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Physical Chemistry of Interfaces
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Date of Birth : 11 April, 1952

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1975 : graduated from Kyushu University, Department of Chemistry

1980 : Ph.D from Kyushu University

1990-1991: Max Planck Institute (Goettingen)

1997 : Professor, Department of Chemistry, Faculty of Sciences, Kyushu University

2010 : Dean, Faculty of Sciences, Kyushu University

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Keywords:

Soft interfaces, Thermodynamics, Adsorption, Phase transition at interfaces, Line tension, Self-organized systems

Publication list:2012- present, total publications (peer reviewed) : about 200

1. R. Kauer, S. Gupta, SK Mehta, Y. Imai, T. Takiue, H. Matsubara, **M. Aratono**
Probing the self-aggregation behavior and counter ion distribution of a copper surfactant complex
New J. Chem., **38**, 3925-3932(2014)
2. HH. Li, Y. Imai, T. Takiue, H. Matsubara, **M. Aratono**
Thermodynamic study on the interaction of imidazolium salts and POE-type nonionic surfactant in the adsorbed film
Colloid Polymer Sci. **292**, 1209-1215(2014)
3. T. Takiue, M. Shimasaki, M. Tsuura, H. Sakamoto, H. Matsubara, **M. Aratono**
Surface Freezing and Molecular Miscibility of Binary Alkane-Alkane and Fluoroalkane-Alkane Liquid Mixtures
J. Phys. Chem. B **118**, 1519-1526 (2014)
4. H. Takumi, Y. Imai, N. Toh, H. Matsubara, T. Takiue, **M. Aratono**
Miscibility of imidazolium and pyridinium ionic liquids including BF₄⁻ at the air/water interface
Colloid Surfaces A **441**, 59-65 (2014)
5. SK. Mehta, Y. Imai, H. Takumi, K. Shibata, H. Sakamoto, T. Takiue, H. Matsubara, **M. Aratono**
Temperature effect on the surface phase transitions of monolayer films of C12E1 at air/water interface
Colloid Polymer Sci., **11**, 2647-2652 (2014)
6. H. Matsubara, B. Ushijima, BM. Law, T. Takiue, **M. Aratono**
Line tension of alkane lenses on aqueous surfactant solutions at phase transitions of coexisting interfaces

- Adv. Colloid Interface Sci.*, **206**, 186-194 (2014)
7. HH. Li, Y. Imai, T. Takiue, H. Matsubara, **M. Aratono**
Effect and mixing of counter anions at the surface of aqueous solution of imidazolium-based ionic liquids
Colloids Surfaces A, **427**, 26- 32 (2013)
 8. Y. Takajo, M. Yamanaka, RG. Rubio, T. Takiue, H. Matsubara, **M. Aratono**
Synergistic Interaction of Short-Chain Phospholipids in the Adsorbed Film and Micelles: Study by Surface Tension and Dilational Viscoelasticity Measurements
J. Phys. Chem. C, **117**, 1097-1104 (2013)
 9. H. Matsubara, T. Takaichi, T. Takiue, **M. Aratono**, A. Toyoda, K. Iimura, CD. Bain
Morphological Transformations in Solid Domains of Alkanes on Surfactant Solutions
J. Phys. Chem. Lett. **4**, 844-848 (2013)
 10. H. Matsubara, T. Takaichi, T. Takiue, . . . , **M. Aratono**
X-ray reflectivity measurements for freezing transitions of alkane wetting film on surfactant surface.
Bull. Chem. Soc. Jpn., **86**, 492-496 (2013)
 11. T. Takiue, T. Tottori, K. Tatsuta, H. Matsubara, . . . , **M. Aratono**
Multilayer Formation of the Fluoroalkanol-omega-Hydrogenated Fluorocarbon Mixture at the Hexane/Water Interface Studied by Interfacial Tensiometry and X-ray Reflection
J. Phys. Chem. B, **46**, 13739-13748 (2012)
 12. H. Takumi, M. Noda, H. Matsubara, T. Takiue, **M. Aratono**
Dynamics of Condensed Monolayer and Multilayer Formation of Hexadecylpyridinium Chloride-Sodium Dodecyl Sulfate Mixed Systems at the Air/Water Interface
Chemistry Letters, **41**, 1218-1220 (2012)
 13. Y. Imai, HH. Li, H. Takumi, . . . , T. Takiue, H. Matsubara, **M. Aratono**
Study on the distribution of binary mixed counterions in surfactant adsorbed films by total reflection XAFS measurements
J. Colloid Interface Sci., **388**, 219-224 (2012)
 14. E. Ohtomi, N. Ikeda, Y. Tokiwa, . . . , T. Takiue, **M. Aratono**, H. Matsubara
Thin Thick Transition of Foam Film Driven by Phase Transition of Surfactant-Alkane Mixed Adsorbed Film
Chemistry Letters, **41**, 1300-1302 (2012)