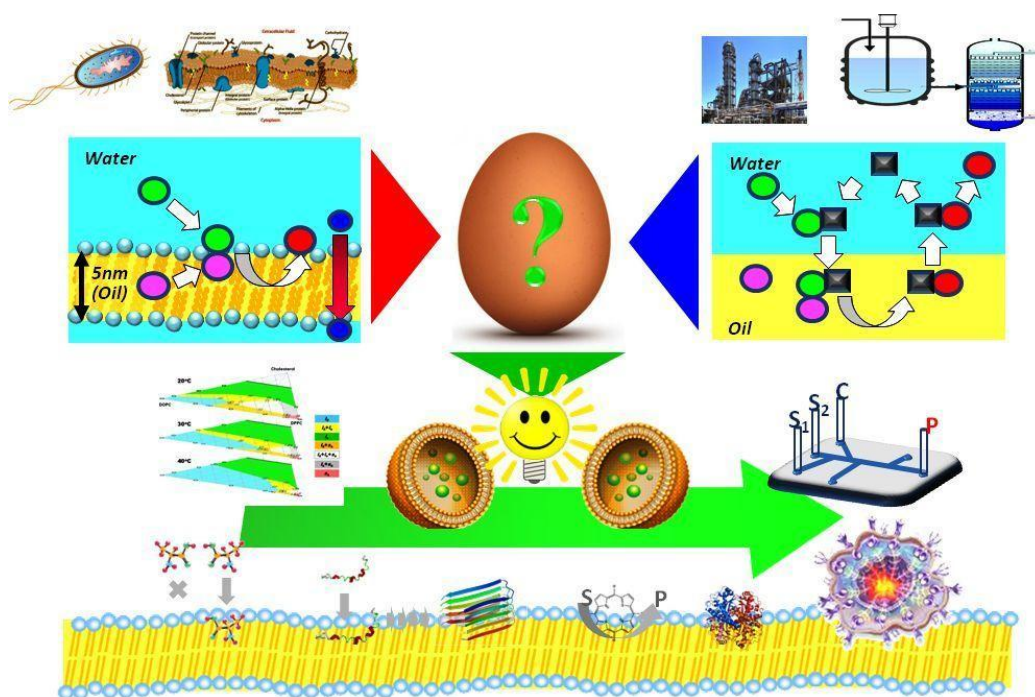


“Membranome” for “Bio-Inspired Chemical Engineering”

(Membranome2 / MSB9 / ESL8)



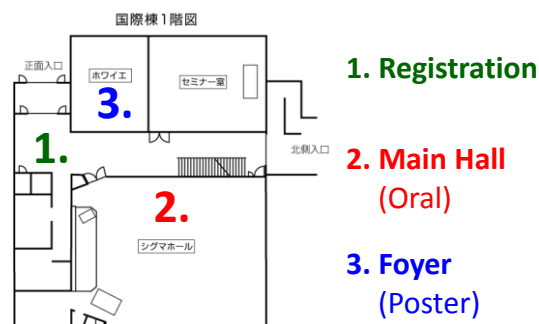
2013. 9. 13 (Fri)

*Sigma International Hall,
Osaka University,
Toyonaka, Osaka, Japan*

● VENUE



**Sigma International Hall,
Osaka University,
1-3, Machikaneyama-cho, Toyonaka,
Osaka 560-8531, Japan**



● ORGANIZING COMMITTEE

<Executive Committee>

- H. Umakoshi, Prof. Dr., Grad. Sch. of Eng. Sci., Osaka Univ.
- K. Suga, Assist. Prof., Dr., Grad. Sch. of Eng. Sci., Osaka Univ.
- P. Walde, Prof. Dr., Department of Materials, ETH Zürich
- S. Ichikawa, Prof., Dr., Grad. Sch. of Life and Env. Sci., Univ. of Tsukuba
- T. Shimanouchi, Assoc. Prof. Dr., Grad. Sch. of Env. and Life Sci., Okayama Univ.
- K. Hayashi, Assist. Prof., Dr., Department of Chem. Eng., Nara Nat'l. Coll. of Tech.
- T. Ishigami, JSPS Fellow, Grad. Sch. of Eng. Sci., Osaka Univ.

<Steering Committee >

- K. Sugita, J. Chinzaka, T. Hinoyama, F. Iwasaki, Y. Kaneko, M. Kiriishi, D. Kondo, Y. Takaya,
- M. Hirose, K. Fukumoto, M. Kouta, K. Goshima, Y. Tsujimoto, A. Hamasaki, T. Yoshida, Y. Kishi

● SUPPORTS

NEXT Generation World-Leading Researchers of the CSTP/JSPS (GR066)
Interactive Materials Science Cadet Program (Eng. Sci., Osaka Univ.)

● REGISTRATION & BANQUET

Poster Registration: 1-Page Abstract should be sent to secretariat before “September 6th”
Participation: Registration is needed. Please e-mail to secretariat before “September 9th”

Registration Fee: **Free**

Banquet Fee (Drink): **2000 JPY** / at Senri-Hankyu Hotel

CONTACT INFORMATION

Secretariat (Ms. Keiko Fukumoto)

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<http://www.membranome.jp/B-ICE/>

NEXT Symposium **“Membranome” for “Bio-Inspired Chemical Engineering”**

Date: 2013. 9. 13 (Fri)

Place: Sigma International Hall, Osaka University, Toyonaka, Osaka, Japan

9:30	Opening Remarks	***** Chair: Prof. UMAKOSHI *****
9:35	Pesticide and Biomembrane: Impact and Resistance	Le Quoc TUAN (Nong Lam Univ.)
9:55	Stress Induced Cell Membranes Injury and Activation of Sigma E Promoter in <i>Escherichia coli</i>	Huong Thi BUI (Delft Univ. of Tech.)
10:15	Active Targeting and Attacking of Novel Span80 Vesicles at Tumors in Vitro and in Vivo toward Cancer Therapy in DDS	Keiichi KATO (Ehime Univ.)
[Coffee Break]		
10:50	Stable and Functional Model Biological Membrane Composed of Polymeric and Fluid Lipid Bilayers	Kenichi MORIGAKI (Kobe Univ.)
11:10	Self-assembly of Novel Hybrid Biopolymer	Kien Xuan NGO (AIST)
11:30	Development of DNA-Aptamer Based Sensor for Determination of Antibiotic Tetracycline	Huong Thi VU (Hanoi Natl. Univ. Edu.)
11:50	Bio-Inspired Chemical Engineering Based on Membranome	Hiroshi UMAKOSHI (Osaka Univ.)
[Lunch Break and Poster]		
12:50	“2-min Short Oral” for Poster Presentation Poster Presentation at Foyer	***** Chair: Assis. Prof. HAYASHI ***** Poster Presenters
14:20	Localized Reactions in Vesicle Systems	***** Chair: Prof. ICHIKAWA ***** Peter WALDE (ETH Zurich)
15:20	Use Liposome Membrane as a Platform of Asymmetric Recognition and Conversion	Takaaki ISHIGAMI (Osaka Univ.)
15:40	Soft Template Syntheses of Hollow Inorganic Particles in the Presence of Sodium Oleate	Haruyuki ISHII (Tohoku Univ.)
16:00	Preparation of Phospholipid-Based Giant Liquid Crystalline Aggregates and Their Optical Properties	Takashi KUROIWA (Tokyo City Univ.)
[Coffee Break]		
16:30	Lipid Vesicles with High Entrapment Yield Prepared by Using Multiple Emulsions	***** Chair: Prof. WALDE ***** Sosaku ICHIKAWA (Univ. of Tsukuba)
16:50	Rapid Formation of Lipid Vesicles by Using a Microfluidic Platform	Ho-Sup JUNG (Seoul Nat’l Univ.)
17:10	Kinetics of Interaction between Immobilized Liposome and Amyloid β	Seiichi MORITA (Wakayama Nat’l. Coll. Tech.)
17:30	Span 80 Vesicle Has Unique Membrane, Resulting in the Easy Interaction with Phospholipids Vesicle	Keita HAYASHI (Nara Nat’l. Coll. Tech.)
17:50	Design of Nanosized Domain on Liposome Membrane for Recognition and Functionalization of Biomolecules	Keishi SUGA (Osaka Univ.)
18:10	Closing Remarks	
19:00	[Banquet] Senri-Hankyu Hotel (by Bus)	
	Amyloid Fibril Formation on Ordered Interfaces and Use of Biomass-Related Library	Toshinori SHIMANOUCHI (Okayama Univ.)

Poster Presentation (12:10-14:00)

P-01	Takaaki ISHIGAMI (Osaka Univ.)	Analysis of Chiral Recognition Induced by Liposome Membrane; Effects of Surface Polarity at Initial Adsorption Step
P-02	Masanori HIROSE (Osaka Univ.)	L-Proline-Catalyzed Michael Addition on Liposome Membranes in Water
P-03	Yoshinori KANEKO (Osaka Univ.)	Liposome-Induced Homochiral Polymerization of Amino Acids in Aqueous Media
P-04	Kazuma SUGITA (Osaka Univ.)	Characterization of Liposome Membrane Immobilized in Hydrogel and Its Application to Optical Resolution of Amino Acids
P-05	Fumihiko IWASAKI (Osaka Univ.)	Adsorptive Behavior of Substrates and Regulation of Cycloaddition by Using Cationic Liposome
P-06	Junpei CHINZAKA (Osaka Univ.)	Control of Consecutive Reactions of TCA cycle-Related Enzymes on Liposome Membrane
P-07	Takushi HINOYAMA (Osaka Univ.)	Study on J-Aggregates of Porphyrin on Liposome Membrane toward Bio-Inspired Photoreduction System
P-08	Keisuke MIZOTE (Osaka Univ.)	Physicochemical Properties of Lipid Membrane Including Cardiolipin for Functional Elucidation of TLR4
P-09	Madoka KIRIISHI (Osaka Univ.)	Analysis of Transport of Drug Molecules across the Nano Membrane Interface of Vesicles and Its Application
P-10	Shogo TAGUCHI (Nara Nat'I Coll. Tech.)	Characterization of Liposomes Prepared by Non-Solvent Supercritical Reverse Phase Evaporation Method
P-11	Dai KONDO (Osaka Univ.)	Preparation and Characterization of Chiral Fatty Acid Vesicle Modified with Ricinoleic Acid
P-12	Gaku MORIMOTO (Univ. of Tsukuba)	Conventional and efficient preparation of size-controlled vesicle entrapping hydrophilic materials using a combination of lipid-coated ice droplet hydration method and extrusion technique
P-13	Yukari NISHITA (Univ. of Tsukuba)	Challenges for the Construction of Multicompartment Giant Vesicles by Lipid-Coated Ice Droplet Hydration Method
P-14	Tsuyoshi YAMASHITA (Kobe Univ.)	Formation Control of Reverse Micelles of Ionic Surfactant by Complexation with Counter-ionic Molecule
P-15	Yuki TAKAYA (Osaka Univ.)	Estimation of Phase Separation of Heterogeneous Giant Vesicles by Using Microscopic Raman Analysis
P-16	Toshinori SHIMANOUCHI (Okayama Univ.)	Amyloid Fibril Formation on Ordered Interfaces and Use of Biomass-Related Library
P-17	Koichiro SHIOMORI (Miyazaki Univ.)	Formation Control of Reverse Micelles of Ionic Surfactant by Complexation with Counter-ionic Molecule
P-18	Momoko KOUTA (Osaka Univ.)	Thermodynamic Properties of DOPC/DPPC Liposomes: Phase Separation Analysis Based on DSC
P-19	Keishi SUGA (Osaka Univ.)	Liposome Membranes Enhance Self-Cleavage of Hammerhead Ribozyme in the Absence of Magnesium (II)
P-20	Tomohiro YOSHIDA (Osaka Univ.)	Preparation of Au Nano Particle-Hybridized Liposomes towards Sensitive Analysis of Lipid Membrane Surface by SERS