

Supporting Information of
Polytypic phase transition
in alkyl chain-functionalized valence tautomeric complexes

Daisuke Kiriya,^a Ho-Chol Chang,^{*a,b} Akiko Kamata,^a and Susumu Kitagawa^{*a}

“Department of Synthetic Chemistry and Biological Chemistry, Graduate School of Engineering,

Kyoto University, Nishikyo-ku, Kyoto 615-8510 (Japan)

and

^b“Structural Ordering and Physical Properties”, PRESTO

Japan Science and Technology Agency (JST), 4-1-8 Honcho Kawaguchi, Saitama,

332-0012 (Japan)

Fax: (+81)75-383-2732

E-mail: chang@sbchem.kyoto-u.ac.jp and kitagawa@sbchem.kyoto-u.ac.jp

Contents

Figure S1. TG-DTA of the solvated **CoC n bpy** ($n = 0, 1,$ and 5).

Figure S2. XRPD patterns of the solvated and the desolvated **CoC n bpy** ($n = 0, 1,$ and 5).

Figure S1. DSC curves of **CoC9bpy** and **CoC13bpy** under a scan rate of 1, 5, 10, and 20 K min⁻¹.

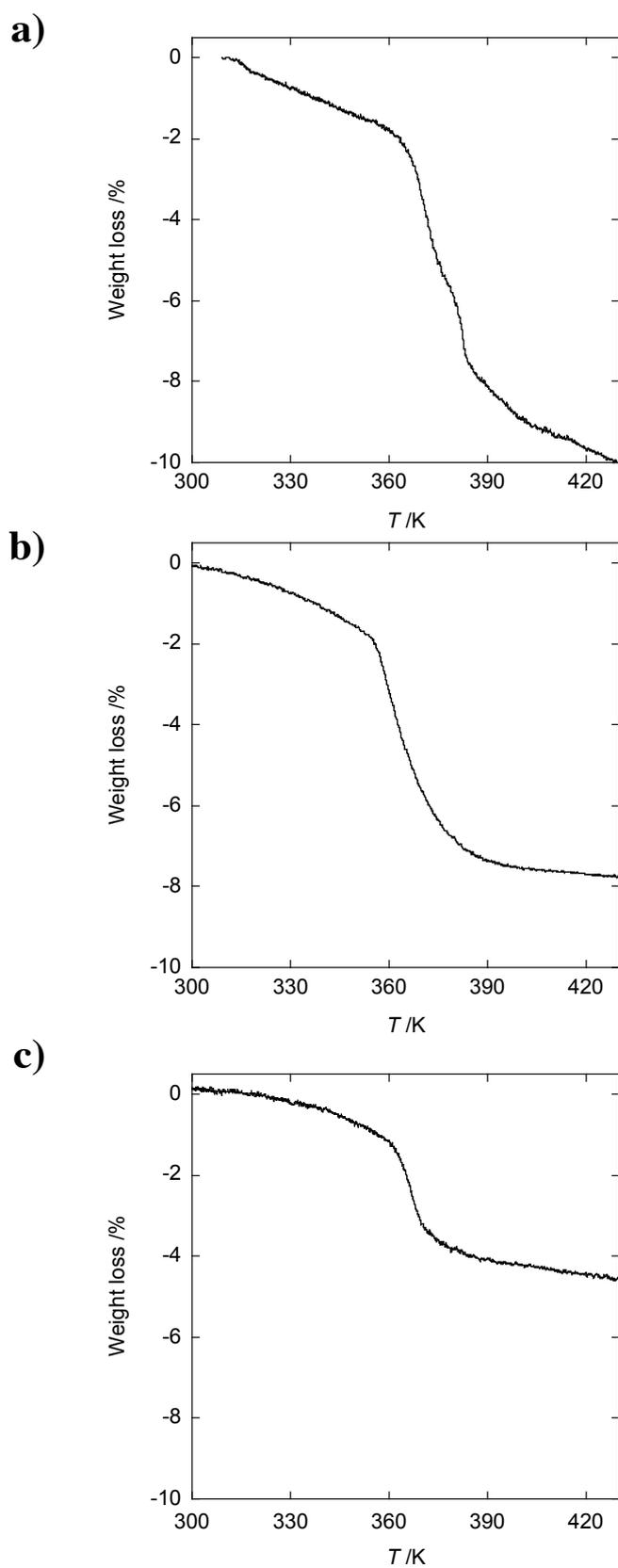


Figure S1. TG-DTA curves of a) the solvated **CoC0bpy**, b) the solvated **CoC1bpy**, and c) the solvated **CoC5bpy** recrystallized from toluene/acetonitrile. Each weight loss corresponds to the removal of the solvated toluenes, affording the desolvated samples.

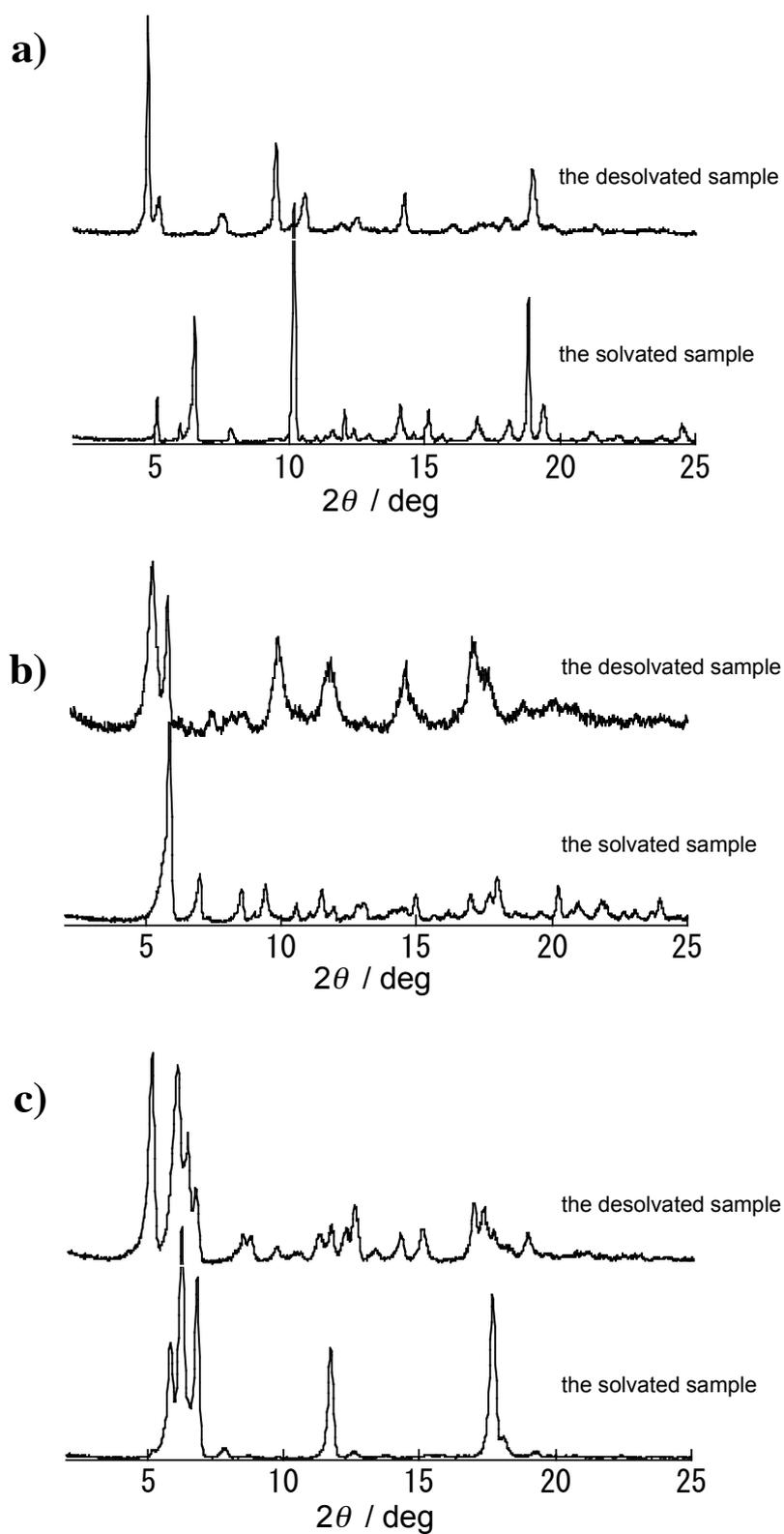


Figure S2. XRPD patterns of the solvated CoC_nbpy ($n = 0, 1, \text{ and } 5$) and the desolvated samples. The observed changes in the XRPD profiles are due to the removal of the toluene.

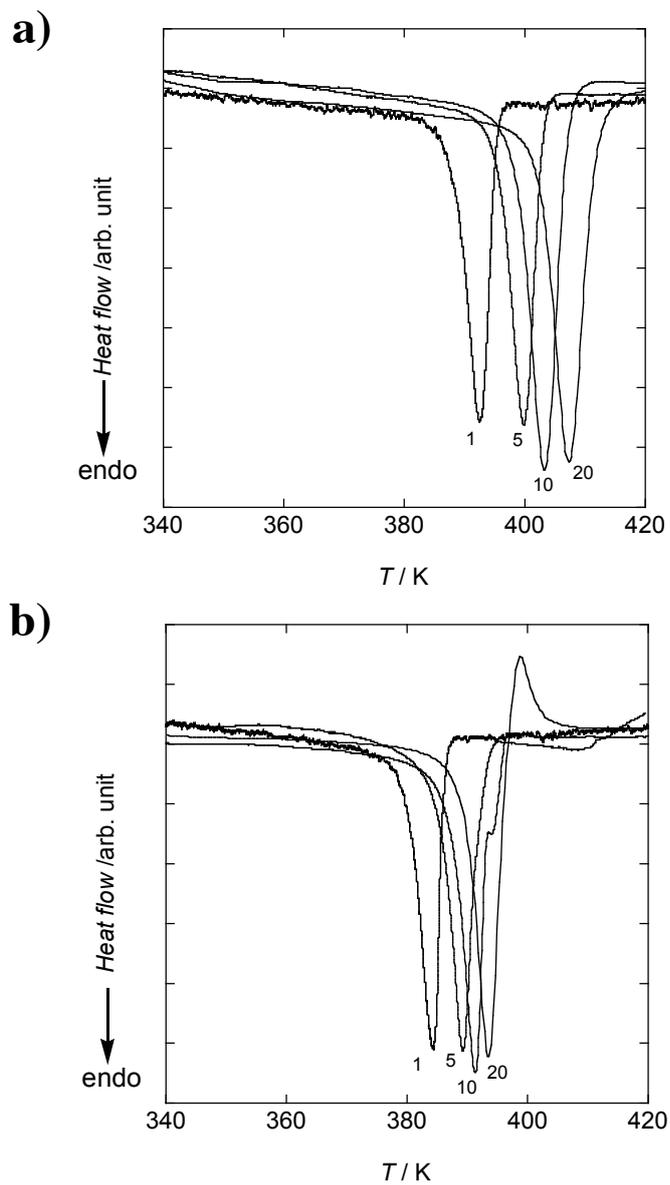


Figure S3. DSC curves of a) **CoC9bpy** and b) **CoC13bpy** under a scan rate of 1, 5, 10, and 20 K min^{-1} .