

EDITORIAL

This Volume 19 of the *Journal of Automata, Languages, and Combinatorics* is dedicated to Erzsébet Csuhaj-Varjú on the occasion of her birthday (which one, we keep it secret...). It is impossible to cover all aspects of the scientist, teacher, supervisor, and person Erzsébet Csuhaj-Varjú in a short editorial. Thus we restrict to two features: professionalism and devotion.



Erzsébet Csuhaj-Varjú (or Erzsi – as the friends call her) is one of the most active lady researchers in theoretical computer science of the last decades, well-known already since the eighties of the century recently ended. She has written more than 170 scientific contributions to the automata and formal language theory, her main areas of interest. But more important, she has opened several research vistas, sometimes in collaboration with colleagues from several countries. Just three examples from a list which can be longer:

- cooperating distributed grammar systems, a vigorous branch of grammar systems area, introduced by Erzsi – together with one of the editors – in 1988 (the paper appeared in 2000, in *EIK*, the predecessor of the present *JALC*),
- networks of language processors, introduced in 1997 together with Arto Salomaa,

- P automata, an important part of membrane computing, initiated in 2002, in collaboration with her student and collaborator György Vaszil.

Already more than hundred papers were published and several PhD theses were presented in each of these areas.

There are a lot of activities by Erzsébet Csuhaj-Varjú which are very important for the scientific community. We mention the organization of some conferences (e. g. DCFS 2003, FCT 2007, AFL 2008, and MFCS 2014), her membership in more than 50 program committees of mostly international conferences, her commitment in steering committees of conference series and in the institutions which host her.

This proves the professionalism of Erzszi in its creative direction and in organizational matters. The technical professionalism is illustrated by each of her published papers and conference presentations.

In what concerns the devotion – for the profession, for the institute where she worked or works, for her group, for her friends – many superlative words can be said. In particular, the three co-editors of this volume, old friends of Erzszi, since the times of the Young Computer Scientists Conferences in Smolenice, Slovakia (at that time, the beginning of eighties, Czechoslovakia), owe a lot to her – let us mention only the four authors monograph *Grammar Systems: A Grammatical Approach to Distribution and Communication* and, of course, the many joint papers.

The present volume is a direct consequence of what we mentioned above: many contributors have immediately answered positively our invitation to celebrate the Erzszi birthday by submitting a paper related to her work, thus, implicitly, the volume nicely provide hints to many areas where she contributed. We mention here only a few topics investigated in the papers which follows: networks of language processors, bio-inspired models of computations, membrane computing, P automata, grammar systems, grammars with regulated rewriting, descriptional complexity of automata/networks/systems, multi-tape automata, multi-dimensional grammars, combinatorics on words.

As active as ever, although intensively involved in the last years in teaching, for sure the community will also benefit in the years to come from the professionalism and the devotion of our colleague and friend.

Many Happy Returns, Erzszi! Long life, health and joy!

Jürgen Dassow, Magdeburg
 Jozef Kelemen, Opava
 Gheorghe Păun, Bucharest

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