

# Construction of thermo-responsive elastin-like polypeptides (ELPs)-aggregation-induced-emission (AIE) conjugates for temperature sensing

Zhe Chen<sup>1,2</sup>, Zhaoyang Ding<sup>1</sup>, Guangya Zhang<sup>3</sup>, Leilei Tian<sup>2,\*</sup> and Xuanjun Zhang<sup>1,\*</sup>

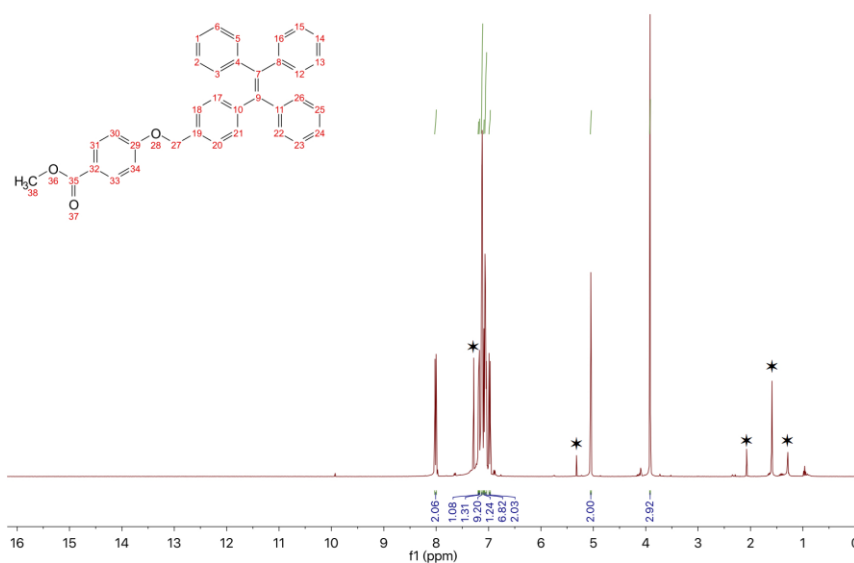
<sup>1</sup> Faculty of Health Sciences, University of Macau, Taipa 999078, Macau, China; yb67616@umac.mo (Z.C.); zydingl@uW.edu (Z.D.)

<sup>2</sup> Department of Materials Science and Engineering, Southern University of Science and Technology, Shenzhen 518055, Guangdong, China

<sup>3</sup> Department of Biotechnology and Bioengineering, Huaqiao University, Xiamen 361021, Fujian, China; zhgyghh@hqu.edu.cn (G.Z.)

\* Correspondence: tianll@sustc.edu.cn (L.T.); xuanjunzhang@umac.mo (X.Z.); Tel.: +86-0755-88018524 (L.T.); +853-8822-4928 (X.Z.)

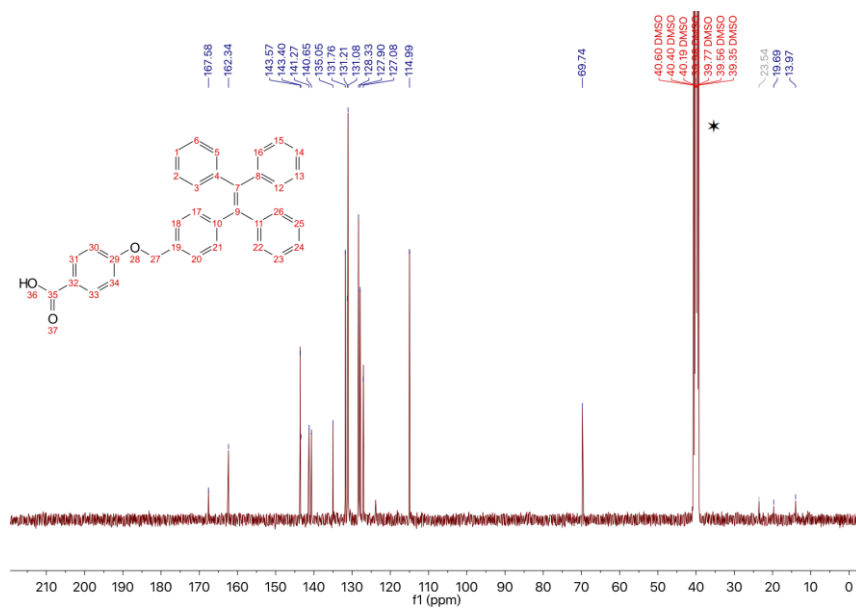
## 1. <sup>1</sup>H NMR spectrum of compound (1)



**Figure S1.** <sup>1</sup>H NMR spectrum of (1) in CDCl<sub>3</sub>. The residual solvent signals are marked with asterisks.

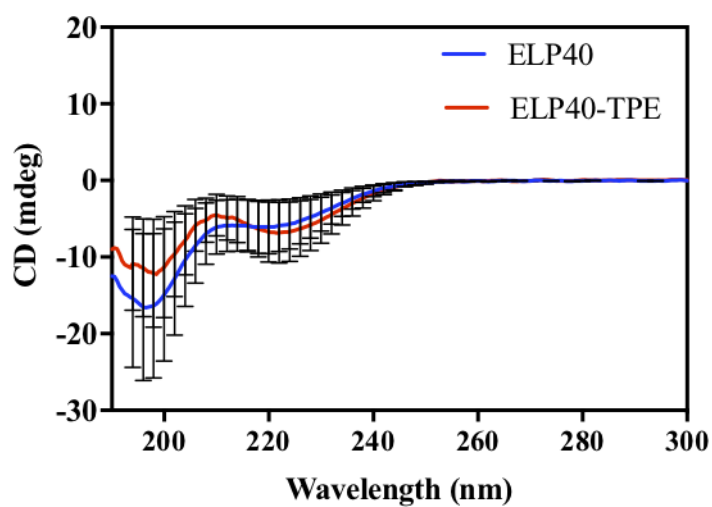
## 2. <sup>13</sup>C NMR spectrum of compound (1)





**Figure S4.**  $^{13}\text{C}$  NMR spectrum of **(2)** in DMSO- $d_6$ . The residual solvent signals are marked with asterisks.

#### 5. CD spectra of ELPs40 and ELPs40-TPE



**Figure S5.** CD spectra of ELPs40 (blue) and ELPs40-TPE (red). The concentrations of ELPs40 and ELPs40-TPE were 10  $\mu\text{M}$ . Data as mean values  $\pm$  SD ( $n = 3$ ).