

CONTENTS

Preface	3
A. ATANASIU, C. MARTÍN-VIDE Arithmetic with Membranes	5
A. BARANDA, J. CASTELLANOS, R. GONZALO, F. ARROYO, L.F. MINGO Data Structures for Implementing Transition P Systems in Silico	21
H. CIRSTEA, C. KIRCHNER Rewriting and Multisets in ρ -Calculus and ELAN	33
E. CSUHAI-VARJÚ, G. VASZIL Test Tube Systems with Objects	49
A. DOVIER, C. PIAZZA, G. ROSSI Multiset Rewriting by Multiset Constraint Solving	59
R. FREUND Sequential P Systems	77
P. FRISCO On Two Variants of Splicing P Systems	89
S. KOBAYASHI Concentration Prediction of Ligation Reaction Systems	101
S.N. KRISHNA, K. LAKSHMANAN, R. RAMA Hybrid P Systems	111
M. KUDLEK Algebraic Characterization of Multiset Languages over Different Multiset Structures	125
M. MADHU, K. KRITHIVASAN P Systems with Dynamic Membrane Polarization	135
V. MANCA Monoidals for Molecules and Membranes	155
C. MARTÍN-VIDE, Gh. PĂUN, A. RODRÍGUEZ-PATON P Systems with Immediate Communication	171
T.Y. NISHIDA Multiset and K-subset Transforming Systems: Nondeterministic Model and Probabilistic Model ...	183
A. OBTULOWICZ Deterministic P Systems for Solving SAT-problem	195

A. PĂUN	
On P Systems Partially Parallel Rewriting	203
M. STURM, T. HINZE	
Distributed Splicing of RE with 6 Test Tubes	211
H. SUZUKI	
Core Memory Objects with Address Registers Representing High-dimensional Interaction	225
C. ZANDRON, C. FERRETTI, G. MAURI	
Using Membrane Features in P Systems	241