

This article was downloaded by:

On: 19 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



International Journal of Polymeric Materials

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713647664>

The IXth All-Union Scientific Symposium on “Synthetic Polymers for Medical Purposes”

T. E. Rudakova; G. E. Zaikov

To cite this Article Rudakova, T. E. and Zaikov, G. E.(1993) 'The IXth All-Union Scientific Symposium on “Synthetic Polymers for Medical Purposes”', International Journal of Polymeric Materials, 20: 3, 251 – 253

To link to this Article: DOI: 10.1080/00914039308048367

URL: <http://dx.doi.org/10.1080/00914039308048367>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

The IXth All-Union Scientific Symposium on “Synthetic Polymers for Medical Purposes”

T. E. RUDAKOVA and G. E. ZAIKOV

The IXth All-Union Symposium on “Synthetic Polymers for Medical Purposes” was held in the city of Zvenigorod (Moscow region) from 5 through 7 December 1991. The symposium was organized by the USSR Academy of Sciences, the Topchiev Institute of Petrochemical Synthesis, the Scientific Board on High-molecular Compounds within the Division of General and Industrial Chemistry of the Presidium of the Academy of Sciences, and by the GKNT Scientific Board. “Synthetic Polymers for Medical Purposes.” The symposium was sponsored by the Research Institute “Medpolymer,” the Research-Industrial Association “Biotekhnologiya,” and the Scientific Industrial Center of Biotechnology and Engineering.

Among the 120 participants to the symposium were scientists from Moscow, St. Petersburg, Kiev, Minsk, Riga, Tashkent, Tbilisi, Alma-Ata, Dushanbe, Dzerzhinsk and other cities. One of the plenary presentations was made by the Italian professor.

Prof. E. F. Panarin, an associate member of the Russian Academy of Sciences, (St. Petersburg) opened the first morning session as a vice-chairman of the Organizing Committee.

Of much interest was a plenary presentation of the paper prepared by Academician N. A. Platae, the Chairman of the Organizing Committee, and Prof. A. E. Vasiliev (Moscow). The latter read the paper on behalf of the authors, reporting on the transdermal and therapeutic systems which are new generation preparations for continuous and steady delivery of remedial substances through undamaged skin, a very effective treatment of chronic diseases. Both the systems already created and those under development were described. The relevant equipment for these systems was demonstrated and the problems of their full-scale production were discussed.

Another plenary paper was presented at the opening session by Prof. U. N. Musaev (Tashkent), who considered some problems of synthesis and preparation of polymeric forms of pharmacologically active monomers. The dependence of pharmacological activity on macromolecular characteristics of polymers and copolymers with present properties was shown. Prof. U. N. Musaev was the first to use pectin compounds obtained from cotton serum, apple, husks, and sugar beet

pulp as polymeric carriers. These synthetic preparations were found to be highly efficient in tests on experimental animals. Prof. R. D. Katsarava (Tbilisi) reported on new biocompatible water-soluble carriers of α -amino-acid-based biological substances.

The paper presented by Prof. I. K. Grigoryants, in collaboration with G. A. Trikhanova, M.Sc. in chemistry (Moscow), dealt with physico-chemical aspects of the technology of controlled formation of biologically and chemically active substances. The initial conditions necessary for functioning of macromolecular chemical machines without any external energy sources were described. New approaches to development of the systems of directed transport of medicines based on the use of self-accumulating supermolecular complexes were reported by Prof. E. S. Severin in collaboration with Prof. V. Yu. Alakhov and A. V. Kabanov, Ph.D. in chemistry (Moscow).

Prof. R. Barbucci (Italy) presented a very interesting paper on the synthesis and physico-chemical and biological characteristics of materials capable of binding up large amounts of heparin.

Prof. E. F. Panarin, an associate member of the USSR Academy of Sciences, presented interesting data on the correlation of biological activity of glucocorticoid hormones by synthetic polymers, L. L. Stoitskaya, M.Sc. in chemistry (Moscow), reported on macromolecular therapeutic systems of antiviral and antitumorogenic action. A very interesting paper on interpolyelectrolyte reactions as a basis for some new methods of diagnosis was presented by Prof. A. B. Zuzin prepared in collaboration with V. I. Izumrudov, Ph.D. in chemistry (Moscow). Prof. G. P. Vlasov (St. Petersburg) reported on synthetic immunoreagents. New express methods for testing carboplastics for the purpose of their application in medicine were reported by Doctor T. E. Rudkova and Prof. G. E. Zaikov (Moscow).

According to the provisional program, about 132 exposition papers were presented at the sessions.

In addition to presentations made at the symposium, 26 papers which were not included in the program but were of certain interest to the scientific community were published in "Abstracts" of the symposium.

Prof. E. F. Panarin spoke at the closing session of the symposium. He noted that, unlike the previous symposium, the current one dealt with the most topical and practical problems facing health care. He also stressed the importance of research work in the field of physico-chemical properties of macromolecules and called for paying more attention to the problems of synthesis process control. Panarin mentioned the fact that the chemistry of medico-biological polymers has become a new speciality and suggested that it be taught at the higher educational establishments.

To the regret of the participants no papers were presented by medical workers, whose needs and requirements should be considered as determining factors in research. It was proposed that a review report on the latest achievements in molecular biology should be presented at the forthcoming symposium, with pharmacologists being invited to the symposium since the tasks before the scientists

should be formulated by pharmacologists and medical workers. Also proposed for the next symposium was the idea of a roundtable talk with a discussion of one or two problems.

In his speech Prof. U. N. Musaev concluded the symposium with a proposal to convene the next symposium in Tashkent in 1993.

The materials of the Conference are available in the library of the Institute of Chemical Physics and also from the authors of this communication.