

International Workshop on  
Self-organization in Chemical and Biological Systems:  
Modeling, Analysis and Simulation

Organizers: M. Mimura, Y. Nishiura, D. Ueyama, T. Yamaguchi

Date: 7th - 9th July 2009

Place: Shikon-Kan, Surugadai Campus (Tokyo), Meiji University

<http://www.meiji.ac.jp/cip/english/other/surugadai.html>

**7<sup>th</sup> (Tue.)**

14:00 – 14:40

M. Mimura (Meiji University)

“Self-organized patterns in smoldering combustion: modeling and simulation”

14:50 – 15:30

T. Sakurai (Chiba University)

“Pattern formation in a chemotaxis-diffusion-growth system”

*Break*

16:00 – 16:40

I. Takagi (Tohoku University)

“Localized patterns generated by an activator-inhibitor system in inhomogeneous media”

16:50 – 17:30

T. Ogawa (Osaka University)

“Oscillating patterns on sphere via wave bifurcation”

**8<sup>th</sup> (Wed.)**

10:30 – 11:10

K. Yoshikawa (Kyoto University)

“Spatio-temporal structure under constant photon-flux”

11:20 – 12:00

T. Yamaguchi (AIST)

“Periodic self-assembly of colloidal particles in dewetting process”

*Lunch*

14:00 – 14:40

Z. Rácz (Eötvös University)

“Control of precipitation patterns: I. Theory”

14:50 – 15:30

A. Volford (Budapest University)

“Control of precipitation patterns: II. Experiments”

*Break*

16:00 – 16:40

D. Hilhorst (Paris-Sud University)

“A mathematical model for Liesegang bands in one space dimension”

16:50 – 17:30

Y. Nishiura (Hokkaido University)

“Collision dynamics in dissipative systems”

18:00 -

*Banquet* (at Meiji University's Liberty Tower, on 23<sup>rd</sup> floor.)

**9<sup>th</sup> (Thu.)**

10:30 – 11:10

H. Miike (Yamaguchi University)

“Self-organizing Image Processing in Discrete Reaction-Diffusion Systems”

11:20 – 12:00

F. Izsák (Eötvös University)

“Centrally symmetric Liesegang patterns: simulation with an adaptive grid PDE method”

*Lunch*

14:00 – 14:40

A. Toramaru (Kyushu University)

“Effects of front propagation velocity on the Liesegang patterns: An experimental study”

14:50 – 15:30

D. Ueyama (Meiji University)

“Pattern formation in precipitation systems -modeling and simulations-”

*Break*

16:00 – 16:40

M. Matsushita (Chuo University)

“Colony Formation in Bacteria: Experiments and Modeling”

16:50 – 17:30

K. Showalter (West Virginia University)

“Density Dependent Behavior in Populations of Discrete Chemical Oscillators”