Electronic Supplementary Material (ESI) for Polymer Chemistry.

Supplementary Information

Fully bio-based aromatic-aliphatic copolyesters: Poly(butylene furandicarboxylate-*co*-succinate)s obtained by ring opening polymerization

Juan Carlos Morales-Huerta, Claudio Batista Ciulik, Antxon Martínez de Ilarduya and Sebastián Muñoz-Guerra*

Department d'Enginyeria Química, Universitat Politècnica de Catalunya, ETSEIB, Diagonal 647,8028 Barcelona, Spain

Corresponding author: sebastian.munoz@upc.edu

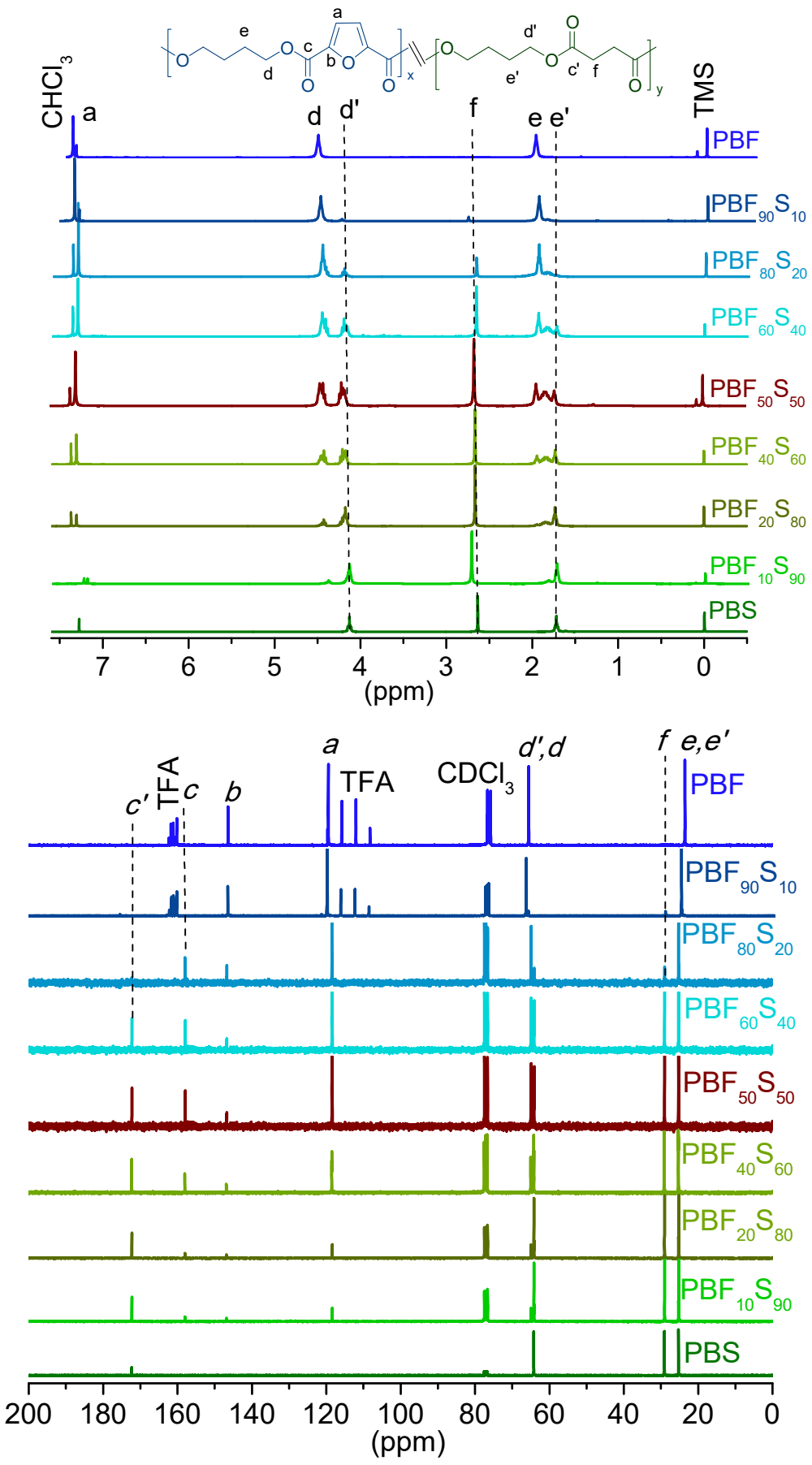

Figure SI-1. ^{1}H (top) and ^{13}C NMR (bottom) spectra of *co*PBF_xS_y obtained by $Sn(Oct)_2$ catalyzed ROP.

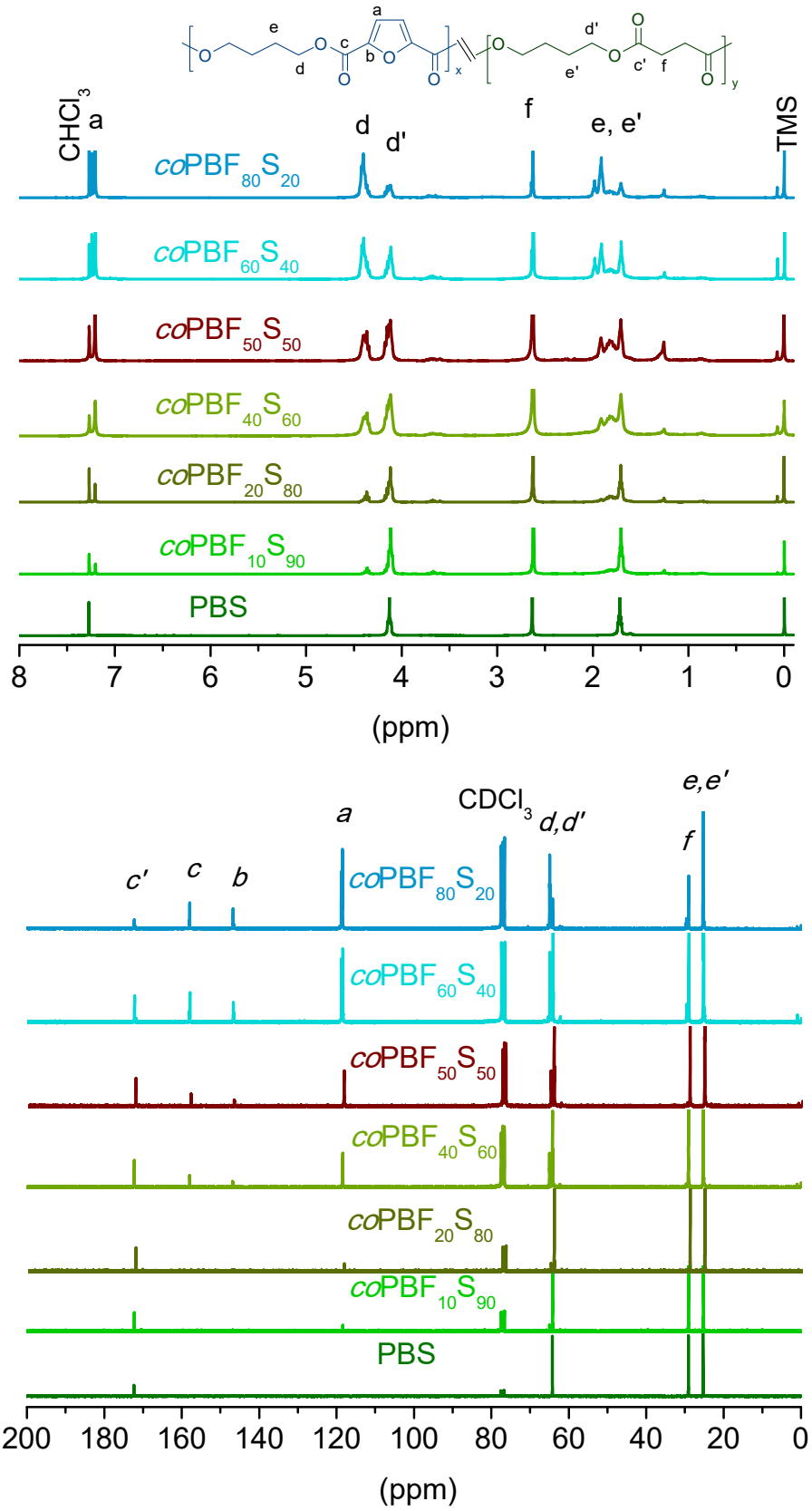

Figure SI-2. ^{1}H (top) and ^{13}C NMR(bottom) spectra of the *co*PBF$_x$S$_y$ obtained by ROP assisted by CALB.

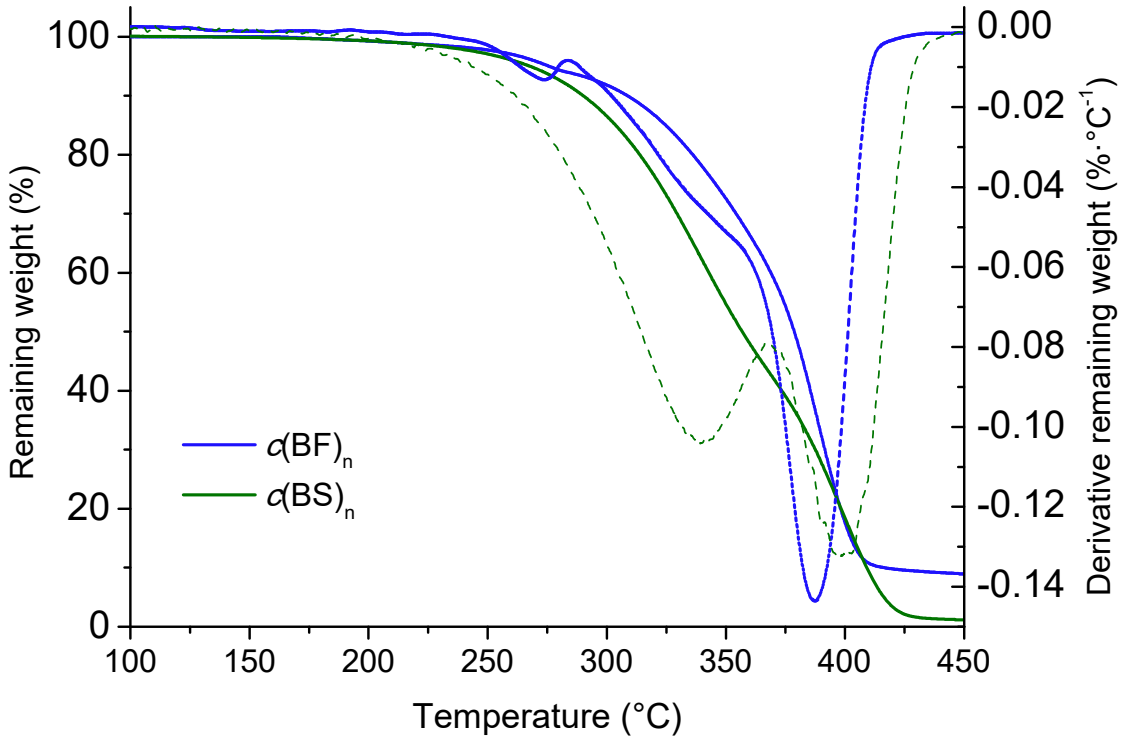

Figure SI-3. TGA analysis of $c(BF)_n$ and $c(BS)_n$.

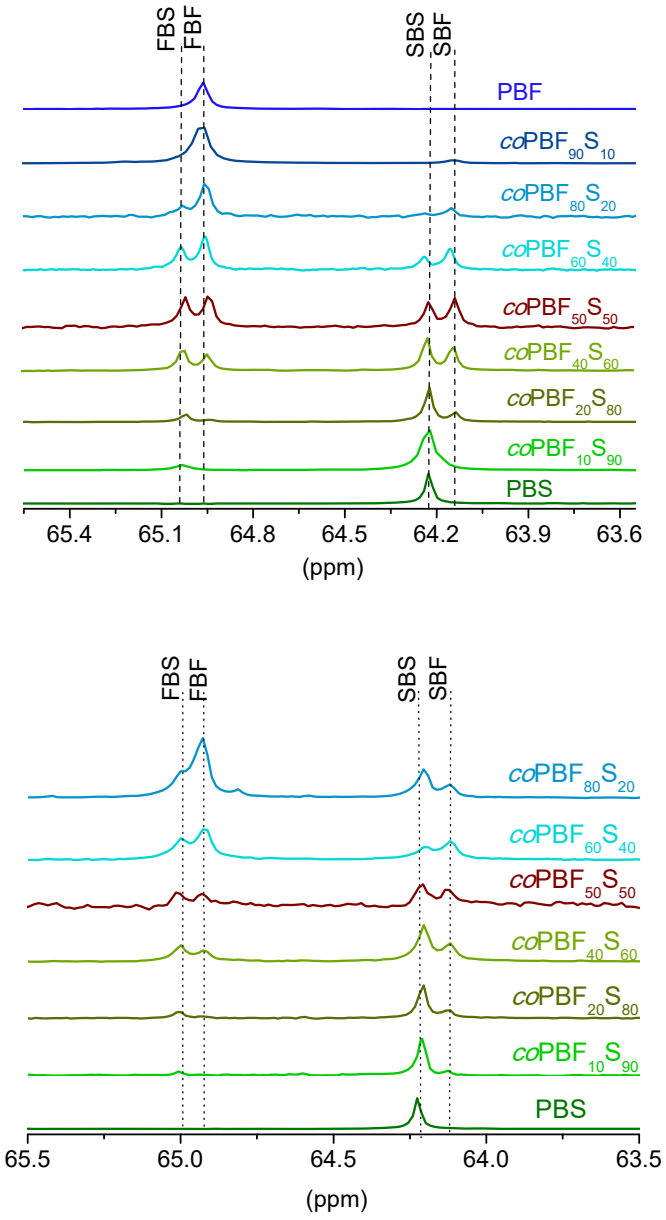

Figure SI-4. ^{13}C NMR enlarged in the region 65.5-63.5 of *co*PBF_xS_y obtained by using $Sn(Oct)_2$ (top) and CALB (bottom) as catalysts.

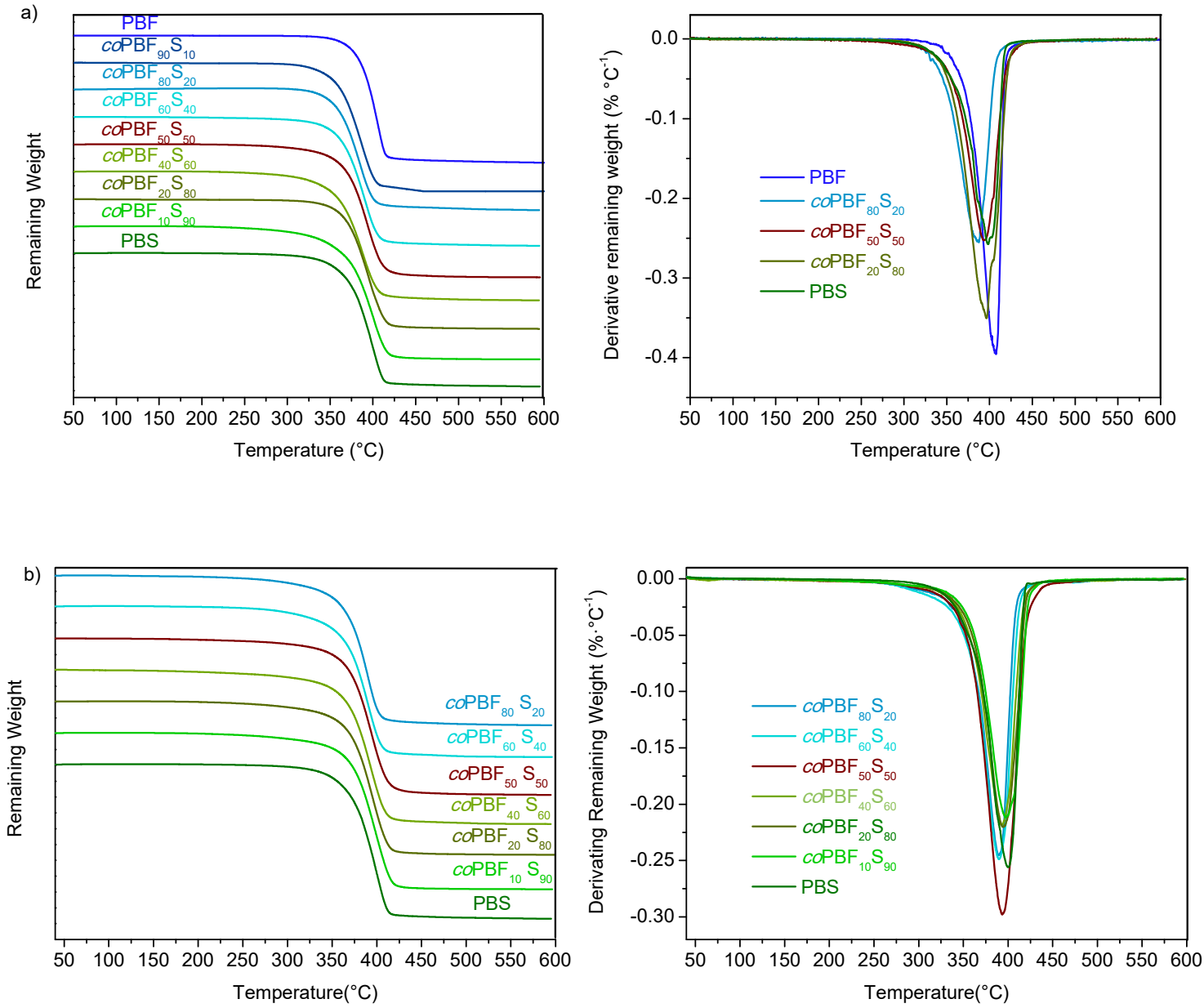

Figure SI-5. TGA analysis of *co*PBF$_x$ S$_y$:obtained by using Sn(Oct)$_2$ (a) and CALB (b) as catalysts.

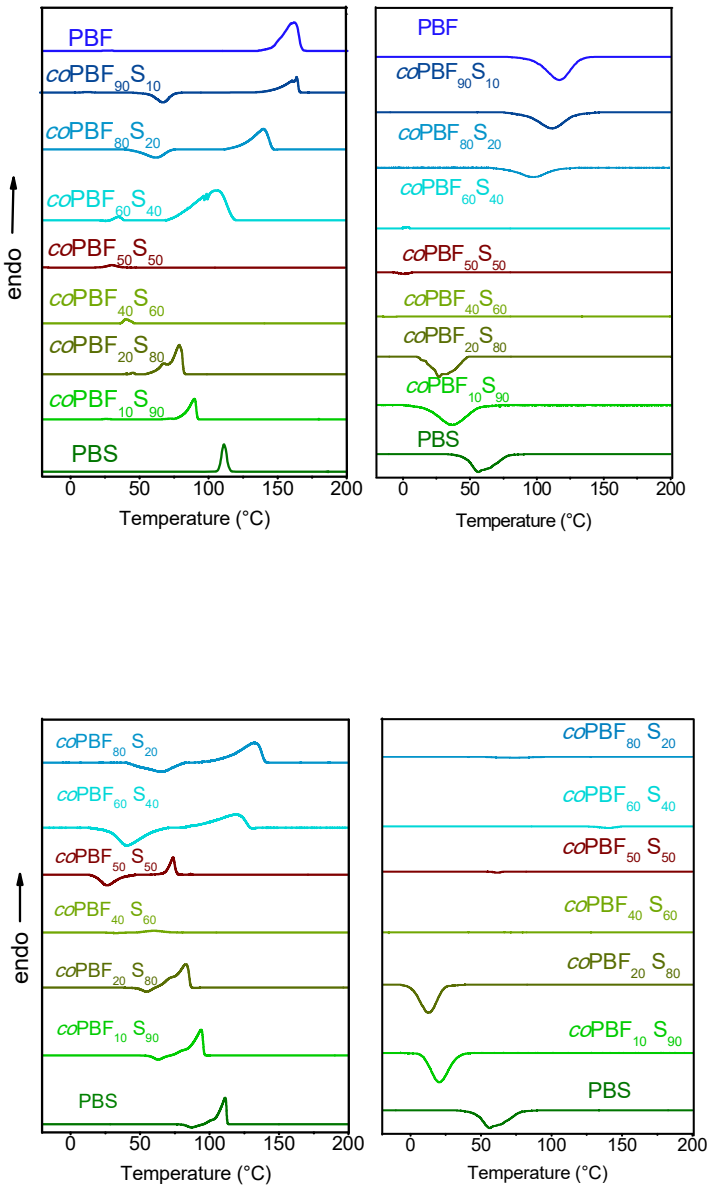

Figure SI-6. DSC analysis of *co*PBF$_x$ S$_y$ obtained by using Sn(Oct)$_2$ and b) CALB as catalysts. Left: first heating; Right: cooling from the melt.

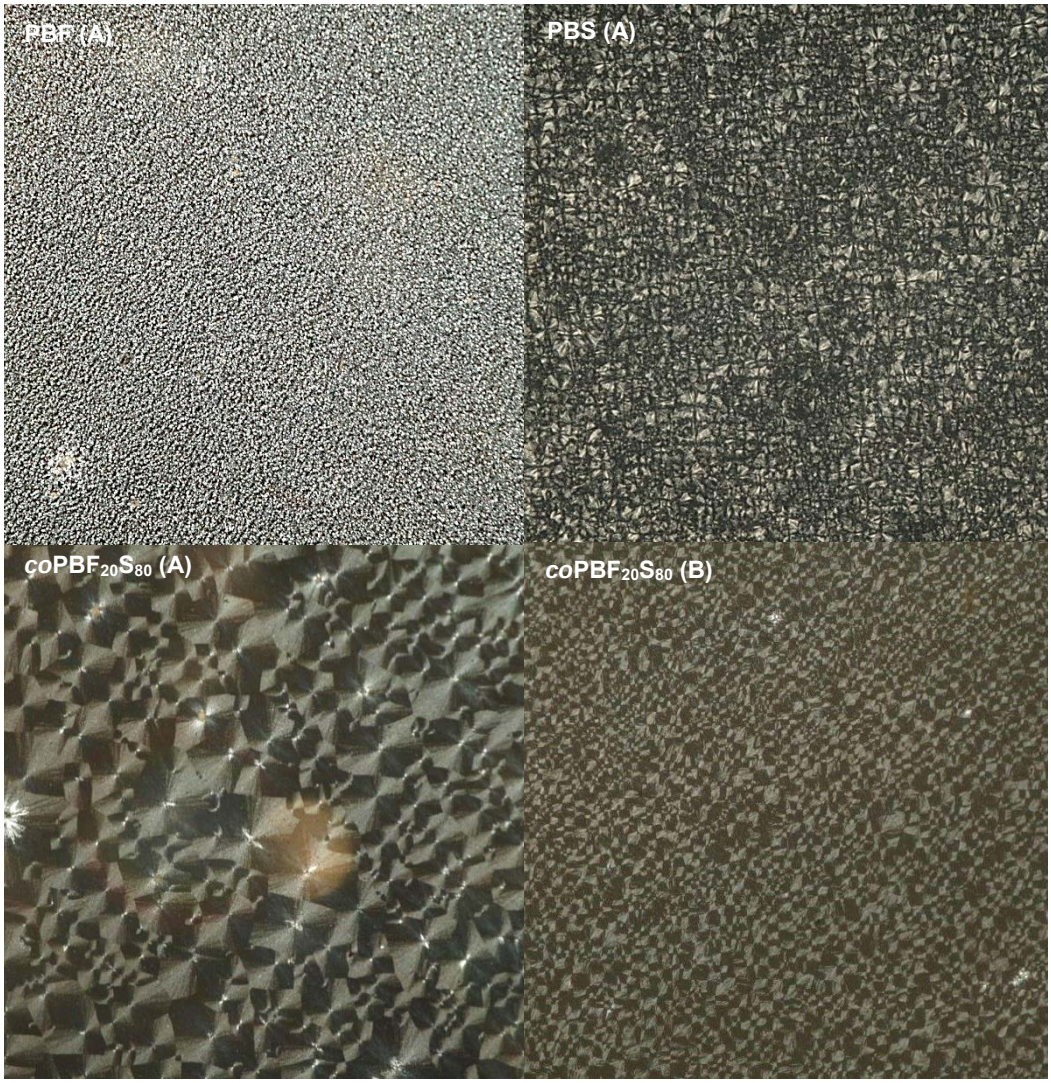

Figure SI-7. POM of films of polyesters crystallized from the melt that were obtained by $Sn(Oct)_2$ (A) or CALB (B) catalyzed ROP.