

CURRICULUM VITAE

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PERSONAL DATA

Family name Berzan
First name Vladimir
Date of birth: 28.01.1948
Citizenship: Republic of Moldova
Marital status: Married

EDUCATION

1966 -1971 Technical University, Moldova, Engineer's Diploma – Electromecanical Engineer
1976-1980 Post-graduate student, Power Engineering Institute of an Academy of Science of Moldova
1991 State Technical University, Sanct -Petersburg, Russia
PhD in Engineering
1999 Doctor habilitat of Science in Engineering
The Institute of Power Engineering of the Academy of Science of Moldova
1996 Researcher Associate of the Academy of Sciences of Moldova
2001-present Invited professor of the Technical University of Moldova
2011-present Invited professor University of the Academy of Sciences of Moldova

POSITION AND YEARS WITH FIRM

2010-2014 Director of the Institute for Power Engineering of ASM
Principal scientific researcher IPE ASM
2004-2010 Deputy Director of the Institute for Power Engineering of ASM
1991-2004 Head of lab "Diagnostics of electrical equipments" of the IPE ASM
1980 -1991 Senior Researcher in the Institute of IPE ASM
1972-1980 Engineer at the Institute of Power Engineering of the ASM

TRAINING AND WORKSHOPS

14.03.2013 Seminar INOGATE. Communication problems. Problem identification workshop to promote energy efficiency and RES in Moldova, Hotel JAZZ, Chisinau
14.05. 2013 Development and assessment of Mitigation / Adaptation Climate Change policy portfolios for Moldova, Workshop, Chisinau
14-17.05.2013 Seminar: Partnership Program in the regulation of the energy sector, USAID, National Asociation of Regulatory Utility Commissioners, Chisinau: NARUC-USAID Regulatory Partnership Program
21.06.2013 National Workshop "Quality of fuel from biomass produced in Moldova", Chisinau, AEE of the Moldova
08.07.2013 Workshop "UN-UNDP Capacity Building Programme Emmission Low-Moldova", Ministry of Environment of the Republic of Moldova
25-26.10 2012. Investment Forum in regional development , Creating opportunities for attracting investments in South Development Region, Purcari, Republic of Moldova , 25-26.10 2012.
03.02.2011 Seminar "Organization of the KIT, the result of research, promotion, stimulation, research topics", Chisnau, IPE ASM.
13-19.07.2008 Seminar Humbolt Koleg, Minsk, May 13 to 19, 2008
13-18.10 2018 International Workshop on "COOPERATION MOLDOVA - SWEDEN WITHIN SCIENCES, TECHNOLOGY TRANSFER AND NANOTECHNOLOGY", Chisinau, ASM
05.11.2009 Implementing the provisions of the Kyoto Protocol to the UN Framework Convention on Climate Change (Law No.29 RM + AV 02/13/2003 OJ-48 of 18.03.2003)
Theme: Finalize policy priorities and strategies elaborated by IE ASM in mitigating climate change phenomenon promovării through investments in energy efficiency and renewable energy.
25-29.09.2007 CTI Industry Joint Seminar: Prospects for Energy Efficiency and Renewable Energy Technologies in CIS countries, Kiev, Ukraine
11-14.11. 2007 International Seminar "Regional Workshop on Promoting Sustainable Biofuels Production and Use in Central and Eastern Europe", Croatia, Dubrovnik ,Cavtat, Hotel Croatia

KEY QUALIFICATIONS

Climate Change: Experience in application of quality assurance and quality control for the management of the waste management.
Energy management: Experience in energy management at national level; Experience in energy economics studies, investment planning, energy sector modeling; Experience and theoretical knowledge in the management and control operation of the electrical power systems, FACTS, Controlled Transmission Lines; Experience and theoretical knowledge and modeling, Renewable sources

SYSTEM EXPERIENCE

- 2010-present Member of the National Commission for the Implementation of the Framework Convention of the United Nations on climate change and the mechanisms and provisions of the Kyoto Protocol (CN), of which you are a member of your (Government Decision 1574 of December 26, 2003).
- 2012-2013 Member of the Coordinating Council for organizing national competition ECO-MOLDOVA
- 1999 **Participation of the Elaboration of Energy Strategy until 2010**
- 2004 -2007 **Participation in work group for preparing of Energy Strategy until 2010**
Law for renewable sources, Laws in Energy Sector

OTHER RELEVANT WORK EXPERIENCE

- 2001-2011 Expert of the Consiliulul Național de Acreditare și Atestare a Moldovei
- 2003-2014 Expert Council for Science and Technological Development of the Academy of Sciences of Moldova in the field of energy

LANGUAGES

- Native:** Romanian
- Foreign:** English, Russian

COMPUTER SKILLS

Windows 7, Word 2010, Excel 2010, Internet Explorer, E-mail, Mathcad, special energetic programs

RELEVANT PUBLICATION

Author of 230 scientific works. The most relevant are as following: **2013**

Monographs

- ANDRONATI, N.R.; SPIVAK, V.M.; MLADENOV, GH.M.; BERZAN, V.P.; BOGDAN, A.V.; COLEVA, E.GH.; TÎRȘU, M.S.; GOLOVANOV, N. **Noțiuni generale despre micro- și nanoelectronica modernă.** – Ch.: Tipografia Academiei de Științe a Moldovei, 2013. – 341 c. ISBN 978-9975-62-357-5.
- РИМСКИЙ В., БЕРЗАН В., ПАЦЮК В. **КАРЧЕВА Н., АНДРОС И. Волновые явления в неоднородных линиях. Том 4. Параметрические цепи.** АН Молдовы. Ин-т энергетики.- К.: Тип. АН Молдовы, 2008.- 552 с. - ISBN 978-9975-62-227-1.
- РИМСКИЙ В., БЕРЗАН В., ПАЦЮК В. **РЫБАКОВА Г., КАПЧЕЛЯ Т. Волновые явления в неоднородных структурах. Том 5. Теория и методы расчета электрических цепей, электромагнитных полей и защитных оболочек АЭС.** АН Молдовы. Ин-т энергетики.- К.: Тип. АН Молдовы, 2008.- 664 с. - ISBN 978-9975-62-248-6.
- РИМСКИЙ В., БЕРЗАН В., ПАЦЮК В. **КАРЧЕВА Н., АНДРОС И. Как увеличить передаваемую мощность в десятки раз.** Ch.: Tipografia Academiei de Științe a Moldovei, 2007. –176p. –ISBN 978-9975-62-191-5.
- РИМСКИЙ В., БЕРЗАН В., ТЫРШУ М., ПАЦЮК В., ФИЛИПП К., УЗУН М. **РИМСКИЙ С. Расчет потерь и перетоков мощности в сетях постоянного и переменного тока./** Academia de Științe a Moldovei. Institutul de Energetică Ch.: Tipografia Academiei de Științe a Moldovei, 2007.- 60p. –ISBN 978-9975-62-174-8.
- RIMSCHI V., BERZAN V., TÎRȘU M., UZUN M., RIMSCHI S. **Soluții precise ale ecuațiilor telegrafiștilor/** Academia de Științe a Moldovei. Institutul de Energetică Ch.: Tipografia Academiei de Științe a Moldovei, 2007.- 85p. –ISBN 978-9975-62-180-9.
- РИМСКИЙ В., БЕРЗАН В., ПАЦЮК В., ТЫРШУ М., УЗУН М. **Волновые явления в неоднородных линиях. Том III. Передача мощности по цепям постоянного и переменного напряжения /** Sub red. academicianului AȘM V. Postolati. Chișinău: Tipografia AȘM, 2007. -328p. –ISBN 978-9975-62-075-8.
- BERZAN V., RIMSCHI S. **Piața liberalizată de energie electrică. Structura, mecanisme de formare a prețurilor și instrumente de management a riscului/** Academia de Științe a Moldovei. Institutul de Energetică Ch.: Tipografia Academiei de Științe a Moldovei, 2007.- 88p. –ISBN 978-9975-62-220-2.
- РИМСКИЙ В., БЕРЗАН В., ТЫРШУ М. **Волновые явления в неоднородных линиях. Том 2. Переходные процессы в линиях с сосредоточенными параметрами.** Под ред. В.М. Постолатий, член.-корр. АНМ./ Кишинев: Типография Академии Наук Республики Молдова, 2006. -263 с. –ISBN 978-9975-62-075-8.
- BERZAN V., RIMSCHI V. **Procese nestaționare în circuite electrice neomogene./**Sub red. Prof.,dr.ing. Petru Postolahce.-Chișinău:Combinatul Poligrafic,1998. -412p.
- РИМСКИЙ В., БЕРЗАН В., ТЫРШУ М., **Волновые явления в неоднородных линиях. Том 1. Теория распространения волн потенциала и тока.** Под ред. В.К. Римского. -Кишинев: Типография Академии Наук Республики Молдова, 1997. -295 с.
- Справочник по электрическим конденсаторам /** В.П. Берзан, Б.Ю. Геликман, М.Н. Гураевский и др. Под ред. В.В. Ермуратского. -Кишинев: Штиинца, 1982. -312с.
- Электрические конденсаторы. Справочник /** В.П.Берзан, Б.Ю. Геликман, М.Н. Гураевский и др. Под ред. Г.С. Кучинского. -М.: Энергоатомиздат,1987.-656с.

Manuals

- Менеджмент отходов- коммунальных и сельскохозяйственных отходов”(Waste management-communal and agricultural wastes)/** Berzan V, Pobedinschii V.M., Scler P.A. (UASM)etc. Praga, 2008, 182p. (Cehia, IE AȘM, UASM).
- Биомасса для энергетического использования (Biomass for energy use)/** BerzanV. Pobedinschii V.M., Scler P.A. (UASM) etc. Praga, 2008, 154p. (Cehia, IE AȘM, UASM).

Articles

- BERZAN, V.P; RIMSCHI, V.X.; TIRSU, M.S.; PATSYUK, V.I.; UZUN, M.N. *About some features of the power transfer mode on the long transmission line.* Euro-Asian Jornal of sust. energy development policy, 2013, vol.4, nr. 1, January-June 2011, p.1-10.
- BERZAN, V., OLESCHUK V. AND SIZOV, A. *Six-Phase Multi-Converter Drive with Specialized Schemes of Space-Vector*

PWM. THE 4TH INTERNATIONAL SYMPOSIUM ON ELECTRICAL AND ELECTRONICS ENGINEERING, 11-13 October, 2013, Galați, Romania. <http://www.aciee.ugal.ro/ISEEE/2013>

BICOVA, E.; BERZAN, V.; MORARU, L. *The analysis of evolution indicators of the energy security in electricity and heat sector of the Republic of Moldova*. THE 4TH INTERNATIONAL SYMPOSIUM ON ELECTRICAL AND ELECTRONICS ENGINEERING, 11-13 October, 2013, Galați, Romania. <http://www.aciee.ugal.ro/ISEEE/2013>

2012.

BERZAN, V.; BICOVA, E.; POSTOLATI V. *Power engineering in Republic of Moldova: Challenges of development*. Forumul Energiei pentru Europa Centrală și de Sud-Est- FOREN 2012, a 11-ea ediție, 17-21 iunie 2012, Neptun-Olimp, Romania. Section 1. Energy Policies to Support EU and Regional Security of Supply. Key Issue 1. Energy Sector Development in Accordance with the European Union Objectives. Raportul nr.3.-5 p.

BERZAN, V. P.; TIRSU, M. S. *Renewable energy sources in Republic of Moldova and estimation of its energy potential*. Forumul Energiei pentru Europa Centrală și de Sud-Est- FOREN 2012, a 11-ea ediție, 17-21 iunie 2012, Neptun-Olimp, Romania. Section 1. Energy Policies to Support EU and Regional Security of Supply. Key Issue 5. Efficient Use of Primary Energy Resources. Raportul nr. 4.-6 p.

SIT, M.; BERZAN, V.; SIT, B. *Energy efficiency growth in industry based on the use of heat pump technologies*. Forumul Energiei pentru Europa Centrală și de Sud-Est- FOREN 2012, a 11-ea ediție, 17-21 iunie 2012, Neptun-Olimp, Romania. Section 4. Clean and Efficient Generation Technologies (for Coal and other Primary Energy Sources) and their Market Penetration. Key Issue 2. Promoting the New innovative Solutions, Clean and Efficient Technologies, renewables Use Towards and integrated European Natural Gas Market. Raportul nr. 1.-5 p.

2011

CALININ, L.; ZAIȚEV, D.; TÎRȘU, M.; BERZAN V.; ZLATANOVICI, D. Using of capacitor bank in combination with classical two-core phase shift installation. *TEHNOLOGIILE ENERGIEI: producerea, transportul și distribuția energiei electrice și termice*. 2011, 10(45), 00-00. <http://www.icemenerg.ro/>

DUKA, G.H.; BERZAN, V.; ROBU, S. Application in Moldova of IAEA's Energy Planning Tools. *Proceedings from the Regional Conference: Nuclear Energy - Global Trends and Perspectives in South-East Europe, 10-12 May 2011*. Podgorica, Montenegro.

2010

SIT, M.; BERZAN, V.; SIT, B.; ANDRONATI, N.; CHIORSAC, M. Transcritical CO₂ heat pump with expander-ejector cycle and intermediate heat carrier contour. *Buletinul Institutului Politehnic din Iași, Tomul LVI(LX), Fasc.3a*. 2010, 453-462. ISSN 1220 - 2169

BERZAN, V. Surse de energie regenerabilă. Provocări și așteptări privind utilizarea potențialului SER disponibil// <http://mbw2010.miepo.md/uploads/2010/05/6>. Moldova Business Week 2010, 22-25 2010, Chișinău.

BERZAN, V. ERMURACHI, I.U. POSTORONCĂ, S. *Power Supply Technology for Consumers by Smart Connection to the Medium Voltage Network* : WEC Central & Eastern Europe Regional Energy Forum 13th Edition – FOREN 2016. “Safe and Sustainable Energy for the Region”. 12-16 iunie. Costinești, România

BERZAN, V.; ERMURACHI, I.U.; POSTORONCĂ, S.; COCIU R. *Micro-Inverter for Photovoltaic Modules*. 2016 International Conference and Exposition on Electrical and Power Engineer, 6p.

TIRSHU, M.; **BERZAN, V.**; BOGDAN, A.; ORLOV, A. *Energy-Effective Electrical Converters of Solar Energy based on Semiconductor Nanomaterials and their Use in Lighting Systems of Premises*. International Conference “Modern Problems of Radio Engineering, Telecommunication, and Computer Science” TCSET 2012, February 21-24, 2012, Lviv-Slavske, Ukraine. Lviv Polytechnic national University, 2012. IEEE Catalog Number: CFP12338R-PRT. –p.120. ISBN 978-617-607-208-9

BERZAN, V. PAȚIUC, V.; RIBACOVA, G.; SAVIN, I. *Electromagnetic Field Calculation for 110 KV Power Line* : WEC Central & Eastern Europe Regional Energy Forum 13th Edition – FOREN 2016. “Safe and Sustainable Energy for the Region”. 12-16 iunie. Costinești, România

BERZAN, V.; ERMURACHI I.U.; POSTORONCĂ, S. *Power supply electric energy sources with high frequency converter* : International Conference Celebrating 55 Years of Higher Education and 40 Years of technical Higher Education into”, Bacau , 2-4 iunie 2016, Vasile Alecsandri” University, 6p.

OLESCHUK, V.; ERMURACHI, V.; **BERZAN, V.** *Six-Phase Vehicle Drive with Non-Linear Adjustment and Voltage Synchronization of Modulated Inverters* : WEC Central & Eastern Europe Regional Energy Forum 13th Edition – FOREN 2016. “Safe and Sustainable Energy for the Region”. 12-16 iunie. Costinești, România

Berzan, V.P.; Ermurachi, I.U. *Single Phase Inverter with Hybrid Topology and Efficient Switching Principles*. Proceedings- 2017 International Conference on Modern Power Systems (MPS 2017), Cluj-Napoca, Romania 6-9 June 2017, IEEE Catalog Number: CFP17MPR-POD, ISBN 978-1-5090-6565-3. DOI:10.1109/MPS.2017.7974370. Access Mode: <http://ieeexplore.ieee.org/document/7974370/>

Berzan, V.; Ermurachi, I.U. *High-Efficiency Electronic Transformer for Powering of Individual Consumers from the Medium Voltage Grid*. Proceedings- 2017 International Conference on Electromechanical and Power Systems (SIELMEN 2017), Chișinău, Republic of Moldova October 11-13, 2017.-pp. 516-521. Access Mode: DOI: 10.1109/SIELMEN.2017.8123386.

Berzan, V.P.; Ermurachi, I.U. *High Efficiency Bridgeless AC/DC Power Supply with Single Step Conversion for the Data Centers Powered from the Three-Phase Network*. 5th International Symposium on Electrical and Electronics Engineering ISEEE 2017, Galați, Romania, October 20 - 22, 2017 DOI:10.1109/ISEEE.2017.8170654

Certification:

I, the undersigned, certify that to the best of my knowledge, these data correctly describe me, my qualifications and my experience.

Berzan Vladimir

Signature



29.03.2018

Date