Preface

All below published reports and communications of the 2nd International Conference on Chemistry of Highly-Organized Substances represents a new step in combining isolated effects in studying covalent and non-covalent multinuclear chemical individuals, which currently are separately investigated by the chemistry of supermolecular compounds and by supramolecular chemistry, respectively. The matter is the general theory, which has predicted the existence and specified the ways of synthesis of highly organized substances, i.e., high-molecular and supermolecular chemical individuals, the existence of which is forbidden by standard theory of non-stoichiometry.

As these publications illustrate, the substances under consideration are extraordinary interesting research objects. They are the carriers of an extreme amount of information and they can participate not only in the process of transcription and compilation, but also in the process of production (chemical manufacturing), and materialization of information (PMI) such as chemical assembly and molecular self-assembly similar to biosynthesis. As in PMI processes the unlimited amount of information can practically be made, and thus be embodied, basically, in any product of usual and high technology, the forthcoming technological development of these processes creates the prospect of producing an unlimited amount of every possible material resource for the cost of an inexhaustible non-material factor – information. The mastering of a chemical way of producing and "recording" any amount of information also creates a very attractive prospect for the natural sciences.

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