

REPORTS

SHORT REPORT ON THE NINTH WROCLAW SYMPOSIUM ON ELECTROMAGNETIC COMPATIBILITY (EMC)

The Ninth Wroclaw Symposium on EMC was held June 28—30, 1988. It enjoyed the cooperation of 8 international organisations and associations of electrical and electronic engineers from 15 countries.

Prof. W. Majewski chaired the Symposium Council, and Prof. F. L. Stumpers chaired the Scientific Program Committee. Prof. D. J. Bern, who served as the Symposium Chairman, was supported by Co-chairman Mr. J. Rutkowski and Organizing chairman, Mr. W. Moron.

About 300 participants from 24 countries attended the symposium with large groups from Eastern European Countries (21 delegates came from non-European Countries).

A total of 108 papers were presented in English or Russian with simultaneous interpretation between both languages (oral presentation 79, posters 29). A two-volume, 906-page 'Proceedings', containing 155 papers accepted for presentation, was available during the Symposium.

During the Opening Ceremony, the key-note speech was delivered by the deputy Minister of Transport, Navigation and Communication of the Polish People's Republic, Mr. J. Tomaszewski, and two welcome addresses were read from Mr. R. C. Kirby, Director of the International Radio Consultative Committee CCIR, and from Mr. T. Irmer, Director of the International Telephone and Telegraph Consultative Committee CCITT. CCIR and CCITT were bodies, which cooperated with the Symposium, and Mr. Kirby and Mr. Irmer were vice-chairmen of the Symposium Scientific Program Committee.

A Plenary Session was held at the beginning of the Symposium at which Prof. F. L. Stumpers gave his remarks on its program and Prof. S. Gorgolewski (N. Copernicus University, Toruń, Poland) highlighted the significance of radio-astronomy, its achievements and the necessity of frequency protection.

23 sectional sessions covered many fields of EMC, and at the core of the Symposium were 7 sessions organized by invited chairmen/organizers. These sessions were:

- Ball, Bead or Anomalous Lighting and EMC (URSI Com. E. Sponsored session organized by Prof. H. Kikuchi, Japan),
- ESD, Lighting, EMP (URSI Com. E sponsored session organized by Dr. J. Hamelin, France),
- EM Environment of the Earth (URSI Com. E sponsored session organized by Prof. K. Bullough, UK),
- EMC in Wire Communications (CCITT SG. 5 sponsored session organized by Dr. H. Lorke, GDR),
- EMC and EMP in Industrial Gas Discharge and Plasma Processing (session organized by Prof. J. S. Chang, Canada),
- Seismological Effects and EMC (session organized by Prof. T. Yoshino, Japan),



— EMC in Amateur Radio Service (IARU Region 1 — EMC Working Group, session organized by H. Cichoń, Poland).

The other sessions were: Antennas, EM Radiation Hazards, EMC and Biological Risk, EMC Education, EMC in Mobile Communication, EM Coupling Path, EMI Prediction and Analysis, EMI Sources and Reduction Techniques, Filters and Filtering Techniques, Grounding and Shielding, Immunity of Electronic Systems, Power Lines, Propagation, Spectrum Management and Monitoring, Susceptibility and Vulnerability.

Two very successful workshops accompanied the Symposium. One workshop, organized by Rohde and Schwarz Co., and run by Mr. E. Gauger (FRG), focused on "Conducted and Radiated Emission Test to FTZ/VDE Requirements" and the other, titled "Spectrum Management and Monitoring", was organized by CCIR Study Group 1 Vice-Chairman Mr. T. Boe (Norway). The speakers were Mr. T. Boe (introduction), Mr. R. Mayher, USA (Progress in Computer-Aided Spectrum Management), Mr. G. Lehning, FRG (ISM Radiation Problems), Mr. A. Kashel, OIRT Technical Centre in Prague, Czechoslovakia (OIRT Monitoring), Prof. I. Novak, Hungary (Demonstration of High Resolution Monitoring Equipment).

The young scientists' participation program was organized with financial support from URSI. Three young scientists were invited (from Bulgaria, China and Sudan) but only two (from Bulgaria and Sudan) managed to attend.

A technical exhibition and a literature exhibition were opened during the Symposium. The technical exhibition displayed the work of 8 exhibitors, among them Rohde and Schwarz Co. (FRG), Emerson and Cuming Europe N.V. (Belgium), Licencia (Hungary) and INCO Electronic Instrumentation (Poland).

The literature exhibition featured publications of such international organizations as IFRB, CCIR, CCITT, and URSI with information materials from such publishers as Elsevier Sequoia and Springer Verlag. Both exhibitions were busy and crowded with participants all the time.

The symposium was held on the premises of the Wrocław Technical University where, for the first time, the Central Information Computer System for the Symposium was launched. It made possible the displaying of actual information about papers just delivered and other news in all places where such information was needed. The system was highly valued by the delegates.

The 'get-together' cocktail party and picnic in the countryside offered a good opportunity to make informal contacts.

On the last day there was a joint meeting of the Symposium Council, the Program Committee, and Organizing Committee together with all the Session Chairmen. The Symposium results and organization were evaluated and future improvements were discussed. The general opinion was that the 9th Wrocław Symposium on EMC created a valuable forum for the presentation of results achieved in various countries and circles.

Contributions in Session XI: EMC and Biological Risks.

O. V. Betsky: Interaction of low-intensive microwave radiation with biological objects.

G. Cerri, I. V. Moglie: Interstitial applicators for microwave hyperthermia.

V. V. Kislov, I. V. Taranov: Resonant action of external electromagnetic radiation on nonlinear processes in biomacromolecules.

Li Ji-xi, Niu Zhongqi, Zhu Pengjiu, Cheng Jizhong: Bioeffects of MM-wave irradiation on the hemopoietic system.

H. Mikołajczyk, M. Kameduła: Biological effects related to E and H vectors of e-m fields.



Copies of the Symposium Proceedings are still available from:

EMC SYMPOSIUM

Box 2141

51-645 Wrocław 12, Poland

The next (10th) International Wrocław Symposium on Electromagnetic Compatibility is planned for June 1990.

Scientific Program Committee:

Chairman: *Prof. F. L. Stumpers*, The Netherlands

V-Chairman: *R. C. Kirby*, CCIR; *T. Irmer*, CCITT

Dr. V. A. Antipenko, USSR; *Prof. P. Degauque*, France; *C. Gary*, France; *Prof. H. Kikuchi*, Japan; *Dr. H. Lorke*, GDR; *Prof. H. Mikołajczyk*, Poland; *Prof. E. Nano*, Italy; *Prof. A. Pilatowicz*, Poland; *Prof. R. Showers*, USA; *Dr. A. D. Spaulding*, USA; *Prof. T. Takagi*, Japan; *P. Vaculikova*, Czechoslovakia; *Prof. A. Wedan*, Yugoslavia; *Prof. A. Wojnar*, Poland; *Yu. B. Zubarev*, USSR.

Prof. Henryk Mikołajczyk,
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