INTER-NOISE 86

The 15 th International Conference Inter-Noise 86 was held on 21–23 July 1986. It was sponsored by the International Institute on Noise Control Engineering and organized by the Massachusetts Institute of Technology in Cambridge, USA.

525 representatives including students from 36 countries from the whole world took part in the Conference, namely from the USA, Japan, West Germany, Denmark, Sweden, France, Belgium, Great Britain, Australia, China, Netherlands, Israel, Norway, Finland and Canada.

Professor Richard H. Lyon, the chairman of the Organizing Committee, welcomed the participants in the Conference, asking the President of the International Institute on Noise Control Engineering, Professor Fritz Ingerslev to open the Conference. Professor Ingerslev congratulated the Institute on Noise Control Engineering in the USA on the occasion of organizing now the 15th international conference devoted to the problems of noise control, and then presented briefly the history of previous conferences.

The motto of the Inter-Noise 86 Conference was "progress in noise control". At the conference 271 lectures were delivered in the framework of three plenary sessions and sessions denoted to particular subjects. Three lectures were delivered at plenary sessions.

Professor Jens P. Blauert from Ruhr University in Bochum West Germany delivered a lecture "Cognitive and aesthetic aspects in technical noise control". The speaker paid particular attention to low noise levels which can essentially interfere with man's environment. He gave a number of examples to support his thesis.

Dr Frank Fahy from the Institute of Sound and Vibration Research, Southampton University Great Britain delivered then the plenary lecture "Sound and structural vibration — a review". Dr Fahy presented a complete review of the problems, based on his recently published book "Sound and Structural Vibration", analyzing the vibration of a body in the acoustic field by applying Kirchhoff-Helmholtz differential equations. He also discussed various aspects of the mutual interaction between sound and the structure of a vibrating body. In his discussion, he included the problem of sound radiation by different vibrating bodies.

The third plenary lecture was delivered by Dr George MALING from IBM, Poughkeepsie. In his lecture "The progress in applying sound intensity for noise control", the speaker presented in a brief outline the historical development of the sound intensity problems, beginning with Olson's wattmeter from 1930, and then presented various studies and applications used in many countries for noise control purposes. He also discussed the standardization work.

The other lectures were delivered at 57 sessions within 27 ones on particular subjects. These sessions included:

- 1. Sound sources, reduction of source emission (4 sessions)
- 2. Industrial noise (4 sessions)
- 3. Sound systems
- 4. Hydraulic systems
- 5. Diagnostics (2 sessions)
- 6. Structural noise (2 sessions)

- 7. External noise propagations (3 sessions)
- 8. Sound transmission
- 9. Control of airport noise (5 sessions)
- 10. Dampers and absorbers (3 sessions)
- 11. Signal analysis (3 sessions)
- 12. Legislation (3 sessions)
- 13. Influence of airport noise on health
- 14. Noise reduction (3 sessions)
- 15. Measurements
- 16. Computers in measurements of acoustic quantities (2 sessions)
- 17. Active methods of noise control (2 sessions)
- 18. Aerodynamic noise (2 sessions)
- 19. Ventilator noise (3 sessions)
- 20. Communal noise (3 sessions)
- 21. Acoustic holography
- 22. Sound intensity (3 sessions)
- 23. Standardization
- 24. Vibration (2 sessions)
- 25. Transportation noise
- 26. Psychoacoustics
- 27. Acoustics in South America

The sessions were held at the same time in 6 rooms. Most interest among the conference participants was enjoyed by sessions on airport noise, industrial noise, reduction of source emission and also those on the problems involved in applying intensity methods. During the conference, there was an exhibition of acoustic equipment and sound-absorbing systems and materials, presented by 18 companies, mainly from the USA, Japan and Denmark, e.g., General Radio, Brüel-Kjaer and Rion.

On 22 July, 1986, there was a plenary session of the members of the Internation Institute on Noise Control Engineering, headed by the president of this organization, Professor Firtz INGERSLEV from Denmark. The president presented a report on the annual activity and then the projected Inter-Noise conferences in the next years.

These conferences will be held as follows: Inter-Noise 87, Peking, China, 15-17 September 1987, Inter-Noise 88, Avignon, France, 30 August-1 September 1988, Inter-Noise 89, Los Angeles, USA.

Z. Engel

S. Diagnostics (2 sessions)