## 清水 洋/ Shimizu, Yo

Born in 1956 特任教授 / Specially-Appointed Professor

国立大学法人 奈良先端科学技術大学院大学 Nara Institute of Science and Technology (NAIST), NUC.

マテリアル研究プラットフォームセンター

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先端科学技術研究科 物質創成科学領域

Graduate School of Science and Technology, Division of Materials Science 〒630-0192 奈良県生駒市高山町 8916-5/ 8916-5 Takayama, Ikoma, 630-0192 Nara, Japan



B.S. in 1981(Department of Industrial Chemistry, Faculty of Engineering, Kyoto Institute of Technology, Japan)

M.S. in 1983 (Division of Process Engineering, Graduate School of Engineering, Osaka University, Japan)
Ph.D. in 1986 (Division of Process Engineering, Graduate School of Engineering, Osaka University, Japan)
for the thesis, "Studies on Liquid Crystalline and Photoconducting Properties of Heteroaromaticscontaining Mesogens" (Supervisor: Prof. Shigekazu Kusabayashi)

#### **Professional Career**

1986-1990 Sumitomo Electric Industries, Ltd.: R&D of highly functional organic materials (organic nonlinear optical materials, conducting polymers)

1990-1917 National Institute of Advanced Industrial Science and Technology (AIST), Kansai Center: R&D of functional liquid crystals (Liquid crystalline semiconductors and their application to devices, metallomesogen, photo-responsive liquid crystals, etc.)

1917- NAIST: Collaboration manager in Governmental political program for science and technology (ARIM program and Nanotechonology platform program), R&D of functional liquid crystals (novel photo-functional liquid crystals).

#### **AWARDS**

 2006 Outstanding Poster Presentation Award, The 7<sup>th</sup> International Conference on Nano-Molecular Electronics, Dec. 13-15, 2006. Hirosato Monobe, Kunio Awazu and Yo Shimizu,

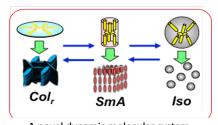


- "Alignment control of columnar liquid crystals with wavelength tunable CO<sub>2</sub> laser irradiation"
- 2008 Outstanding paper award (section A) of The Japanese Liquid Crystal Society (JLCS) Yo
   Shimizu, Kazuma Oikawa, Kenich Nakayama and Daniel Guillon, "Mesophase Semiconductors and the Field Effect Transistors", J. Mater. Chem., 2007, 17, 4223-9 (highlight article, invited).
- 2013 JLCS Award (academic contribution) for "Studies on novel functions based on dynamic aspects of liquid crystals"
- 2014 JLCS Kousai Award (best poster presentation by academic young researchers), <u>Lydia Sosa-Vargas</u>, Fabien Nekelson, Daiju Okuda, Minokazu Takahashi, Hiroyuki Yoshida, Akihiko Fujii, Masanori Ozaki and Yo Shimizu, "Optimisation of the charge transport properties by use of novel perfluoroalkylated phthalocyanine/fullerene systems".
- 2023 JLCS Wakaba Award (best poster presentation by students), <u>Asumi OKA</u>, Hikaru SANADA, Koji KITAGAWA, Noboru OHTA, Yohei HATTORI, Tsuyoshi KAWAI, Kingo UCHIDA and Yo SHIMIZU, "Mesomorphic phase transitions of dodecyloxy homologue of the ether-linked alkoxyazobenzene-triphenylene derivatives", 2023 The annual meeting of the Japanese Liquid Crystal Society (JLCS) at Tokyo Univ. Sci. Tech.
- Best Poster Award (poster presentation by students), 11<sup>th</sup> East-Asia Symposium on Functional Dyes and Advanced Materials (NTU, Taipei), <u>Asumi OKA</u>, Hikaru SANADA, Koji KITAGAWA, Noboru OHTA, Yohei HATTORI, Tsuyoshi KAWAI, Kingo UCHIDA and Yo SHIMIZU, "Mesomorphic phase transitions of dodecyloxy homologue of the ether-linked alkoxyazobenzene-triphenylene derivatives".

#### Research interests

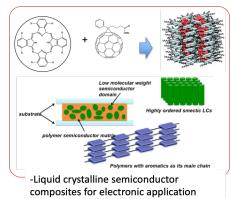
Liquid crystal, soft matter, organic electronic materials

# Dynamic molecular systems: liquid crystals with conformation change on mesomorphic phase transition



A novel dynamic molecular system Rod-disc compatible liquid crystals In thermal & photonic processes

### Liquid crystalline composites for organic electronics



#### **Publications**

191 original papers & proceedings, 23 topics &review articles