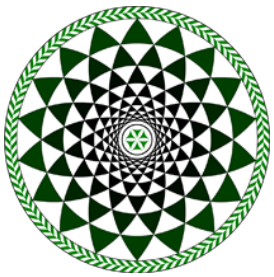

Contribution ID: **26** Type: **not specified**

Molecular Flexibility and Aggregation Structure of Liquid Crystals

Thursday, July 9, 2015 12:00 PM (30 minutes)

Our previous study based on structural thermodynamics [1-3] established that the conformation of alkyl chains attached to the end(s) of the rigid core part of mesogenic molecules is fully molten in any liquid crystalline (LC) mesophases. Besides, recently revealed is that the nano-segregated structure is a fundamental structure for layered (smectic) LCs formed by such molecules [4,5]. Based on these findings, in this talk, the interrelation will be discussed between aggregation structures in LCs and the molecular flexibility.

[1] K. Horiuchi, Y. Yamamura, R. Pelka, M. Sumita, S. Yasuzuka, M. Massalska-Arodz & K. Saito, J. Phys. Chem. B, 114, 4870 (2010).
[2] Y. Yamamura, T. Adachi, T. Miyazawa, K. Horiuchi, M. Sumita, M. Massalska-Arodz, S. Urban & K. Saito, J. Phys. Chem. B, 116, 9255 (2012).
[3] T. Adachi, H. Saitoh, Y. Yamamura, M. Hishida, M. Ueda, S. Ito & K. Saito, Bull. Chem. Soc. Jpn., 86, 1022 (2013).
[4] T. Miyazawa, Y. Yamamura, M. Hishida, S. Nagatomo, M. Massalska-Arodz & K. Saito, J. Phys. Chem. B, 117, 8293 (2013).
[5] K. Saito, T. Miyazawa, A. Fujimura, M. Hishida, H. Saitoh, M. Massalska-Arodz & Y. Yamamura, J. Chem. Phys., 139, 114902 (2013).

Primary author: Prof. SAITO, Kazuya (University of Tsukuba)

Presenter: Prof. SAITO, Kazuya (University of Tsukuba)

Session Classification: Soft Matter and Glassformers