



Project Summary

Third U.S./U.S.S.R. Symposium on Particulate Control

Jaroslav Pekar

The primary objective of the Third U.S./U.S.S.R. Symposium on Particulate Control, held September 10-12, 1979, in Suzdal, U.S.S.R., was to discuss work done by U.S. and Soviet specialists on particulate control and measurement technology.

The two symposium co-chairmen were: (U.S.) A. B. Craig, Deputy Director of the Industrial Environmental Research Laboratory,* U.S. Environmental Protection Agency, Research Triangle Park, NC; and (Soviet) I. K. Reshidov, Director of the Scientific Research Institute of Industrial and Sanitary Gas Cleaning (NIIOGAZ), Moscow, U.S.S.R.

This Project Summary was developed by EPA's Air and Energy Engineering Research Laboratory, Research Triangle Park, NC, to announce key findings of the research project that is fully documented in a separate report of the same title (see Project Report ordering information at back).

The following organizations participated:

U.S.—Industrial Environmental Research Laboratory,* U.S. Environmental Protection Agency, Research Triangle Park, NC 27711.

U.S.S.R.—Scientific Research Institute of Industrial and Sanitary Gas Cleaning (NIIOGAZ), Moscow

- Semibratovo Branch of NIIOGAZ
- Zapozozhye Branch of NIIOGAZ
- Special Design Office for Gas Cleaning and Dust Eliminating Equipment (SK-BGPO), Semibratovo
- State Institute for Gas Cleaning Equipment Design (GIPROGAZOOCHISTKA), Moscow
- All-Union Heat Engineering Institute imeni Dzerzhinskiy (VTI), Moscow
- State Research and Design Institute for Environmental Protection in the Building Materials Industry (NIPIOS-TROM), Novorossiysk
- Moscow Energy Institute (MEI), Moscow
- Moscow Transport Engineering Institute (MIIT), Moscow
- All-Union Electrotechnical Institute imeni Krzhizhanskoy (VEI), Moscow

The Third U.S./U.S.S.R. Symposium on Particulate Control was sponsored by the Particulate Control Technology Project Group of the U.S./U.S.S.R. Stationary Source Air Pollution Control Technology Working Group under the U.S./U.S.S.R. Environmental Agreement. Papers were presented by Soviet specialists from scientific research and design institutes and by representatives of the U.S. Envi-

*Now, Air and Energy Engineering Research Laboratory.

ronmental Protection Agency and representatives of the private sector.

The topics included: prediction of back corona formation, fly ash resistivity prediction, improved electrostatic precipitator (ESP) mathematical model, calculation of effects of back corona in wire-duct ESPs, study of chemical conditioning of flue gas before an ESP on a 500 MW power unit, sodium conditioning test with EPA mobile ESP, fly ash dielectric properties and critical current density, improved design for general industrial application of precipitating electrodes for ESPs, performance analysis of a hot-side ESP, dynamics and strength of corona electrodes in industrial ESPs, progress on ESPs for use at high temperatures and high pressures, cleaning of hot aspirated air from sinter machines and clinker coolers, ESP model for the TI-59 calculator, problems of fly ash removal at electric power stations, particle collection by granular bed filters and dry scrubbers, filter materials for cleaning gases and possible areas of their application, high temperature ceramic filters, methods and instruments for measuring size of finely dispersed particles less than $0.3 \mu\text{m}$ for process gases, particle measurement in the U.S., current trends in aerosol dispersion analysis, instruments for automatic monitoring of particle-size distributions, methods and instruments for measuring the dew point of process emissions, and design of an improved impactor.

Jaroslav Pekar is the EPA Project Officer (see below).

The complete report, entitled "Third U.S./U.S.S.R. Symposium on Particulate Control," (Order No. PB 85-190 890/AS; Cost: \$26.50, subject to change) will be available only from:

National Technical Information Service

5285 Port Royal Road

Springfield, VA 22161

Telephone: 703-487-4650

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Research Triangle Park, NC 27711

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