

## Congress Report

### Seventh International Symposium on Wood and Pulping Chemistry, May 25–28, 1993, Beijing, P.R. China

After Stockholm (1981), Tsukuba (Japan 1983), Vancouver (1985), Paris (1989), Raleigh (NC, USA 1989) and Melbourne (1991), the seventh ISWPC took place in Beijing International Hotel, Beijing, P.R. China, on May 25–28, 1993. The eighth ISWPC is scheduled to take place in Helsinki, June 6–9, 1995. Thus, as pointed out at the Farewell Dinner by J.L. McCarthy, the coming ISWPC will be held at the site where its idea was born, at the EuChem Symposium, June 9–10, 1980 in Helsinki (see Congress Report in *Holzforschung* 34 (1980), p. 182).

Being the largest regular international symposium in its field, the size and character of this symposium have changed little since the so-called "Ekman days" in Stockholm in 1981, with the only exception being that the Beijing symposium was combined with the 1993 Symposium on Cellulose and Lignocellulosics Chemistry.

The 7th ISWPC was attended by some 280 participants from 21 countries. 130 oral and 120 poster presentations were offered in four parallel sessions dealing with (1) Biosynthesis and chemical structure of wood and wood components (11 oral presentations), (2) Chemistry of pulping and bleaching (32 o.p.), (3) Biological treatment of wood and pulp (21 o.p.), (4) Chemistry and chemical processing of non-wood fibres (18 o.p.), (5) Chemical modification of wood and pulp (5 o.p.), (6) Modern analytical methods in wood, pulping and bleaching (10 o.p.), (7) Chemicals and by-products from lignocellulosic materials (5 o.p.), (8) Chemistry of high yield pulping (6 o.p.), (9) Biological and chemical aspects of effluent treatment (8 o.p.) and (10) Photochemistry of lignocellulosic materials (5 o.p.).

As always, the number of oral presentations (32) in the pulping and bleaching session (2) was by far the largest. It is, however, interesting to note that compared to the Ekman days in 1981 (24 oral presentations on pulping and bleaching), the topics in this area have considerably changed towards chlorine-free bleaching and non-waste pulping. Also, the sessions on biological treatment of wood and pulp (3) with 21 papers as well as on biological and chemical effluent treatment (9) with 8 papers, areas which remained unconsidered in 1981, indicate the trend in research towards environmentally non-hazardous technologies. Another large session with 18 oral presentations dealt with the chemistry and chemical processing of non-wood fibers (4). The high level of representation of this field may be at least partly due to domestic reasons in China as the largest producer of pulp from grasses like cereal straw, rice straw, reed and bamboo. However, it may also reflect some newer trends in industrial countries, induced by global increase in paper and board consumption. Also, surpluses of agricultural products in Europe raise the question, whether non-wood fibers could be an alternative income to farmers, provided that convenient technologies for economical processing of such raw materials to pulp are available.

Four of the seven plenary lectures underscored the research efforts in new pulping and bleaching technologies. The three others dealt with the formation and structure of lignified plant cell walls (N. Terashima), photo-induced yellowing of lignin containing pulps (K. Fischer) and graft polymerization of lignosulfonates (S.Y. Lin). Complete Proceedings (3 volumes) of the 7th ISWPC were available to the registered participants at the registration desk. It is not known to the reviewer whether additional copies may be obtained from the local organizer: China Technical Association of Paper Industry, No. 12, Guang-Hua Road, Beijing 1000 20, P.R. China.

H.H. Nimz (Hamburg)

## Book Reviews

R.M. Rowell, T.P. Schultz and R. Narayan (Eds.): *Emerging Materials and Chemicals from Biomass*. ACS Symposium Series No. 476. X, 470 pages. Hardcover. American Chemical Society, Washington, D.C. 1992. US \$ 99.95. ISBN 0 8412 2171 5

For a great number of reasons, a keener interest in renewable biomass is currently being developed worldwide. In contrast to the early days of mankind when many different plant materials already played an important role, materials of the present which are based on plant biomass have to compete with so-called „high-tech“ products mostly based on petroleum. However, it is specifically these latter products that are becoming more and more questionable with regard to environmental compatibility, global CO<sub>2</sub> aspects, recycling properties, etc.

As this period of changing social awareness, technologies, techniques and products will not be short-lived any effort to compile and distribute up-to-date knowledge in this field is much appreciated. In this context the ACS Symposium Series contributes on a broad basis to the subject. 25 papers by about 40 authors including a good number of high-ranking scientists deal with lignocellulosic materials and composites, biopolymers and chemicals and fuels from biomass and wastes. Many of the articles are an excellent combination of literature reviews with results from current investigations. The book may therefore be used as a reference book and as a source of up-to-date scientific and applied sciences information.

Although the reviewer has to admit that wood is not the most important subject in this volume – despite its predominant role as renewable biomass – anyone interested in extending and improving wood utilization should read this book with a view to collating ideas and strategies towards a successful future use of wood and other plant biomass for the benefit of mankind.

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DIN Deutsches Institut für Normung e.V./Deutsche Gesellschaft für Holzforschung e.V. (Eds.): *Holzschutz – Vorbeugender chemischer Holzschutz*. (Preventive Chemical Wood Preservation). Eine Erläuterung zu DIN 68 800, Teil 3. 164 pages. Paperback. Beuth Verlag, Berlin. 1992. DM 69,- ISBN 3 410 12698 8

The new edition of the DIN standard 68800 Part 3: Vorbeugender chemischer Holzschutz (Preventive Chemical Wood Preservation) appeared in April, 1990 after years of discussions and extensive appeal hearings involving all circles interested in wood preservation. The wish to create a standard that would, on the one hand, cover as wide a spectrum of interests as possible and, on the other, be succinctly formulated and not too long resulted in the standard's not being easily readable in all its parts for all those interested. Many of the explanatory contributions presented during the consultations held on the standard were not taken over into its text. They are, however, indispensable for an understanding of the standard, as well as for its full practical realization.

The present commentary sets itself the necessary task of presenting the text of the standard so that it can be applied. The commentaries on the standard have been written mainly by members of the standard commission, which means they are reliable firsthand sources of information.

In the new edition of the DIN standard 68800 special attention is given to health and environmental aspects of wood preservation. Particularly detailed commentaries on these areas, as well as on the newly introduced protective classes and methods of impregnation are included. These will be of help in the conflict between