

50 YEARS OF CELLULOSE CHEMISTRY AND TECHNOLOGY

In the academic year 1949/1950, the Cellulose department established a year earlier in Bucharest, was transferred to Iasi, and the responsibility for coordinating it lay with Academician Cristofor Simionescu, then associate professor. The core of the department was formed by Assoc. Prof., Eng. Vasile Diaconescu (later professor) and Profs.-to-be Elena Calistru and Emanuel Poppel. The team was then completed by Dorel Feldman, Grigore Stejar, Elena Corlăţeanu and Gheorghe Rozmarin, who along the years brought their contribution to the formation of specialists in the fields of cellulose, paper and synthetic fibres, and to the development of a number of research directions. From the very start, the teaching staff became actively engaged in a prolific research activity, which was recognised both nationally and internationally. As a result, the first success was recorded in 1961, when the **First International Symposium of Cellulose Chemistry and Technology** was held in Iaşi, under Prof. Cristofor Simionescu's coordination. The event became a tradition, and 13 editions were further organised under Prof. Cristofor Simionescu's leadership. The 14th edition paid homage to Prof. Simionescu's lifelong scientific activity, celebrating his 90th birth anniversary. Over the years, the international symposia have enjoyed the participation of renowned experts in the field from around the world.

On the occasion of the 2nd Symposium (1965), Z. A. Rogovin, former professor at the Institute of Textiles in Moscow, well-known for his valuable contribution to the field of cellulose chemistry, along with other foreign specialists, proposed to launch a journal entitled *Cellulose Chemistry and Technology*, to be edited in Iaşi under the auspices of the Romanian Academy, and to entrust Acad. Cristofor Simionescu with this mission. Pointing out the steadfast climate favourable for the progress of research in this area, the great hospitality of the Romanian people, the spiritual youth and the excellent organisation of the symposia, in association with a few foreign participants, whose names are still listed on the frontispiece of the journal, even though they have passed away, he addressed Acad. I. G. Murgulescu, asking him to embrace and support this proposal. Further results confirmed that, although it appeared spontaneous, his suggestion was well thought out and had chances of long-term success. The meetings of the members of an international editorial board would create occasions for more and more specialists, both experienced and younger ones, to come to know each other, build communication bridges and boost creation. The city of Iaşi was entrusted with a research centre, which, at the crossroads of civilisations and responsive to cultural acts, would prove capable of standing up to the scientists' expectations.

In September 1968, the first meeting of the editorial board was organized (at that moment, formed by 53 members), which drew together the most brilliant representatives of the cellulose schools from around the world at that time: M. Chêne (France), P. Cremonesi (Italy), K. Dimov (Bulgaria), H. Dolmetsch (Germany), E. Giese (Germany), R. Husemann (Germany), A. I. Kalninh (USSR), H. Sihtola (Finland), T. E. Timell (USA), V. Diaconescu (Romania). The meeting was held on the occasion of the 3rd International Symposium of Cellulose Chemistry and Technology, organised on 18-22 September, 1968, in Iaşi. The editor-in-chief Cristofor Simionescu's report highlighted the wide geographical coverage of the journal, ensured by scientific contributions submitted for publication by authors virtually from all over the world: Austria, Bulgaria, Canada, Czechoslovakia, Egypt, France, the split Germany at the time, India, Italy, Japan, Poland, Romania, USA and USSR.

The second editorial meeting was held in September 1971, and again enjoyed remarkable international participation: F. Bertran (Cuba), E. Correns (GDR), E. Daruwalla (India), Y. Fahmy (Egypt), A. Frey-Wyssling (Switzerland), E. Garnum (FAO), M. Lewin (Israel), H. P. Naveau (Belgium), Z. A. Rogovin (USSR), I. Sakurada (Japan), J. Schurz (Austria), L. Stockman (Sweden), V. Diaconescu, E. Poppel and D. Feldman (Romania). The participants emphasised the echo of the *Cellulose Chemistry and Technology* journal abroad and expressed their appreciation of its steady progress, achieved by raising the scientific quality and the degree of originality of the contributions published – the result of a collective effort, of the perseverance and enthusiasm of all those involved in the magazine. In his report, Prof. Simionescu underscored the contribution of the 58 members of the editorial board (from 27 countries), who engaged in reviewing the manuscripts to ensure the publication of high-quality scientific content.

In the opening conference of the 4th International Symposium (Iaşi-Suceava, 28 September-2 October 1971), Prof. Simionescu addressed issues of pressing actuality in the field of cellulose and paper chemistry

and technology of the time, which, despite the time elapsed, are still as current and have even turned into priorities. Defying the idea brought out the same year (1971) by *Angewandte Chemie*, which announced that “natural sciences were approaching their endpoint”, Prof. Simionescu expressed his belief that, in order to maintain the status of science in progress, cellulose chemistry and technology needed to join biology, physics and mathematics in an interdisciplinary relation (a very bold idea!). In his view, the so-called crisis in the theoretical chemical sciences emerged from the lack of understanding that in the near future the various branches of the natural sciences would interact and join in the common effort to decipher the secrets of nature. Thus, considering that the chemistry of cellulose, hemicelluloses, lignin and their derivatives was only a Cinderella of modern chemistry, it would be imperative to intensify research in the field of wood to find solutions to pressing issues:

- the alarming increase in the degree of irrational forest exploitation, as a result of expanding industrialisation and continual population growth;
- a more efficient use of the wood, possible by deeper research on its biological, physical and chemical structure;
- processing wood in a way that would diminish the quantity of waste and unusable by-products, and thus, would reduce environmental pollution;
- preventing global crisis in the cellulose and paper industry, which was going to affect mainly Europe – said Prof. Simionescu in 1971! – by planting new forests, along with using alternative raw materials, provided by, for example, annual plants, gramineae straws, reed, kenaf or fast-growing species, especially willow, poplar and eucalyptus, and other tropical species that can be grown on lands unsuitable for agriculture.

However, all these objectives require not only theoretical studies in plant physiology, anatomy and molecular biology (and other sciences), but also the fast application of the results in practice, developing chemical technologies and biotechnologies for valorising vegetal biomass. In this context, since its founding, the journal has published numerous papers on fundamental and applicative issues regarding regenerative and recyclable resources, which make this field the only one that belongs under sustainable development, thus embodying the hope to provide, besides conventional products, bioproducts with the most diverse applications. In this way, the biorefinery concept was coined, which refers to a facility that can lead to increasing the efficiency of the cellulose and paper industry, integrating the possibilities to obtain products of chemical and energetic value. Thus, contributions to the biorefinery field have also found a place in the contents of the journal in recent years.

The journal joined an already existing publication in Romania – *Cellulose and Paper* (1951), and allowed the exchange with journals and books published abroad, thus offering Romanian scientists the possibility to keep a permanent contact with similar research centres from around the world, even during the harsh period preceding 1989.

In its 50 years of existence, the journal has proven its real importance in ensuring the participation of Romanian scientists to the exchange of information, to make their contribution known, as well as in bringing numerous journals and books into the country annually.

At present, when we are witnessing a real informational tsunami, the *Cellulose Chemistry and Technology* journal, indexed ISI since 1992, is published in both online (www.cellulosechemtechnol.ro) and print forms, and successfully continues its activity, hosting papers from all over the world. On this anniversary, we hope that both the editorial board and our steadfast collaborators will continue to contribute to increasing the quality and prestige of the journal.

Valentin I. Popa, Editor in chief
Iuliana Spiridon, Associate Editor