naši autori





Tomislav Bičanić was born in Vinkovci, Croatia 1977. He received B.Sc. from the Faculty of Electrical Engineering, Zagreb, Croatia in 2002. From 2002 to 2005 he worked with »Končar« – GIM – generators and motors manufacturing, Zagreb as a specialist in machine quality testing. In 2005 he specialized in digital control of excitation systems at the ABB University, Turgi, Switzerland. Thereafter, he joined EnergoControl Zagreb

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Nikša Burum was born in Dubrovnik, Croatia. He received the M.S and the Ph.D. degrees in electrical engineering from Faculty of Electrical Engineering and Computing, University of Zagreb, in 1999, and 2004 respectively. His main research interests are antenna design and numerical techniques in electromagnetic. He is currently Assistant Professor in the Department of Electrical Engineering and Computing, University of Dubrovnik.



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Lorena Cabria was born in Santander, Spain. She received the Telecommunications Engineering degree from the University of Cantabria, Santander, Spain, in 2001, where she is currently working toward the Ph. D. degree. Since June 2001, she is working as a Research Assistant in the RF and Microwave Group at the University of Cantabria. Her research interests include microwave integrated circuits and planar active anten-

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Marin Despalatović was born in Split, Croatia, in 1976. He received the B.S. degree in electrical engineering from the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, Split, Croatia, in 2000. Since 2001 he has been in the Department of Electrical Power Engineering at the University of Split as a Research Assistant. He is currently working toward a Ph.D. degree in electrical engineering. His research interests in-

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Renato Filjar is a senior research engineer and a project manager at Ericsson Nikola Tesla d. d., Zagreb, Croatia. He holds MSc and BSc degrees, both from the Faculty of Electrical Engineering and Computing, University of Zagreb. His main professional interests include satellite positioning systems (positioning performance improvement and applications development), navigation algorithms, mathematical modelling, loca-

tion context aggregation, geospatial web and location-based services. Mr Filjar is a Fellow of the Royal Institute of Navigation (RIN), London UK and the Chair of the RIN Croatian Branch; a Member of the Civil Global Positioning System Service Interface Committee (CGSIC); a Member of the International GNSS Society, Milton, QLD, Australia; and a Member of the Internet Society, Reston, VA. He authored 5 journal and 28 conference papers. At the same time, Mr Filjar has been actively involved in organisation of various international conferences related to (ENC2006, ICECom and ELMAR conferences) and professional advancement events (five RIN Croatian Branch seminars), mostly related to satellite navigation. In his spare time, he enjoys travelling, photography, theatres, movies, amateur radio and amateur weather forecasting. Lucia Fregoli did this work at Instituto de Telecomunicações, Instituto Superior Técnico, in the framework of the EU Socrates/Erasmus program, as part of her final year project for graduation in Telecommunication Engineering from University of Pisa.

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Jose Angel García received the Telecommunication Engineering degree (with honours) from the Instituto Superior Politécnico »José A. Echeverría« (ISPJAE), Havana, in 1988, and the Ph.D. degree from the University of Cantabria, Santander, in 2000. From 1988 to 1991, he was a Radio System Engineer at a High Frequency Communication Center, where he designed antennas and RF circuits. In 1991, he was appointed

Instructor Professor in the Telecommunication Engineering Department, ISPJAE. From 1999 to 2000 he was a Radio Design Engineer in Thaumat Global Technology Systems, working with base station arrays. He also worked as Microwave Design Engineer and Project Manager in TTI Norte from 2000 to 2001, being in charge of the research line on Software Defined Radios while involved in LNA and active antenna design. Since January 2002, he is working as a Senior Research Scientist at the University of Cantabria. His main research interests include non-linear characterisation and modelling of active devices, intermodulation distortion control on RF and microwave applications, reconfigurable terminals, as well as active antennas and arrays.



Alenka Hren received the B.Sc. degree in 1987, the M. Sc. degree in 1990 and the D. Sc in 2000, all in electrical engineering from the University of Maribor, Slovenia. From 1987 to 1994 she worked as a researcher at the Faculty of Electrical Engineering and Computer Science, University of Maribor. Since 1994 she has been working as a teaching assistant at the same institution. In 1990 she spent six months as a visiting

research student at the Imperial College, London, England. She was awarded by the Slovenian Ministry of Science and Technology and ISKRA Holding with the Bedjanic award for master thesis. Her research interests are in the field of power electronics, modeling and control of DC-DCconverters, control of electrical drives and estimation techniques.



Martin Jadrić received the B.S. degree in electrical engineering from the University of Split, Split, Croatia, and the M.S. and Ph.D. degrees from the University of Zagreb, Zagreb, Croatia, in 1964, 1970, and 1976, respectively. After completing his graduate studies, he joined Končar Company, Zagreb, Croatia. Since 1996, he has been with the Faculty of Electrical Engineering, Mechanical Engineering

and Naval Architecture, University of Split, first as an Assistant (through 1978), then as an Associate Professor (1978-1984), and currently as a Full Professor. During his career with the university, he has been responsible for the electric machines and drives curriculum, was the Head of the Department of Electric Power Engineering and, from 1980 to 1983, he was the Dean of the Faculty of Electrical Engineering. Mechanical Engineering and Naval Architecture. He has been involved in numerous government- and industry-sponsored projects in the areas of electrical machines and drives, and has authored more than 50 published technical papers and one book, Dynamics of Electrical Machines (Zagreb, Croatia: Graphis, 1997) (in Croatian). Currently, he leads project »On-line synchronous hydrogenerator parameter identification« which is supported by Ministry of Science, Education and Sports, Republic of Croatia.



Karel Jezernik received B.Sc. (1968), M.Sc. (1974) and Ph. D. (1976) degrees in electrical engineering from the University of Ljubljana. In 1976 he joined the University of Maribor and in 1985 he became a Full Professor and Head of the Institute of Robotics. His research and teaching interests include automatic control, robotics, power electronics and electrical drives. Current projects in these areas are high precision tracking control in machine tools, DD robots and robust

torque control in EV's. He consults on industrial servo control systems and other control and computer applications.



Helena Palacios Jurado, Telecommunication Engineer (1995) specialised in Radio-Communication (antennae, links, radar and RF communications in general). She works at the Department of RF and Electronic Technologies of INTA (National Institute of Aerospace Technologies), mainly on the design and development of antennae for Synthetic Aperture Radar (SAR). She has taken part in several antennae programs of the European Space Agency (ESA), i.e., »Array Antenna Panel« (L-band flat

antenna for satellite communications), »MIRAS/LICEF« (L-band interferometer boarded on space platform for measuring ocean salinity and soil moisture).



Dubravko Krušelj was born in Zagreb, Croatia, in 1972. He received his B.S.E.E. and M.S.E.E. degrees from Faculty of Electrical Engineering, University of Zagreb, in 1995 and 1998, respectively. He has been working in Končar – Electrical Engineering Institute since 1994. He works in Power Electronics and Control Department. His research interests are electromotor drives with induction motors (especially traction drives), vector control and modulation techniques.



at the Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia. He received his BSc, MSc and PhD degrees from the Faculty of Electrical Engineering and Computing, University of Zagreb, His main research interests include satellite navigation positioning performance improvements and positioning error modelling. Prof. Kos is an Associate Fellow (AFRIN) of the Roval Institute of Navigation, London, UK.

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Josip Macan was born in Sinj, Croatia, in 1957. He received the B.S. degree in electrical engineering from the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, Split, Croatia, in 1980. From 1980 to 1987 he was with KONČAR Electrical Engineering Institute, Zagreb, Croatia. Since 1987 he has been with Peruća hydroelectric power plant (HPP), Sinj, Croatia. Currently, he is the manager of the Peruća HPP and is the leader of a team for the Peruća

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Siniša Marijan received B.Sc. degree in E.E. from the Faculty of Electrical Engineering and Computing, University of Zagreb. For more than 20 vears he is, as a KONČAR employee, involved in development of different industrial, traction and power engineering proprietary control systems. While in the past particularly involved in the design of real time operating systems, application programming graphical tools and application soft-

ware, nowadays the scope of his responsibility is, apart from complex projects leadership, development of embedded central processing units. He was responsible for several successfully completed projects where the development of proprietary embedded control systems were project objective, such e.g. several generations of single and twin channel digital voltage regulators, locomotive main control system, tramcar vehicle control unit, tramcar traction power converters, auxiliary power supplies, static converters, etc.



Vojko Matko was born in Celje, Slovenia, in 1959. He received his M.Sc. and Ph.D. degrees in Electrical Engineering from the Faculty of Electrical Engineering and Computer Science, University of Maribor, Slovenia in 1990 and 1994, respectively. From 1978 to 1985 he carried out a research work at a Slovenia's leading home appliances producer Gorenje Research Laboratory in Velenje, Slovenia. He joined the Univer-

sity of Maribor in 1985 as a Research Assistant in Electrical Engineering. Presently, he is Associate Professor for measuring systems. He is involved in the research of new accurate measuring methods related to highly sensitive resonant methods using quartz crystals. His other fields of interest include Internet-based measurements and comparative measurement

of position, speed, height, and accelerations using satellite signals and various databases.



Muharem Mehmedović was born in Bešnjevo, Šipovo, Republic of Bosnia and Herzegovina 1948. He received B.Sc., M.Sc. and Ph.D. degrees from the Faculty of Electrical Engineering, Zagreb, Croatia in 1970, 1974 and 1995, respectively. From 1970 to 1985 he worked at Institute of Electrical Engineering »Končar«, Zagreb as researcher and specialist in mathematical modelling of electric power systems and excitation control sys-

tems for large synchronous generators. In 1973 he specialized electric power system stability at MEI, Moscow, Russia. In 1975 he was awarded with the »Prof. dr. V. Bedjanič« for M. Sc. thesis. Liubliana. Slovenia. From 1985 to 1990 he was head of the Department for Electric Plants and Systems. During the same period he lead several research and development projects at the same Institute. In 1991 he joined the Energy Institute, Zagreb where he dealt with electric power system transient phenomena and stability, power quality, excitation control systems and various primary equipment tests within Croatian electric power utilities and organisations. Since 1998, he has been lecturing mathematical modelling of electric power systems at the Faculty of Electrical Engineering and Computing, Zagreb. In 2002 he joined the EnergoControl Zagreb d.o.o., Zagreb and worked as the head of the Department for Electric Power System Analysis. In 2005 he specialized in digital control of excitation systems at the ABB University. Turgi, Switzerland. Currently, he is the assistant professor at the Faculty of Electrical Engineering in Osijek, Croatia.



Miro Milanovic received the B.Sc., M.Sc. and Dr. Eng. Degrees in electrical engineering from the University of Maribor, Maribor, Slovenia in 1978, 1984, and 1987, respectively. From 1978 to 1981 he worked as a Power Electronics Research Engineering at TSN Co. Maribor, Slovenia. From 1981 to the present he has been a Faculty member of the Faculty of Electrical Engineering and Computer Sciences, the University of Maribor.

In 1993 he was a visiting scholar at the University of Wisconsin, Madison, USA and in 1999 he spent two months at the University of Tarrgona, Spain as a Visiting Professor. Currently he has a full professor position at the University of Maribor. His main research interests include control of power electronics circuits, unity power factor correction and switching matrix converters.



Juan Enrique Page was born in Madrid, Spain, in 1946. He received the Ingeniero de Telecomunicación degree and the Doctor Ingeniero degree from the Universidad Politécnica de Madrid, in 1971 and 1974, respectively. Since 1983 he is a Professor of the Departamento de Electromagnetismo y Teoría de Circuitos of the Universidad Politécnica de Madrid. His activity includes the teaching of Electromagnetic and Circuit Theory

and research in the field of CAD of microwave devices and systems.



Custodio Peixeiro, was born in Évora, Portugal in 1956. He received the graduation, master and doctor degrees in electrical and computer engineering from Instituto Superior Técnico (IST), Technical University of Lisbon, in 1980, 1985 and 1993, respectively. He has been teaching in the Department of Electrical and Computer Engineering since 1980 where he is now Assistant Professor. He is also a researcher of Instituto de

Telecomunicações. His present research interests are focused in microstrip antennas and circuits for applications in mobile terminals (handsets, PDAs and laptop computers).



Nedjeljko Perić (M'94–SM'04) received the B.Sc., M.Sc. and Ph.D. degrees in Electrical Engineering from the Faculty of Electrical Engineering and Computing (FER Zagreb), University of Zagreb, Croatia, in 1973, 1980, and 1989, respectively. From 1973 to 1993 he worked at the Institute of Electrical Engineering of the Končar Corporation, Croatia, as an R&D engineer. Head of the Positioning Systems Department, and Manager of the Automation Section. In

1993 he joined the Department of Control and Computer Engineering at FER Zagreb as an associate professor. He was appointed as a full professor in 1997 and he currently teaches several courses in automatic control. His current research interests are in the fields of process identification and advanced control techniques. Professor Perić serves as the Chairman of KoREMA, the Croatian Society for Communications, Computing, Electronics, Measurements and Control. He is also a member of several international professional associations. Professor Perić is a Fellow of Croatian Academy of Engineering.



Marko Podberšič was born in Ljubljana, Slovenia, in 1964. He received his M.Sc. and Ph.D. degrees in Electrical Engineering from the Faculty of Electrical Engineering and Computer Science, University of Maribor, Slovenia in 1998 and 2006, respectively. From 1989 to 2002 he carried out a research work at an electricity meters producer ISKAEMECO d.d. in Kranj, Slovenia. He joined the Republic of Slovenia, Ministry of defence, Admini-

stration for civil protection and disaster relief in 2002. Presently, he is Head of telecommunication and information department. He is involved in the research of methods for solving an EMC problems. His other fields of interest include telecommunications particularly radio telecommunications.



Zdravko Rabuzin was born in Varaždin, Croatia in 1966. He received B.Sc. from the Faculty of Electrical Engineering, Zagreb, Croatia in 1991. From 1991 to 1996 he worked at the Faculty of Electrical Engineering, Zagreb, as teaching assistant. He designed and led several projects for control systems in industrial plants and public companies in Croatia. In 1996 he joined EnergoControl Zagreb d.o.o., where he led projects for design, manufacturing, factory, field testing and commissioning of several

control, monitoring, protection and excitation computer based systems in several hydro power stations in Republic of Bosnia and Herzegovina. From 2001 to 2004, Mr. Rabuzin implemented digital protection and excitation systems for several generation units in electric power and industrial systems of Republic of Croatia and Macedonia. Since 2006 he led projects for SCADA and load frequency control system of the Electric Power Generation and Dispatch Center of EP HZ HB in Mostar, Republic of Bosnia and Herzegovina. He is currently the project leader for design, manufacturing, factory, field testing and commissioning for the control, monitoring and protection system for new hydro power plants in Republic Bosnia and Herzegovina.



Professor Borivoje Rajković (1937) graduated at the University of Zagreb Faculty of Electrical Engineering in 1961 and received his dostor's degree in 1973. Since 1961 with Končar Institute of Electrical Engineering working on development and design and leading projects dealing with controlled a.c. and d.c. motor drives as well as complex industri and transportation facilities. He was chief desinger of Končar Thyristor Locomotive project. At the Institute he worked as

scientific research investigator, group leader, head of Electrical Drives department and director of the Plants and Systems division. As full professor he teaches electrical machines control at the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture in Split. He lectures on industrial plants at a postgraduate course at the Faculty of Electrical Engineering and Computing Science in Zagreb. He has published more than 70 scientific and technical papers and was awarded several merit awards and prizes such as one at the World Exhibition Plovdiv '85, the Nikola Tesla Prize in 1985. For 37 years he has been on the Editorial Board of AUTOMATI-KA and from 1993 as its editor-in-chief.



Andreja Rojko received B.Sc. (1997) and Ph.D. (2002) degrees in electrical engineering from the Faculty of Electrical Engineering and Computer Science, University of Maribor, Slovenia. She is currently in the Institute of Robotics, University of Maribor, Slovenia where she works as a Research Assistant since 2001. Her research interests include fuzzy systems, neural networks, genetic algorithms and implementation of the intelligent motion control in the robotics.



Vladimir Siladi was born in Čakovec, Croatia in 1956. He received his B.S.E.E. and M.S.E.E. degrees from Faculty of Electrical Engineering, University of Zagreb, in 1979 and 1990, respectively. Since 1979 he has been working in Končar – Electrical Engineering Institute where he is currently head of Power Electronics and Control Department. His research interests include power converters for traction applications, especially their impact on motor behaviour. He is

author and co-author of 15 papers, mostly presented at national and international conferences. He is a part-time assistant at Polytechnic of Zagreb.



Zvonimir Sipus was born in Zagreb, Croatia, on March 12, 1964. He received the M.Sc. degree from University of Zagreb, Croatia, in 1991, and the Ph.D. degree from Chalmers University of Technology, Gothenburg, Sweden, in 1997. He is now an associate professor at the Department of Radiocommunications, Faculty of Electrical Engineering, University of Zagreb, Croatia. In addition, he was an adjunct researcher at the Department of Electromagnetics, Chalmers

University of Technology. He has been involved in European scientific projects on antennas and optical fibers. His research interests include analytical and numerical methods in the electromagnetic theory, and optical communication systems. He was involved in development of the software for analyzing planar, circular cylindrical and spherical antennas and scatterers. He is married and he has two daughters.



Nino Stojković received Bachelor degree in 1989., Master degree in 1995. and Ph.D. degree in 1999., all at Faculty of Electrical Engineering and Computing, University of Zagreb. In 2005. he earned title of associate professor at Faculty of Engineering University of Rijeka. He published textbooks and two problem collections. He was researcher on three scientific projects of MZOŠ RH and leads one scientific project. He published 3 papers in domestic journals

and 22 scientific papers on domestic and international conferences. Field of investigation includes analog signal processing and communication technologies. He was Fulbright grantee, year 2003/2004 at Texas A&M University in College Station, Texas. He is chair of Department of Automatics, Electronics and Computing and member of task group for developing new study programs according to Bologna manifest. He is member of IEEE.



Riko Šafarič received B. Sc. (1985), M.Sc. (1989) and Ph. D. (1994) in Electrical Engineering from the Faculty of Electrical Engineering and Computer Science, University of Maribor, Slovenia. He has been holding the position of a full professor of Robotics since 2006. His research interests are mainly in the field of robotics: adaptive control of directdrive robot mechanism, neural-network control, sliding-mode control, telerobotics via internet, collision de-

tection in virtual reality world, mechatronics design etc.



Siniša Škokić was born in Zagreb in 1978. He got his B.Sc. and M.Sc. from the Faculty of Electrical Engineering and Computing of the University of Zagreb in 2001 and 2005, respectively. He spent two specialisation terms at the University of Siena, in 2004 and 2006, where he was involved in the development of mathematical models for analysing curved frequency selective protective radomes. Siniša Škokić is currently a

Ph.D. student and research assistant at the Department of Wireless Communications, Faculty of Electrical Engineering and Computing, Zagreb.



Božo Terzić was born in Grab, Croatia, in 1962. He received the B.S. and Ph.D. degrees in electrical engineering from the Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, Split, Croatia, in 1986 and 1998, respectively, and the M.S. degree from the Faculty of Electrical Engineering, University of Zagreb, Zagreb, Croatia, in 1993. In 1986, he became an Assistant in the Department of

Electrical Power Engineering, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, where, from 2000 to 2004, he was an Assistant Professor and currently he is an Associate Professor. His research interests include ac electrical machines and drives, sensorless permanent-magnet motor drives, in particular, parameter identification of electrical machines.

Mladen Tomić received Bachelor degree in 2000. at Faculty of Electrical Engineering and Computing, University of Zagreb. During the study he received the *Josip Lončar* award and after graduation took position at Faculty of Engineering, University of Rijeka, at Department of Electrical Engineering. He received his Masters degree in 2004., also at Faculty of Electrical Engineering and Computing, University of Zagreb and is current-ly working on his Ph.D. thesis. He was researcher on two projects of MZOŠ RH and he is involved in research areas of signal processing and compression and communication technologies. He is appointed as an instructor at the Cisco Networking Academy.



Antonio Tazón Puente was born in Santander, Spain, in 1951. He received the M. Sc. Degree in physics in 1978 and received the Ph. D. in physics in 1987, both from the University of Cantabria, Santander. He has carried out research on analysis and optimisation of non-linear microwave active devices and circuits in both hybrid and monolithic technologies. Currently, his main research areas of interests are active microwave circuits

mainly in the area of linear and large-signal modelling, small signal intermodulation of GaAs and Si-Ge devices and their applications in non-linear computer aided design, as well as active arrays and reflectors with electronic beam control. He was a Professor with the Department of Electronics, University of Cantabria, from 1991 to 1995. Since 1996, he has been a Professor at the Department of Communication Engineering in the same University. In parts of 1985 and 1986, he carried out stages at the IRCOM Department, University of Limoges, France, working in non-linear modelling and loadpull techniques. He has participated in Spanish and European projects in non-linear modelling (Esprit project 6050 MANPOWER), and microwave and millimetre wave communication circuits and systems (Spanish Project PlanSAT, European Project CAB-SINET, etc).



Josip Ungarov was born in Šibenik, Croatia in 1950, where he finished grammar school in 1968. In 1973 he received B.Sc. degree from the Zagreb Faculty of Electrical Engineering, Dept. Electrical Machinery & Automation. In 1980 he received the M.Sc. degree from the Zagreb Faculty of Electrical Engineering, Dept. Electrical Machinery and Automation. From 1973 to 1977 he worked with a railway transport company (Željez-

ničko transportno poduzeće Zagreb). Since 1977 he is with Končar – Electrical Engineering Institute in Zagreb. His main field of work are power electronics systems, in particular their applications in railway vehicles (electric traction and auxiliary supply systems). He is the member of several associations: member of KoREMA – Croatian Society for communication, Computing, Electronics, Measurement and Control, member of Electrical Engineering Association Zagreb, chairman of Croatian Electrical Standardization committee No. 22 »Power electronics«, member of Croatian Electrical Standardization committees No. 9 »Electrical equipment for railway vehicles«, IEEE Senior member.

Radoslav Urban, did this work at Instituto de Telecomunicações, Instituto Superior Técnico, in the framework of the EU Socrates/Erasmus program, as part of his Warsaw University of technology master thesis.



Juan Vassal'lo Sanz, Ph.D. in Physics in 1983, Since 1976 is working on microwaves circuits and antennas at CSIC, now at the Antennas Technology Laboratory of the Institute of Applied Physics. He has worked on the propagation study on ferrimagnetic materials, developing non-reciprocal devices. Since 1982 he has developed a completed set of land mobile antennas in photoetched technology, and flat antennas for space environ-

ment under several ESA contracts. He has been also involved on several antenna contracts, projects and publications, with Spanish Universities, Industrial Companies and other European Working Groups through several COST Actions on Antennas as 213, 223, 260 and 284. Since 1995 he is involved on the developing of passive and active reflectarrays and new technologies on Fresnel reflectors for communication applications, and since 2000 on interferometric radiating systems for direction finding and surveillance applications.



Mario Vašak received the B.Sc. and Ph.D. degrees in Electrical Engineering from the Faculty of Electrical Engineering and Computing (FER Zagreb), University of Zagreb, in 2003 and 2007, respectively. He currently works at the Department of Control and Computer Engineering, FER Zagreb as a senior assistant. His main research interests are: identification and optimal control of hybrid systems, computational geometry and application of estimation techniques in mechatronics.