

PROCEEDINGS OF THE CONFERENCE ON NOISE SUPPRESSION NOISE CONTROL 85

FOREWORD

Several days after the INTER NOISE 85 Conference the International Conference on Noise Suppression — NOISE CONTROL 85 was held from the 24-th to the 27-th of September 1985 in Cracow. It was organized by the Committee on Acoustics of the Polish Academy of Sciences, Commission of Acoustics of the Hungarian Academy of Sciences, Institute of Mechanics and Vibroacoustics of the Academy of Mining and Metallurgy in cooperation with the Institute of Structural Engineering, the Central Institute of Work Protection and the Noise Control League.

The NOISE CONTROL 85 conference was organized parallelly with the XXXII Open Seminar on Acoustics.

The present NOISE CONTROL 85 conference is the seventh conference organized in Poland every three years from the inspiration of Prof. Stefan Czarnecki. Initially these conferences were held for solely domestic participants. Beginning from 1976 also specialists from other countries take part in this conference. In the framework of these conferences not only problems of existing threats of noise and vibrations in the work and life environment were discussed, but also scientific and technical achievements of various scientific and industrial centres, Polish theoretical works constituting a foundation for further research and original Polish developments, in many cases practically implemented. A Scientific Committee headed by the senior of Polish acousticians — Prof. Ignacy Malecki was engaged with the scientific problems of the conference. Prof. Tomás Tarnóczy from the Hungarian Academy of Sciences was the vice chairman of the Scientific Committee.

Both conferences were attended by 528 persons, 382 at the NOISE CONTROL conference and 146 at the XXXII OSA, including 96 participants from abroad, from 23 countries of the whole world, namely from: Australia, Austria, Belgium, Bulgaria, China, Czechoslovakia, Denmark, Egypt, France, Greece, Holland, Japan, Yugoslavia, Canada, Cuba, GDR, FRG, Roumenia, USA, Sweden, Hungary, Italy, USSR. 158 papers was presented in the framework of the NOISE CONTROL conference — 9 plenary and 11 on poster sessions.

Plenary papers were presented by:

1. I. BALLO, N. SZUTTOR — Institute of Materials and Machine Building of the Slovak Academy of Sciences, "*Active systems in the vibration control of operators seats of heavy-weight machines*".
 2. C. CEMPEL — Institute of Applied Mechanics of the Poznań Technical University, "*Tribovibro-acoustical model of a machine*".
 3. R. CIESIELSKI, J. KAWECKI — Institute of Structure Mechanics of the Cracow Technical University, "*Diagnostic foundations of the national standard PN-85/B-02170*".
 4. Z. ENGEL — Institute of Mechanics and Vibroacoustics of the Academy of Mining and Metallurgy in Cracow, "*Progress in noise and vibrations control in Poland*".
 5. F. INGERSLEV — President of the International Institute of Noise Control, Technical University, Lyngby, Denmark, "*International cooperation in acoustics*".
 6. R. LYON — Massachusetts Institute of Technology, Cambridge, USA, "*Diagnostics and noise control in industry*".
- Thesis: Diagnostics is a proper field for noise control engineers.
7. H. MYNCKE — President of the International Commission of Acoustics, Catholic University, Leuven, Belgium, "*Some considerations on common noise criteria*".
 8. J. P. NAGY — Technical University of Budapest, "*Sound insulation requirements with respect to room absorption*".

9. J. SADOWSKI — Institute of Structural Engineering, Warsaw, "*Acoustic problems in multi-storey residential buildings raised by means of industrialized technology methods*".

Besides the plenary papers, the following papers were invited:

1. P. FRANCOIS — Electricite de France, Clamart, France, "*Labelling and reduction of the noise level of house-hold appliances*".
2. Z. JAGODZIŃSKI — Technical University of Gdańsk, "*Ultrasonic Doppler vibrometer*".
3. J. LANG — Versuchsanstalt für Wärme- und Schalltechnik am Technologischem Gewerbemuseum, Vienna, Austria, "*Sound insulation requirements in office buildings and in schools*".
4. A. LAWRENCE — University of NSW, Sydney, Australia, "*NOISE CONTROL — the architects and planners roles*".
5. Z. MAEKAWA — Kobe University, Japan, "*Simple estimation methods for noise reduction by various shaped barriers*".
6. V. M. A. PEUTZ — Nijmegen, Holland, "*Reverberation times and reverberation levels*".
7. E. J. RICHARDS — University of Southampton, England, "*Using the energy accountancy equation to modify punch design in presses*".

Scientific problems with which the Conference dealt, were grouped in 11 sessions, namely:

- A. Computer techniques in vibroacoustics,
- B. Physical foundations of sound emission and propagation,
- C. Machine and equipment noise,
- D. Industrial noise,
- E. Noises in building objects,
- F. Communication noise,
- G. Measurement and analysis methods of vibroacoustical signals,
- H. Materials in noise and vibrations suppression,
- I. Vibrations,
- J. Noise and vibration hazards to man,
- K. Vibroacoustical diagnostics.

After analysing the programme it has to be stated that the NOISE CONTROL 85 Conference has served its purpose. Many papers, 11 sessions, wide discussions have proved the great activity of Polish acousticians. The Conference made possible the further integration of the Polish Academy of Sciences, universities, institutes and scientific centres, design offices and industrial plants. Several original papers were presented at the Conference, as well as results of research conducted in the framework of various research problems. Basic and theoretical investigations constituted a correct foundation for the utilitarian work. Discussions indicated the necessity of conducting fundamental research, which should be the ground for subsequent technical and implementation works.

All papers were published in a two-volume publication titled: Proceedings NOISE CONTROL 85.

It seems purposeful to conduct subsequent NOISE CONTROL Conferences with the participation of foreign guests every three years.

Z. ENGEL