

Professor Aleksandar Marinčić

ALEKSANDAR S. MARINČIĆ is Full Member of the Engineering Academy of Yugoslavia from 1998, Full member of the Serbian Academy of Sciences and Arts from 2000 and Professor Emeritus of the Faculty of Electrical Engineering, University of Belgrade. He was born on July 9, 1933 in Sinj (Croatia) by father Stevan and mother Katica, born Zanki. From 1935 he has lived in Belgrade, where he completed primary and secondary schooling. In 1951 he enrolled in the Faculty of Electrical Engineering, University of Belgrade, and graduated from it in 1956 as the best student of the generation. During 1956/57 he obtained his postgraduate diploma from the same faculty. During 1961-1963 he was a postgraduate student at the University of Sheffield, England, where he obtained his Ph.D. degree at the end of 1963.

He is married and has two sons: Dušan and Srđan.



EMPLOYMENT:

Teaching assistant (1958-1965), Assistant Professor (1965-1969) at the Faculty of Electrical Engineering in Belgrade. In the period 1967-1971 UNESCO expert, Visiting Associate Professor and Acting Chief Technical Adviser at the Middle-East Technical University in Ankara, Turkey. From 1971 Associate Professor at the Electronics Faculty of Niš, where he was a Vice-dean and the Chief of Telecommunication Department. Elected Associate Professor at the Faculty of Electrical Engineering, University of Belgrade in 1974 and worked as Full Professor from 1980 to his retirement in October 1998. Three times with two-year terms elected Chief of Department of Electronics, Automatics and Telecommunications. During four years he was head of the Chair of Telecommunications. For one year he was Chief of military air-electronics section at the VTVA in Žarkovo.

At the Faculty of Electrical Engineering in Belgrade, Professor Marinčić taught the following courses: Measurements in Telecommunications (1963-1967), Fundamentals of Telecommunications, Data Transmission, Lightguides, Optoelectronic Telecommunications and Optoelectronic Devices and Systems. At the Electronics Faculty of Niš he lectured Electrical Measurements, Fundamentals of Telecommunications, Microwave Techniques, and at the Faculty of Technical Sciences in Novi Sad Fundamentals of Telecommunications and Radio and Cable Communications. Besides, he taught several advanced courses on telecommunications to postgraduate students.



He supervised about 50 M.Sc. theses and 16 Ph.D. theses at the three universities in Yugoslavia, as well as several of them at two foreign universities. He was editor in chief of the Yugoslav periodical "Elektrotehnika" (1980-1985). In the period 1982-1996 he was Director of the Nikola Tesla Museum in Belgrade. For a long time he has been the President of the Nikola Tesla Society for the promotion of scientific knowledge, and since 2000 President of the Tesla Memorial Society in New York. He has been a member of programme committees of the Yugoslav conferences ETRAN, TELFOR, TELSIS, and organised the 5th and 6th International Nikola Tesla Symposia in 1991 and 1996. He co-authored organization of three exhibitions about the life and work of Nikola Tesla in the Serbian Academy of Sciences and Arts, Belgrade, parts of which were presented at the World's Fairs in Tokyo and Seville, as well as in several Yugoslav cities. In 2001 he organized a special session and exhibition on the subject of Tesla's work in the development of radio at the International Conference TELSIS 2001 at Niš.

SCIENTIFIC AND PROFESSIONAL WORK:

Research work of Prof.dr Marinčić has been related to the following topics:

- Modeling and computer simulation of semiconductor lasers, optical amplifiers, MOSFET detectors, optoelectronic systems and modulation techniques (polarization modulation, direct frequency laser modulation, CDMA techniques for applications in LANs, etc);
- Processing of thermal images with the aim to develop new efficient coding methods including compression and application of discrete cosine and wavelet transformations;
- Object navigation using laser beam, beam expanders of novel design and quadrant photodiodes;
- Cylindrical and rectangular resonant cavity modeling;
- Antenna modeling, rain effect on antenna radiation, horns with low side lobes;
- Theoretical and experimental investigations of various balun transformers;
- Measurements of dielectric constant at millimetre wavelengths;
- Measurements of laser beam waist and use of lasers in measurements of focal lengths of lenses and system of lenses;
- Development of microwave components for radio-relay of small capacity.

He published over 250 papers from the domains of microwaves and optoelectronics in the telecommunications. Of these, 48 were published in the eminent foreign periodicals, 36 in the proceedings of international conferences with 4 invited papers, 15 papers in national periodicals and more than 100 papers presented at national conferences, with 16 invited papers. He delivered more than twenty invited lectures about his work at the universities in Yugoslavia, England, Wales, USA, Turkey and Austria. Besides, he presented his work in England, Italy, Holland, Belgian, Spain, Greece, Wales, Israel and Poland. He was twice visiting professor at universities in England and once in Wales. He participated in an International project COST (1971-1974), and later in the exchange of experts between the universities of Belgrade and Nottingham, supported by the British Council. His papers were cited more than 60 times in foreign periodicals and over 70 times in Yugoslav proceedings and periodicals.

He published two monographs in Serbian, six textbooks in the fields of microwaves and optoelectronics. Wrote introductions and comments in several books devoted to Nikola Tesla and Mihailo Pupin.

Outside the Faculty he worked with the institutes "Mihailo Pupin" and "IMTEL" from Belgrade, with the institute IRI-Niš and "Novkabel" from Novi Sad. In connection with these activities he worked on the concepts and realizations of a part of small capacity microwave radio-relay, the first in Serbia, and on the development and tests of microwave barriers, microwave ovens and applicators to the paper industry, and in the research stages of optoelectronics components.

For his scientific and professional work he obtained the following awards: Radio-television of Belgrade, two awards for the best papers at the ETAN conference and award for the best paper in "Elektrotehnika" periodical and award for the scientific achievement "Nikola Tesla", Award of Appreciation of JAZU (1976), Charter for contributions to the development of ETAN, Charter of the Union of Yugoslav engineers and technician for contribution to periodical TEHNIKA at the occasion of 50 years celebration (1995), Charter for outstanding contribution to the development of Electronic Faculty of Niš (1995), Gold medal and plaque of the periodical "Raum und Zeit", Plaque and golden coin for contribution to YU-MTT Society (1998), The appreciation of invaluable services and contributions during the growth period of the Electrical Engineering Department METU, Ankara (2001), Appreciation of the Yugoslav Communication Society for outstanding contributions in the development of telecommunications and microwaves (2001), and The Certificate of Appreciation of the Microwave Society YU-MTTS (London, 2001).

Professor Marinčić was elected corresponding member of the Serbian Academy of Sciences and Arts in 1991 and full member in April 2000. Elected full member of Yugoslav Engineering Academy from its formation.