



TELSIS'95

2nd Conference

Telecommunications in Modern Satellite and Cable Services

Niš, the administrative, economic and cultural centre of the south-east Serbia will host with pleasure the largest gathering in the country of scientists and engineers in the area of satellite, cable and broadcasting technologies. Namely, the TELSIS'95 Conference and Exhibition will be held at the Faculty of Electronic Engineering in Niš, Yugoslavia, on 10-12 October 1995. Thanks to electronics industry Ei Holding Co., founded in 1948, which is the leading domestic manufacturer of wide electronics products, Niš is occasionally called "The City of Electronics". The Faculty of Electronic Engineering, one of organizers, is one of the most perspective university institutions in the country, gives the great contribution in the development of the University of Niš.

The Conference TELSIS'95 is organized by Faculty of Electronic Engineering, Niš, Ei HOLDING Co., Niš and Radio-Television of Serbia, Belgrade. The Conference is held under the auspices of the Ministry of science and technology of the Republic of Serbia, in co-operation with Ministry of traffic and communications of the Republic of Serbia, Ministry of information of the Republic of Serbia, IEEE Yugoslavia Section, Society for Telecommunications, IEEE Microwave Technique and Technology Chapter and many sponsors.

The Conference TELSIS (Telecommunications in Modern Satellite and Cable Services) is intended to be a highly competent scientific and professional meeting of national character with great international contribution.

The previous Conference was held in 1993, in Niš. The focus of this Conference was *Satellite and Cable Television and High-Definition Television*. An Exhibition of corresponding electronics elements, devices and systems was organized as an accompanying manifestation. The numerous experts for programme topics were registered and take part at. Regarding to refereeing 65 papers from the country and 4 from abroad are accepted. These papers were presented in one plenary session and 8 professional sessions. The programme has included also 4 round tables. Actual topics, a large number of

quality papers, extremely great participation on the sessions and round tables and good organization, made this Conference to find its place in the group of renowned scientific meetings. Some high quality papers, after getting the additional, positive referring, were printed in the special issue of international publication **Facta Universitatis** (series Electronic and Energetics) of the University of Niš.

The aim of the conference TELSIS'95 is to improve the development, manufacturing and introducing the modern television technologies through the efficient exchange of information and presentation of current scientific results. This year the Conference will focus on *Modern Broadcasting Technologies*. It has to be concluded that the Call for Papers was very well received. A large number of authors have registered to participate in the Conference. All received papers were refereed by the most competent experts. Final programme includes 2 plenary invited keynote papers, 15 invited keynote papers and 126 regular papers. It should be noted that 26 eminent foreign authors were contributed to TELSIS'95: 10 from U.S.A, 3 from Germany, 3 from United Kingdom, 3 from Romania, 2 from Ukraine, 2 from New Zealand, 2 from the Republic Srpska and one from Finland. Among them, there are such world-known names as T.Itoh, D.Rutledge, C.Christopoulos etc. It should be emphasized that this conference gathers probably the largest number of scientists of Yugoslav origin, that work very successfully in abroad. These eminent scientists are, for example, J.Isailović, R.Petrović, Z.Popović, Z.Pantić-Tanner and O.Borić-Lubecke from U.S.A, M.Temerinac from Germany, V.Trenkić from United Kingdom and so on. In our situation, the great participation of these authors is maybe the best way for keeping the connections with world and actual trends.

The papers will be presented in one plenary session and 18 professional (oral) sessions. Scientific and Professional part of the Conference will involve also 2 round tables on actual topics from the programme areas of the Conference.

Highlights in the programme are 2 plenary invited papers. Prof. Dr. Aleksandar Marinčić, Academy Member from the Faculty of Electrotechnical Engineering, Belgrade, Yugoslavia, will talk about optical telecommunications and their role in cable television development. Prof. Dr. Miodrag Temerinac from ITT, Freiburg, Germany, will present digital video and audio broadcasting - EBU and FCC standards.

Also, most of 18 professional sessions will begin with invited keynote papers, where renowned authors will present the important results in corresponding field. The sessions cover all topic areas.

Rapid development in digital broadcasting and processing has been induced a great number of papers related to this area. Two sessions cover digital communications and digital radio broadcasting, three sessions are devoted to digital signal processing and one to digital image processing. For instance, developments and research activities related to video coding techniques in high definition TV will be discussed. Also, a report about new alternative format MPEG-2 should be emphasized. Actual trends in speech and audio coding, narrowband PCS networks, HDSL and ADSL technology, etc. will be presented too.

Many accepted papers are related to the applied electromagnetics, including the microwave devices. Among other, the contributions to analysis of wire, horn, patch and aperture antennas will be presented. Also, there are important results in the area of methods for analysis of waveguides, planar lines and other transmission structures. A novel and very attractive microwave technology will be presented by describing micromechanical planar tuning elements. There are the other interesting contributions in the area of analysis and design of microwave devices, for example the analysis of baluns, filters, diplexers, the application of TLM method, symbolic analysis in microwaves, etc.

The work in the field of microwave communication and broadcasting systems will be presented through two sessions. For example, some new results in design of microwave oscillators, mixers and amplifiers were reported. Several papers describe contributions in microwave communication systems performances. In the area of microwave broadcasting, important place is taken by the papers that present MMDS systems and devices. Also, reports of microwave TV-FM transceiver and dielectric resonator oscillators should be emphasized.

Two sessions are devoted to optical communication systems. An interesting invited paper describes active quasi-optical components for communications. Several authors report of performances of optical systems and their parts.

Cable television, emission techniques, television techniques, information systems take important place also. For instance, it will be discussed about cable distribution systems and their automatization, the modernisation of TV transmitters and TV transposers, tendencies of actual developments in TV technique, intelligent control systems, etc.

It can be expecting that the important place and great interest will be taken by round tables of Conference. Topic of round table I is cable television (perspective, system concept, law regulative, project documentation, domestic electronics industry support, etc.). Topic of round table II is perspective of involving the modern television technologies (video and audio formats, digital compression, MMDS, SATV, teletext, domestic electronics industry support, etc.).

Exhibition part will include presentation of the development and research results and products (devices, elements, systems and applicative softwares) in the area of emission, transmission, distribution and receiving TV signal, and in other areas of interest. Most important domestic companies in this field have announced their participation.

Finally, I would express my expectation that the Conference TELSIKS'95 will justify the great scientific and organizing efforts and influence the positive trends in this area. I truly hope that you will attend the Conference and in this way contribute to its quality.

Prof. Dr. Bratislav Milovanović
Organizing Committee Chairman