

Professor Bratislav D. Milovanović

Brief career details:



Bratislav D. Milovanović is a full professor at the Faculty of Electronic Engineering, University of Niš. He was born in the village Rosica near Ribarska Banja, Serbia in 1948. He completed the elementary school in the nearby village Ribare and secondary (technical) school in Niš. He obtained his B.Sc. degree from the Faculty of Electronic Engineering, University of Niš in 1972 as the best student of his generation. At the same faculty, he earned his M.Sc. in 1975 and Ph.D. degree in 1979. From 1972 to 1980 he was a research assistant, then an assistant trainee and teaching assistant. He was promoted to assistant professor in 1980, associate professor in 1985 and full professor in 1990. Professor Milovanović has founded one laboratory for students' practical exercise and two research laboratories. He is the author of 5 student's textbooks and supervisor of 16 doctoral dissertations (5 in progress), 17 master theses and more than 150 graduate diploma works. From 1981 to 1984 he was Head of the Chair for Theoretical Electrical Engineering. In 1989, together with the group of his associates, he joined the Chair for Telecommunication and successfully introduced a great number of new subjects and formed a Telecommunication program. From 1994 to 2000 and again from 2004 to 2011 he was Head of the Chair for Telecommunication. He was the Vice-dean of the Faculty of Electronic Engineering in Niš in the period from 1987 to 1991 and Dean from 1994 to 1998. From 1996 to 2001 he was the President of the Administrative Committee of Ei HOLDING Corporation, Niš.

He is the author of 542 scientific contributions in telecommunications - three published in international monographs, 50 published in world-known scientific journals (35 in SCI journals such as *Archiv fur Electrotechnik*, *Electronics Letters*, *Journal of Microwave Power and Electromagnetic Energy*, *Journal de Physique*, *Acta Acustica*, *Applied Microwave & Wireless*, *COMPEL*, *Microwave and Optical Technology Letters*, *International Journal of RF and Microwave Computer-Aided Engineering*, *International Journal of Numerical Modelling*, etc), 210 were presented at international conferences, 45 published in domestic journals (2 papers from category M24), 223 were presented at domestic conferences, etc. The publication history from 1974 to 2013 is shown in Fig. 1.

According to the Science Citation Index database, Professor Milovanović's works have been cited 343 times in the world-leading scientific journals and conference papers (160 citations and 183 self citations). Also, his scientific papers have been cited in a large number of monographs, doctoral dissertations, master thesis and textbooks. His paper presented at the conference *EUMC'77* in Copenhagen was published in the widely-known monograph "Advanced Antenna Technology", by distinguished scientist Prof. J.B. Claricoats, which comprises the group of papers that significantly influenced the development of microwave antenna technology. The paper entitled *High frequency circuits manufactured by micromachining technique*, presented at the conference *MIEL'97*, is cited in highly respectable monograph "Introduction to Microelectromechanical (MEM) Microwave Systems", by Hector J. De Los Santos, published by Artech House in 1999. Also, the paper entitled *Tunnel type microwave applicator modelling using TLM method* was published in the monograph "Problems in Modern Applied Mathematics, Series of Reference Books and Textbooks: Mathematics and Computers in Science and Engineering", edited by Prof. N. Mastorakis and published by World Scientific and Engineering Society Press in 2000. Professor Milovanović is also co-author of three papers presented at international

conferences in Turin and Brussels that published results achieved within the European research project in the field of telecommunications entitled *Aerials with reduced sides lobes and maximum G/T yield*, COST 25/2.

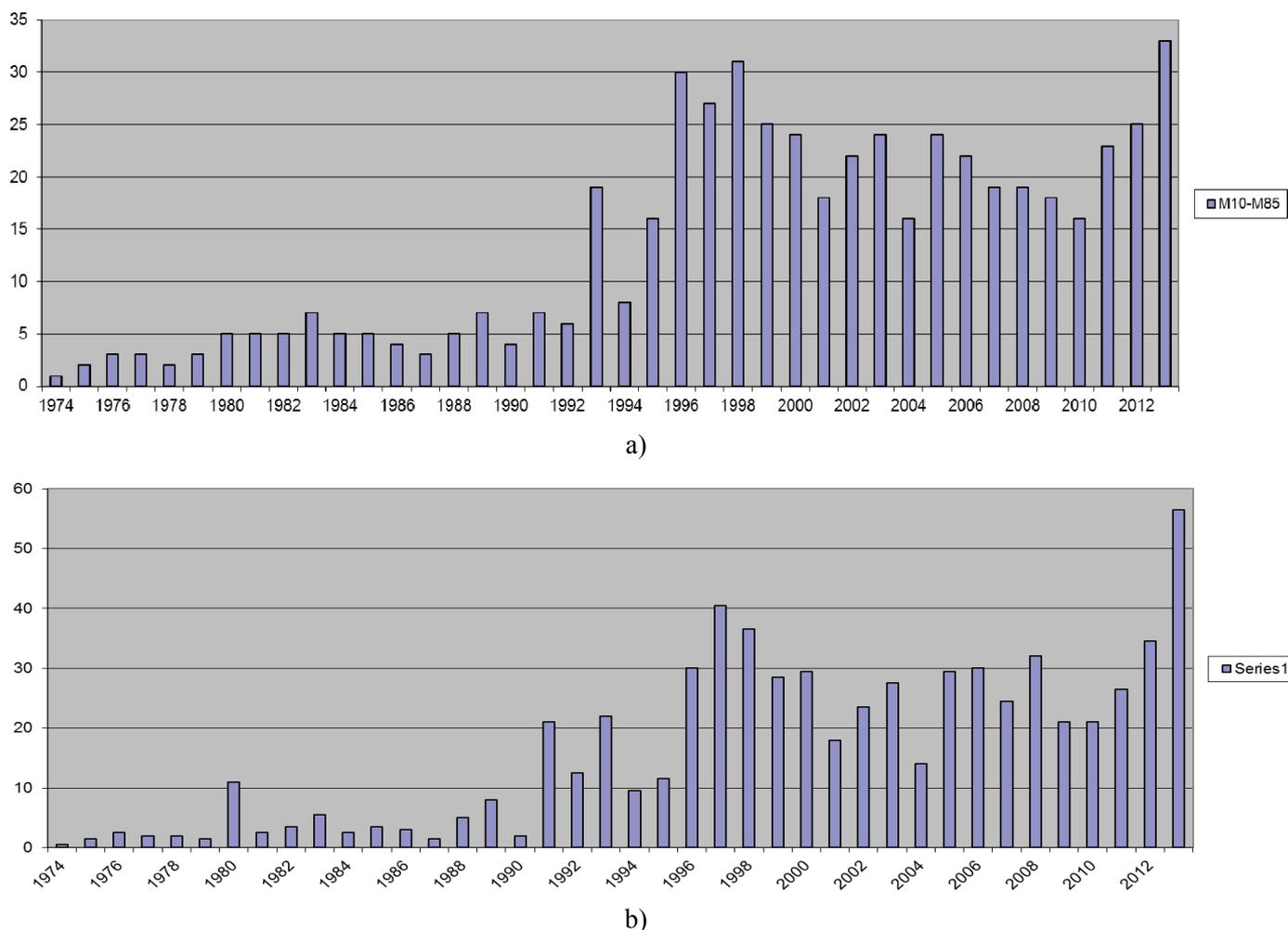


Fig.1 Publication history (1974 - 2013): a) Total number of papers per year;
b) Total number of Mpoints per year

Professor Milovanović has established a very successful scientific co-operation with a number of scientific-research institutions (Universities and Institutes) located all around the world, such as in: Bochum, Munich (Fig. 2) and Karlsruhe (Germany), Nottingham and London (United Kingdom), San Francisco (USA), Lviv (Ukraine), Krasnoyarsk (Russia), Sofia (Bulgaria), etc.

Professor Milovanović has been the editor of 10 international conference proceedings. He has also been a reviewer of a great number of world-leading scientific journals and conferences and a member of the editorial boards of the international journals. He was also a guest editor nine times of special issues of some international and national scientific journals. Professor Milovanović is a founder (1993) and General Chairman of the high-level international *IEEE* conference on telecommunications – *TELSIKS* (Figs. 3, 4, 5 and 6). Also, he is one of three founders of regional scientific conference *ICEST* (2002). As chairman or a member of organizing or technical program committees he has given a significant contribution to the organization of a number of other scientific and professional conferences (*NEUREL*, *NIKOLA TESLA*, *TELFOR*, *ETRAN*, *YU INFO*, *JUŽEL*, and *InfoTeh-Republic of Srpska*).



Fig. 2. Prof. B. Milovanović and Prof. P. Russer from Technical University Munich have collaborated within the DAAD project – photo taken at the TELSIS 2013 Conference



Fig. 3. Prof. B. Milovanović, Prof. K. Wu and Prof. T. Itoh - photo taken at the TELSIS 2001 Conference



Fig. 4. Prof. A. Marinčić, Prof. K. Wu, Prof. B. Milovanović, Prof. T. Benson, Prof. I. Stojanović and Prof. J. Surutka - photo taken at the TELSIS 2003 Conference

Professor Milovanović has achieved outstanding results in the field of research and scientific work. He was a successful leader of the research team in the field of satellite and cable television (Faculty of Electronic Engineering and Ei EDS) and microwave technique (Faculty of Electronic Engineering and Ei IRIN) in a long-term co-operation with the company Electronic Industry (Ei) in Niš, claiming the authorship of a number of lab and industrial prototypes of specific microwave circuits and devices. He was a pioneer and one of the most credited researchers for the development of domestic equipment for satellite and cable television. He also defined a concept and technical solution for national multichannel multipoint distribution system (MMDS). He was a leader of several innovation projects for the Ei-Niš and the Republic Hydro-meteorological Service of Serbia in Belgrade. He has supervised the realization of more than 30 projects in the field of fundamental and applied research. Since 1990, he has managed the strategic telecommunication projects in the field of technological development, financed by the Ministry of science and technological development, as one of the most successful researchers in the field of electrical engineering and information communication technologies.

His most important research results are:

- the first national SATV low-noise converter prototype, developed through co-operation with Siemens, for which he received *The Annual Prize of Radio Television of Serbia* in 1985,
- the first national satellite receiver prototype, that went into mass production, for which he received *The October Prize of the City of Niš* in 1986,
- the development of a number of devices for cable television (amplitude correctors, line and distribution amplifiers, modulators and demodulators, antennas, splitters, etc.) that went into mass production,
- the development of the specific high-performance microwave devices for Yugoslav Army,



Fig. 5. Prof. B. Milovanović and Prof. M. Salazar-Palma, President of IEEE Antennas and Propagation Society from 2010 to 2011 - photo taken at the TELSIS 2011 Conference



Fig. 6. Prof. B. Milovanović and Prof. D. Pasquet, IEEE Region 8 coordinator - photo taken at the TELSIS 2013 Conference

- the development of microwave barrier-system for efficient space protection that went into production and it still on the market,
- the development of the MMDS sub-devices and realization of the first two complete experimental MMDS systems in the country at 2.45 and 11 GHz, for which he received *The Annual Prize of Radio Television of Serbia* in 1994,
- the development of the automated measurement set-up for characterization of diode TV tuner that found application in, at that time, the largest manufacturer of TV tuners (Ei EDS) and major exporter (million pieces per year), for which he received *The Annual Prize of Radio Television of Serbia* in 1998.
- the development of a system for automation of operation of the weather radars to provide hail protection, working as a leader and researcher of strategic multidisciplinary project *Operation automation of weather radars in the system of hail protection*, supported by Republic Hydro-meteorological Service of Serbia in Belgrade.

Professor Milovanović has been a leader of expert team that realized projects *WiNet - Wireless platform for fast Internet access* in Niš and *CableNet - Cable Internet in hybrid coax-fibre (HFC) network KDS Niš*. He is author of a number of original results contributed to the development of concept and technical solutions for fast Internet access. He has been also a leader

of research team that developed a lab prototype of microwave dryer within the national project of energy efficiency *Development of microwave applicators for material drying*. The conducted investigation of apples and plums drying by using the developed microwave dryer prototype showed superior characteristics in terms of quality of drying and energy savings compared to conventional dryers.

Professor Milovanović is the author of prototype of automated mobile measuring set-up for characterization of electric fields of radio-broadcasting and mobile communication systems. Also, he has given a great contribution to the development of new and efficient methods for noise factor measurements of low-noise satellite converter, power measurements in microwave frequency range, resonant frequency and permittivity measurements in cylindrical metallic cavity, etc. He is the most credited for founding and he is a leader of accredited *Laboratory for certification of instruments for measurements in the field of microwave communications* at the Faculty of Electronic Engineering, Niš.



Fig. 7. Prof. B. Milovanović, President of national MTT Society, presented the Lifetime Achievement Award to Prof. A. Marinčić and Prof. A. Nešić in 2005



Fig. 8. Prof. Milovanović and members of Commission for accreditation and quality assurance of the Republic of Serbia

corresponding member of the Yugoslav Engineering Academy since 2000 and full member of Academy of Engineering Sciences of Serbia since 2004.

Awards and prizes

Professor Milovanović has received the following awards and prizes:

1. *The Certificate of Excellence of University of Niš* for The Best Student of Faculty of Electronic Engineering in school 1968/69, 1969/1970 and 1971/72, and *the Prize "14 October"* of the Assembly of Niš for The Best Graduated Student of Faculty of Electronic Engineering in 1970/71,

2. ***The Certificate of Appreciation*** of EI OUR “Specifični elementi” (1985) for outstanding activities and achievements in the development of satellite receiving equipment,
3. ***The October Prize of the City of Niš*** (1986) for outstanding research-development achievements in the development of satellite TV receiver which was later introduced into series production in Electronic Industry of Niš,
4. ***The Annual Prizes of Radio Television of Serbia*** (1985, 1994 and 1997) for the scientific achievement in the field of telecommunications,
5. ***The Charter of the Faculty of Electronic Engineering*** (1985) and ***the Certificate of Excellence of the University of Niš*** (1989) for the outstanding contributions to the development of the Faculty and University,
6. ***The diploma for the best paper*** (1994) “CAD Prediction of noise parameters behaviour for microwave FET devices” of thesection “Microwaves”, International Semiconductor Conference-CAS’94, Romania,
7. ***The Certificate of Appreciation*** for the generous help and support of faculty in the period 1993-1997, Faculty of Electrical Engineering, Banja Luka, Republic of Srpska,
8. ***The Distinguished Prize*** of the YU IEEE Society for Microwave Technique and Technology (1999)for outstanding contribution to development of microwave technique,
9. ***The Diplomas of Academy of Engineering Sciences of Serbia and Montenegro*** for its corresponding (2000) and full (2004) member,
10. ***The Certificate of Appreciation*** (2006) for contribution made as MTT-S Chapter Chair-Serbia and Montenegro Section, IEEE Microwave Theory and Techniques Society, USA,
11. ***The Certificate of Appreciation*** (2005-2007) for Notable Services and Contributions towards the advancement of IEEE and Engineering professions, IEEE - the Institute of Electrical and Electronics Engineering, USA,
12. ***The Certificate of Appreciation*** for contributing to the growth of the communications industry and the Society, IEEE Communication Society, USA,
13. ***The Certificate of Appreciation*** (2006) for continuous efforts for organization of conferences ICEST and cooperation in the area of sciences and high education, Faculty of Communication Technique and Technologies, Sofia, Bulgaria,
14. ***The Certificate of Excellence*** for outstanding contribution to the development ***The Diploma:Distinguished Membership*** (2006) for distinguished services to the development, advancement and pursuit of the technical objectives in achieving ETRAN’s goals and tasks, ETRAN Society,
15. ***The Certificate of Excellence“Nikola Tesla”*** (2009) for outstanding contribution to the study of life and works of Nikola Tesla - Association of University Professors and Scientists of Serbia,
16. ***The prestigious Tesla Prize - (The Plaque and The Charter)*** (2010) for significant scientific achievements in natural and technical-technological sciences, Tesla foundation, Serbia,
17. ***The Plaque*** (2010) for outstanding contribution to the development of Faculty of Technical Sciences, University of Novi Sad,
18. ***The Diploma*** (2008) and ***The Plaque*** (2011) of Regional Chamber of Commerce Niš for outstanding business results,
19. ***The Certificate of Excellence “Kapetan Miša Anastasijević”*** (2011) for application of science to the practice and the best-investment in 2011, Media invent, Novi Sad, Regional Chamber of Commerce Kruševac.

List of supervised doctoral dissertations

Professor Milovanović has supervised the following doctoral dissertations:

1. Vera Marković, “*Quasistatic analysis of transmission lines and their discontinuities in microwave integrated circuits*” (in Serbian: “*Kvazistatička analiza transmisionih linija i njihovih diskontinuiteta u mikrotalasnim integrisanim kolima*”), Faculty of Electronic Engineering, 1992 – 183 pages,
2. Vladan D. Stanković, “*Analysis of planar microwave structures by using 2D TLM approach*” (in Serbian: “*Analiza planarnih mikrotalasnih struktura primenom 2D TLM pristupa*”), Faculty of Electronic Engineering, 1998 – 136 pages,
3. Aleksandar Kostić, “*Work automation of weather radars in the system of hail protection*” (in Serbian: “*Automatizacija rada meteoroloških radara u sistemu odbrane od grada*”), Faculty of Electronic Engineering, 1999 – 144 pages,
4. Slađana Ivković, “*Contribution to the analysis of microwave cavities loaded with imperfect dielectric*” (in Serbian: “*Prilog analizi mikrotalasnih rezonatora optrećenih nesavršenim dielektrikom*”), Faculty of Electronic Engineering, 1999 – 172 pages,
5. Nataša Trivunac-Vuković, “*Contribution to the analysis of soliton propagation in optical fibre*” (in Serbian: “*Prilog analizi prostiranja solitona u optičkom vlaknu*”), Faculty of Electronic Engineering, 2001 – 134 pages,
6. Nebojša Dončov, “*Development and application of 3-D TLM approach for modelling of coupling between microwaves and complex wire and dielectric structures*” (in Serbian: “*Razvoj i primena 3-D TLM prilaza za modelovanje sprege između mikrotalasa i složenih žičanih i dielektričnih struktura*”), Faculty of Electronic Engineering, 2002 – 188 pages,
7. Dejan Milić, “*Analysis of performances of coherent optical systems with frequency modulation in the presence of phase noise*” (in Serbian: “*Analiza performansi koherentnih optičkih sistema sa frekvencijskom modulacijom u prisustvu faznog šuma*”), Faculty of Electronic Engineering, 2005 – 191 pages,
8. Goran T. Đorđević, “*Analysis of nonlinearity effects of satellite communication systems, interferences and noise on qualities of transmission of digital signals*” (in Serbian: “*Analiza efekata nelinearnosti satelitskog komunikacionog sistema, interferencije i šuma na kvalitete prenosa digitalnih signala*”), Faculty of Electronic Engineering, 2005 – 204 pages,
9. Jugoslav J. Joković, “*Modelling and analysis of coupling of wire elements and electromagnetic field in microwave cavity by using integral 3D TLM method*” (in Serbian: “*Modelovanje i analiza sprege žičanih elemenata i elektromagnetnog polja u mikrotalasnom rezonatoru primenom integralnog 3D TLM metoda*”), Faculty of Electronic Engineering, 2007 – 146 pages,
10. Zoran Stanković, “*New approaches in modelling of microwave resonant applicators based on neural networks*” (in Serbian: “*Novi pristupi u modelovanju mikrotalasnih rezonantnih aplikatora zasnovani na neuronskim mrežama*”), Faculty of Electronic Engineering, 2007 – 190 pages,
11. Maja Sarevska, “*Adaptive antenna systems based on neural networks*” (in Serbian: “*Adaptivni antenski sistemi zasnovani na neuronskim mrežama*”), Faculty of Electronic Engineering, 2008 – 113 pages,

List of conducting subjects

Professor Milovanović has conducted the following subjects at the Faculty of Electronic Engineering, University of Niš in the period 1972-2010: Basics of electrical engineering, Technique of hyper frequencies, Microwave technique, Microwave systems, Satellite telecommunications, Optical

communications, Measurement in telecommunications, Radar technique and radio location, Mobile communications, Telecommunication software, Design of telecommunication systems, Antenna theory and propagation of electromagnetic waves, Special microwave devices, Electrothermy, Microwave communications, Satellite and cable television, Design of microwave circuits and devices, Wireless communications, Multimedia communications, Microwave antennas, Electromagnetic effects on transmission lines, Wireless communication systems, Antennas and propagation, Antennas and antenna systems, Adaptive antennas and MIMO systems, Modelling in telecommunications and Electromagnetic compatibility.

In addition, Professor Milovanović conducted the following subjects at other high education institutions: Electrical engineering with electronics from 1976 to 1979 at the Mechanical Engineering Faculty, University of Niš, Microwave technique from 1992 to 1999 at the Faculty of Electrical Engineering, University of Priština, Microwave technique from 2000 to 2006 at the Technical Faculty in Kosovska Mitrovica, Electrical engineering from 1982 to 1984 at the Higher Technical School in Vranje and Wireless multimedia communications from 2008 to 2010 at the Faculty of Electrical Engineering in Banja Luka.

List of current activities

In 2013, Professor Milovanović is involved in the following activities:

Activities:

1. Full professor at the Faculty of Electronic Engineering, University of Niš (teaching process on bachelor, master and doctoral academic studies),
2. The leader of *Laboratory for microwave technique and wireless communication* and one of the founders of *Laboratory for Antennas and Propagation* (in establishing),
3. Reviewer for a great number of leading scientific Journals and Conferences,
4. Chairmen/member of Steering/TPC/Organizing Committee for a great number of leading scientific Conference,
5. Reviewer of *Serbian National Commission for accreditation and quality assurance (KAPK)*,
6. Chairman of *IEEE MTT-S Chapter of Serbia and Montenegro*,
7. Full member of *Academy of Engineering Sciences of Serbia*,
8. Member of *Serbian Scientific Society*,
9. President of *Chairmanship of the Serbian ETRAN Society*,
10. President of *National Society for Microwave Technique, Technologies and Systems*,
11. Member of *Management Board of National Society for Telecommunications*,
12. President of *Advisory Council of Republic Agency for Electronic Communications (RATEL)*,
13. President of *Assembly of Business Society of Cable Operators of Serbia (PUKOS)*,
14. President of *Advisory Council of Innovation Centre of Advanced Technologies CNT- Mediana, Niš*,
15. Research fellow of *Development Production Centre "Pogled Telekomunikacije"*,
16. Member of *Management Board of Company "Niška mlekara a.d."*,
17. President of *Assembly of "Pogled Rosica" Company*.

Supervisor of the following doctoral dissertations:

1. Aleksandar Atanasković, "*Contribution to linearity improvement of microwave power amplifier*" (in Serbian: "*Prilog poboljšanju linearnosti mikrotalasnih pojačavača snage*"), Faculty of Electronic Engineering, (approved in 2010 - in progress),

2. Siniša Jovanović, “*Contribution to the design of microwave pass-band filters with capacitive coupled resonators*” (in Serbian: “*Prilog projektovanju mikrotalasnih filtara propusnika opsega sa kapacitivno spregnutim rezonatorima*”), Faculty of Electronic Engineering, (approved in 2010 - in progress),
3. Marija Agatonović, “*Novel approach in the direction of arrival estimation of incoming EM signal based in using artificial neural networks*” (in Serbian: “*Novi pristup u proceni pravca zračenja EM signala zasnovan na primeni veštačkih neuronskih mreža*”), Faculty of Electronic Engineering, (approved in 2013 - in progress),
4. Marija Milijić, “*Design of integrated printed antenna structures and 3D reflectors with side lobe suppression*” (in Serbian: “*Projektovanje integrisanih štampanih antenskih struktura i 3D reflektora sa potisnutim bočnim listovima zračenja*”), Faculty of Electronic Engineering, (approved in 2013 - in progress),
5. Vesna Milutinović, “*Development and application of approaches for efficient characterization of electromagnetic coupling achieved through apertures in enclosures*” (in Serbian: “*Razvoj i primena postupaka za efikasnu karakterizaciju elektromagnetske sprege ostvarene posredstvom otvora u oklopljenim kućištima*”), Faculty of Electronic Engineering, (in progress).

Member of Editorial Board of Scientific Journals:

1. “*Telecommunication Sciences*”, publisher: Institute of Telecommunication Systems, National Technical University of Ukraine,
2. “*International Journal of Reasoning-based Intelligent Systems*” - IJRIS scientific journal, publisher: INDERSCIENCE, UK,
3. “*Electronics*”, publisher: Faculty of Electrical Engineering, Banja Luka, Republic of Srpska,
4. “*Microwave Review*”, Publisher: National Society for microwave technique, technologies and systems, Belgrade, Serbia.

Scientific conferences:

1. Chairman of Scientific and Organization Committee of the International IEEE Conference on *telecommunications in modern cable, satellite and broadcasting services - TELSIS*, (since its start in 1993)
2. Chairman/Co-chairman of Scientific and Organization Committee of the *International Conference on information, communication and energy systems and technologies – ICEST* (since its start in 2002),
3. Chairman of Technical Program Committee of the *International Nikola Tesla Symposium* (since 2011),
4. President of ETRAN 2013 Technical Program Committee, President of the *IcETRAN 2014* Steering Committee (in progress),
5. Member of Scientific Committee of the *International Telecommunication Forum - TELFOR* (since its start in 1993),
6. Member of Technical Program Committee of the *International Symposium on Neural Network Applications in Electrical Engineering - NEUREL*,
7. Member of Technical Program and Organizing Committee of *YU INFO and ICIST Conferences* (since 1996),
8. Member of Scientific Committee of the *International ICT Forum*, Niš (since 2012).

Projects:

1. The project leader of the Serbian research team within the international DAAD project: *Network methods in electromagnetic field modelling*, 2011-2013.
2. Member of team engaged in the TEMPUS project: *Enhancing the quality of distance learning at western Balkan higher education institution*, 2011-2013.
3. The leader of the national project: *Research and development of solutions for improving performances of wireless communication systems in microwave and millimetre frequency ranges*, financed by the Serbian Ministry of Education, Science and Technological Development, 2011-2014.
4. The leader of subproject within the project: *Development of digital technologies and networking services in systems with embedded electronic components*, financed by the Serbian Ministry of Education, Science and Technological Development, 2011-2014.

Reviewer work in international and national journals:

1. *Electronic Letters*, IET,
2. *IEEE Transaction on Wireless Communications*, IEEE Communication Society, USA,
3. *IEEE Vehicular Technology Magazin*, IEEE Vehiculat Technology Society, USA,
4. *COMPTEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, Emerald Group Publishing Limited, United Kingdom
5. *International Journal of Antennas and Propagation*, Hindawi Publishing Corporation, Egypt, USA,
6. *Telecommunication Sciences*, Institute of Telecommunication Systems, National Technical University of Ukraine,
7. *International Journal of Reasoning-based Intelligent Systems*, *IJRIS scientific journal*, INDERSCIENCE publisher, UK,
8. *Microwave Review*, National Society for Microwave Technique, Technologies and Systems, Serbia and Montenegro IEEE MTT-S Chapter,
9. *Facta Universitatis*, Series: Electronics and Energetics, University of Niš,
10. *Serbian Journal of Electrical Engineering*, FTN Čačak, University of Kragujevac, et all.

In addition, Professor Milovanović has been also a reviewer of a number of professional books and monographs published by international publication houses.

The publication history of Professor Milovanović research work from 1972 to 2013, classified by M10-M80 categories and including M10-M80 points, is given in Table 1. This table also contains, as separate columns, the M10-M80 category classified Professor Milovanović's publications in 2013 showing that he is still very active in research work.

Finally, Prof. Milovanović has established over the years an excellent research team. Some of the present members are shown together with Prof. Milovanović in Fig. 9.

Some previous members are now working with prestigious scientific-research institutions and companies all over the world such as in USA, UK, Switzerland, Finland, The Netherlands, etc.

Table 1. Professor Milovanović's publications classified according to M10-M80 categories and the total number of M10-M80 points from 1972 to 2013 and separately for 2013

M category	M points	1972-2013		2013	
		Number of papers	Number of M points	Number of papers	Number of M points
M14	4	3	12.0		
M21	8	10	80.0	2	16
M22	5	1	5.0		0
M23	3	24	72.0	3	9
M24	3	2	6.0		0
M31	3	12	36.0		0
M33	1	198	198.0	9	9
M51	2	10	20.0	1	2
M52	1.5	47	70.5	6	9
M53	1	1	1.0		0
M61	1.5	26	39.0	1	1.5
M63	0.5	197	98.5	8	4
M85	2	10	20.0	3	6
	Σ	541	658.0	33	56.5



Fig. 9. Members of TELSIXS 2013 Organizing Committee - photo taken at the TELSIXS 2013 Conference