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C H R O N I C L E

Professor Antoni Śliwiński
— JUBILEE

The Scientific Symposium was held on 15-th of February 1994 at Gdańsk University on the occasion of 65-th birthday of Professor Antoni Śliwiński. The Symposium was organized by the Institute of Experimental Physics (University of Gdańsk) and the Gdańsk Sections of the Polish Acoustical Society and Polish Physical Society.

The followers and friends of Professor Śliwiński took part in the Symposium and they represented not only the Gdańsk community but other regions such as Gliwice, Kraków, Poznań, Rzeszów, Szczecin, Warszawa and Wrocław. During the opening ceremony Professor Jerzy Ranachowski (Institute of Fundamental Technological Research of Polish Academy of Sciences) summarized the scientific achievement and the professional career of the honoured guest. Congratulation letters were read on the occasion. Professor J. Burnewicz, pro-rector of Gdańsk University and Professor E. Kozaczka, a representative of the Commander of the Naval Academy awarded Professor Śliwiński medals from both Universities. Professor Śliwiński received many congratulations, wishes, thanks and flowers from the well-wishers.

Speeches were made. Professor L. Filipczyński (Institute of Fundamental Technological Research of Polish Academy of Sciencess) mentioned his first contacts with Professor Śliwiński. Professor F. Kaczmarek, who has been his collegue since the student time spoke about beginning of their early academic career at Poznań University. Professor E. Hojan (Poznań University) reminded those gathered Professor Śliwiński's contribution is designing the room acoustics during the reconstruction of the Great Opera Theatre in Warsaw under Professors M. Kwiek and E. Karaśkiewicz supervision. Professor Szustakowski read a congratulation letter, written by the Commander of the Technical Military Academy, with thanks for the cooperation in the field of acoustooptics. Directors Dr K. Knapiński (Institute of Experimental Physics, University of Gdańsk) and Professor J. Dera (Institute of Oceanology, Polish Academy of Sciences) expressed their thanks for the enormous amount of efforts given to the teaching and research activities in both places. The respectives of the Polish Acoustic Society Professor A. Opilski and Dr T. Pustelny

(Gliwice Section), Dr A. Drzymała (Rzeszów Section), Professors E. Hojan and M. Łabowski (Poznań Section) congratulated and wished the further success. Then Professor Śliwiński expressed his career in limeric composed by his family.

The participants had the opportunity to listen to the following papers during the Symposium:

1. Acoustic sensor of gasses — Professor A. Opilski (Institute of Physics, Silesian Technical University, Gliwice).
2. Dynamic properties of liquids in ultrasonic fields — Professor R. Płowiec, (Institute of Fundamental Technological Research of Polish Academy of Sciencess).
3. Investigation of the influence of the constant magnetic field on the propagation of ultrasonic field in the conductive media — Professor M. Łabowski (Institute of Acoustic, University of Poznań).
4. Detection of tissue elastic properties by MRJ method. — Professor Cz. Lewa (Institute of Experimental Physics, University of Gdańsk).

Finally the informal part of the Symposium took place, patronated by the local „Solidarity" Trade Union, with its warm atmosphere, a glass of wine and the song „Sto lat" (that could be expressed as a wish of „One hundred years").

We would like to highlight to the attention some facts of Professor Śliwiński's career.

He was born on 15-th of November 1928 in Jarocin (near Poznań). In 1942 he completed grammar school in Gliniak (near Mińsk Mazowiecki). In 1947, after graduating from the State Secondary School for Adults in Bydgoszcz, he started his studies in the Department of Mathematics and Natural Science, Physics Division, at Poznań University and graduated with a master of philosophy in physics in 1952. In the meantime (1950) he undertook the post at Poznań University, and nearly from the begining he had been under Professor Marek Kwiek supervision (until Kwiek's tragic death). Promoted by Professor Kwiek he prepared his Ph.D. thesis on the phenomenon of ultrasonic wave propagation in the media being near the critical point, where the fluctuation of the state parameters occured and completed the thesis in 1960. Still with Poznań University he became the associate professor after the presentation of the thesis concern with the light diffraction by ultrasonic waves propagating in the transition media. In 1970 he joined the newly founded Gdańsk University where he has been working until now. Beside his scientific, research and teaching activites he appeard to be excellent manager that is why he has been acting as the Head of the Acoustic Group, the Dean of the Mathematics-Physics-Chemistry Faculty, vice-rector of Gdańsk University. He has been the initiator of the research work and a leader of the big group of scientists from the very beginning of his activity at Gdańsk University. In 1973 he helped to initiate founding for the Environmental Laboratory of the Acoustics and Spectroscopy, the unit that had been devoted to the environment protection of Gdańsk region, with special attention to acoustics problems among them noise pollution.

Professor Śliwiński scientific outputs is mainly concern with the wide aspects of acoustics:

1. Acoustooptics: investigations of light diffraction by ultrasonic waves, non-linear effects occuring during diffraction of the strong laser light by ultrasonic wave, application of interferometric techniques to the examination of ultrasonic fields and transducers.

2. Molecular investigations and ultrasonic spectroscopy: examinations of the organic substances including polymers and liquid crystals, viscoelastic media.

3. Room acoustics: examinations of noise and vibration, material noise.

4. Hydroacoustics: acoustic examianation of the Baltic Sea, surface water pollution.

5. Photoacoustic spectroscopy.

Professor Śliwiński promoted 27 ph.d. thesis, five people among his coworkers become the associated professors and three of them full professors. Number of Ph.D. thesis and dissertation for associate professor degree were reviewed by him as well in Poland as abroad. Either as a referee or reviewer he gave his acess to the nomination procedure for full professors.

Professor Śliwiński wrote as an author or co-author more than 200 papers known to the internal audience. He is a member of Physics, Acoustics and Marine Investigation Committees of the Polish Academy of Sciencess and Several Research Councils. Awarded a fellowship he became a member in the international societies such as European Physics Society, Audio-Engineering Society and Polish ones: Polish Acoustic Society (being a President for the last two tenures), Polish Physical Society, Gdańsk Scientific Society and Gdańsk Academic Society. Moreover he took part in the editorial boards of the following journals: Ultrasonic, Acoustic Letters, Archives of Acoustics, Oceanologia, Acustica, Akusticheskij Zhurnal, Optoelectronics Review. During 1981–1987 Professor Śliwiński represented Poland in the International Comission on Acoustics (of Internal Union of Pure and Applied Physics). He was honoured and awarded a number times. The international audience had many opportunities to listen to his lectures during the conferences, meetings or seminars.

On the other hand Professor Śliwiński is known as an organizer of many scientific meetings: five of them on acoustooptics, i.e. „Spring School on Acoustooptics and Applications", „Prospects in Modern Acoustics, Education and Development and the Open Seminars on Acoustics.

He closely collaborates with foreign academic centers such as Universities in Leuven, Halle, Bremen, Triest and PTB from Braunschweig.

Professor Śliwiński has been building his own acousto-optic school, that is regarded as very strong scientific center and that is why the Spring School on Acoustooptics has become so popular as well in Poland as abroad.

Bogumił Bolesław Juliusz Linde
Anna Markiewicz

98TH AES CONVENTION — 25–28.02.1995 — PARIS
POLISH AES SECTION REPORT

Audio Engineering Society Conventions became traditional world meetings of all scientist, engineers, industry managers, producers, dealers and even fanciers interested in the domain of sound and vision systems, equipments, facilities, components, hard – and software computer elements etc. Such meetings take place twice a year: Spring Convention in Europe (denoted with consecutive even numbers), and Fall Convention in the USA (denoted with odd ones).

The latest European Conventions: the 94th in Berlin, the 96th in Amsterdam, and the 98th one in Paris, reported herewith, were marked with parcitipation of several newly organized AES Sections from countries of former Eastern socialist block of states. Among the members of those Sections, the most numerous participation was of the Polish Section. Since the Berlin Convention, the Polish AES Section has organized, for the third time already, inexpensive coach expeditions for their members, mostly student-members, to participate in Conventions. Such participation is highly valubale, especially for young adepts of acoustics, sound engineering and related topics who otherwise would be unable to cover all costs of participation, accomodation, transport etc. In appreciation of those numerous participations and of other initiatives, as well as assessing the whole scientific activity of the Polish Section, the Vice-President for Europe AES Region, Mr Dan Popescu, during the special Convention meeting in Paris, highly estimated its achievements in 1994, calling the Polish Section „the best of all Europe Sections".

Among Polish participants of the 98th AES Convention, held in Paris, at Palais de Congrès, were numerous authors and coauthors who read their papers and took part in discussions during the debates within the scientifical Convention program. The debates were grouped in the sixteen sessions: Audio Data Reduction I & II (A & C), Architectural Acoustics I & II(B & D), Electronic Music and Musical Instrument Acoustics (E), Sound Reinforcement I & II (F & H), Audio Electronics (G), Audio Signal Processing I & II (I & K), Transducers I & II (J & L), Measurement (M), Psychoacoustics I & II (N & P), Networks and Interfacing (O).

All the eighty five Convention papers were supported by a preprint. The Polish presentation included the following ones (in brackets — preprint no. and in parentheses — session no.): A. Czyżewski, B. Kostek, S. Zieliński, *New Approach to the Synthesis of Organ Pipe Sound* [3957] (E2); B. Żółtogórski, *Inverse Radiation Problem — Capabilities and Limitations*, [3981] (J1); D. Ruser, H. Ruser, *An Elementary High Resolution Microphone System for Localization of Sound Source in Air*, [4002] (M1); M. Niewiarowicz, *Directional Properties of Sound Sources During Transients*, [4004] (M3); B. Kostek, *Statistical versus Artificial Intelligence Based Processing of Subjective Tast Results* [4018] (P3); M. Kin, J. Renowski, *The Influence of Spectrum on Perception of Differential Pitch Sensitivity for Short Waves*, [4020] (P5).

Moreover, Polish AES Section members, in particular the young student-members, have taken an active participation in the, so called, workshop sessions.

Those were devoted to the following technical aspects: Preservation of and Access to Audio and Video Carriers; New Digital Media Developments; Wave Front Sculpture for Sound Reinforcement; Premastering for the New CD Formats; The Interaction of the Visual and Auditory Senses: „How Does One Measure It"; Current Trends of Research in Musical Instruments Acoustics; Musical and Non-Musical Application; Digital Audio Broadcasting.

Apart from the scientific activities, the participants got an enormous quantity of information concerning the most recent audio systems and equipments presented during a large exhibition, accompanying traditionally the Convention. The exhibition was held inside the Convention site, at the Palais de Congrès, on three levels, however, being easy acessible to all participants. More than three hundred enterprises, from all over the world, displayed their best products in richly outffitted demonstration stands, giving a visitor a unique possibility to keep track of the development trends in the whole domain of audio engineering. Broadly disseminated leaflets, prospects, technical data lists, system descriptions, records, even manuals, etc. will provide valuable information and reference source for participants at their professional practice.

Immediate press assessments, which appeared still before closing of the Conventions debates, have stated that the greatest interest of industry representatives concentrated on problems connected with the digital sound processing and the reinforcement systems. The latter ones were often entitled as room acoustics or building acoustics problems, however, only sound reinforcement techniques were treated thereby, withouth any reference to proper desing, measurement and acoustical correction or adaptation of rooms. At any rate, those were discussed during session debates devoted to Architectural Acoustics.

Generally, the scientific part of the Paris Convention was not so largely filled as e.g. the 94^{th} one, held in Berlin. The number of papers was almost halved in comparison to Berlin record. However, may be, it was intended by Paris Convention Committee, which probably dismissed a part of the submitted papers in order not to exaggerate the numbers of parallel sessions, necessary otherwise. So, the more important is the number of Polish Section presentations, which amounted 7% of the total number of papers.

It may be interesting to compare the share of authors' contributions from particular countries. The most numerous were twelve papers from the U.S.A. Next in number were papers from Germany and from the United Kingdom, ten papers from each country. Nine papers were presented by French authors. Eight ones by Dutch authors. Poland and Russia presented six papers each. Danish authors presented four papers. Finnland and Hong-Kong presented three papers each. Two papers came from authors from Greece, Ireland, Portugal and Switzerland. One paper was presented by authors from Australia, Austria, Italy, Japan, Spain and Sweden. Thus, it was a really international contribution to audio engineering scientific progress.

Such yearly repeated contact with the international progress in the audio engineering domain is, without a doubt, a very useful event for the Polish AES

Section members and for their entire scientific and professional surrounding. Thus, a continuation of similar contacts in the future seems to be highly desirable. In this context, it has to be added here, that the 100th AES Convention, the jubilee one, will be held in Copenhagen, at Bella Center, on May 11–14, next year, 1996.

Marianna Sankiewicz
(Chairman of the Polish AES Section)

Information about CIB W–51 Acoustics Meeting in Warsaw, 25–27 May 1994

The Information Council for Building Research Studies and Documentation is an international organization concerned with studies, research and documentation in the building industry. It unites 70 countries. It has over 500 collective and individual members.

Over 70 International Committees and Working Groups operate within CIB. One of them is the W–51 Acoustics Committee. The Committee is headed by Prof. A. Cops and Prof. G. Vermeir from the Catholic University in Leuven.

The W–51 Acoustics Committee consists of the representatives of Research Centers, dealing with building acoustics, requiring more in -depth theoretical and experimental examination, are discussed during these meeatings. Discussions are held on the chosen scientific issues, study and measurement methods, and the results of studies obtained in the last several years in the various Institutes are analyzed.

Scientific presentations are prepared for the Committee meetings and these are later presented and discussed at the seminar. Later on these papers are prepared — according to the publisher's requirements — for publication in Applied Acoustics.

A collective publication is prepared from each seminar, which includes the written and presented papers. This publication includes the papers presented at the meeting of the CIB W–51 Acoustics Committee on May 25–27, 1994 in Warsaw.

The seminar in Warsaw was devoted to two very significant groups of topics, namely:

I. Experimental study and modeling of sound insulation in construction building joints in buildings.

II. Sound absorption, shape and indicator of reference curve, measurement and desing.

A total of 21 papers were announced 11 — in Section I, 10 — in Section II; 18 papers were presented. From which 16 were delivered in the form of xerox-copied publications the remaining 2 due to research being in progress, were only presented, and will be published at a later date in Applied Acoustics. Three papers were not sent in their authors were also absent.

A list of the presented papers, according to the program of the meeting, is given.

Participation in the CIB W−51 Acoustics Committee meeting undoubtedly allowed its participants to confront the progress of studies conducted on similar topics in the various countries, as well as facilitated better planning in the area of building acoustics studies to be carrier out in the forthcoming years.

Prof. André Cops
Laboratory for Acoustic and Thermal Physics
Catholic University of Leuven, Belgium

Prof. Gerrit Vermeir
Laboratory for Building Physics
Catholic University of Leuven, Belgium

Prof. Jerzy Sadowski
Zakład Akustyki Instytutu Techniki
Bdowlanej.

Presented papers

Theme 1 — JUNCTION DAMPING: modeling, experiments

1. Bosmans I., Mees., Vermeir G. (Belgium),
   Structure-borne sound transmission between thin orthotropic plates: analytical solution.
2. Craik R. (England), Osipow A. (Russia),
   The use of elestic interlayers at joints to reduce structure-borne sound transmission.
3. Villot M., Jean P. (France),
   Structure-borne sound transmission through a pillar-beam-floor system. Case of bulidings constructed on top of covered railways.
4. Pedersen D.B. (Denmark),
   Estimation of vibration attenuation through junctions of building structures.
5. Gerretsen E. (The Netherlands),
   Junction transmission with double-leaf building elements.

Theme 2 — JUNCTION DAMPING: examples, applications

1. Nightingale T. (Canada),
   Application of the CEN draft building acoustics prediction model to a lightweight double leaf construction.
2. Martin H.J., Moorlach M.F.C. (The Netherlands),
   Sound transmission and junction damping in sheet steel dwellings.
3. Szudrowicz B., Iżewska A. (Poland),
   Simplified evaluation of flanking transmission based on the mean mass and mean area of flanking elements.

4. Pietrzyk A., Kropp W., Kihlman T. (Sweden), *Numerical simulation of low frequency air-borne sound transmission in buildings.*

Theme 3 — SOUND ABSORBTION: reference artefacts, measurement, design

1. Vorländer M. (Germany),
   Reverbation room measurements and preparations of round robin tests on the sound absorption coefficient of reference artefacts.
2. Kristiansen U.R., Vigran T.E. (Norway),
   On the design resonant absorbers.
3. Chyla A., Czyżewski K., Nurzyński J. (Poland),
   Reverberation time: comparison of measurement results obtained in the laboratory using different methods and instrumentation.
4. Mirowska M. (Poland),
   Sound absorption of spatial acoustics absorbers, laboratory measurements, repeatibility, reproducibility.

Theme 4 — SOUND ABSORPTION MEASUREMENT: simulation, experiments, in-situ mesurement

1. Mees P., Vermeir G. (Belgium),
   Numercal simulation of sound absorption in reverbation rooms.
2. Cops A., Vanhaecht J., Leppens K. (Belgium),
   Sound absorbtion in a reverberation room: causes of discrepancies on measurement results.
3. Mommertz E. (Gremany),
   Angle-dependent in situ measurements of the complex reflection coefficient using a subtraction technique.
4. Madalik L. (Estonia),
   Measurements and computer simulation of sound field of the St. Charles' Church in Tallin.

2nd International Congress on Acoustical and Vibratory Surveillance Methods and Diagnostic Techniques

Clamart (Paris), France 10-12 October 1995

Organised by: Société Française des Mécaniciens (S.F.M.),
Société Française d'Acoustique (S.F.A.), and International Measurement Conference (IMEKO)

The Congress is hosted by a research centre (D.E.R.) of Electricité de France (E.D.F.)

TECHNICAL PROGRAM

The domain of the Congress covers all scientific and technical matters which contribute to the development of surveillance and diagnostic using acoustical and vibratory information

The program is divided into six topics areas:

- physical modelling
- signal processing
- vibration mechanics
- acoustics
- innovative techniques
- case histories and systems

Inter-noise '96. The 25th International Conference on Noise Control
July 30th through to August 2nd 1996
The Adelphi Hotel and Conference Centre, Liverpool, England

The conference is promoted by the Institute of Acoustics and organised under the superversion of. The International Institute of Noise Control Engineering. The theme for '96 is „Noise, the next 25 years — scientists engineers and legislators in partnership". The objective of the event is to promote all aspects of technical and administrative control of excessive noise in order to provide a safer and more acceptable environment for all. Conferences are organised annually alternating between US and other international venues, the '94 conference was in Yokohama, Japan and the '95 event is in Newport Beach, California, USA. Attendance is usually around 1.000 drawn from industry, government and academia from around the world.

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