TENTH WORKSHOP ON MEMBRANE COMPUTING, WMC10
Curtea de Argeş, Romania, August 24–27, 2009

PROGRAM

Monday, August 24

8.30 – 10.00:	Registration
10.00 – 10.30:	Opening ceremony
10.30 – 11.00:	Coffee break
11.00 – 11.45:	**S. Marcus (invited speaker): Bridging membrane computing and biosemiotics**
11.45 – 12.05:	R. Freund, M. Kogler: Hybrid transition modes in (tissue) P systems
12.05 – 12.35:	A. Castellini, V. Manca, Y. Suzuki: Metabolic P system flux regulations by artificial neural networks
12.35 – 12.55:	R. Gutiérrez-Escudero, M.J. Pérez-Jiménez, M. Rius-Font: Characterizing tractability by tissue-like P systems
13.00 – 14.30:	Lunch
15.00 – 15.45:	**E. Csuhaj-Varjú (invited speaker): P automata: Concepts, results and new aspects**
15.45 – 16.15:	A. Valsecchi, A.E. Porreca, A. Leporati, G. Mauri, C. Zandron: An efficient simulation of polynomial-space Turing machines by P systems with active membranes
16.15 – 16.35:	T. Hinze, T. Lenser, G. Escuela, I. Heiland, S. Schuster: Modelling signalling networks with incomplete information about protein activation states: A P system framework of the KaiABC oscillator
16.35 – 17.00:	Coffee break
17.00 – 17.30:	R. Nicolescu, M.J. Dinneen, Y.-B. Kim: Discovering the membrane topology of hyperdag P systems
17.30 – 17.40:	L. Cienciala, L. Ciencialová: Eco-P colonies
18.00 – 19.30:	Visit of Curtea de Argeş Monastery
18.00 – 20.00:	PhD course about software engineering approaches in membrane systems (M. Gheorghe, F. Ipate, V. Manca, M.J. Pérez-Jiménez)
20.00 – 22.00:	Dinner

Tuesday, August 25

9.00 – 9.45:	**R. Freund (invited speaker): Transition and halting modes for tissue P systems**
9.45 – 10.30:	**P. Frisco (invited speaker): Conformon P systems and topology of information flow**
10.30 – 10.50:	T.-O. Ishdorj, A. Leporati, L. Pan, J. Wang: Solving NP-complete problems by spiking neural P systems with budding rules
10.50 – 11.00:	A. Obtułowicz: Approaching a question of biologically plausible applications of spiking neural P systems
11.00 – 11.30:	Coffee break
11.30 – 12.00:	P. Sosik, A. Păun, A. Rodriguez-Patón, D. Pérez: On the power of computing with proteins on membranes
12.00 – 12.20:	M. Garcia-Quismondo, R. Gutiérrez-Escudero, I. Pérez-Hurtado, M.J. Pérez-Jiménez, A. Riscos-Núñez: An overview of P-lingua 2.0
12.20 – 12.40:	M. Cardona, M.A. Colomer, A. Margalida, I. Pérez-Hurtado, M.J. Pérez-Jiménez, D. Sanuy: A P system based model of an ecosystem of some scavenger birds
12.40 – 12.50:	I.I. Ardelean: Could procaryotic (as well as eukaryotic cells) provide software and hardware for P systems based computers?
13.00 – 14.30:	Lunch
15.00 – 15.45:	**M. Gheorghe (invited speaker): Formal verification and testing based on P systems**
15.45 – 16.05:	J. Wang, H.J. Hoogeboom, L. Pan, Gh. Păun: Spiking neural P systems with weights and thresholds
16.05 – 16.35:	M.A. Gutiérrez-Naranjo, M.J. Pérez-Jiménez: Searching previous configurations in membrane computing
16.35 – 17.00:	Coffee break
17.00 – 17.30:	O. Agrigoroaiei, G. Ciobanu, A. Resios: Evolving by maximizing the number of rules: Complexity study
17.30 – 19.00:	Special session: WMC10 awards, WMC11 venue, EMCC meeting, others
20.00 – ??.??:	Workshop special dinner

Wednesday, August 26

9.00 – 9.45:	**O.H. Ibarra (invited speaker): A look back at some early results in membrane computing**
9.45 – 10.30:	**V. Manca (invited speaker): From P to MP systems**
10.30 – 10.40:	M. Garcia-Quismondo, B.M. Henley, I. Pérez-Hurtado, A. Riscos-Núñez: A first attempt to model Notch signalling by means of P systems
10.40 – 11.00:	A. Alhazov, E. Boian, S. Cojocaru, Yu. Rogozhin: Modelling inflections in Romanian language by P systems with string replication
11.00 – 11.30:	Coffee break
11.30 – 11.50:	C. Liu, G. Zhang, H. Liu, M. Gheorghe, F. Ipate: An improved membrane algorithm for solving time-frequency atom decomposition
11.50 – 12.00:	Gh. Ştefănescu, T. Şerbănuţă, C. Chira, G. Roşu: P systems with control nuclei
12.00 – 12.20:	P. Cazzaniga, G. Mauri, L. Milanesi, E. Mosca, D. Pescini: A novel variant of tissue P systems for the modelling of biochemical systems
12.20 – 12.40:	L. Pan, X. Zeng: A note on small universal spiking neural P systems
12.40 – 12.50:	R. Barbuti, A. Maggiolo-Schettini, P. Milazzo, S. Tini: On the efficiency of promoters and of cooperative rules in P systems
13.00 – 14.30:	Lunch
15.00 – ??.??:	Excursion to mountains, with dinner

Thursday, August 27

9.00 – 9.45:	**G. Mauri (invited speaker): Energy-based models of P systems**
9.45 – 10.30:	**M.J. Pérez-Jiménez (invited speaker): A computational complexity theory in membrane computing**
10.30 – 10.50:	B. Aman, G. Ciobanu: Typed membrane systems
10.50 – 11.00:	N. Murphy, D. Woods: Uniformity - uncovering the frontier of parallelism
11.00 – 11.30:	Coffee break
11.30 – 11.50:	S. Verlan: Look-ahead evolution for P systems
11.50 – 12.10:	V. Nguyen, D. Kearney, G. Gioiosa: A region-oriented hardware implementation of membrane computing applications and its integration into Reconfig-P
12.10 – 12.30:	G. Franco, V. Manca, R. Pagliarini: Regulation and covering problems in MP systems
12.30 – 12.40:	E. Csuhaj-Varjú, S. Verlan: Power and size of generalized communicating P systems with minimal interaction rules
13.00 – 14.30:	Lunch
15.00 – 15.20:	M.A. Martinez-del-Amor, I. Pérez-Hurtado, M.J. Pérez-Jiménez, J.M. Cecilia, G.D. Guerrero, J.M. Garcia: Simulating active membrane systems using GPUs
15.20 – 15.40:	T.Y. Nishida: Reversible P systems with symport/antiport rules
15.40 – 16.00:	A. Alhazov, K. Morita: On reversibility and determinism in P systems
16.00 – 16.20:	R. Lefticaru, F. Ipate, M. Gheorghe, G. Zhang: Tuning P systems for solving the broadcasting problem
16.20 – 16.30:	A. Alhazov, A. Krassovitskiy, Yu. Rogozhin, S. Verlan: A note on P systems with small-size insertion and deletion
16.30 – 17.00:	Coffee break
17.00 – 17.20:	J.A. de Frutos, L. Fernandez, F. Arroyo: Decision trees for obtaining active rules in transition P systems
17.20 – 17.30:	V. Mitrana, J.M. Sempere: Accepting evolutionary P systems
17.30 – 17.45:	Closing
20.00 – 21.30:	Dinner