

研究論文

エチレンジアミンを用いて両親媒性基をもつ没食子酸と連結された
芳香族化合物の合成と熱応答特性

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Synthesis and thermoresponsive properties of aromatic compounds connected with gallic acid
bearing amphiphilic groups using an ethylene diamine spacerYuto NAKASHIMA[†], Masato ARAI[†], Kazuaki SATO[†] and Kazuaki ITO[†]

Aromatic compounds (**1-4**) connected with gallic acid bearing amphiphilic oligo (ethylene glycol) groups were synthesized using an ethylene diamine spacer. Their thermoresponsive properties (lower critical solution temperature behaviors) were investigated on the basis of their solute concentration dependence and the effect of salt or organic solvent addition in their aqueous solutions. In addition, temperature-sensitive fluorescence properties induced via aggregation during phase transition of the aromatic compounds (**4** and **8**) bearing pyrenyl groups were investigated.

Keywords : LCST behavior, OEG chain, aromatic hydrocarbon, AIE, salting-in effect, salting-out effect