

## Supporting Information

### **Introducing Random Bio-terpene Segments to High Cis-Polybutadiene: Making Elastomeric Materials More Sustainable**

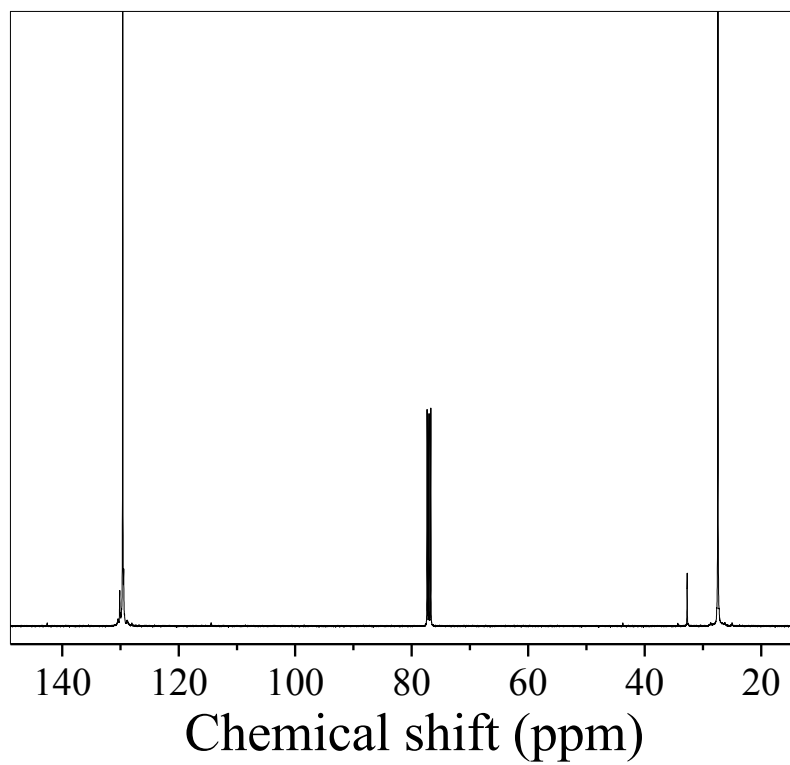
José Luis González-Zapata<sup>a</sup>, Francisco Javier Enríquez-Medrano<sup>a</sup>, Héctor Ricardo López González<sup>a\*</sup>, Javier Revilla-Vázquez<sup>b</sup>, Ricardo Mendoza Carrizales<sup>a</sup>, Dimitrios Georgouvelas<sup>c</sup>, Luis Valencia<sup>d\*</sup> and Ramón Enrique Díaz de León Gómez<sup>a\*</sup>

<sup>a</sup> Research Center for Applied Chemistry, Blvd. Enrique Reyna 140, San José de los Cerritos, 25294, Saltillo, Coahuila, Mexico. E-mail: [Ricardo.lopez@ciqa.edu.mx](mailto:Ricardo.lopez@ciqa.edu.mx), [Ramon.diazdeleon@ciqa.edu.mx](mailto:Ramon.diazdeleon@ciqa.edu.mx)

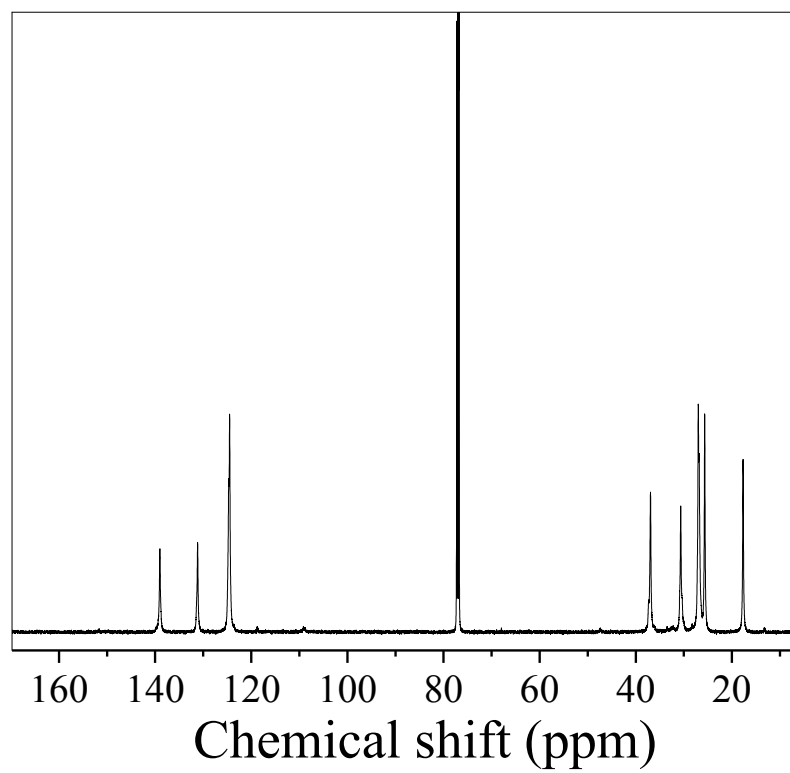
<sup>b</sup> Departamento de Ingeniería y Tecnología, División Ciencias Químicas, Facultad de Estudios Superiores Cuautitlán-UNAM, Av. Primero de Mayo s/n Cuautitlán Izcalli, C.P. 54740, Estado de México, México

<sup>c</sup> Division of Materials and Environmental Chemistry, Stockholm University, Frescativägen 8, 10691, Stockholm, Sweden

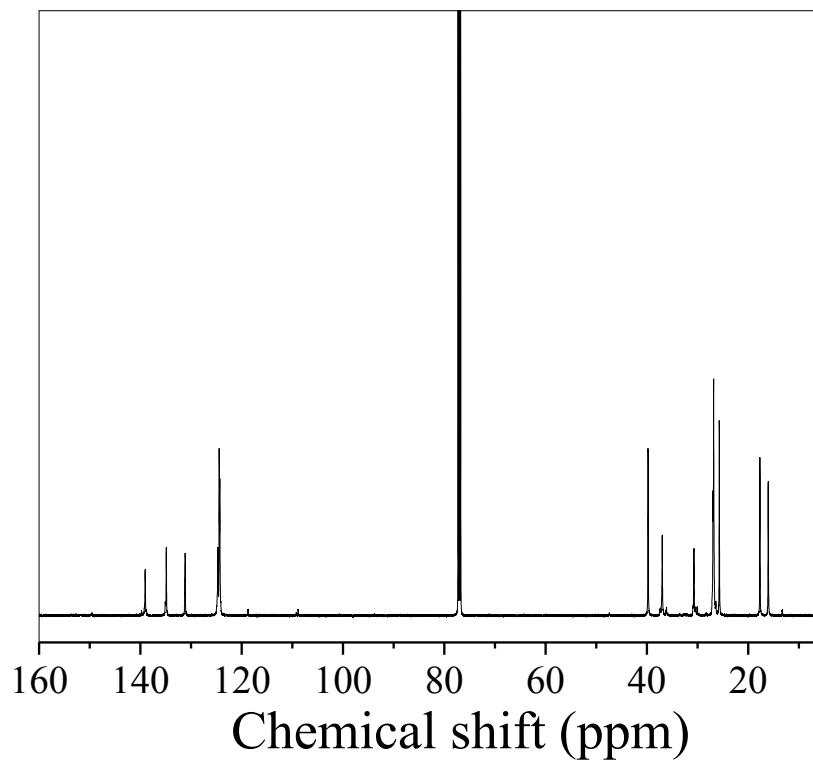
<sup>d</sup> Materials Technology and Chemistry, Alfa Laval Tumba AB, SE-14782 Tumba, Sweden. Email: [Luisalexandro.valencialopez@alfalaval.com](mailto:Luisalexandro.valencialopez@alfalaval.com).



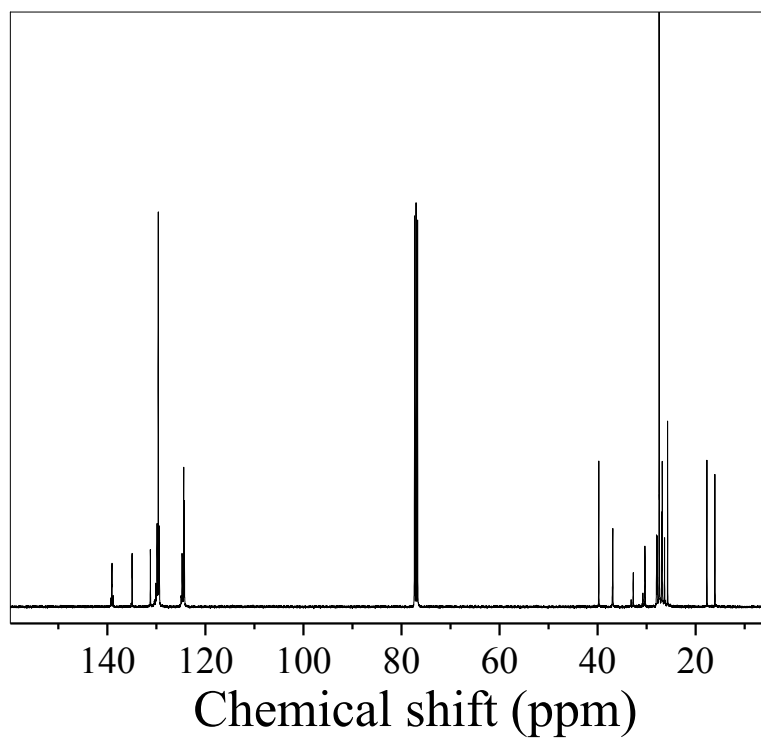
**Figure S1.**  $^{13}\text{C}$  NMR spectra of PB1.



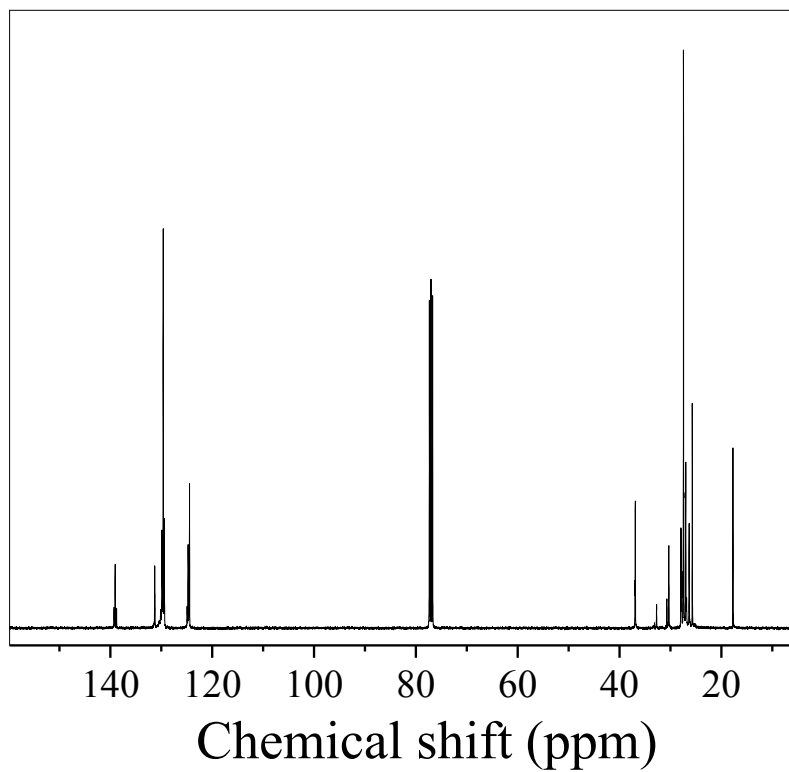
**Figure S2.**  $^{13}\text{C}$  NMR spectra of PMy



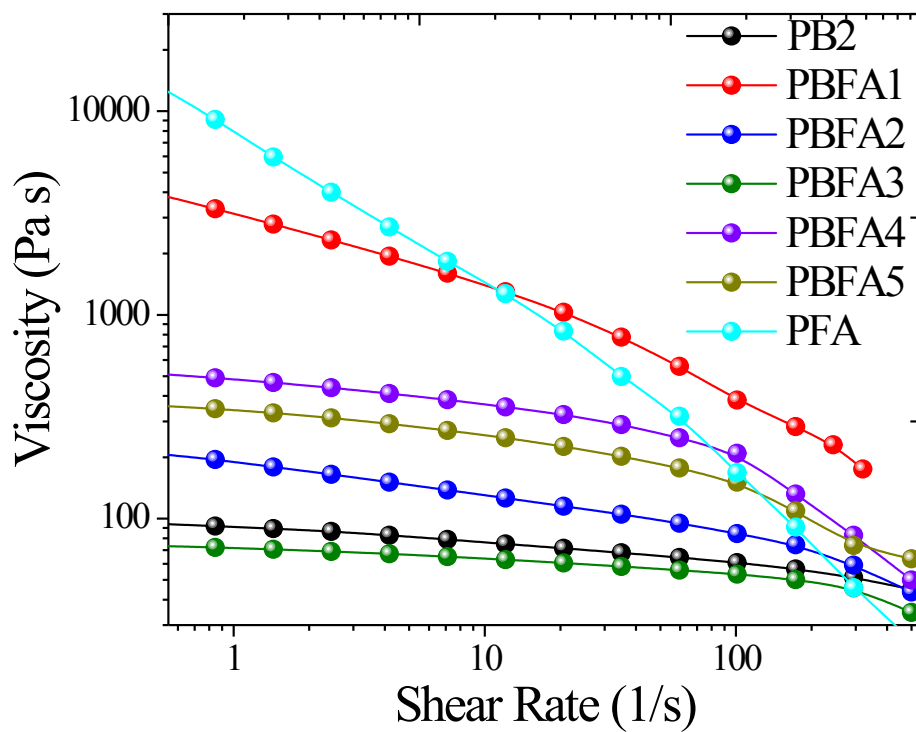
**Figure S3.**  $^{13}\text{C}$  NMR spectra of PFa.



**Figure S4.**  $^{13}\text{C}$  NMR spectra of PBFa4.



**Figure S5.**  $^{13}\text{C}$  NMR spectra of PBMy3.



**Figure S6.** Flow curves of the different PBFA copolymers and the respective PB and PFA homopolymers.