Electronic Supplementary Material (ESI) for Polymer Chemistry. This journal is © The Royal Society of Chemistry 2014

## A Polyester/Polystyrene Hybrid Connected by Dynamic Covalent Bonds Prepared via Radical Polymerization of Styrene in a "RAFT Gel"

Daiki Yoshimura, Shinji Yamada, Akinori Takasu\*

Department of Frontier Materials, Graduate School of Engineering, Nagoya Institute of Technology, Gokiso-cho, Showa-ku, Nagoya 466-8555, Japan

AUTHOR EMAIL ADDRESS: takasu.akinori@nitech.ac.jp

\*To whom correspondence should be addressed: Telephone: +81-52-735-7159. Fax:

+81-52-735-5342. E-mail takasu.akinori@nitech.ac.jp

**Supporting Information** 

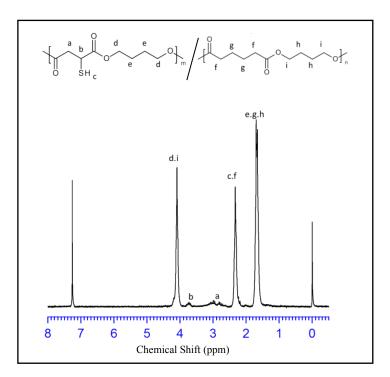
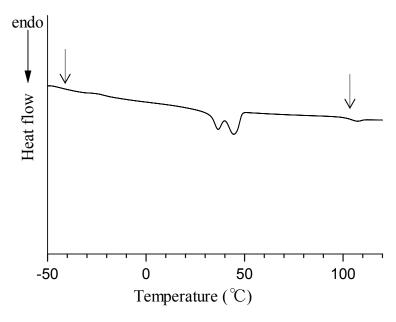
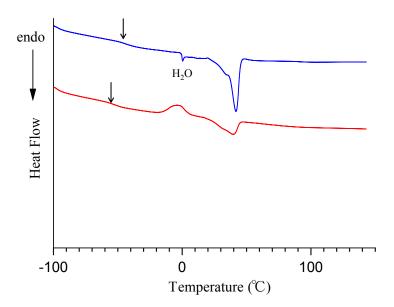


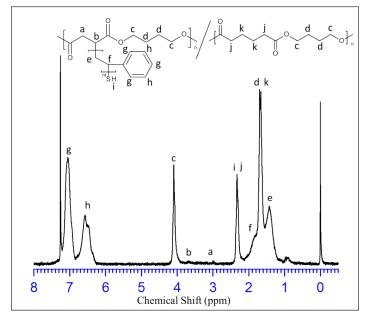
Figure S1 <sup>1</sup>H NMR spectrum of poly[(butylene thiomalate)-co- (butylene adipate)] in CDCl<sub>3</sub>.



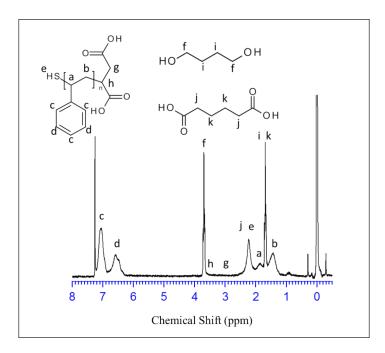
**Figure S2** DSC traces of Polyester/PSt blend. Heating rate, 10°C/min.



**Figure S3** DSC traces of PSt@CDI gel (red line) and the CDI gel (blue line). Heating rate, 10 °C/min.



**Figure S4** <sup>1</sup>H NMR spectrum of poly[(butylene thiomalate)-*co*-(butylene adipate)]-*graft*-poly(styrene) in CDCl<sub>3</sub>.



**Figure S5** <sup>1</sup>H NMR spectrum of poly(styrene) branches derived from saponification of the corresponding RAFT gel in CDCl<sub>3</sub>.