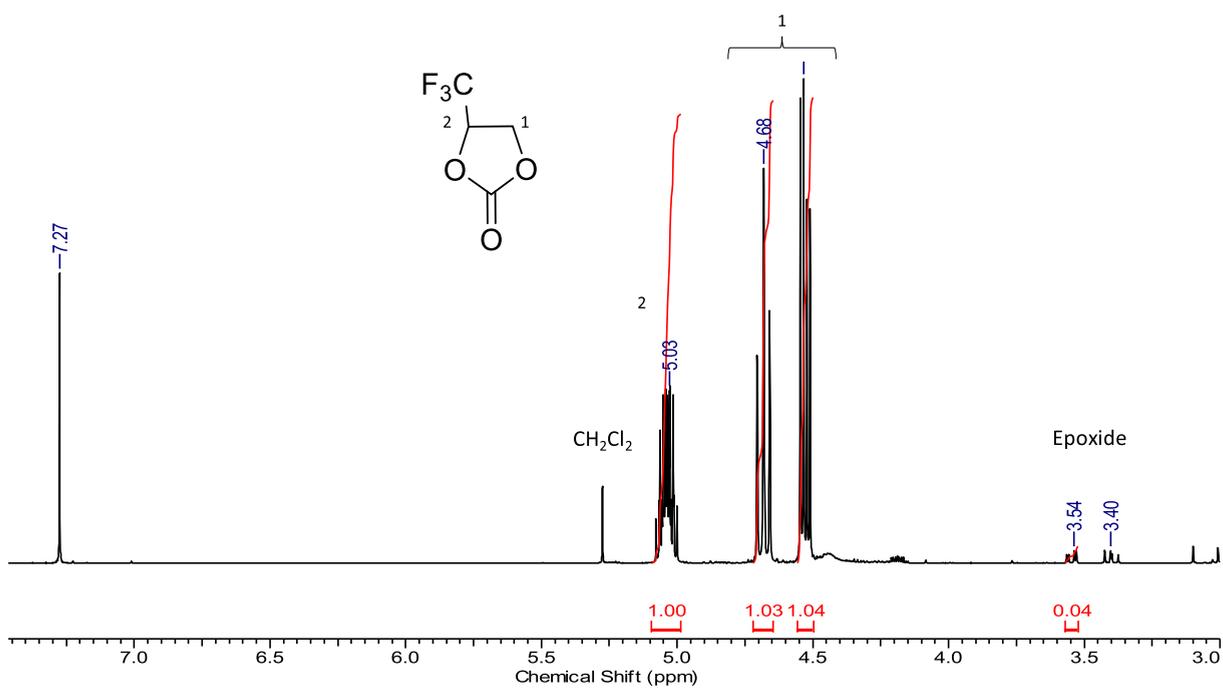
Supplementary Figure S1. ^{19}F NMR spectrum of (1) recorded in CDCl_3 (20 °C, 235.3 MHz).



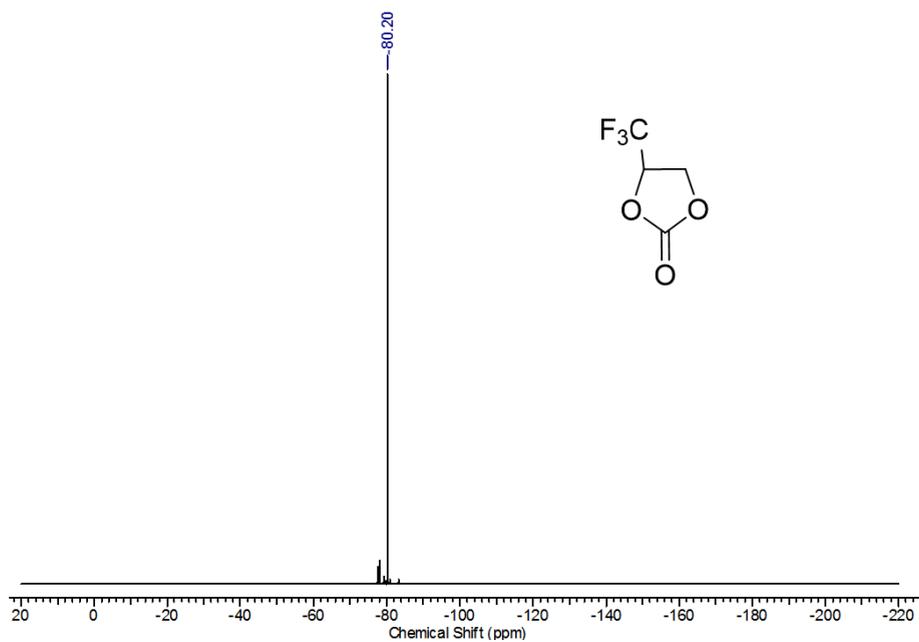
Supplementary Figure S2. ^{19}F NMR spectrum of (2) and (2') recorded in CDCl_3 (20 °C, 235.3 MHz).



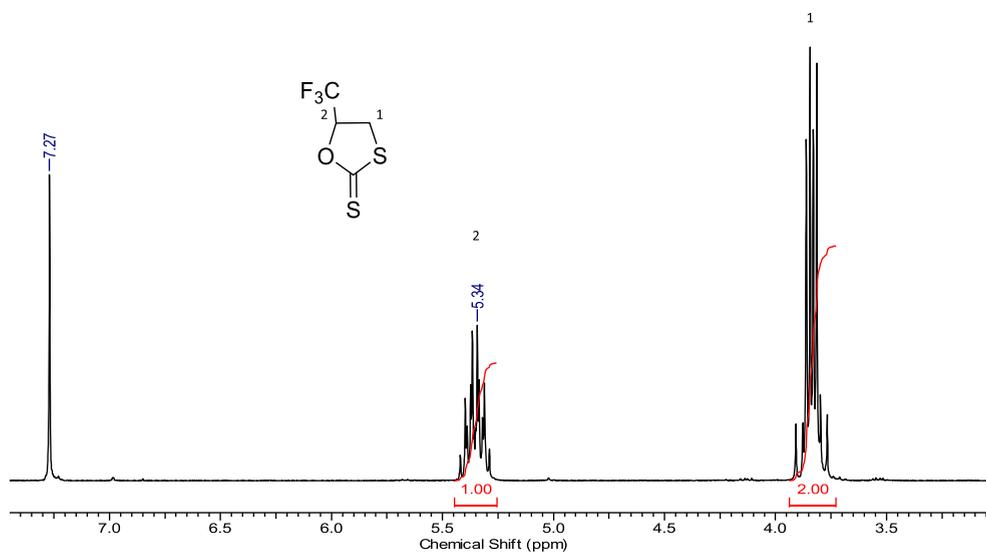
Supplementary Figure S3. ^{13}C NMR spectrum of (2) and (2') recorded in CDCl_3 (20 °C, 100.6 MHz).



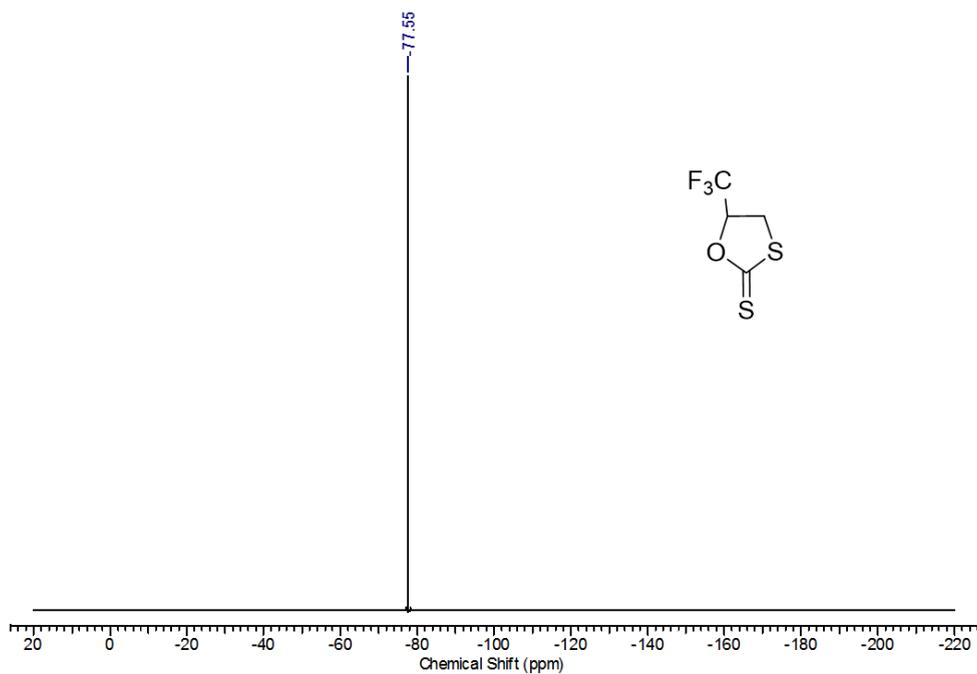
Supplementary Figure S4. ^1H NMR spectrum of (3) recorded in CDCl_3 (20 °C, 400.1 MHz).



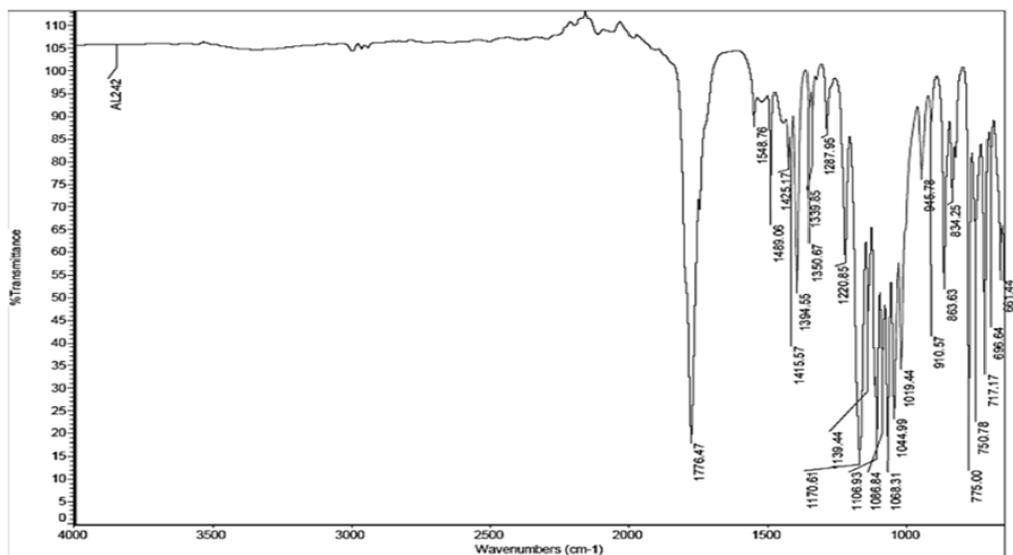
Supplementary Figure S5. ^{19}F NMR spectrum of (3) recorded in CDCl_3 (20 °C, 235.3 MHz).



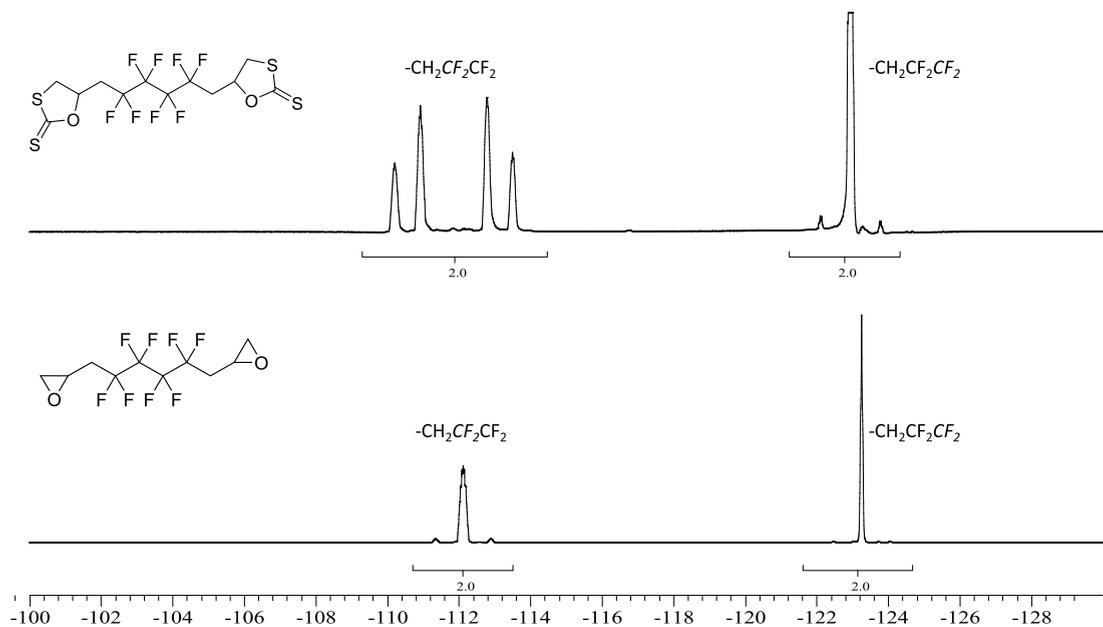
Supplementary Figure S6. ^1H NMR spectrum of (4) recorded in CDCl_3 (20 °C, 400 MHz).



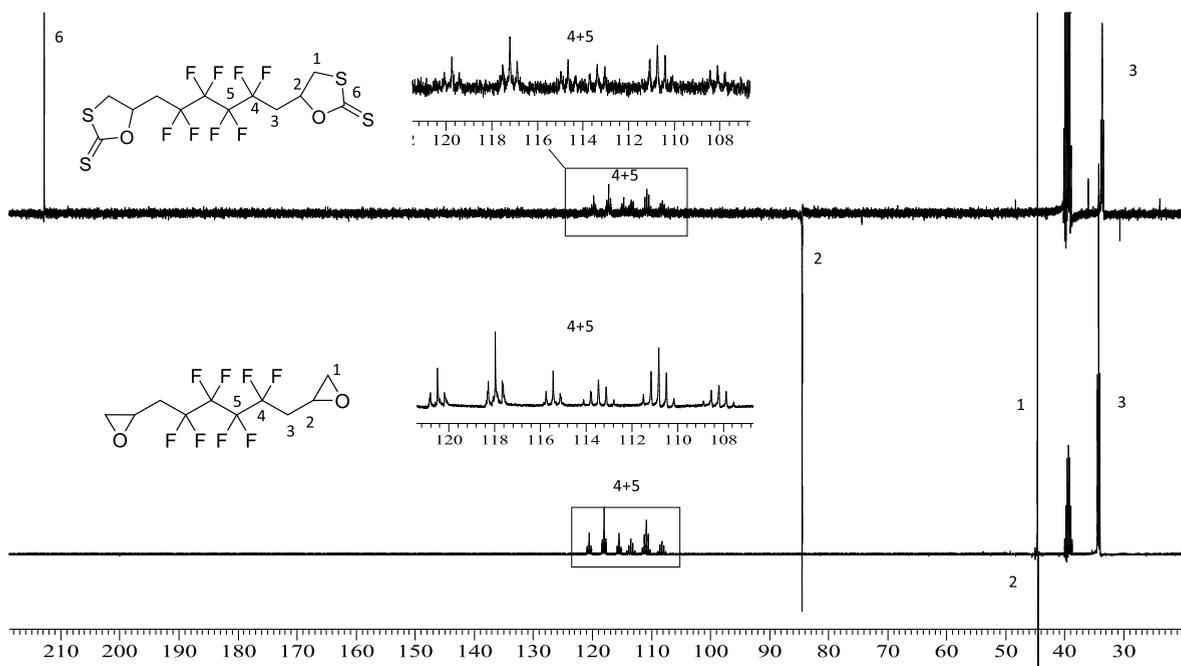
Supplementary Figure S7. ^{19}F NMR spectrum of (4) recorded in CDCl_3 (20 °C, 235.3 MHz).



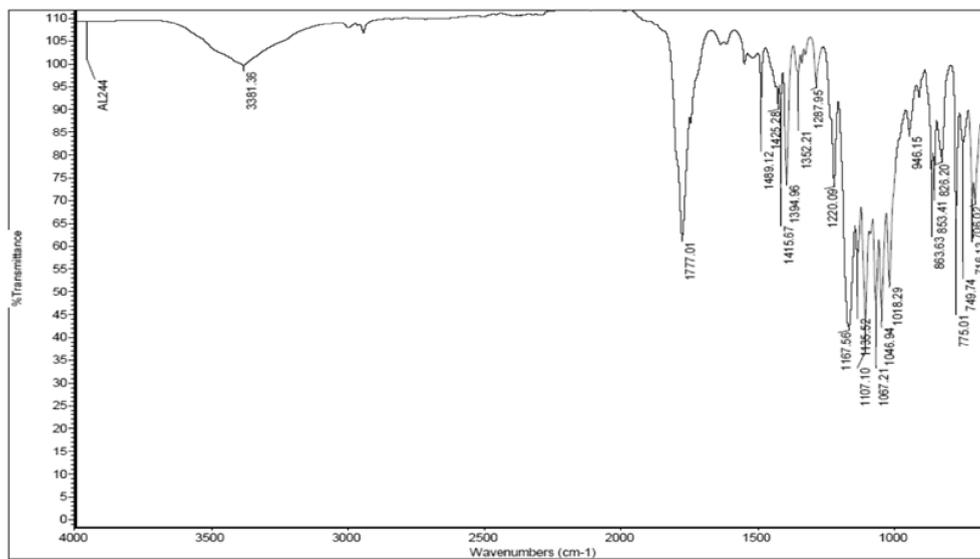
Supplementary Figure S8. FTIR spectrum of (5).



Supplementary Figure S9. ^{19}F NMR spectrum of (6) (upper spectrum) and BEPFB (lower spectrum) recorded in DMSO-d_6 , (20 °C, 235.3 MHz).



Supplementary Figure S10. ^{13}C NMR spectrum of (6) (upper spectrum) and BEPFB (lower spectrum) recorded in DMSO-d_6 (20 °C, 100.66 MHz).



Supplementary Figure S11. FTIR spectrum of (6).