CV



Title, name and surname



PhD.E.E-Full Research Professor (Principal Research Fellow), Zeljko V. Despotovic

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EDUCATION	
University/ Faculty Title of thesis	School of Electrical Engineering (Chair of Power Converters and Drives), University of Beigrade
	"The Performance Optimization of Resonant Electromagnetic Vibratory Conveyors Using Current Controlled Transistor Power Converters"
Mentor and examiners	Supervisor: Prof.dr Zoran Stojiljkovic ; Examiners: Academician of Serbian Academy of Science and Arts (SASA) -Prof. dr Antonije Djordjevic, Prof.dr Slobodan N. Vukosavic, Prof.dr Borislav Jeftenic, Prof.dr Milos Nedeljkovic
Place and date of defense	School of Electrical Engineering (Chair of Power Converters and Drives), University of Belgrade, 15.11.2007.
• Title	Ph.D. of Electrical Engineering
	M.Sc. STUDY
 University/ Faculty 	School of Electrical Engineering (Chair of Power Converters and Drives), University of Belgrade
Title of thesis	"Power Converters for Electromagnetic Vibratory Feeder Drive in Systems for Dosing and Conveyance of Granular Materials",
Mentor and examiners	Mentor: Prof.dr Zoran Stojiljkovic; Examiners: Prof. dr Vladan Vuckovic, Prof.dr Dragan Petrovic, Prof.dr Borislav Jeftenic, Prof.dr Zoran Lazarevic
Place and date of defense	School of Electrical Engineering (Chair of Power Converters and Drives), University of Belgrade, 11.12.2003.
• Title	M.Sc. of Electrical Engineering
	B Sc STUDY
 University/ Faculty 	School of Electrical Engineering (Chair of Power Converters and Drives), University of Belgrade
• Title of thesis	"Comparative Synopsis Characteristics of Darlington BJT and IGBT as Power Current
	Switches in Voltage Source Inverters"
 Year of graduation 	April 1990

• Title B.Sc. of Electrical Power Engineering

AREAS OF WORK Primary interest research:

Power electronics, Power converter, Industrial electronics, Mechatronics, Vibration control, Electrostatic precipitators control.

During his scientific research work deals with the following areas: control of mechanical systems and mechanisms, hydraulics and hydrodynamics systems, control of vibrations, development of industrial controllers, control of power converters and control of AC and DC motion drives

Additional professional background:

Theory of Electrical Machines, Kinematics, Dynamics, Control and Stability Theories, Numerical Simulations, Neural networks and fuzzy control in power electronics, Renewable energy sources. The working experience includes research in the following areas:

- Power electronics and power converters design-25 years of experience
- Mechatronics, robotics and servo drives (DC, AC, Brush-less) -20 years of experience
- Control of vibratory conveying systems and vibratory feeder drives-15 years of experience
 - Design of low and medium power AC motion drive-14 years of experience
- Development of power and control of Electrostatic precipitators (ESP's)-15 years of experience
- Research an development in area of high voltage high frequency power supplies and its application in solving ecological problems (reduction air pollution)- 15 years of experience
- Power electronics circuit computer simulation-20 years of experience
- Hydraulics control and hydrodynamics power transmission-10 years of experience
- Embedded motion control-6 years of experience
- Design of photovoltaic (PV) OFF-grid systems 8 years of experience
- Control of photovoltaic (PV) OFF-grid systems- 8 years of experience
- Design of photovoltaic ON-grid power plants 5 years of experiences
- Experience with PC and PC104 systems
- Digital/analogy hardware design experience
- Familiar interfaces I2C, RS232, RS422-485, CANBUS, PROFIBUS
- Comfortable with Windows based tools
- Hardware/software design tools: Or CAD, TANGO, ACCEL, PSPICE, MSIM Design Centre and MATLAB.
- Proficiency in hardware/software design tools: Or CAD, TANGO, ACCEL, PSPICE, MSIM Design Centre and MATLAB.
- **ENGINEERING CERTIFICATES** <u>Graduate Engineer's Licenses</u> (Serbian Chamber of Engineers):

-Responsible Designer of Electrical Drive Control - automatic, measuring and regulation (Licence 352)

-Responsible Designer of Low and Medium Voltage Power System (Licence 350) -Responsible Contractor of Low and Medium Voltage Power System (Licence 450)

ACADEMIC AND SCIENTIFIC ACTIVITIES PhD.E.E, Full Research Professor at University of Belgrade, School of Electrical Engineering, June 2019 to present, (Professor at PhD academic studies, Chair of Power Converters and Drives. Teaching on the courses: Power Converters, Control of Power Converters)

> PhD.E.E, Associate Research Professor at University of Belgrade, School of Electrical Engineering, March 2015 to June 2019 (Professor at PhD academic studies, Chair of Power Converters and Drives. Teaching on the courses: Power Converters, Control of Power Converters)

> Professor at the School of Electrical Engineering and Computer Science Applied Studies -Belgrade, Serbia, February 2010 to present. (Professor at B.Sc., specialist applied study and Master Applied Studies), Chair of New Energy Technology. Teaching on the courses: Electrical Power Converters, Power Electronics, Control of Power Converters and Design of Power Converters)

> <u>Associate fellow of Department for Applied Mechanics and Automatic Control</u>-Faculty of Engineering, University of Kragujevac, Serbia, April 2010 to present.

Associate fellow of Laboratory for Digital Control of Power Converter and Drives-School of *Electrical Engineering*, University of Belgrade, Serbia, November 2007 to present. http://vozila.etf.rs/clanovi.html <u>Member of professional board</u> (Field of Science and Mathematics), University of Belgrade, December 2019 to present.

Member of Presidency, Association of Institutes of Serbia, Jul 2020-present

President of Scientific Council of Mihajlo Pupin Institute, March 2020.-Present.

<u>Member of Parent Scientific Committee for Energy, Mining and Energy Efficiency, Ministry of</u> Science, Technological Development and Innovations, Republic Serbia: Belgrade, Republic of Serbia, January 2022-Present

MEMBERSHIP IN PROFESSIONAL IEEE Senior Member, (from 27 July 2015 to present)

AND SCIENTIFIC ASSOCIATIONS

IEEE Industrial Electronics Society, USA, (Member from 2006. to present)

IEEE Industry Applications Society, USA, (Member from 2006. to present)

IEEE Power Electronics Society, USA, (Member from 2006. to present)

IEEE Power and Energy Society USA, (Member from 2018. to present)

POWER ELECTRONICS SOCIETY, Serbia , (1995. to present)

SOCIETY OF THERMAL ENGINEERS, Serbia (2008. to present)

SOCIETY FOR RENEWABLE POWER SOURCES, Serbia (2012. to present)

SERBIAN CHAMBER of ENGINEERS (2009. to present)

SERBIAN ASSOCIATION of POWER ENGINEERING (2010. to present)

SERBIAN NATIONAL COMMITTEE CIGRE- HVDC and Power Electronics, (2008. to present)

COMMISSION FOR THE STANDARDIZATION OF POWER ELECTRONICS, INSTITUTE FOR STANDARDIZATION OF SERBIA, June 2013-Present

COMMISSION FOR THE STANDARDIZATION OF SOLAR ENERGY, INSTITUTE FOR STANDARDIZATION OF SERBIA, March 2021-Present

INSTITUTE FOR STANDARDIZATION OF SERBIA, Member of assembly, 2020-present

PUBLISHED PAPERS, BOOKS AND PARTICIPARTION IN PROJECTS

He has published 19 papers in international scientific journals (12 in top international journals), 99 papers at international symposiums and conferences, 30 papers in leading national journals and more than 60 papers at national conferences and symposiums. He is the author of many technical realizations of Industrial prototypes. He participated in a number of scientific and national investment projects.

A) The chapter in the books

1. J.Subić, M.Jovanović, **Ž.V.Despotović**, M.Jeločnik, "Possibilities of applying robotic systems and smart sensor networks in integral agricultural apple production", *Advances in Robot Design and Intelligent Control*, Robotics in Alpe-Adria-Danube Region (RAAD16), Vol.540, Chapter 30, pp.269-285, *SPRINGER* ISBN 978-3-319-49058-8, Available at November 2016 LINK: <u>http://www.springer.com/la/book/9783319490571</u>

2. Ž.V.Despotović, M.D.Jovanović, I.Stevanović, "Possibilities of using renevable energy sources in agriculture in the republic of Serbia ", *SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT IN TERMS OF THE REPUBLIC OF SERBIA STRATEGIC GOALS REALIZATION WITHIN THE DANUBE REGION*-development and application of clean technologies in agriculture, Chapter 7, pp.107-128, Publisher: Institute of Agricultural Economics, Belgrade, ISBN 978-86-6269-056-2. (Invited paper) LINK:

http://www.iep.bg.ac.rs/images/stories/izdanja/Tematski%20Zbornici/Thematic%20Proceedings_ IEP%202016.pdf

 M. Matijević, Ž.V.Despotović, M.Milanović, N. Jović, S.N.Vukosavić (2018), "Laboratory Model of Coupled Electrical Drives for Supervision and Control via Internet", *Online Engineering* & *Internet of Things*, Lecture Notes in Networks and Systems (LNNS), Vol .22, pp.392-407, In: Auer M., Zutin D. (eds), SPRINGER, available at September 2017: <u>https://doi.org/10.1007/978-3-319-64352-6_37</u>
 Print ISBN 978-3-319-64351-9, Online ISBN 978-3-319-64352-6 LINK: <u>https://link.springer.com/chapter/10.1007/978-3-319-64352-6_37</u>

B) The papers in international journals

1. **Z.V.Despotovic**, Z.V.Stojiljkovic, "Power Converter Control Circuits for Two-Mass Vibratory Conveying System with Electromagnetic Drive: Simulations and Experimental Results", *IEEE Transactions on Industrial Electronics*, Vol.54, Issue I, pp.453-466, February 2007.

2. A.I.Ribic, **Z.V.Despotovic**, "High Performance Feedback Control of Electromagnetic Vibratory Feeder", *IEEE Transactions on Industrial Electronics*, Vol.57, Issue IX, pp.3087-3094, September 2010.

3. S.Vukosavic, N.Popov, **Z. Despotovic**, "Power Electronics Solution to Dust Emissions from Thermal Power Plants", *Serbian Journal of Electrical Engineering*, Vol.7, No2, pp.231-252, November 2010.

4. K. Addi, **Z. Despotovic**, D. Goeleven, A. Rodic, , "Modelling and Analysis of a Non-Regular Electronic Circuits Via a Variational Inequality Formulation", *Applied Mathematical Modelling*, Vol.35., Issue 5, pp.2172-2184, May 2011.

5. **Ž. V. Despotović**, A. I. Ribić, V.Sinik "Power Current Control of a Resonant Vibratory Conveyor Having Electromagnetic Drive", *Journal of Power Electronics*, Vol.12, No4, pp.677-688, July 2012.

6. **Ž. Despotović**, A. Ribić, "The Increasing Energy Efficiency of the Vibratory Conveying Drives with Electromagnetic Excitation", *International Journal of Electrical and Power Engineering*, Vol.6(1), pp.38-42, April 2012.

7. **Z. V.Despotovic** , M.Lecic, M.Jovic, A.Djuric "Vibration Control of Resonant Vibratory Feeders With Electromagnetic Excitation", *Journal FME Transactions*, Vol.42, No.4, pp.281-289, December 2014.

8. A.Radojković, S.M.Savić, N.Jović, J. Ćirković, **Ž.Despotović**, A.Ribić, Z.Branković, G.Branković, "Structural and Electrical Properties of BaCe0.9Eu0.102.95 Electrolyte for IT-SOFCs", *Electrochimica Acta*, Vol.161, pp.153-158, April 2015.

9. **Z. V.Despotovic**, V.Sinik, "The Simulations and Experimental Results of Dynamic Behavior of Torque Motor Having Permanent Magnets", *Journal of Electrical Engineering*, Vol.66, No.2, pp.92-102, April 2015.

10. S.L.Srdic, **Z.V.Despotovic**, "A Buck-Boost Converter Modified to Utilize 600V GaN Power Devices in a PV Application Requiring 1200V Devices", *Advances in Electrical and Computer Engineering*, Vol.15, Issue 3, pp.59-64, August 2015.

11. V.Sinik, **Z.V.Despotovic**, I.Palinkas, "Optimization of the Operation and Frequency Control of Electromagnetic Vibratory Feeder", *Elektronika ir Elektrotechnika*, Vol.26, No.1, pp.24-30, February 2016, ISSN 1392-1215.

LINK: http://eejournal.ktu.lt/index.php/elt/article/view/14095/7360

12.V.Sinik, **Z.V.Despotovic,** I.Palinkas, "Improved power supply performance of vibratory conveyor drives", *Elektronika ir Elektrotechnika*, Vol.22, No.6, pp.3-9, December 2016, ISSN 1392-1215.

LINK: http://eejournal.ktu.lt/index.php/elt/article/view/6924/8535

13. P.Mišljen, **Ž.V.Despotović**, M.Matijević, "Modeling and Control of Bulk Material Flow on the Electromagnetic Vibratory Feeder", *Automatika: Journal for Control, Measurement, Electronics, Computing and Communications*, Vol..57, No4 (2016), ISSN: 0005-1144, (https://doi.org/10.7305/automatika.2017.03.1766)

14. **Z.V. Despotovic,** Dj. Urukalo, M. Lecic, A. Cosic, "Mathematical modelling of resonant linear vibratory conveyor with electromagnetic excitation: simulations and experimental results", *Applied Mathematical Modeling*, Vol.41, No.-, pp.1-24, January 2017, ISSN: 0307-904X (Review paper).

LINK: http://www.sciencedirect.com/science/article/pii/S0307904X16304802#

15. **Z. V.Despotovic**, A.M. Pavlovic, J.Radakovic, "Using Regulated Drive of Vibratory Screens with Unbalanced Motors", *Journal of Mechatronics, Automation and Identification Technology,* ISSN (Online) 2466-3603, Vol.1, No.3, pp.20-25, 2016.

LINK: <u>http://jmait.org/wp-content/uploads/2016/11/Despotovic-Pavlovic-Radakovic-Infotech_V1-</u> 13.pdf

16. **Z. V.Despotovic**, Dj.Urukalo, A.I.Ribic, "Hardware and Software Implementations of Measuring System for Resonant Electromagnetic Vibratory Conveyor", *International Journal of Electrical Engineering and Computing*, Vol. 1, No. 1 (2017), DOI: 10.7251/IJEEC1701021D, e-ISSN: 2566-3682.

LINK: http://www.ijeec.org/index.php/ijeec/article/view/9/6

17. J.D.Bobic, M.Ivanov, N.I.Ilic, A.S.Dzunuzovic, M.M. Vijatovic Petrovic, J.Banys, A.Ribic, **Z.Despotovic**, B.D.Stojanovic, "PZT-nickel ferrite and PZT-cobalt ferrite comparative study: Structural, dielectric, ferroelectric and magnetic properties of composite ceramics", *Ceramics International*, Vol.44, Issue 6, pp.6551-6557, ISSN: 0272-8842. Available online 9 January 2018.

https://doi.org/10.1016/j.ceramint.2018.01.057 LINK: https://www.sciencedirect.com/science/article/pii/S0272884218300695

18. P.Misljen, M.Tanaskovic, **Z.Despotovic**, M.Matijevic, "Controlling Electromagnetic Vibrating Feeder by Using a Model Predictive Control Algorithm", *Interciencia Journal*, Vol.43, No.10, pp. 31-47, ISSN 0378-1844, 2018.

http://is.fink.rs/podaci/Milan_Matijevic/50/PMisljen%20et%20all.pdf http://intercienciajournal.com/intercien/index.php/pdf/stream/0NDe3/1537771995

19. V.Ž.Filipović, M.Matijević, P.Mišljen, Ž.V.Despotović, "Outlier Robust Identification of the Thermal Power Plant: Combustion Control and the Solid Fuel Combustion Products Vibratory Transport", *Environmental Engineering and Management Journal*, Print ISSN: 1582-9596, eISSN: 1843-3707 (Paper accepted for publication 12. October 2019)

LINK: http://www.eemj.icpm.tuiasi.ro/pdfs/accepted/26_194_Filipovic_19.pdf

20. V.Šinik, **Ž.Despotović**, S.Ketin, U.Marčeta, "Radiation of Electromagnetic Fields of Industrial Frequencies. Electromagnetic Radiation of Electrical Appliances in Households", International Journal of Engineering, Tome XVIII, February 2020, pp. 3-18.

https://annals.fih.upt.ro/pdf-full/2020/ANNALS-2020-1-01.pdf

21.V.Šinik, **Ž.Despotović**, S.Prvulović, E.Desnica, J.Pekez, J.Tolmač, I.Palinkaš, "Higher Harmonics of Current Caused by the Operation of Rolling Mill", International Journal of Engineering, Tome XVIII, February 2020, pp.63-69.

https://www.proquest.com/openview/3335bcc406eb3e9698a0899daa64ed1d/1.pdf?pqorigsite=gscholar&cbl=616472 22. V. ŠINIK, **Ž.DESPOTOVIĆ**, Lj.RADOVANOVIć, M.ĐURĐEV, B.NOVAKOVIĆ, J.TOLMAČ, I.PALINKAŠ, "SOME ASPECTS OF THE ELECTRICAL POWER QUALITY", ACTA TECHNICA CORVINIENSIS – Bulletin of Engineering [e -ISSN: 2067-3809] TOME XIII, pp. 57-62, March 2020.

https://acta.fih.upt.ro/pdf/2020-1/ACTA-2020-1-10.pdf

23. M. Vijatovic Petrovic, F. Cordero, E. Mercadelli, E. Brunengo, N. Ilic, C. Galassi, **Z. Despotovic,** J.Bobic, A. Dzunuzovic, P. Stagnaro, G. Canu, F.Craciun., "Flexible lead-free NBT-BT/PVDF composite films by hot pressing for low-energy harvesting and storage", Journal of of Alloys and Compounds, https://doi.org/10.1016/j.jallcom.2021.161071, pp.1-35, July 2021 (IF=5.316).

https://www.sciencedirect.com/science/article/abs/pii/S0925838821024804

24. **Ž.V.Despotović**, M.Tajdić, "Design, Implementation and Experimental Testing of a Hybrid Power Supply of Remote Measuring Station in the Surveillance, Alert & Warning System (SAWS)", TELFOR Journal, Vol.14, No1, 2022., pp.12-19.

http://journal.telfor.rs/Published/Vol14No1/Vol14No1_A3.pdf

25. V.Šinik, **Ž.V.Despotović**, B.Radović, M.Đurđev, M.Josimović, "PROBLEMS RELATED TO THE ELECTRIC POWER SYSTEM OF WIND FARMS AND NEW TENDENCIES IN THEM", ACTA TECHNICA CORVINIENSIS – Bulletin of Engineering, Tome XV [2022]|Fascicule 1 [January – March], pp.35-39, 2022.

https://acta.fih.upt.ro/pdf/2022-1/ACTA-2022-1-06.pdf

26. J.Bobić, N.Ilić, **Ž.V.Despotović**, A.Džunuzović, R.Grigalaitis, I.Stijepović, B.Stojanović, M.Vijatović Petrović, "Properties and Potential Application of Lead-Free (BaZr0.2 Ti0.8 O3) and Lead-Based (PbZr0.52 Ti0.48 O3) Flexible Thick Films", Crystals 2023, Vol.13, No8, pp.1178-1193, MDPI, July 2023. (IF=2.7

https://www.mdpi.com/2073-4352/13/8/1178

C) <u>The papers at international conferences</u>

1. <u>Z.V.Despotovic</u>, M.Jovanovic, Z.Stojiljkovic, "Microprocessor controlled converter for electromagnetic vibratory drive", *PROCEEDINGS of the 11th International Symposium of the Power Electronics*, N.Sad 31.10- 2.11.2001., Serbia, Vol.T2-1.5, pp.180-187.

2. <u>Z. Despotovic</u>, "Mathematical model of electromagnetic vibratory actuator", *PROCEEDINGS* of the 12th International Symposium of the Power Electronics, N.Sad, 05.-07.11.2003., Serbia, Vol.T3-3.2, pp.1-5.

3. M. D. Jovanovic, M.Vukobratovic, <u>Z. Despotovic</u>, "General-Purpose Controller for Six-Joint Robot", *PROCEEDINGS of the 12th International Symposium of the Power Electronics*, N.Sad, 05.-07.11.2003., Serbia, Vol.T4-4.3, pp.1-4.

4. Z.Stojiljkovic, <u>Z.Despotovic</u>, "Regulated Rectifier for Supplying Electrostatic Precipitators" *PROCEEDINGS of the 12th International Symposium of the Power Electronics*, N.Sad 05.-07.11.2003., Serbia, Vol.T1-2.1, pp. 1-5.

5. <u>Z.Despotovic</u>, Z.Stojilkovic, "Current Controlled Transistor Power Converter for Driving Electromagnetic Vibratory Conveyor", *PROCEEDINGS of the 13th International Symposium of the Power Electronics*, N.Sad, 02.-04.11.2005., Serbia, Vol.T1-2.1, pp. 1-5.

6. <u>Z.Despotovic</u>, M.Djukic,"Controlled Electro Resistive Annealing of Metal Ingot" *PROCEEDINGS of the 13th International Symposium of the Power Electronics*, N.Sad, 02.-04.11.2005., Serbia, Vol.T1-2.4, pp. 1-4.

7. <u>Z.Despotovic</u>, Z.Stojiljkovic, "PSPICE Simulation of Two Mass Vibratory Conveying System With Electromagnetic Drive", *PROCEEDINGS of International Conference IEEE EUROCON* "Computer as a tool", Belgrade 21.-24.11 2005., Serbia, Vol. II, pp.1509-1512.

8. <u>Z.Despotovic</u>, I.Cvetkovic, S.Vukosavic,"New Technology for Electrostatic Precipitator Control" *PROCEEDINGS of the 14th International Symposium of the Power Electronics*, N.Sad, 07.-09.11.2007., Serbia, Vol.T4-3.5, pp. 1-6.

9. <u>Z.Despotovic</u>, S.Vukosavic,"High Frequency Control of Electrostatic Precipitator" *PROCEEDINGS of the 14th International Symposium of the Power Electronics*, N.Sad, 07-09.11.2007., Serbia, Vol.T4-3.6, pp. 1-6.

10. Z.Stojiljkovic, Z.Despotovic, "Optimization Input Current of Regulated Vibratory Conveying Drive", *PROCEEDINGS of the XIV International Symposium of the Power Electronics*, N.Sad, 07.-09.11.2007., Serbia, Vol.T4-4.8, pp. 1-6.

11. <u>Z.Despotovic</u>, Z.Stojiljkovic, "Influence Regulated Vibratory Conveying Drive on The Mains Power", *PROCEEDINGS of the XIV International Symposium of the Power Electronics*, N.Sad 7.XI-9.XI.2007, Serbia, Vol.T6-2.1, pp. 1-6.

12. <u>Z.Despotovic</u>, D.Arnautovic, I.Stevanovic, S.Vukosavic,"The Adaptive Control of Electrostatic Precipitators", III International Symposium Power Plants 2008-Society of Thermal Engineers of Serbia, Vrnjacka Banja 28-31.X. 2008.

13. <u>Z.Despotovic</u>, S.Vukosavic, D.Arnautovic, I.Stevanovic, "The High Frequency Supply and Its Influence on the Quality Operation of Electrostatic Precipitators", III International Symposium Power Plants 2008-Society of Thermal Engineers of Serbia, Vrnjacka Banja, 28-31.10. 2008.

14. S.Vukosavic, <u>Z.Despotovic</u>, B.Micovic, M.Bakic, "The High Frequency Supply for Remove Fly Asch in The Smoke of Thermal Plants", III International Symposium Power Plants 2008- Society of Thermal Engineers of Serbia, Vrnjacka Banja, 28-31.10. 2008.

15. S.Despotovic, <u>Z.Despotovic</u>, S.Sudarevic, "The High Performances Signal Generator Implemented on Two Axes Hydraulic Pulsator", *PROCEEDINGS of the VI International Conference IEEE-EUROCON 2009-* Russia, St.Petersburg, 18-23.05.2009. pp. 1467-1473.

16. D.Prodanović, P.Vojt, <u>Z.Despotovic</u>, V.Vucurevic, "The Measurements in Belgrade Sewer System", II INTERNATIONAL Symposium –*The Modern Technology of Sewer and Technical Regulations*, Association for water technology and sanitary engineering-Belgrade 17-19.IX.2009, Serbia.

17. <u>Z.Despotovic</u>, A.Ribic, "Low Frequency IGBT Converter for Control Exciting Force of Electromagnetic Vibratory Conveyors", *PROCEEDINGS of the 15th International Symposium of the Power Electronics*, N.Sad, 28- 30.10.2009., Serbia, Vol.T1-1.8, pp. 1-5.

18. <u>Z.Despotovic</u>, M.Bakic, S.Vukosavic, "The Service Testing of High Frequency High Voltage Electrostatic Precipitators Power Supply on Thermal Power Plant Morava", *PROCEEDINGS of the 15th International Symposium of the Power Electronics*, N.Sad, 28-30.10.2009, Serbia, Vol. EE-1.1, pp.1-6.

19. S.Vukosavic, <u>Z.Despotovic</u>, O.Djordjevic,"The Development of High Voltage High Frequency 60kVA Power Transformer for Supplying of Electrostatic Precipitator Stations on thermal Power Plants", *PROCEEDINGS of the 15th International Symposium of the Power Electronics*, N.Sad, 28-30.10.2009., Serbia, Vol.EE3-1.3, pp. 1-6.

20. M.Batic, A.Vitorovic, <u>Z.Despotovic</u>, "The Consideration of Optimal Control Algorithms for Hybrid Renewable Energy Systems", XVI International Conference YU INFO 2010, Kopaonik, Serbia, 03.-06.03.2010.

21. <u>Z.Despotovic</u>, S.Vukosavic, M.Bakic, "The Modern Electrostatic Precipitators", XV International Conference ENERGY 2010, Zlatibor , 23-26.03.2010., Serbia.

22. S.Vukosavic, <u>Z.Despotovic</u>, N.Popov, M.Tasić, "The Increase of Electrostatic Precipitators Efficiency on Thermal Power Plant Morava by Retrofit of Low Voltage Converter Sections and Installation of Device ETFDBS180", IV International Symposium Power Plants 2010- Society of Thermal Engineers of Serbia, Vrnjacka Banja 26-29.10. 2010.

23. S.Vukosavic, <u>Z.Despotovic</u>, N.Popov, M.Tasić, "The Exploitation Investigations of High Frequency Plant for Electrostatic Precipitators Supplying on Thermal Power plant- Morava", IV International Symposium Power Plants 2010- Society of Thermal Engineers of Serbia, Vrnjacka Banja 26-29.10. 2010.

24. <u>Z.Despotovic</u>, A.Ribic, "Vibratory Control of The Resonant Feeder With Electromagnetic Drive", *PROCEEDINGS of VIII International Symposium of Industrial Electronics-INDEL2010*, B.Luka, 4-6.11.2010, Bosnia and Herzegovina, Vol.1 pp.74-79.

25. V.Sinik, Z.Despotovic, V.Milicevic, "Definitions, standards, measuring procedures and equipment for check compatibility of electrical devices with emission norm", *PROCEEDINGS of VIII International Symposium of Industrial Electronics - INDEL2010*, B.Luka, 4-6.11.2010, Bosnia and Herzegovina, Vol.1, pp.184-188.

26. V.Sinik, S.Jankovic, <u>Z.Despotovic</u>, "The Exposure of Humans to the Electromagnetic Fields", I International Conference - Ecology of Urban Areas, Zrenjanin, September 2011.

27. S.Vukosavic, <u>Z.Despotovic</u>, N.Popov, "Retrofit Power Supply of Electrostatic Precipitators on Thermal Power Plant-Morava", *PROCEEDINGS of the 16th International Symposium of the Power Electronics*, N.Sad, 26.-28.10.2011, Serbia, Vol.T1-1.9, pp. 1-5.

28. <u>Z.Despotovic</u>, A.Ribic, "The Increasing Energy Efficiency of the Vibratory Conveying Drives with Electromagnetic Excitation", *PROCEEDINGS of the 16th International Symposium of the Power Electronics*, N.Sad 26-28.10.2011, Serbia, Vol.T3-1.10, pp. 1-5.

29. V.Sinik, <u>Z.Despotovic</u>, "Influence of Electromagnetic Radiation on Health of People. Limits for Exposure to EMF", *PROCEEDINGS of XI International Scientific-Professional Symposium INFOTEH- Jahorina 2012*, Bosnia and Herzegovina, Vol.11, pp. 417-421.

30. <u>Z.Despotovic</u>, V.Sinik, A.Ribic, "The Impact of Switch Mode Regulated Vibratory Resonance Conveyor with Electromagnetic Drives on Power Supply Network", *PROCEEDINGS of XV International Power Electronics and Motion Control Conference (EPE/PEMC)*, N.Sad, 04-06.09.2012., Serbia., pp. LS2c.2-1 - LS2c.2-6.

31. S.Vukosavic, <u>Z.Despotovic</u>, N.Popov, "The Multiresonant Power Converter Topology for Supplying Electrostatic Precipitators on Thermal Power Plants", (*Invited Lecture*), V International Symposium Power Plants 2012- Society of Thermal Engineers of Serbia, Zlatibor 30.10-02.11. 2012., Serbia.

32. <u>Z.Despotovic</u>, A.Ribic, "The Control of Electromagnetic Vibratory Actuator for Efficient Flow of Dust Particulates from The Collecting Hoppers of Electrostatic Precipitators", V International Symposium Power Plants 2012- Society of Thermal Engineers of Serbia, Zlatibor 30.10-02.11. 2012., Serbia.

33. <u>Z.Despotovic</u>, M.Jankovic, V.Sinik, "The Spectral Composition of The Input Current of Regulated Vibratory Conveying Drives and Their Effect on Power Supply Network", V International Symposium Power Plants 2012- Society of Thermal Engineers of Serbia, 30.X-2.XI 2012, Zlatibor, Serbia.

34. <u>Z.Despotovic</u>, A.Ribic, M.Terzic, "A Comparison of Energy Efficiency of SCR Phase Control and Switch Mode Regulated Vibratory Conveying Drives", *PROCEEDIMGS of IX International Symposium Industrial Electronics –INDEL 2012*, Banja Luka, Bosnia and Herzegovina, 1-3.XI 2012., Vol.1, pp. 103-110.

35. K.Dervic, S.Jankovic, <u>Z.Despotovic</u>, V.Sinik, V.Kerleta, "The Radiation of Electromagnetic Fields of Very Low Frequency", II International Conference "ECOLOGY OF URBAN AREAS" 2012, 15 October, Zrenjanin.

36. V.Sinik, <u>Z.Despotovic</u>, S.Jankovic, V.Kerleta, "The Survey of Applied Power Solutions for Wind Farms", II International Conference Industrial Engineering and Environmental Protection (IIZS 2012), 31. October 2012, Zrenjanin.

37. <u>Z.Despotovic</u>, S.Vukosavic, M.Terzic, "Contemporary Approach to Power of Electrostatic Precipitators", *PROCEEDINGS of XII International Conference INFOTEH 2013*, Jahorina, Bosnia and Herzegovina, 20.-22.03.2013., Vol.12, pp.260-265.

38. <u>Z.Despotovic</u>, A.Ribic, "Modelling and Control of Electromagnetic Vibratory Actuator Applied in Vibratory Conveying Drives", *PROCEEDINGS of XII International Conference INFOTEH 2013*, 20.- 22.03.2013, Jahorina, Bosnia and Herzegovina, Vol.13, pp. 1049-1054.

39. <u>Z.Despotovic</u>, "Some Experiences in the Exploitation of Triboelectric Sensors for Measuring Concentration of particulate Matter on Thermal Power Plants" (invited lecture), *PROCEEDIMGS* of XII International Conference INFOTEH 2013, 20.-22.03.2013., Jahorina, Bosnia and Herzegovina, Vol.13, pp.1118-1124.

40. V.Sinik, <u>Z.Despotovic</u>, Lj.Radovanovic, "Influence of Non Ionizing Radiation on the Environment", *Proceedings of the 5th International Science Conference "Reporting for Sustainability"- EMC Project 2013*, Royal Norwegian Ministry of Foreign Affairs, 07-10.05, 2013, Becici, Montenegro, Vol.1, pp. 465-469.

41. V.Sinik, <u>Z.Despotovic</u>, M.Bjelica, V.Kerleta, "Radiofrequency Radiation of GSM Network", *PROCEEDINGS of III International Conference "ECOLOGY OF URBAN AREAS 2013"*, Kaštel Ečka, 11-12.10, 2013, Zrenjanin, Serbia, Vol.1, pp.662-667.

42. K.Dervic, V.Sinik, <u>Z.Despotovic</u>, V.Kerleta, "Radiation of Electromagnetic Fields at Radio Frequency", *PROCEEDINGS of III International Conference "ECOLOGY OF URBAN AREAS 2013*", Kaštel Ečka, 11-12.10.2013., Zrenjanin, Serbia., Vol.1, pp.649-656.

43. <u>Z.V.Despotovic</u>, V.Sinik, "Improving Performance Power of Drive with Electromagnetic Vibratory Feeder", *PROCEEDINGS of III International Conference Industrial Engineering and*

Environmental Protection (IIZS 2013), 30-31.10 2013., Zrenjanin, Serbia, Vol.1, 407-414.

44. S.Vukosavic, <u>Z.V.Despotovic</u>, N.Popov, M.Terzic, "Multi Resonant Topology of ESP Power: Simulations and Experimental Results", *PROCEEDINGS of 17th International Symposium on Power Electronics*- 2013, 30.10-1.11.2013., Novi Sad, Serbia., Vol. T1.5, pp.1-5.

45. <u>Z.V.Despotovic</u>, A.Ribic, V.Sinik, "Power Converters for Efficient Flow of Dust Particulate from ESP Collecting Hoppers", *PROCEEDINGS of 17th International Symposium on Power Electronics- 2013*, 30.10-1.11.2013., Novi Sad, Serbia., Vol. T1.4, pp.1-5.

46. <u>Z.V. Despotovic</u>, M.Jovic, A. Grujic, "DC Injection in Low Voltage Power Network Produced by Regulated Resonant Vibratory Conveying Drives", *Proceedings of XIII International Scientific* –*Professional Symposium INFOTEH*®-*JAHORINA 2014*, Bosnia and Herzegovina., Vol.13, pp.144-149.

47. <u>Z.V. Despotovic</u>, M.Jovic, "Mathematical model of electromagnetic vibratory exciter with incremental motion, *Proceedings of the XIII International Scientific – Professional Symposium INFOTEH*®- JAHORINA 2014., Bosnia and Herzegovina. Vol.13, pp.91-96.

48. <u>Z.V.Despotovic</u>, M.Lecic, M.Jovic, "Vibration Control of Resonant Vibratory Feeders With Electromagnetic Excitation", 1st International Symposium on Machines, Mechanics and Mechatronics – Current Trends, Serbia, University of Belgrade, Faculty of Mechanical Engineering on July 1-2. 2014, pp.27-28.

49. A.Rodic, <u>Z.V.Despotovic</u>, M. Jovanovic, S.Popic, I. Stevanovic, "Mobile Robotic Solar Generator MobiSunProEnergy[™]-Application in New Energy Technologies", VIII International Forum for Clean Energy Technologies 2014 ENERGY CHARTER-SUSTAINABLE DEVELOPMENT OF SERBIA, Novi Sad, 30th September – 1st October 2014.

50. V.Šinik, M.Bjelica, <u>Ž.V. Despotović</u>, D.Dobrilović, V.Kerleta, "Measurement and Analysis of Electromagnetic Fields of Very High Frequency", *PROCEEDINGS of IV International Conference "ECOLOGY OF URBAN AREAS 2014*, 9-10th October 2014, Zrenjanin, Serbia, Vol.2., pp. 527-533.

51. K.Dervić, V. Šinik, <u>Ž.V. Despotović</u>, S.Janković, D. Dobrilović, M.Bjelica, V. Kerleta, "Measurement and Analysis of Electromagnetic Fields of Very Low Frequency", *PROCEEDINGS of IV International Conference "ECOLOGY OF URBAN AREAS 2014*, 9-10th October 2014, Zrenjanin, Serbia, Vol.2., pp.519-526.

52. <u>Ž.V. Despotović</u>, V.Šinik, D.Dobrilović, "Reducing the Impact of Switching Vibratory Conveyor Device on a Power Network", Proceedings of IV International Conference Industrial Engineering And Environmental Protection 2014 (IIZS 2014) October 13-15th, 2014, Zrenjanin, Serbia, Vol.2., pp. 571-578.

53. <u>Ž.V. Despotović</u>, M.D.Jovanović, "AC/AC Power Converter for Thermal Processing of Massive Metal Parts ", *Proceeding of International Conference "Power Plants 2014"*, 28-31.October 2014, Zlatibor Serbia, Vol.1, pp. 645 – 655.

54. M.M. Filipovic, A.M. Djuric, Lj. B. Kevac, <u>Z.V.Despotovic</u>. "The Elastic F-Type Cable Suspended Parallel Robot in The Service of Parents ", International Workshop and Summer School on Medical and Service Robotics 2014, July 10 – 12, 2014, EPFL Lausanne, Switzerland.

55. S.N.Vukosavić, <u>Ž.V.Despotović</u>, N.Popov, N.Lepojevic, "Electrothermal Testing of High Voltage High Frequency ESP Power AR70/1000", *Proceeding of International Conference "Power Plants 2014"*, 28-31.October 2014, Zlatibor, Serbia, Vol.2, pp.656-668.

56. M.D.Jovanović, <u>Ž.V.Despotović</u>, T.Ilić, S.Milanović, "Two Channel Electronic Device for Cortical Stimulations by Microampere DC Currents", *Proceeding of XIV International Scientific – Professional Symposium INFOTEH®-JAHORINA 2015*; 03/2015, Bosnia and Herzegovina, Vol.14, pp.10-13.

57. D.Katic, A.Cosic, <u>Z.V.Despotovic</u>, "QuickBot as Educational and Research Platform for Multi Mobile Robotic Systems", *Proceedings of 3-rd International conference and workshop-Mechatronics in practice and education-MECHEDU 2015*, 14.-15.05.2015., Subotica, Serbia, Vol.1, pp. 70-75

58. M.Vujovic, <u>Z.V.Despotovic</u>, "Dynamic Stress Distribution in Composite Leaf Springs for Electromagnetic Vibratory Feeder", *Proceedings of 3-rd International conference and workshop-Mechatronics in practice and education-MECHEDU 2015*, 14-15.05.2015, Subotica, Serbia, Vol.1, pp. 186-190.

59.P.Misljen, R.Mitrovic, <u>Z.V.Despotovic</u>, M.Matijevic, "SCADA Application for Control and Monitoring of Vibratory Feeder", Paper AUI3.6, ICETRAN 2015, Silver Lake, 08-14.06.2015, Serbia.

60. S. Kovačević, S.Mravik, A. Rodić, <u>Ž. Despotović</u>, I. Stevanović, M. Jovanović, "Patented concentrator of solar energy in production of thermal energy and electricity" in Proceedings of the 3rd International Conference on Renewable Electrical Power Sources, File 14, ISBN 978-86-81505-78-6, Belgrade, October, 15th-16th, 2015.

61. <u>Ž.V. Despotović</u>, V.Šinik, S.Janković, D.Dobrilović, M.Bjelica, "Some specifics of vibratory conveyor drives", Proceedings of V International Conference Industrial Engineering and Environmental Protection 2015 (IIZS 2015), Vol.1., pp.247-253, ISBN: 978-86-7672-259-4, October 15-16th, 2015, Zrenjanin, Serbia.

62. <u>Ž.V. Despotović</u>, A.M.Pavlović, J.Radaković, "*The Regulated Drive of Vibratory Screens with Unbalanced Motors*", Proceedings of 15-th International Scientific – Professional Symposium INFOTEH-JAHORINA 2016, March 16-18th, 2016, Bosnia and Herzegovina, Vol.15., pp. 155-160, ISBN 978-99955-763-6-3, March 2016. Link: http://www.infoteh.rs.ba/rad/2016/ENS-2/ENS-2-7.pdf

63. J.Subic, M.D.Jovanovic, <u>Ž.V. Despotović</u>, M.Jelocnik, "Possibilities of applicati on of robotic systems and smart sensor networks in integral agricultural apple production", 25-th International Conference on the Danube River, Robotics Alpe Adria Danube Region- RAAD 2016, Belgrade, June 30th-July 2nd, 2016.

64. V.Sinik, <u>Z.V.Despotovic</u>, S.Jankovic, *"EXPOSURE TO WHOLE-BODY VIBRATION, TOOLS FOR CALCULATING DAILY EXPOSURES AND MEASURMENT"*, Proceedings of V International Conference ECOLOGY OF URBAN AREAS 2016, ISBN 978-86-7672-291-4, 30th September 2016, Zrenjanin, Serbia, pp.331-339.

65. V.Sinik, S. Jankovic, <u>Z.V.Despotovic</u>, "HEALTH SURVEILLANCE, HEALTH RISKS, SIGNS AND SYMPTOMS FOR HAND-ARM VIBRATION", Proceedings of V International Conference ECOLOGY OF URBAN AREAS 2016, ISBN 978-86-7672-291-4, 30th September 2016, Zrenjanin, Serbia, pp.340-347.

66. V.Sinik, <u>Z.V.Despotovic</u>, S.Jankovic, "EXPOSURE TO HAND-ARM VIBRATION, TOOLS FOR CALCULATING DAILY EXPOSURES AND MEASURMENT", Proceedings of V International Conference ECOLOGY OF URBAN AREAS 2016, ISBN 978-86-7672-291-4, 30th September 2016, Zrenjanin, Serbia, pp.348-357.

67. M.Lj.Ivanov, M.Kržaček, N.Milović, A.H.Roknić, <u>Ž.V.Despotović</u>, "Project-The Environmental Protection and Use of Renewable Energy Sources for Increasing Energy Efficiency in Secondary Technical School Mihajlo Pupin in Kula, Vojvodina" in Proceedings of the 4rd International Conference on Renewable Electrical Power Sources, ISBN 978-86-81505-78-6, Belgrade, October, 17th-18th, 2016.

68. V.Šinik, <u>Ž.V.Despotović</u>, S.Janković, "BACKGROUND OF A VIBRATION MEASUREMENT TO HAND-ARM VIBRATION, HEALTH SURVEILLANCE AND HEALTH RISKS ", VI International Conference Industrial Engineering And Environmental Protection 2016 (IIZS 2016) October 15th, 2016, Zrenjanin, Serbia, pp. 571-578, ISBN 978-86-7672-293-8.

69. <u>Ž.V.Despotović</u>, M.Majstorović, "VOLTAGE STABILISATION AND SYNCHRONISATION OF DC/AC POWER CONVERTERS IN MOBILE OFF-GRID SOLAR POWER SYSTEM", Full Papers Proceeding of International Conference "Power Plants 2016", 23-27.November 2016, Zlatibor Serbia, ISBN 978-86-7877-024-1.

70. <u>Ž.V.Despotović</u>, A.Pavlović, "Reconstruction of Vibratory Sieves Drives in System for Separation Boiler Ash from Slag on Thermal Power Plant TENT-B" (Invited Lecture), Full Papers Proceeding of International Conference "Power Plants 2016", 23-27, November 2016, Zlatibor Serbia, ISBN 978-86-7877-024-1.

71. <u>Ž.V. Despotović</u>, M.Jovanović, Ilija Stevanović, "Possibilities of Using Renewable Energy Sources in Agriculture in the Republic of Serbia" (Invited Lecture), International Scientific Conference SUSTAINABLE AGRICULT URE AND RURAL DEVELOPMENT IN TERMS OF THE REPUBLIC OF SERBIA STRATEGIC GOALS REALIZAT ION WITHIN THE DANUBE REGION - development and application of clean technologies in agriculture, December, 15-16th, 2016, Belgrade.

72. M.Matijevic, <u>Z.V.Despotovic</u>, M.Milanovic, S.N.Vukosavic, "Laboratory Model of Coupled *Electrical Drives for Supervision and Control via Internet*", REV2017- 14th International Conference on Remote Engineering and Virtual Instrumentation, 15-17 March 2017, Columbia University, New York, USA.

73. <u>Z.V.Despotović</u>, M.V.Terzić, "Influence of Proximity Effect on Distribution of Electrical Current in Conductors of System for Deicing of River Sluices", XVI International Scientific-Professional Symposium, INFOTEH 2017, 22-24 March, Jahorina, Bosnia and Herzegovina.

74. <u>Z.V.Despotović</u>, Dj.Urukalo, A.Ribić, "Hardware Implementation of Measuring System of Resonant Electromagnetic Vibratory Conveyor", XVI International Scientific-Professional Symposium, INFOTEH 2017, 22-24 March, Jahorina, Bosnia and Herzegovina.

75. <u>Z.V.Despotović</u>, M.Majstorović, M.D.Jovanović, I.Stevanović, "THE PRESSURE CONTROL IN IRRIGATION "OFF-GRID" PHOTOVOLTAIC SYSTEM BASED ON MOBILE SOLAR GENERATOR", V International Conference on Renewable Electricity Sources, Belgrade, 12-13th October 2017.

76. M.D.Jovanović, <u>Z.V.Despotović</u>, Dj. Urukalo, *"THE CHRONOLOGICAL SYSTEM OF SOLAR TRACKING IMPLEMENTED ON MOBILE SOLAR GENERATOR - IMP MSEG"*, V International Conference on Renewable Electricity Sources, Belgrade, 12-13th October 2017.

77. M.Pajnić, P.Pejović, <u>Ž.Despotović</u>, M.Lazić, M.Skender, "Design consideration for high frequency LLC resonant converter with matrix transformer", Session: Power Converters an Devices, Paper T1.2-3, 19th International Symposium Power Electronics - Ee2017, 18-21. October 2017, N. Sad, Serbia.

78. M.Pajnić, P.Pejović, <u>Ž.Despotović,</u> M.Lazić, M.Skender, "*Characterization and Gate Drive Design of High Voltage Cascode GaN HEMT",* Session: Power Converters an Devices, Paper T1.2-4, 19th International Symposium Power Electronics - Ee2017, 18-21. October 2017, N. Sad, Serbia.

79. M. Majstorović, <u>Ž.Despotović</u>, L.Ristić, "*Application of Mobile Solar OFF-grid Generator in Irrigation System - a case study*", Session: Renewable and Distributed Energy Sources, Paper T7.2-2, 19th International Symposium Power Electronics - Ee2017, 18-21. October 2017, N. Sad, Serbia.

80. <u>Ž.V.Despotović</u>, E.Lakić, N.Laketić, B.Čupić, "Practical realization of dynamic reactive power compensation in industrial system of spot welding", Proceedings of 17th International Symposium INFOTEH-JAHORINA, 21-23 March 2018, East Sarajevo, Bosnia-Herzegovina, Vol.17., pp.1-7, DOI: 10.1109/INFOTEH.2018.8345515

Electronic ISBN: 978-1-5386-4907-7, CD-ROM ISBN: 978-1-5386-4906-0 , Print on Demand(PoD) ISBN: 978-1-5386-4908-4.

LINK: https://ieeexplore.ieee.org/document/8345515/

81. M.Jovanović, <u>Ž.V.Despotović</u>, M.Tajdić, "Control system for portable dry ice cleaning device", Proceedings of 17th International Symposium INFOTEH-JAHORINA, 21-23 March 2018, East Sarajevo, Bosnia-Herzegovina, Vol.17., pp.1-7, DOI: 10.1109/INFOTEH.2018.8345551 Electronic ISBN: 978-1-5386-4907-7, CD-ROM ISBN: 978-1-5386-4906-0, Print on Demand(PoD) ISBN: 978-1-5386-4908-4.

LINK: https://ieeexplore.ieee.org/document/8345551/

82. M.Matijević, A.Veljović, N.Jović, A.Jestrović, <u>Ž.V.Despotović</u>, T.Nestorović, "Designing, Implementation and Testing of Servo Controller for DC Motor via Internet", 15th International Conference on Remote Engineering and Virtual Instrumentation-REV 2018, University of Applied Sciences Duesseldorf, Germany, 21-23.03.2018. LINK: https://www.conftool.com/rev-conference/sessions.php

83. M.Lj.Ivanov, <u>Ž.V.Despotović</u>, M.Pavlović, A.H.Roknić, "THE PROJECT GREEN SCHOOL IN SECONDARY TECHNICAL SCHOOL MIHAJLO PUPIN - KULA, AP VOJVODINA", I INTERNATIONAL SCIENTIFIC – PRACTICAL CONFERENCE – CIBEK 2018, Circular and Bieconomy, Belgrade, Serbia, School of Engineering Management, April 19, 2018. http://fim.edu.rs/en/research-and-cooperation/scientific-meetings-and-projects/circular-andbioeconomy/programme/ 84. V.Šinik, M.Bjelica, S.Janković, <u>Ž.V. Despotović</u>, "CALCULATING DAILY VIBRATION EXPOSURES AND WORKED EXAMPLES IN CASE HAND-ARM VIBRATION", VIII International Conference Industrial Engineering and Environmental Protection (IIZS 2018)-Proceedings, Zrenjanin, 11 - 12th October 2018, pp.473-479, ISBN: 978-86-7672-309-6.

85. V.Šinik, M.Bjelica, S.Janković, <u>Ž.Despotović</u>, "CALCULATING DAILY VIBRATION EXPOSURES AND WORKED EXAMPLES IN WHOLE-BODY VIBRATION", VIII International Conference Industrial Engineering and Environmental Protection (IIZS 2018)-Proceedings, Zrenjanin, 11 - 12th October 2018, pp.479-484, ISBN: 978-86-7672-309-6.

86.<u>Ž.V.Despotović</u>, A.M.Pavlović, U.Tanasić, N.Glišić (Invited Lecture), THE RECONSTRUCTION OF ELECTRO-HYDRAULIC DRIVE OF BUCKET WHEEL BOOM IN THE COAL DELIVERY SYSTEM IN TPP "Nikola Tesla-B", Proceedings of International Conference POWER PLANTS 2018, November, 05th to November, 08th in Zlatibor, Serbia, pp. E2018-37/1-23, ISBN 978-86-7877-029-6.

87. M.Majstorović, Ž.V. Despotović, B.Brković, "SYNCHRONIZATION OF THE OUTPUT VOLTAGE OF THE THREE-PHASE PHOTOVOLTAIC INVERTER WITH A POWER NETWORK APPLYING PLL CIRCUIT", Proceedings of International Conference POWER PLANTS 2018, November, 05th to November, 08th in Zlatibor, Serbia, pp. E2018-70/1-23, ISBN 978-86-7877-029-6.

88. Ž V. Despotović, N.Savić, S.Tešanović, D.Jovanović, D.Ilijević, "Electric Control System for Lubrication Bearings of Double Iron Gate on the Downstream Side of the Navigation Lock in the HPP "Đerdap-1", Proceedings of International Conference POWER PLANTS 2018, November, 05th to November, 08th in Zlatibor, Serbia, pp. E2018-69/1-18, ISBN 978-86-7877-029-6.

89. S.N Vukosavic, <u>Z.V.Despotovic</u>, O.Djordjevic, M.Bakic, "Design and Testing of High Voltage High Frequency Transformer 0.6kV/60kV for Power of 60kW", 18th International IEEE Symposium INFOTEH-JAHORINA (INFOTEH) 2019, East Sarajevo, Bosnia and Herzegovina, Bosnia and Herzegovina, Electronic ISBN: 978-1-5386-7073-6, CD-ROM ISBN: 978-1-5386-7072-9, DOI: 10.1109/INFOTEH.2019.8717656.

LINK: https://ieeexplore.ieee.org/document/8717656

90. Dj.M.Lekic, <u>Z.V.Despotovic</u>, "Control of Half-Bridge Resonant PWM Converter for Electromagnetic Vibratory Actuator", 18th International IEEE Symposium INFOTEH-JAHORINA (INFOTEH) 2019, East Sarajevo, Bosnia and Herzegovina, Bosnia and Herzegovina, Electronic ISBN: 978-1-5386-7073-6, CD-ROM ISBN: 978-1-5386-7072-9, DOI: 10.1109/INFOTEH.2019.8717773. LINK: <u>https://ieeexplore.ieee.org/document/8717773</u>

91. <u>Z.V.Despotovic</u>, S.B.Despotovic, M.Milanovic, I.Berkes, "Two Axes Electro-hydraulic Platform for Generating Stochastic Vibrations",18th International IEEE Symposium INFOTEH-JAHORINA (INFOTEH) 2019, East Sarajevo, Bosnia and Herzegovina, Bosnia and Herzegovina, Electronic ISBN: 978-1-5386-7073-6, CD-ROM ISBN: 978-1-5386-7072-9, DOI:

LINK: https://ieeexplore.ieee.org/document/8717785

10.1109/INFOTEH.2019.8717785.

92 <u>Ž.V.Despotović</u>, A.M.Pavlović, D.Ivanić, "Exciting Force Frequency Control of Unbalanced Vibratory Actuators", 20th International IEEE Symposium of Power Electronics (Ee)-2019, Novi Sad, Serbia, ISBN: 978-1-7281-5067-3, DOI: 10.1109/PEE.2019.8923574. LINK: <u>https://ieeexplore.ieee.org/document/8923574</u>.

93. V.Šinik, <u>Ž.Despotović</u>, S.S.Ketin, U.Marčeta, "Radiation of Electromagnetic Fields of Industrial Frequencies. Electromagnetic Radiation of Electrical Appliances in Households", IX International Conference Industrial Engineering and Environmental Protection 2019 (IIZS 2019) October 3rd-4th, 2019, Zrenjanin, Serbia, Vol.9, pp.504-511, ISBN: 978-86-7672-324-9.

94. V.Šinik, <u>Ž.Despotović</u>, S.S.Ketin, U.Marčeta, "Radiation of High Frequency Electromagnetic Fields, Biological Effects and Health Consequences", IX International Conference Industrial Engineering and Environmental Protection 2019 (IIZS 2019) October 3rd-4th, 2019, Zrenjanin, Serbia, Vol.9, pp.403-410, ISBN: 978-86-7672-324-9.

95. K.Dervić, V.Šinik, <u>Ž.Despotović</u>, "Basic of Electromagnetic Radiation", IX International Conference Industrial Engineering and Environmental Protection 2019 (IIZS 2019) October 3rd-4th, 2019, Zrenjanin, Serbia Vol.9, pp.512-520, ISBN: 978-86-7672-324-9.

96. V.Šinik, <u>Ž.Despotović</u>, S.Prvulović, E.Desnica, J.Pekez, J.Tolmač, I.Palinkaš, "Higher Harmonics of Current Caused by the Operation of Rolling Mill", Proceedings of IX International Conference Industrial Engineering and Environmental Protection 2019 (IIZS 2019) October 3rd-4th, 2019, Zrenjanin, Serbia, Vol.9, pp.50-57, ISBN: 978-86-7672-324-9.

97. V.Šinik, <u>Ž.Despotović</u>, Lj. Radovanović, M.Đurđev, B.Novaković, J.Tolmač, I.Palinkaš, "Some Aspects of the Electrical Power Quality", Proceedings of IX International Conference Industrial Engineering and Environmental Protection 2019 (IIZS 2019) October 3rd-4th, 2019, Zrenjanin, Serbia, Vol.9, pp.183-191, ISBN: 978-86-7672-324-9.

98. V.Šinik, <u>Ž.Despotović</u>, D.Dobrilović, "Power System Architecture for Servers Integrating Active, passive and EMI-Filter Functions Design", Proceedings of IX International Conference on Applied Internet and Information Technologies- AIIT 2019, October 3-4, 2019, Zrenjanin, Republic of Serbia, Vol.9, pp.221-226, ISBN: 978-86-7672-327-0.

99. V.Šinik, <u>Ž.Despotović</u>, D.Dobrilović, "Design and Analysis of DC Motor Using Software Tool MATLAB Simulink", Proceedings of IX International Conference on Applied Internet and Information Technologies- AIIT 2019, October 3-4, 2019, Zrenjanin, Republic of Serbia, Vol.9, pp.207-213, ISBN: 978-86-7672-327-0.

100. M.D.Jovanovic, <u>Z.V.Despotovic</u>, A.Rodic, M.Radmilovic, M.Tajdic, "Large scale data acquisition system for real time measurement", 18th International Symposium INFOTEH-JAHORINA, 20-22 March 2019. https://infoteh.etf.ues.rs.ba/zbornik/2019/radovi/VRT/VRT-9.pdf

101. M.Majstorović, <u>Ž.V.Despotović</u>, D.Mrščević, B.Đurić, M.Milešević, Z.Stević, "IMPLEMENTATION OF MPPT METHODS WITH SEPIC CONVERTER", 19th International IEEE Symposium INFOTEH-JAHORINA (INFOTEH) 2020, East Sarajevo, Bosnia and Herzegovina

https://ieeexplore.ieee.org/abstract/document/9066296

102. Dj.Urukalo, <u>Ž.V.Despotović</u>, "EXPERIMENTAL VERIFICATION OF ELECTRICAL CONSUMPTION OF RESONANT ELECTROMAGNETIC VIBRATORY FEEDER", 19th International IEEE Symposium INFOTEH-JAHORINA (INFOTEH) 2020, East Sarajevo, Bosnia and Herzegovina

https://ieeexplore.ieee.org/abstract/document/9066331

103. <u>Ž.V.Despotović</u>, Dj.Urukalo, "SCR POWER CONVERTER FOR DRIVING OF ELECTROMAGNETIC VIBRATORY SILO EXTRACTOR", 19th International IEEE Symposium INFOTEH-JAHORINA (INFOTEH) 2020, East Sarajevo, Bosnia and Herzegovina <u>https://ieeexplore.ieee.org/document/9066332</u>

104. M.M. Vijatović Petrović, Francesco Cordero, Elisa Mercadelli, Elisabetta Brunengo, Nikola Ilić, Carmen Galassi, <u>Zeljko V. Despotovic</u>*, Jelena D. Bobić, Adis Dzunuzovic, Paola Stagnaro, Floriana Craciun, "Composite Flexible Films Prepared by Hot Pressing for low-Energy Harvesting and Storage", Joint ISAF-ISIF-PFM Virtual Conference; IEEE International Symposium on Applications of Feeroelectric (ISAF), May 2021, Sydney, University of Sydney, Australia.

105. B.Djordjevic, <u>Ž.V.Despotović</u>, "Digital Control of Four Switch Synchronous BuckBoost Power Converter based on PIC18F4520 Microcontroller", 20th International IEEE Symposium INFOTEH-JAHORINA, 17-19 March 2021 https://ieeexplore.ieee.org/document/9400656

106. M.Tajdić, <u>Ž.V.Despotović</u>, J.Kon, "Design and Implementation of an Uninterruptible Power Supply for Command and Control Center of the Surveillance, Alert & Warning System", 20th International IEEE Symposium INFOTEH-JAHORINA, 17-19 March 2021.

107. <u>Ž.V.Despotović</u>, A.I.Ribić, Aleksandar M.Pavlović, "Experimental Characterization of Vibrations on Bucket Wheel Boom of Excavator on Thermal Power Plants "N.Tesla"-B", 20th International IEEE Symposium INFOTEH-JAHORINA, 17-19 March 2021. https://ieeexplore.ieee.org/document/9400659 108. V.Šinik, <u>Ž.V.Despotović</u>, B.Radović, M.Đurđev, M.Josimović, "Problems Related to the Electric Power System of Wind Farms and New Tendencies in Them", XI International Conference Industrial Engineering and Environmental Protection 2021 (IIZS 2021) October 07-08, 2021, Zrenjanin, Serbia.

109. <u>Ž.V:Despotović</u>, M.Tajdić, "Design and Implementation of a Hybrid Power for Telecommunication and Measuring Remote Station of the Surveillance, Alert and Warning System", 29th Telecommunications Forum TELFOR 2021, 23-24.11.2021, Belgrade, Serbia.

110. M.Vuković, <u>Ž.V.Despotović</u>, B.Ivanović, DESIGN AND CONSTRUCTION OF A PHOTOVOLTAIC SOLAR POWER PLANT OF 500 kW ON THE ROOF OF THE FACTORY "GRUNER" Serbian Ltd. -VLASOTINCE, International Symposium POWER PLANTS 2021, 17-18 November, Belgrade, Serbia.

111. <u>Ž.V.Despotović</u>, I.R.Stevanović, HYBRID POWER SUPPLY OF THE AGROKAPILARIS® SYSTEM FOR IRRIGATION OF VEGETABLE CROPS ON THE PLOT "GRABOVAC" - OBRENOVAC, International symposium POWER PLANTS 2021, Belgrade 17-18 November, Serbia.

112. <u>Ž.V.Despotovic</u>, HYBRID "OFF-GRID" POWER SUPPLY SYSTEMS AND THEIR APPLICATIONS IN AGRICULTURE: PRACTICAL REALIZATIONS, 10th International Conference on Renewable Electrical Power Sources-ICREPS 2022, 17-18 October, 2022, Belgrade, Serbia (**Keynote lecture**)

https://www.izdanja.smeits.rs/index.php/mkoiee/article/download/6796/6949

113. <u>Z.V.Despotovic</u>, B.Cupic, Dj.Lekic, "Design and Verification of 22kW / 220Vdc Electromagnet for Separation of Steel Parts from Coal on Conveyor Belts for Delivery", 21th IEEE International Symposium INFOTEH-JAHORINA, 16-18 March 2022. https://ieeexplore.ieee.org/document/9751300

114. B.Djordjevic, <u>Z.V.Despotovic</u>, "Digital Implementation of MPPT Algorithm in Cuk DC/DC Power Converter Based on PIC18F4520 Microcontroller", 21th IEEE International Symposium INFOTEH-JAHORINA, 16-18 March 2022. https://ieeexplore.ieee.org/document/9751278

115. M.Vukovic, B.Ostojic, <u>Z.V.Despotovic</u>, "Quality planning in projects for small power plants for household and commercial facilities", 10th IPMA Research Conference "Value co-creation in the project society", 19-21 June 2022, Belgrade, Serbia.

116. J.Bobic, N.Ilic, <u>Z.Despotovic</u>, A.Dzunuzovic, R.Grigalaitis, I.Stijepovic, M.V.Petrovic, "LEAD BASED (PZT) AND LEAD FREE (BZT) COMPOSITES FLEXIBLE FILMS AS LOW-ENERGY PIEZOELECTRIC HARVESTERS", 6th Conference of The Serbian Society for Ceramic Materials, June 28-29, 2022, Belgrade, Serbia, 6CSCS-2022.

117. J.Vujasinović, G.Savic and Z.V.Despotovic, "Architecture and Sizing of System for Remote Control of Renewable Energy Sources Powered Station for Electric Vehicles Charging", IEEE International Energy Conference-ENERGYCON 2022, Riga, Latvia, May 9th – 12th, 2022. https://ieeexplore.ieee.org/document/9830318

118. J.Bobić, N.Ilić, <u>Z.Despotovic</u>, A.Dzunuzović, R.Grigalaitis, I.Stijepović, M.Vijatović Petrović, "Lead free (BaZr0.2Ti0.8O3) and lead-based (PbZr0.52Ti0.48) flexible thick films: structural properties and potential use as energy storage and energy harvesting systems", 7th World Congress on Joint Event on & 5th World Congress on Lasers, Optics and Photonics June 21-22. 2023 Valencia, Spain.

119. M.Vijatovic Petrovic, F.Cordero, E. Mercadelli, E.Brunengo, N.Ilic, C.Galassi, <u>Z.Despotovic</u>, J.Bobic, A. Dzunuzovic, P.Stagnaro, G.Canu, F.Craciun, "Energy harvesting potential of polymer composites", 7th World Congress on Joint Event on & 5th World Congress on Lasers, Optics and Photonics, June 21-22. 2023 Valencia, Spain.

120. M.Djurovic, Z.V.Despotovic, "The Efficiency of Energy Production From Solar Panels Depending on the Type of Orientation and Mode of Their Installation", CNN TECH CONFERENCE 2023 -International Conference of Experimental and Numerical Investigations and New Technologies, 4-7 July, Zlatibor, 2023.

121. M. Vijatovic Petrovic, F. Craciun, F. Cordero, E. Mercadelli, N. Ilic, <u>Z. Despotovic</u>, J. Bobic, A. Dzunuzovic, C. Galassi, P. Stagnaro, G. Canu, M.T. Buscaglia, E.Brunengo, "ENHANCED PROPERTIES OF PVDF COMPOSITES BY ACTIVE PHASE SILANIZATION", 7th Conference of The Serbian Society for Ceramic Materials, 14-16.06.2023., Belgrade.

122. J.Bobić, N.Ilić, <u>Z.Despotovic</u>, A.Dzunuzović, R.Grigalaitis, I.Stijepović, M.Vijatović Petrović, "TWO-PHASE AND THREE-PHASE FLEXIBLE THICK FILMS: POTENTIAL USE AS ENERGY STORAGE AND ENERGY HARVESTING SYSTEMS", 7th Conference of The Serbian Society for Ceramic Materials, 14-16.06.2023., Belgrade.

123. M.Djurovic, <u>Ž.V.Despotović</u> "Optimization and proper selection arrangement of solar panels on the rooftop PV plant 400 kW AC", XXII International Symposium INFOTEH 2023, 15-17.03.2023, Jahorina, Bosnia and Herzegovina. https://ieeexplore.ieee.org/document/10094083

124. <u>Ž.V.Despotović</u>, M.Vijatović Petrović, J.D.Bobić, A.Dzunizovic, E.Mercadelli, "Experimental Setup for Testing Low Energy Harvesting Devices Based on Lead-Free NBT-BT-PVDF Composite Flexible Films", XXII International Symposium INFOTEH 2023, 15-17.03.2023., Jahorina, Bosnia and Herzegovina.

https://ieeexplore.ieee.org/document/10094150

D) The papers at leading national scientific journals

1. <u>Ž. Despotović</u>, S.Vukosavić, D.Arnautović, I. Stevanović, " The High Frequency Supply and Its Influence on the Quality Operation of Electrostatic Precipitators, *ELEKTROPRIVREDA*, Vol.4, pp.132-143, December 2008. (In Serbian)

2. D.Prodanović, P.Vojt, <u>Ž.Despotović</u>, V.Vučurević, "Measurements In Belgrade Sewer System", WATER and SANITARY TECHNOLOGY, Vol.4, pp.69-80, Jul-August 2009.

3. <u>Ž.Despotović</u>, S.Vukosavić, M.Bakić, "The Modern Electrostatic Precipitators", *ENERGY* – *Economy* – *Ecology*, Vol.3, pp.237-247, March 2010. (In Serbian).

4. S.Vukosavić, Ž.Despotović, N.Popov," The Modern Methods of Electrostatic Precipitation of Particle From Flue Gas", *Energy Technology*, Vol.7, No.4, pp.31-40, March 2010. (In Serbian)

5. <u>Ž.Despotović</u>, A.Ribić, "The Energy Efficiency Increasing of Electromagnetic Vibratory Conveying Drives", *Energy Technology*, Vol.7, No.4, pp.66-75, March 2010. (In Serbian)

6. <u>Z.Despotovic</u>, S.Despotovic, S.Sudarevic, "Electro-Hydraulics Vibratory Exciter for Investigating Vehicle Vibration Effects on Humans", *Scientific Technical Review*, Vol.60, No.1, pp.3-11, September 2010.

7. <u>Ž.Despotović</u>, S.Vukosavić, "The Development of High Voltage High Frequency Power Transformer for Supplying of Electrostatic Precipitators", *ELEKTROPRIVREDA*, Vol.2, pp.107-116, September 2010. (In Serbian)

8. <u>Ž.Despotović</u>, A.Ribić, "Amplitude-frequency Control of The Resonant Electromagnetic Vibratory Feeder", *TEHNIKA-Elektrotehnika*, Vol.4, pp.15-22, October 2010. (In Serbian)

9. S.Vukosavić, <u>Ž.Despotović</u>, N.Popov," The High Voltage High Frequency Power Converter for Electrostatic Precipitation From Flue Gases on Thermal Power Plants: Financial Effects", *ENERGY – Economy – Ecology*, Vol.1, pp. 137-141, March 2011. (In Serbian)

10. S.Vukosavić, <u>Ž.Despotović</u>, N.Popov," The Universal Electronic Module For Measuring Current and Voltage of The Electrostatic Precipitators", *ENERGY – Economy – Ecology*, Vol.2, pp. 32-35, March 2011. (In Serbian)

11. S.Vukosavić, <u>Ž.Despotović</u>, O.Đorđević, N.Popov, M.Bakić, D.Nešić, M.Tasić, G.Stanković, S.Milosavljevic, Lj.Jovanović, D.Kisić, "Electrostatic Precipitator High Frequency AR70/1000 Power Supply System- Operational Testing Results", *ELEKTROPRIVREDA*, Vol.1, pp.5-18, July 2011. (In Serbian)

12. S.Vukosavić, <u>Ž.Despotović</u>, "Retrofit Power Supply of Electrostatic Precipitators For Precipitation Particle From Flue Gases on Thermal Power Plants ", *TEHNIKA-Elektrotehnika*, Vol.66, No.4, pp.597-605, September 2011. (In Serbian)

13. S.Vukosavić, <u>Ž.Despotović</u>, "The Experience With Hybrid Electrostatic Precipitator Power

Supply In Thermal Power Plant-Morava", *ELEKTROPRIVREDA* Vol.64, No.3, pp.241-249, October 2011. (In Serbian)

14. <u>Ž.Despotović</u>, A.Jevtović, I.Berkeš, "The Development of Electro Pneumatic Control Unit for Safety Valves of Boiler Plant K6 at the Generator Unit A5 (110MW) – Thermal Power Plant Kolubara", *ENERGY* – *Economy* – *Ecology*, Vol.1-2, pp.121-127, March 2012. (In Serbian)

15. V.Sinik, <u>Ž.Despotović</u>, M.Bjelica, "EMI/TERMAL Design of Switching Mode Power Units", *Energy Technology*, pp.18-24, 2013. (In Serbian)

16.S.Vukosavić, <u>Ž.Despotović</u>, N.Popov, N.Lepojević, "The High Frequency Distributed Multiresonant Topology of Power Converter for Supplying Electrostatic Precipitators", *ENERGY* –*Economy* – *Ecology*, Vol.3-4, pp. 116-123, March 2014. (In Serbian)

17. <u>Ž.Despotović</u>, "The Burst Mode Controlled Power Converter for Electro Resistive Annealing of Massive Metal Parts", *ENERGY – Economy – Ecology*, Vol.3-4, pp. 359-364, March 2014. (In Serbian)

18. <u>Ž.Despotović</u>, "The Control of Vibratory Discharge of Collecting Hopper In Electrostatic Precipitator Plants ", *ENERGY – Economy – Ecology*, Vol.3-4, pp. 89-99, March 2014. (In Serbian)

19. P.Mišljen, <u>Ž.Despotović</u>, M.Matijević, "Energy Efficiency Control of Vibratory Feeder: Experimental Verification ", *ENERGY – Economy – Ecology*, Vol.3-4, pp. 276-281, March 2015. (In Serbian)

20. <u>Ž.Despotović</u>, S.Vukosavić, N.Lepojević, D.Mihić, "Thermal Characterization of High Voltage High Frequency Power Converter 100kV/1A For Supplying Electrostatic Precipitators ", *ENERGY – Economy – Ecology*, Vol.3-4, pp. 289-296, March 2015. (In Serbian).

20. R.Mitrović, P.Mišljen, <u>Ž.V.Despotović</u>, M.Matijević, "IMPLEMENTATION OF THE RESONANT VIBRATORY FEEDERS CONTROL ALGORITHM ON SIMATIC S7-1200 FROM MATLAB SIMULINK ENVIROMENT", TEHNIKA, Vol.71, No1, pp. 64-69, Januar 2016, ISSN 0040-2176. (In Serbian)

21.<u>Ž.V. Despotović</u>, M.D.Jovanović, I.Stevanović, M.Majstorović, "*The Coupling and Synchronization of Inverters Group in "OFF-grid" Mobile Photovoltaic System ",* ENERGY – Economy – Ecology, Vol.3-4, XVIII, pp. 252-260, March 2016, UDC 620.9, ISSN 0354-8651. (In Serbian)

22. D.Mihić, M.Terzić, S.N.Vukosavić, <u>Ž.V.Despotović</u>, "The impact of mutual interaction of phases on dynamic characteristics 8/6 Switched Reluctance Motor Drive", ENERGY – Economy – Ecology, Vol.3-4, XVIII, pp. 207-214, March 2016, UDC 620.9, ISSN 0354-8651. (In Serbian)

23. <u>Ž.V.Despotović</u>, A.M.Pavlović, D.Ivanić, V. Arsovski, *"Reconstruction of vibratory sieves drives within the system for transport slag and fly-ash on thermal power plants NIKOLA TESLA-B"*, ENERGY –Economy – Ecology, Vol.3-4, XVIII, pp. 165-174, March 2016, UDC 620.9, ISSN 0354-8651. (In Serbian)

24. V.Šinik, <u>Ž.Despotović</u>, "Influence of Nonlinear Low Power Consumer on Power Quality", ENERGY – Economy – Ecology, Vol.1-2, XIX, pp. 357-364, March 2017, UDC 621.317.38, ISSN 0354-8651. (In Serbian)

25. <u>Ž.V.Despotović</u>, M. Lečić, "The Spectral Composition of Excitation Force Acting in Resonant Electromagnetic Vibratory Conveying Drives Supplied from Power Converters", ENERGY – Economy – Ecology, Vol.3-4, XIX, pp. 132-145, March 2017, UDC 621.317.32, ISSN 0354-8651. (In Serbian)

26. <u>Ž.V.Despotović</u>, V.Šinik, *"The Voltage Control of SCR Power Converter for Drive of Electromagnetic Vibratory Silo Extractor"*, ENERGY – Economy – Ecology, Vol.3-4, XIX, pp. 146-155, March 2017, UDC 621.317.32, ISSN 0354-8651. (In Serbian)

27. <u>Ž.V.Despotović</u>, M.D Jovanović, A.Jevtović, "The Development of Electronics Device for Measuring of Position and Tilting of Radial Gate on Sluice Stajićevo", ENERGY – Economy – Ecology, Vol.3-4, XIX, pp. 294-304, March 2017, UDC 621.224-5, ISSN 0354-8651. (In Serbian)

28. P.Ćeran, <u>Ž.V.Despotović</u>, "RECORDING AND ANALYSIS OF TRACTION DIAGRAM FOR ELEKTRO LOCOMOTIVE SERIE 441 IN THE COAL DELIVERY SYSTEM AT THERMAL POWER PLANTS TENT-A AND TENT-B", ENERGY –Economy – Ecology , Vol.1-2, XX, pp. 197-206, March 2018, UDC 620.9, ISSN 03540-8651. (In Serbian)

29. <u>Ž.V.Despotović</u>, M.D.Jovanović, M.Tajdić, " THE CONTROL MODULE FOR DRY ICE CLEANING SYSTEM ", ENERGY –Economy – Ecology , Vol.1-2, XX, pp. 341-347, March

2018, UDC 620.9, ISSN 03540-8651. (In Serbian)

30.P.Mišljen, <u>Ž.V.Despotović</u>, M.Matijević, "System Approach to Bulk Material Flow Control on an Electromagnetic Vibratory Feeder", Scientific Technical Review, 2019, Vol.69, No.2, pp. 3-7.

E) The papers at national conferences

At the national symposiums and conferences has published more than 60 scientific papers, of which the most important are:

1. <u>Ž.Despotović</u>, N.Vulić, "Semiconductor Load Switch od Electro Locomotive Series 461", *PROCEEDINGS of 39th Conference ETRAN*, Zlatibor 06-09.04.1995, Serbia, pp. 547-550.(In Serbian)

 V.Lazarević, N.Vulić, <u>Z.Despotović</u>, "Thyristor Load Switch of Repaired Tap Changer on The Locomotive 25kV, 50Hz", *PROCEEDINGS of VIII Symposium Power Electronics*, N.Sad 27-29.
 1995, Serbia, pp. 259-266.(In Serbian)

3. <u>Z.V.Despotovic</u>, D.Ostojic, M.Timotijevic, "A Microcontroller Based System for Supervision and Control of the Mixer In Technology line VINFLEX-PS GRMEC", *PROCEEDINGS of 40th Conference ETRAN, Budva 04-07.06.1996, Serbia and Montenegro, pp. 34-37.*

4. Z.Stojiljkovic, <u>Z.V.Despotovic</u>, "Power Factor Correction of Drive With Electromagnetic Vibratory Feeder", *PROCEEDINGS of X Symposium Power Electronics*, N.Sad 14-16. X. 1999, Serbia, pp. 259-266.(In Serbian)

5. <u>Z.Despotovic</u>, Z.Stojiljkovic, M.Jovanovic, "Thyristor converter for driving electromagnetic vibratory feeder", *PROCEEDINGS of X Symposium Power Electronics*, N.Sad 14-16. X. 1999, Serbia, pp. 150-156.(In Serbian)

6. <u>Z.Despotovic</u>, Z.Stojiljkovic, M.Jovanovic, "Frequency Controlled Power Converter for Driving of Electromagnetic Vibratory Feeder", *PROCEEDINGS of 47th Conference ETRAN*, 08-13.06.2003., H.Novi, Serbian and Montenegro, Vol.1., pp.413-416. (In Serbian)

7. M.D.Jovanovic, M.Vukobratovic, <u>Z. Despotovic</u>, "General-Purpose Six-Joint Robot Controller", *PROCEEDINGS of 47th Conference ETRAN*, H.Novi 08-13.06.2003., Vol. 4, pp.371-375. (In Serbian)

8. <u>Z.V.Despotovic</u>, M.Pesko, "Mathematical Model of Vibratory Feeder Drive with Electromagnetic Vibratory Actuator", *PROCEEDINGS of 48th Conference ETRAN*, Cacak, 8-13.06.2004., Serbia, Vol.1, pp.276-279.(In Serbian)

9. A.I. Ribic, <u>Z.V. Despotovic</u>, "PI plus State Observer Control of Electromagnetic Vibratory Feeder", *PROCEEDINGS of 53* th Conference ETRAN, Vrnjačka Banja, Serbia, 15-19.06.2009., Serbia, Vol.1, pp. AU01.1-4.

10. I.Stevanović, S.Popić, A.Rodić, <u>Ž.Despotović</u>, M.Jovanović, "Moving Robotic Solar Generator, example of structural design of the mechanical structure", *PROCEEDINGS of* 57th *Conference ETRAN*, Zlatibor, 03-06.06, 2013, Serbia, pp. RO2.6.1-4. (In Serbian)

11. <u>Ž.Despotović</u>, M.Nedeljković, "SCR Resonant Power Converter for Amplitude-Frequency Control of Electromagnetic Vibratory Actuator", *Proceeding of XIV International Scientific – Professional Symposium INFOTEH®-JAHORINA 2015*; 03/2015, Bosnia and Herzegovina, Vol.14, pp. 25-31.(In Serbian)

12. M.Nedeljković, <u>Z.Despotović</u>, "Specifics of High Voltage High Frequency Measurements on Electrostatics Precipitator Electrode System in Thermal Power Plants", *Proceeding of XIV International Scientific – Professional Symposium INFOTEH®-JAHORINA 2015*; 03/2015, Bosnia and Herzegovina, Vol.14, pp. 18-24.(In Serbian)

F) Participation in SCIENTIFIC PROJECTS

1.Development of Hydrodynamic Transmission on The Drive of The Coal Mils 1.1MW-2MW, for Thermal Power Plant- Project No.ETR6.02.0059A, Serbian Ministry of Science and Environmental Protection, Program of Technology Development in Energy technology and Mining, April 2001-December 2004.

2. Development Technologies and Devices for Efficient Electrostatic Precipitation of Smoke and Flay Ash in Power Thermal Plants and Thermal Station", project No.TR6610, Serbian Ministry of Science and Environmental Protection, Program of Technology Development in Energetic technology and Mining, January 2005-December 2007.

3. New Applied Mathematical Methodologies in Solving Different Engineering Problems"- Bilateral Project within Serbian-French Technology Co-Operation for Year 2008-2009.

4. The Development of System for Measuring the Quantity and Quality water in Open Channel Based on GPRS Communication for Requirements of Control and Management, Project No.TR22013 of Serbian Ministry of Science-Program of Technology Development for period 01.04.2008-31.03.2011. (Project manager)

5. The Development and Application High Voltage High Frequency Ecological Equipments to Avert Aero Pollution in Industry and Electric Power Industry

Project No.TR21007, Serbian Ministry of Science-Program of Technology Development for period 01.04.2008-31.03.2011.

6. Energy Warden (EW)- FP7 project, Renewable Energy Sourcing Decisions and Control in Buildings, 2010-2012, (participation in period 2010-2011)

7. The Integrated Systems for Flue Gas Cleansing and Development of Technologies for Zero Pollution Power Plants

Project No.TR33022, Serbian Ministry of Science-Program of Technology Development, realization 2011-2020.

8. ARTEMIS-Artificial Intelligence in Energy Management Innovative Services Artificial Intelligence Program, Science Found Republic of Serbia, 2020.-2022.

G) Participation in ACADEMIC PROJECTS

1. TEMPUS JEP 41029/2006 - "Interdisciplinary Engineering Education Establishment", funded by the European Commission, DURATION: 2007-2009 WEB SITE: <u>http://jep41029.etf.rs/</u> PROJECT TYPE: CARDS 2006 Curriculum Development SUBJECT AREA : T810 - Interdisciplinary Studies

2. TEMPUS JP 144856-2008: "International Accreditation of Engineering Studies", DURATION: 2008-2011 WEB SITE: <u>http://www.tempus.ac.rs/projects-tempus/view/764/70/</u>

WEB SITE: <u>http://www.tempus.ac.rs/projects-tempus/view//64//0</u> PROJECT TYPE: Governance Reform SUBJECT AREA : 520 - Engineering and Technology

H) The development and technical realization of industrial prototypes

Hi has the author or coauthor of more than 80 engineering technical realisations and solutions in the above mentioned areas that have received of confirmation in practical applications: two new technical solutions recognized at the international level, 25 substantially improved the existing technical products and developed 57 industrial prototypes.

1.Programming Current Mode PWM Converter for Driving Electro Hydraulic Pressure Valve in Control System of Hydraulics Tunnel Press-Factory of rubber-Vulkan, Nis, Serbia, May 1990 to May 1991.

Members: Zeljko Despotovic, Milija Timotijevic

2. Prototype of Supervisory and Control System for Reversible AC Drive of Belt Conveyors in Automatic Line for Sorting and Dosing of Tree Trunks-Viskoza, Loznica, Serbia, March 1992 to June 1992.

Members: Zeljko Despotovic, Nebojsa Vesovic, Vladeta Buljak

3. **Development of Plant for Fruit and Vegetable Maintenances in Controlling Atmosphere**-*Innovation project financially supported by Ministry of Science and Technology of Republic Serbia*, February 1993 to December 1993.

Members: Nebojisa Ivancevic, Milija Timotijevic, Zeljko Despotovic, Milos Pavlovic

4. **Programmable Automatic Machine for Finishing of Glasses Edges** – *Serbian Factory of Glass, SFS Paracin, Serbia,* June 1993 to September 1993. Members: Zeliko Despotovic, Dragan Strujic, Vladeta Buljak

5. Development Prototype of Reconstruction Voltage Regulator URELA 30/600 on Electro Locomotives series 461-000/100, Serbian Railway, July 1994 to December 1995.

Members: Milija Timotijevic, Zeljko Despotovic, Branko Kovacevic, Dragan Ostojic

6.Electronic System for Supervision and Control of Rotational Tables for Disassembling and Purification of Bearings-SARTID Smederevo, June 1994 to November 1996. Members: Prof. Zoran Stojiljkovic, Zeljko Despotovic, Nebojsa Vesovic, Vladeta Buljak

7. **Regulated Single-phase AC Drive for Movable Truck with Crane**, *SARTID Smederevo*, February 1995 to June 1995.

Members: Zeljko Despotovic, Milija Timotijevic

8. Microcontroller Module for Supervision and Control of the High-Yield Mixer in the Technology Line VINFLEX- *PS GRMEC, Belgrade,* June 1996 to December 1996. Members: Milija Timotijevic, Dragan Ostojic, Zeljko Despotovic

9. Control System of Wastewater Treatment Plant in Seaport Novorosijsk- Seaport Novorosijsk, Russia, March 1997 to September 1997.

Members: Zeljko Despotovic (project manager), Miloš D Jovanovic, Milija Timotijevic

10.Microcontroller Module of Automatic Water Pumping System of Mine Ajvalija- *Mine Trepca, Serbia, July 1997 to October 1997.*

Members: Zeljko Despotovic (project manager), Milija Timotijevic, Mirko Pesko, Miloš D Jovanovic

11. Reconstruction of Control System of Mixing Station for Painting Skin, Tannery "ETERNA"-Kula, Serbia, March 1999 to May 1999.

Members: Zeljko Despotovic (project manager), Mirko Pesko, Miloš D Jovanovic

12. Micro Controller Device for Supervision and Control of System Military Rifle Range, *Yugoslav Armed Forces*, November 1999 to August 2000.

Members: Milos D. Jovanovic, Zeljko Despotovic, Milija Timotijevic, Dragan Ostojic

13. Automatic Temperature Control System for Silo Dryers-The Oils and Proteins Factory BIOPROTEIN, Obrenovac, Serbia, June 1999 to September 1999.

Members: Zeljko Despotovic (project manager), Nenad Grujic, Miloš D Jovanovic

14. Unidirectional Thyristor Converter for Driving Electromagnetic Vibratory Feeder in Dosing System of Clinkers - *Cement Factory N.Popovac, Paracin, Serbia,* September 1999. to February 2000.

Members: Zeljko Despotovic, Milija Timotijevic

15. Development and Design of Control System for Hydraulic Pulsator - METALOPRERADA Uzice, Serbia, January 2000 to December 2000.

Members: Nenad Grujic, Miroslav Ravlic, Milija Timotijevic, Zeljko Despotovic, Zivorad Milic, Dragan Ostojic

16. Development and Hardware Design for Micro Programmable Logic Controller uPLC-504, Mihajlo Pupin Institute (MPI) - Dept.Mechatronics, Belgrade, Serbia, April 1995 to March 2000.

Members: Milija Timotijevic, Miloš D Jovanovic, Nenad Grujic, Zeljko Despotovic

17. **Microprocessor Based Wind Speed Monitoring Device**, *KOMEL Belgrade, Serbia,* June 2001 to May 2002.

Members: Milija Timotijevic, Nenad Grujic, Zeljko Despotovic, Miloš D Jovanovic

18. Hardware Design of PC Compatible Device for Testing Digital Boards of Control System FLS625 in Technological Line for Cement Production, Cement factory Novi Popovac, Paracin, Serbia, August 2000 to February 2001.

Members: Zeljko Despotovic (project manager), Nenad Grujic, Miloš D Jovanovic

19. Fast Peak Current Detector for Power AC Drive 1.5MW of Exhausting System, Cement

Factory, N.Popovac, Paracin, Serbia, October 2000 to December 2000. Members: Zeljko Despotovic, Z.Dobrosavljevic, Miloš D Jovanovic

20. Development of Control System of Electrostatic Precipitator for Separation Smoke and Fly Ash, *Thermal Power Plant Obrenovac, Serbia,* December 2001 to May 2004. Members: Prof. Slobodan Vukosavic, Zeljko Pantic, Zeljko Despotovic, Igor Cvetkovic, Rajko Prole.

21. Supervisory and Control of the Mass Flow System on Belt Conveyor Scale 1000t-Cement Factory N.Popovac, Serbia, May 2001 to November 2001. Members: Zeljko Despotovic, Prof. Zoran Stojiljkovic, Mirko Pesko.

22. Thyristor Chopper for Regulating of Mixer DC Drive in Field Weakening Region, *Thermal Power Plant Pljevlja, Montenegro,* August 2001 to October 2001. Members: Zeljko Despotovic, Prof. Zoran Stojiljkovic

23. **Microprocessor Checking Devices for Belt Conveyor Scale** -*Cement Factory Novi Popovac, Paracin,* October 2001 to May 2002.

Members: Zeljko Despotovic, Bosko Tanasijevic, Mirko Pesko

24. Automatic Control of High Speed Tracked Vehicle Transmission, *Military Technical Institute (MTI)-Kumodraz, Serbian Armed Forces, Belgrade,* March 2002 to February 2003. Members: Zlatomir Zivanovic, Goran Jerkin, Miloš D Jovanovic, Zeljko Despotovic

25. Optimization Regulated Thyristor Converter Control System for Supplying of High Voltage Electrostatic Precipitator- Thermal Power Plant "Kolubara", Serbia, April 2002 to August 2002.

Members: Nenad Rebic- Corporation Shrack-Serbia (project manager) Prof. Zoran Stojiljkovic, Zeljko Despotovic,

26. Electro Thermal Module for Soft Switching High Current Switchgear- Thermal Power Plant Kolubara, Serbia, May 2002 to June 2002.

Members: Nenad Rebic- Corporation Shrack-Serbia (project manager), Zeljko Despotovic, Miloš D Jovanovic,

27. **Time Machine** (Hardware design for family devices based on Philips 80C571 and Atmel 89C52 micro controller), Mihajlo Pupin Institute Belgrade, January 1998 to July 2002.

Members: Milija Timotijevic (project manager), Miloš D Jovanovic, Nenad Grujic, Zeljko Despotovic, Milorad Stefanovic, Dragan Ostojic.

28. PC104 Based Controller With Real Time Operating System for Universal Educational Six Joint Robot – ROBED, *Mihajlo Pupin Institute (MPI), Dept. Robotics, Belgrade, Serbia,* March 2002 to November 2002.

Members: Academician, Prof. Miomir Vukobratovic (project manager), Miloš D Jovanovic, Zivko Stikic, Zeljko Despotovic

29. **Static Burst-mode Power Converter for Controlled Burn of Metal Ingots**, *Enterprise for the Manufacture of boilers and thermo-energetic units, RUDNAP GROUP MINEL - Kotlogradnja, Belgrade, Serbia,* February 2003 to June 2003. Members: Zeljko Despotovic, Milan Djukic

30.**Design of Servo Positioning Control for Two Axes Stepper Motor System**-*ANDRIJASEVIC Company, Ruma, Serbia,* March 2003 to February 2004. Members: Zeljko Despotovic, Miloš D Jovanovic

31. Design and Development FLASH ROM Emulator Hardware - *Pupin Telecom DKTS, Belgrade, Serbia,* April 2003 to June 2003.

Members: Zeljko Despotovic, Miloš D Jovanovic

32.Microprocessor Module for Temperature Control of Heating Metal Ingot on Technological Burn Treatment, Enterprise for the manufacture of boilers and thermo-energetic units, *MINEL* – *Kotlogradnja*, Serbia, May 2003 to July 2003. Members: Milan Djukic, Zeljko Despotovic

33. Design and Development LASER Optoelectronics Control Device for Tank Training Targeting System, *MTI Kataniceva, Serbian Armed Forces,* June 2003 to December 2003 Members: Bosko Tanasijevic, Miloš D Jovanovic, Zeljko Despotovic

34. Electro-Pneumatic Control Module of Safety Valves of Main Boiler, *Thermal Power Plant Kolubara Serbia,* July 2003 to October 2003 Members: Zeljko Despotovic, Miloš D Jovanovic, Igor Berkes, Predrag Jevtovic

35. Universal Automatic Manufacturing Machine for Forming Core of Mattress-ANDRIJASEVIC Company, Ruma, December 2003 to June 2004. Members: Miloš D Jovanovic, Zeljko Despotovic

36. Development of Control System of Hydrodynamic Transmission of Mills Drive 1.1MW to 2MW, on Thermal Power Plants- Project financially supported by Ministry of Science and Technology of Republic Serbia, April 2001 to December 2004.

Members: Branimir Kikovic, Predrag Jevtovic, Igor Berkes, Zeljko Despotovic

37. Inertial Electronic Module for Triaxial Measuring of Accelerations and Angular Velocity, *DSU "Oziris", Belgrade, Serbia,* May 2006 to September 2006. Members: Zeliko Despotovic, Milovan Zivanovic, Milos Zivanovic

38. **PWM Control Electronic Module for Triaxial Servo Drive in Unmanned Aerial Vehicles**, *DSU "Oziris", Belgrade, Serbia,* July 2006 to September 2006. Members: Zeljko Despotovic, Milovan Zivanovic

39. Development of Modified MODBUS Software Communication Interface for Interconnection Between Local SCR Control Unit of Electrostatic Precipitators and SCADA Control System, Thermal Power Plant "Nikola Tesla" -Obrenovac, Serbia, August 2006 to October 2006

Members: Prof.Slobodan Vukosavic, Miloš D Jovanovic, Igor Cvetkovic, Zeljko Despotovic, Vladimir Nesic

40. Electrostatic Precipitator of the Unit A1: SCR Power Supply, Control and Communications, Thermal Power Plant "Nikola Tesla" - Obrenovac, Serbia, September 2006 to March 2007

Members: Prof. Slobodan Vukosavic, Igor Cvetkovic, Zeljko Despotovic, Zeljko Pantic, Rajko Prole, Ilija Stevanovic

41. The Chamfer Measuring of Segment Shutter on the Water Dam Stajicevo, Public Water Management Company "Vode Vojvodine", Novi Sad, Serbia, December 2006 to February 2007. Members: Zeljko Despotovic, Miloš D Jovanovic, Igor Berkes, Predrag Jevtovic, Aleksandar Jevtovic

42. Communication Interface for Remote Data Transfer from Absolutely Encoder to Intelligent LCD module - The Dam Stajicevo, Public Water Management Company "Vode Vojvodine", Novi Sad, Serbia, November 2006 to February 2007. Members: Miloš D Jovanovic, Zeljko Despotovic

43.Development and Design of Devices and Technology for the Efficient Electrostatic

Precipitator Control – Thermal Power Plants "Nikola Tesla "-Obrenovac, Serbia, January 2005 to December 2007. Members: Prof. Slabadan Vukasavia, Ducan Arrautavia, Zeliko December Zeliko December Jaka Pantia, Ilija

Members: Prof. Slobodan Vukosavic, Dusan Arnautovic, Zeljko Despotovic, Zeljko Pantic, Ilija Stevanovic, Darko Jevtic, Slobodan Bogdanovic

44. The Servo Hydraulics Control System of Hydrodynamic Exciter HP-2007, Mechanical Faculty of Kragujevac, Serbia, November 2007 to June 2008.

Members: Zeljko Despotovic (project manager), Predrag Jevtovic, Igor Berkes

45. The Programmable Narrow and Wide Band Amplitude and Frequency Generator of References Wave Shapes, *Mechanical Faculty of Kragujevac, Serbia, March 2008 to May 2008.*

Members: Prof. Miroslav Demic, Svetlana Despotovic, Zeljko Despotovic, Srdjan Sudarevic

46. Revitalization of the antiterrorist mobile robot for operations against the diversion, *MUP Serbia*, November 2009 to December 2009.

Members: Zeljko Despotovic, Miloš D Jovanovic

47. High Voltage High Frequency Power Station for Electrostatic Precipitation of Fly Ash Particles on the Thermal Powers, *Thermal Power Plant "Morava"- Svilajnac, Serbia,* September 2009 to March 2010.

Members: Prof. Slobodan Vukosavic, Zeljko Despotovic, Miroljub Bakic, Obrad Djordjevic, Nikola Popov

48. Development of the Prototype of High Voltage High Frequency Resonant IGBT Power Converter for Electrostatic Precipitators Control, *Thermal Power Plant "Morava"- Svilajnac, Serbia,* June 2008 to February 2009.

Members: Prof. Slobodan Vukosavic, Zeljko Despotovic, Srdjan Srdic, Obrad Djordjevic, .Milos Nedeljkovic

49. Development of High Voltage High Frequency Power Transformer 0.4/60kV/60kVA, Thermal Power Plant "Morava"- Svilajnac, Serbia, January 2009 to June 2009.

Members: Slobodan Vukosavic, Zeljko Despotovic, Obrad Djordjevic

50. The Universal Electronic Module for Measuring Current and Voltage of Electrostatic

Precipitator 100kV/1A, Thermal Power Plant "Morava"- Svilajnac, Serbia, June 2009 to September 2009.

Members: Prof. Slobodan Vukosavic, Zeljko Despotovic, Obrad Djordjevic

51. Development of High Voltage High Frequency Rectifier AR70/1000 for Supplying Electrostatic Precipitators, *Thermal Power Plant "Morava"- Svilajnac, Serbia,* September 2009 to February 2010.

Members: Prof. Slobodan Vukosavic, Zeljko Despotovic, Obrad Djordjevic, Nikola Popov, Milos Nedeljkovic

52. Development of Current Controlled IGBT Power Converter 3x380V, 50Hz to 100kVDC/2A (200kVA) for Retrofit Supplying of Electrostatic Precipitators, Thermal Power Plant "Morava"- Svilajnac, Serbia, July 2009 to September 2010.

Members: Prof. Slobodan Vukosavic, Zeljko Despotovic, Obrad Djordjevic, Nikola Popov

53. Development of Electro Pneumatic Control Unit for Safety Valves of Boiler Plant K6 at the Generator Unit A5 (110MW) – Thermal Power Plants "Kolubara", Serbia, March 2011 to December 2012.

Members: Zeljko Despotovic, Aleksandar Jevtovic, Igor Berkes

54. Development of Mobile Robotic Solar Generator MobiSun-ProEnergy™, Mihajlo Pupin Institute (MPI),Belgrade, Serbia, January 2011 to March 2014.

Members: Aleksandar Rodic, Zeljko Despotovic, Milos Jovanovic, Svemir Popic, Ilija Stevanovic

55. Development of Multi Resonant Topology Based High Voltage High Frequency Rectifier AR100/1000 for Supplying Electrostatic Precipitators, *Thermal Power Plant "Nikola Tesla"*- Obrenovac-Unit A1, Serbia, May 2010 to June 2012.

Members: Prof. Slobodan Vukosavic, Zeljko Despotovic, Nikola Popov, Nikola Lepojevic, Stanimir Susic, Ljiljana Peric

56. **The Bio Medical Device for Cortical Stimulation by DC Micro-ampere current,** Mihajlo Pupin Institute, Institute for Medical Research, Belgrade, January-April 2014. Members: M.Jopvanovic, Z.V.Despotovic, T.Ilic, S.Milanovic.

56. **High Voltage High Frequency Power Station for Electrostatic Precipitation of Fly Ash Particles** (6 units AR100/1000 ; 100kV/1A), *Thermal Power Plant "Nikola Tesla "- Unit A1, Obrenovac, Serbia,* June 2012 to September 2016.

Members: Prof. Slobodan Vukosavic, Zeljko Despotovic, Nikola Popov, Nikola Lepojevic

57. Industrial prototypes of regulated drives of vibratory sieves in the system of transport of slag and boiler ash-Thermal Power Plant N.TESLA-Obrenovac, (two units), Obrenovac, Serbia, March 2015.

Members: Zeljko Despotovic (project manager), Alexander Pavlovic, Dusan Ivanic, Vladimir Arsovski

58. The experimental Setup for High Voltage Testing and Hardware Simulation of Real Exploitation Conditions of ESP Power, Scholl of Electrical Engineering-University of Belgrade, Mihajlo Pupin Institute-University of Belgrade, Enterprise STEMP-Belgrade, January 2014 – March 2015.

Members: S.N.Vukosavic, Z.V.Despotovic, M.Terzic, N.Popov, N.Lepojevic, D.Mihic

59. **Regulated Drive for Electromagnetic Vibratory Conveyor,** Mihajlo Pupin Institute-University of Belgrade, Faculty of Technical Science-University of Kragujevac, January-December 2015.

Members: P.Misljen, Z.V.Despotovic, M.Matijevic

INVESTMENT PROJECTS He participated in in the preparation of project documentation as a designer and as responsible designer, on more investment projects:

1.**Main project of power installation for inspection gas station** - *Mihajlo Pupin Institute (MPI), Belgrade,* July 1994 to September 1994. Participation in the project: designer

2. Main project of power installation, control and supervision of wastewater treatment plant of town Topola, *Topola, Serbia,* March 1994 to June 1994.

Participation in the project: designer

3. Main project of power installation, control and supervision of wastewater treatment plant of headquarters building of seaport Novorosijsk, *The Sea Port Novorosijsk Russia*, March 1995 to July 1995

Participation in project: responsible designer

4. Main project of power installation, control and supervision for wastewater treatment plant of forgery, *Metallurgic Industry "Petar Drapsin"*, *Mladenovac, Serbia*, April 1996 to July 1996. Participation in project: designer

5. Project reconstruction of power installation and supervision for AC drive of suction GEHO pumps in alumina factory- *Plant of Aluminium Podgorica, Montenegro,* December 1995 to May 1996.

Participation in project: designer

6. **Main project of power installation, control and supervision for rotational circular saw**-*ILR Zeleznik, Belgrade, Serbia,* February 1996 to September 1996. Participation in project: designer

7. Main project of power installation, control and supervision for safety system of ramps-Yugoslav Bank for International Economic Cooperation, AD Belgrade, Serbia, March 1996 to July 1996

Participation in project: responsible designer

8. **Main project of supply installation and supervision for AC drive of power mill** -Chemical Industry Zupa, Krusevac, April 1996 to October 1996. Participation in project: designer

9. Main project of power installation, control and supervision of wastewater treatment plant for factory of meat processing, *Butchery Mesokombinat Leskovac, Serbia,* December 1996 to March 1997.

Participation in project: designer

10. Main project of power installations: AC drives, road, lighting and grounding, in technological line for fine grinding quick lime- Factory of lime "Ravnaja", Mali Zvornik, Bosnia and Herzegovina, April 1997 to May 1998 Participation in project: designer

11. **Conceptual project of control system for coke batteries extruding**-*GOSA, Smederevska Palanka, Serbia,* June 1998 to September 1998. Participation in project: designer

12. Main project reconstruction of power installation, control and supervision for segment breech of the ship lock on river Tisa, *Public Water Management Company "Vode Vojvodine", Novi Sad, Serbia,* April 1998 to June 1998. Participation in project: designer

13. Main project reconstruction of power installations: AC drive for segment breech, heating and lighting of the dam Stajicevo, *Public Water Management Company, "Vode Vojvodine", Novi Sad, Serbia,* March 2004 to July 2004. Participation in project: designer

14. Integral Pay Tolls Systems – Main project of Power Installation (Section of the highway Belgrade-Sid Toll gates: Sremska Mitrovica, Pecinci, Kuzmin, Adasevci, Morovic,Ruma, Simanovci, Sid), *Public Enterprises Roads of Serbia,* January 2004 to May 2004. Participation in projects: designer

15. Project of power installations: AC drive for segment breech, heating and lighting of the dam Bezdan, *Public Water Management Company, Vode Vojvodine, Novi Sad, Serbia,* October 2008 to January 2009. Participation in project: designer

16. Conceptual design and feasibility study of building small hydro-power plants on the river Djetinja- *HPP "Vrutci", Uzice, Serbia* (Investor of project: Public Water Management Company "Srbijavode", Belgrade), September 2008 to December 2008. Participation in project: designer

17. Main project of power installation for system of surveillance and notification-dams "Vrba" and "Klinje", Investor Project: "Mine and Thermal Power Plant" Corporation, GACKO, Bosnia and Herzegovina, October 2009 to December 2009. Participation in project: responsible designer

18. **Preliminary design of electrical installations floodgates and lock "Sebesfok"**, Sombor, (Investor: Public Water Management Company, Vode Vojvodine, Novi Sad, Serbia), March 2011 to June 2011.

Participation in project: responsible designer

19. **Main project of electrical installations floodgates and lock "Sebesfok"**, Sombor, (Investor: Public Water Management Company, Vode Vojvodine, Novi Sad, Serbia), June 2011 to December 2011.

Participation in project: responsible designer

20. Main project of lightning rod installation and mechanical constructions antenna tower-Transformer Station TS 35/10kV "Zeleznik", Belgrade, Serbia (Investor: Power Distribution Belgrade, Serbia), May 2013 to August 2013. Participation in project: responsible designer

21. The main project of electrical and lighting rod installations of modular gas-heating units (The Club of Deputies- Tlostojeva 2, Belgrade), September 2014

Investor: Government Building and Diner/ Government of Republic Serbia Role: Responsible Designer (Licence 350) Description: Design of electrical installation, earthing and lightning protection of modular gasheating unit

Team members: Zeljko Despotovic, Milica Vujovic, Igor Berkes

22. The Reconstruction of Hydro Power Plants "Zvornik"- Generator and Excitation System, June 2015

Type of project: RECONSTRUCTION-The Main Project (Project for Building Permit) Investors: Electric Power Industry of Serbia, DLHE Bajna Basta, Serbia Object: Hydro Power Plant "Zvornik" The name of project part: Section 5 - The Generator and Excitation System The design companies: IMP Projekt Inzenjering- Belgrade, ELNOS BL

The role: Responsible designer (Licence 350, 352)

Team members: Zeljko Despotovic, Milica Vujovic, Aleksandar Pavlovic, Igor Berkes

23. The main project of roof-top Photovoltaic Power Plants 500kW, Gruner Serbian d.o.o, The design companies: CONSEKO, Belgrade, Serbia

The design companies. Conservo, beigrade, Serbia The role: Responsible designer (Licence 350, 450) Team members: Zeljko Despotovic, Miodrag Vukovic, Bojan Simonovic 2020-2021.

24. The main project of the free-field Photovoltaic Power Plants 2.8MW, HELION, Green d.o.o,

The design companies: CONSEKO, Belgrade, Serbia The role: Responsible designer (Licence 350, 450) Team members: Zeljko Despotovic, Miodrag Vukovic, Zoran Petrovic 2021.-2023.

25. The main project of roof-top Photovoltaic Power Plants 500kW, EP Belt, Loznica,

The design companies: IMP Projekt Inzenjering , Belgrade, Serbia The role: Responsible designer (Licence 350, 450) Team members: Zeljko Despotovic, Nikola Petkovic, Marko Djurovic 2021.-2022.

26. The main project of roof-top Photovoltaic Power Plants 323kW, TIM d.o.o., B.Karlovac. .

The design companies: CONSEKO, Belgrade, Serbia The role: Responsible designer (Licence 350, 450) Team members: Zeljko Despotovic, Miodrag Vukovic, April 2023

27. The main project of roof-top Photovoltaic Power Plants 158kW, FMT - Zajecar,

The design companies: CONSEKO, Belgrade, Serbia The role: Responsible designer (Licence 350, 450) Team members: Zeljko Despotovic, Miodrag Vukovic, February 2023.

VOLUNTEER EXPERIENCE	1. Member of COMMITTEE for ETALONS of ELECTROMAGNETIC MEASURES, Directorate for Measurements and Rare Metals- Ministry of Economy and Regional Development of Republic Serbia, January 2001-Decembre 2006.
	2. Reviewer at IEEE Industrial Electronics Society- Journal: IEEE Transactions on Industrial Electronics, USA, November 2007 - Present
	3.Editorial Board Member at American Journal of Electrical and Electronic Engineering -Science and Education Publishing, USA, January 2012 - Present
	4. Member of the commission for the standardization in solar energy and power electronics at Institute for Standardization of Serbia, June 2013 - Present
	5. Reviewer at Elsevier Journal Renewable & Sustainable Energy Reviews, May 2015-Present
	6. Reviewer at Environmental Engineering and Management Journal, Dec 2016-Present
	7. Reviewer at Chemical Industry Journal, Dec 2016-Present
	8. Reviewer at Journal Facta Universitatis, Series: Electronics and Energetics, June 2017- Present
	9. Editorial Board Member at Journal Industrial Process Automation in Engineering and Instrumentation-Ukraine, 2015-Present.
	10. Reviewer at Journal of Electrical Engineering -Bratislava , Dates volunteered Feb 2019 – Present
	11. Reviewer at Journal Thermal Science, Dates volunteered May 2019 – Present
	12. Reviewer at Journal IEEE Access, Dates volunteered May 2019 – Present
	13. Reviewer at Journal IEEE Vehicular Technology, Dates volunteered May 2019 – Present
	14. Reviewer at World Journal of Engineering, Dates volunteered October 2019 – Present
	15. Reviewer at Elsevier Journal: Automation in Construction, Dates volunteered October 2019 – Present
	16. Reviewer at Journal IET Electric Power Applications, Dates volunteered September 2019 – Present
	17. Member of Professional Board (Field of Science and Mathematics), University of Belgrade, Serbia, Dates volunteered December 2019 – Present
	18. President of Scientific Council of Mihajlo Pupin Institute, March 2020Present.
	19. Editorial Board- Journal Energy-economy-ecology, Serbia 2020-present
Honors and Awards	1. Charter of recognition for exceptional contribution in the field of renewable electrical power sources-on the occasion of the 10th International Conference of Renewable Electrical Power Sources, Society for Renewable Energy Sources at SMEITS, SERBIA October 2022.
	2. The Best Researcher Award- Mihajlo Pupin Institute, University of Belgrade, Serbia, December 2021
	3. The award "Đorđe Paunović" for the best TELFOR 2021 scientific paper Ž.Despotović and M.Tajdić, for the scientific paper "Design and Implementation of a Hybrid Power for Telecommunication and Measuring Remote Stations of the Surveillance, Alert and Warning System". November 2021.
	4. The best scientific paper on 34 Conference CIGRE 2019-V.Banja STK B4 High Voltage DC and Power Electronics: "DIGITAL CONTROLLED SYNCHRONOUS BUCK-BOOST POWER CONVERTER - APPLICATION IN SOLAR SYSTEMS ", Authors: Dr Z.V Despotovic, Boban Djordjevic.

5. The best scientific paper on 33 Conference CIGRE 2017-Zlatibor

honor date Jun 2017 honor issuer CIGRE Serbia

honor description Study committee STK B4 High Voltage and Power Electronics, PAPER: "THE OPTIMIZATION OF REGULATED AC DRIVES OF VIBRATORY SIEVES FOR SEPARATION BOILER ASH FROM SLAG ON THERMAL POWER PLANTS", Authors: Dr Z.V Despotovic, Aleksandar M.Pavlovic

6. The Best Technological Innovation 2016 in Serbia

honor date Dec 2016 honor issuer Ministry of Education, Science and Technological Development of Republic Serbia honor description "Two Axes Solar Concentrator", authors from Institute M.Pupin, Belgrade:

Aleksandar .Rodic,, Zeljko.V.Despotovic, and from partner enterprises SEF/Pancevo: Stanko Kovacevic, Samjuel Mravik, Zorica Kovacevic; LINKS:

(1) <u>http://www.rts.rs/page/stories/sr/story/125/drustvo/2568979/nagrade-za-tehnolosku-inovaciju-2016-.html</u>

(2) http://inovacija.org/polufinale-nti2016-arandjelovac/

7. Grade Elevation to IEEE Senior Member, July 2015.

8. The best scientific paper on 30 Conference CIGRE 2011-Zlatibor

honor date Jun 2011 honor issuer CIGRE Serbia, honor description Study committee, STK B4-High Voltage DC and Power Electronics, PAPER: "Experiences in Exploitation of Retrofit Power of ESP on Thermal Power Plant Morava", authors: S.N.Vukosavic, Z.V.Despotovic

OTHER SKILLS A) Sports -Basketball (Ex basketball player) -Swimming -Volleyball -Table tennis B) Driving License -B type (car driving) since 1992

REFERENCES Prof. Slobodan N. Vukosavic, PhD.E.E, School of Electrical Engineering, University of Belgrade, Serbia Senior Member IEEE boban@etf.rs

> Prof. Predrag Pejovic, PhD.E.E School of Electrical Engineering, University of Belgrade, Serbia Senior Member IEEE <u>peja@etf.rs</u>

Prof. Vladimir Katic, PhD.E.E Faculty of Technical Sciences, University of Novi Sad Senior Member IEEE <u>katav@uns.ac.rs</u>