

## Buchbesprechung

**Biology of Water-Works Processes (Biologie vodárenských procesů).** Methodical Advice of the Czech Ministry of Forestry and Water Management 68, Prague, 1989, p. 100, in Czech, not on market

For the annual conference "Actual questions of water-works biology 1990" there was issued a booklet containing 13 papers.

L. ŽÁČEK "Problems with the treatment of humic waters and the possibilities of solving them". There are applied, e.g. coagulation, sorption and oxidation. The remains of the aluminium flocculants and organic matter penetrate to the consumer.

M. HOLUBEC and M. HOLOBRADÁ "Regeneration and utilization of polluted sources of drinking water". Experiments were performed in the field to recover the chemically polluted underground water by aeration in the course of pumping and recharge.

B. HAVLÍK and J. HANUŠOVÁ "Biological problems with barium". As a trace element in drinking water, barium is dangerous to human health. The new value for its maximum permissible concentration is 1,0 mg/l, instead of 1,5 in the past standards.

E. BÜCHLEROVÁ and L. ŠUSTER "Removal of viruses at the treatment of drinking waters". Experiments with hydrogen peroxide, iodine, chlorine, ozone, UV-radiation and gamma-radiation were performed by means of the RNA-coliphage. Ozone and UV-radiation gave best results in the disinfection.

K. GÁGYOROVÁ "Occurrence of cysts of *Giardia lamblia* in drinking water" was detected in N. Moravia. Ozone proved to be the best disinfectant in killing the cysts.

V. MORAVCOVÁ "Slow sand filtration". The author recommended its application even nowadays, as there is gained drinking water of the best quality.

L. ŠVORCOVÁ "The effect of slow sand filters at Carlsbad" was documented on 4 graphs and found to be very good.

J. HELAN and J. ZAHŘÁDKA "*Phormidium retzii*—a new danger to the water-works process". At its mass development (in periphyton) this blue-green alga causes tastes and odours of drinking water. Two cases are reported from Moravia.

B. NOVÁKOVÁ "Biological control at the washing of drinking water reservoirs" was perfected with great success at the water-works of Žatec (N. W. Bohemia).

E. KOUTNÍK "Evaluation of biological analyses of the water-works of Hradiště" allowed the effective changing of the doses of coagulants and the application of aid-flocculants or other means.

A. SLÁDEČKOVÁ "Passing through of microorganisms from the drinking water treatment". Several bacteria were found to be able to penetrate through the whole treatment to the consumer. This may be aided by some worms (Nematoda) and insect larvae.

A. SLÁDEČKOVÁ, P. ADLER and O. DABMOVZAL "Results of an experiment with bentonite in the water-works of Koryčany". The aid-flocculant bentonite created large flocs. These were measured microscopically and proved the success of the technology.

V. SLÁDEČEK "Ciliata-Spirotricha indicating trouble in water-works". There was given an atlas consisting of 5 plates with 37 figures together with saprobiological quantitative characteristics.

The booklet is meant as a guide to the water-works biologists and was supported by the Ministry of Forestry and Water Management (Ing. JOSEF ŠTASTNÝ, CSc).

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