

Curriculum Vitae

1. General information

Professor Leonids RIBICKIS
Rector of Riga Technical University
Director of the Institute of Industrial Electronics and Electrical Engineering

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2. Education

<i>Education institution</i>	Riga Technical University
<i>Period of time</i>	1994
<i>Title of qualification awarded</i>	Habilitated Doctor of Engineering Sciences

<i>Education institution</i>	Riga Technical University
<i>Period of time</i>	1992
<i>Title of qualification awarded</i>	Doctor of Engineering Sciences

<i>Education institution</i>	Riga Polytechnical Institute
<i>Period of time</i>	From 1975 till 1979
<i>Title of qualification awarded</i>	Doctor's degree (Cand.Tech.Sc.)

<i>Education institution</i>	Riga Polytechnical Institute
<i>Period of time</i>	From 1965 till 1970
<i>Title of qualification awarded</i>	Higher education (Dipl.Engineer's qualification)

<i>Education institution</i>	Cesis High School No.1
<i>Period of time</i>	Graduated in June 26 th , 1965
<i>Title of qualification awarded</i>	Secondary education

3. Academic and Scientific degrees

- Academician of Latvian Academy of Sciences (from 2007) (No. A-166)
- Academician of IAELPS (International Academy of Ecology and Life Protection Sciences) (from 2013) (№05067)
- Corresponding Member of Latvian Academy of Sciences (from 2001 till 2007) (No. K-235)
- RTU Professor (from 2000) (Diploma No. 12)
- Habilitated Doctor of Engineering Sciences (from 1994) (B-Dh No. 000080)
- Doctor of Engineering Sciences (from 1992). (B-D No. 000023)
- Associate professor of Department of Electrical Drives and Power Electronics (from 1986) (ДЦ No. 087991)
- Candidate of Technical Sciences (PhD) (from 1980) (TH No. 043125)

4. Employment

Since 2011	Rector, Riga Technical University (RTU)
2000 – 2011	Vice-Rector for Research, Riga Technical University (RTU)
2002 – 2003	Chairman of Council, SSC Latvenergo
2001 – till now	Director of the Institute of Industrial Electronics and Electrical Engineering (IEEI), Faculty of Power and Electrical Engineering (FPEE), RTU
2001 – 2002	Member of Council, SSC Latvenergo
2001 – 2010	Head of Department of Industrial Electronics equipment and Electrical Technologies, IEEI, FPEE, RTU
2001 – till now	Professor of the Department of Industrial Electronics equipment and Electrical Technologies, IEEI, FPEE, RTU
2000 – till now	Chairman of Council, Latvia Technology Park
1999 – 2001	Director of Division of Industrial Electronic equipment, FPEE, RTU
1994 – 2001	Professor of Division of Industrial Electronic equipment, FPEE, RTU
1996 – 2000	Director, Latvia Technology Park
1992 – 1999	Director, Latvian – Germany management and consultations joint venture „AB&RTU”, Ltd.
1986 – 1987	Visiting Professor, Wisconsin – Madison University, WEMPEC Research Center, USA
Year 1984	Internship at Moscow Institute of Energy
1983 – 1994	Associate Professor, Riga Technical University, Department of Electrical Drives and Power Electronics
1980 – 1983	Senior Lecturer, Riga Polytechnical Institute, Department of Electrical Drives and Power Electronics
1979 – 1980	Visiting Researcher Budapest Technical University, Department of Electrical Machines, Hungary
1975 – 1980	Research Associate, Riga Polytechnical Institute, Department of Electrical Drives and Power Electronics
1970 – 1975	Engineer, Head of Research Group, Laboratory of Power Traction Equipment, Riga Branch of SU Railway Carriage Building Research Institute, Riga Railway Carriage Building Factory

5. Languages

(Evaluation from 1 till 5 (1 - low; 5 - fluent))

	Reading	Speaking	Writing
English	5	5	5
Russian	5	5	5
German	4	3	3

6. Member and Chairman of different European Union and Latvian Council of Science Expert Communions, Science Councils and associations

- Chairman of the Board, Latvian Association of Universities (2011-2019)
- Member of the Board, Latvian Association of Universities (since 2019)

- Member of Latvian Research and Innovation Strategic Council (since 2014)
- Member of Monitoring Committee of European Union Structural Funds and Cohesion Fund (EU funds) (since 2014)
- Council member of Latvian Chamber of Commerce and Industry (2012-2018)
- Council member of Employers Confederation of Latvia (2012-2018)
- Member of State Scientific Qualification Committee
- Member of European Union Universities of Small States Association (since 2011)
- Member of the Senate of the Latvian Academy of Sciences (2016-2020)
- Member of Latvian Council of Science (2002-2020)
- Member of Latvian Union of Scientists
- Member of Associations of Professors of Latvia
- Member of the Board of World Power Industry Council's Latvian National Committee (since 1992)
- Senior member of Institute of Electrical and Electronics Engineers (IEEE). Head of IEEE Latvia Section (since 2008)
- Executive Council of EPE Association (since 2013)
- Member of European Power Electronics and Drives Association (EPE)
- Member of the Board and Assembly of European Power Electronics and Drives Association (EPE)
- Member of the Board of Power Electronics and Motion Control (PEMC)
- Member of Union on Energetics
- Member of Latvian Electrical Engineers Society
- Member of the Board of Excellence Web of European Power Electronic Research organizations (from 2009)
- Member of Assembly of European Power systems Research Center ARTEMIS (from 2008)
- Delegate and Expert of Republic of Latvia at Energy Commission of European 7th Framework Program (2007- 2014)
- Member of the Board of World Energy Council
- Member of the Board of NORDTEK (network of Rectors and Deans of Technical Universities in Nordic and Baltic countries) (2019-2021)

7. Scientific publications

Altogether: 600 publications, incl. 21 monographs and 77 patents

More than 30 popular-science articles in journals

8. Awards in Science and Research

- Prize "USSR Inventor" 1986
- United Kingdom prize "UK Royal Award" 1993
- Acknowledgement of Ministry of Higher Education and Science of Republic of Latvia for significant contribution in development of RTU Scientific activities 2002
- Prize in the name of Professor A.Vitols from Latvian Academy of Sciences and Latvenergo 2006
- Prize of Tallinn University of Technology for promotion of long term cooperation between Riga Technical University and Tallinn University of Technology 2006
- Acknowledgement of Ministry of Higher Education and Science of Republic of Latvia for significant contribution in development of Latvian Science activities 2007
- Acknowledgement of Ministry of Economics of Republic of Latvia for promotion of innovations and new technology development in Latvia 2007
- Diploma from Lithuanian Academy of Sciences for the best paper in the International electronics conference 2007
- Acknowledgement of Tallinn University of Technology for contribution in international science cooperation 2009
- Award of European Power Electronic Association for significant contribution in organizing international scientific conference 2010
- Award of Defence foundation "Lacplešis" for significant contribution in science and research in Latvia.
- Acknowledgement of Prime Minister of Republic of Latvia, 2012
- Acknowledgement of Latvian Ministry of Education, 2012
- The Three-Star Order for significant contribution in the field of science and research, 2012

- Award of city Riga for promoting and support of innovations, 2012
- Acknowledgement of Ministry of Foreign Affairs for important contribution to the strengthening of the Republic of Latvia, 2015
- Awarded an honorary member's name of Latvian Science History Association, Latvian Academy of Sciences on the contribution of RTU historical tradition cultivation, 2015
- Ciceron Award for persistent higher technical education and its strengthening on national economy, 2015
- Award from Cabinet of Ministers, Republic of Latvia for significant contribution in the improvement of education quality in the field of engineering sciences, 16th of November, 2016
- Acknowledgement of Employers Confederation of Latvia, 2017
- Acknowledgement of the Board of World Power Industry Council's Latvian National Committee, 2017
- Riga Technical University Honorary Diploma for significant investment in higher education of Latvia, for development of united academic environment in the field of energetics, electronics and environment, as well as because of the 60th anniversary of the Faculty of Power and Electrical engineering, 1st of September 2018
- Ministry of Defence of the Republic of Latvia Diploma for successful cooperation and support providing contribution in the defence and security of Latvia, 5th of November, 2018
- World Cultural Council Medal for Educational Merit, November 2018
- European Business Assembly Corporation of Social Partnership "The Name in Science Prize", May 2019
- Diploma of praise from the president of the Republic of Latvia for personal contribution in the development of society and sciences, July 2019
- PEMC outstanding service and achievement award for outstanding contribution to scientific field of Power Electronics and Motion Control, May 2021
- Association of Polish Electrical Engineers (SEP) award – Michał Doliwo-Dobrowolski medal for achievements in electrical engineering, June 2021

9. Organizational activities:

- Member of the working group for developing Concept of National Innovation program (Resolution of Prime Minister from 2000.07.13, № 268)
- Member of the Latvian – Italian cross border cooperation agreement implementation working group (from 1998)
- Public Consultant of Riga City Municipality Transport's Department in questions of electorviecles, electric and power systems
- Delegate of Republic of Latvia at DG Research "Energy" and "TREN" commissions of EU 5th Research and development Framework program
- Delegate and Expert of Republic of Latvia at EU 6th Framework program "Sustainable Development, Global Change and Ecosystems"
- Delegate and Expert of Republic of Latvia at subprogram „ENERGY” of EU 7th Framework program (from 2007)
- Member of Senate of RTU and Member of Council of Faculty of Power and Electrical Engineering
- Chairman of the RTU Promotion Council for Electro technic sciences
- Member of the RTU Promotion Council for Power industry sciences
- Chairman of the RTU Professor Council for Electro technic sciences
- Member of the RTU Professor Council for Power industry, Electro technic and transport sciences
- Member of the Riga Technical Collage Council
- Member of the editorial board of the "European Power Electronics and Drives Association Journal"
- Member of the editorial staff for Journal "Energy and The World"
- Member of the editorial staff for RTU Journal "Power industry and Electro technic"
- Member of the editorial board of the scientific magazine "Electronics and Communications"
- Member of the editorial staff for Journal „Высшее образование в России"
- Member of the Organizing Committee of "Baltic Dynamic" conference (from 1996 – till 2003)
- Member of the Organizing Committee of annual RTU International – Scientific Conference (from 2001 – till 2010)
- Member of the Organizing and Programme Committee of the 27th Baltic Conference in History of Science, Riga, Jelgava, Latvia, October 1-2, 2015
- Member of the Interdisciplinary Jury of the World Culture council (from March 2016);

- Chairman of EPE'18 ECCE EUROPE, 20th European Conference on Power Electronics and Applications, Riga, Latvia, September 2018
- General-Chairman of 11th Worldwide Power industry and Motion Control Conference EPE_PEMC (2004)
- Co-Chairman for:
 - International Power Electronics Conference (EPE) in Dresden, Germany (2005); in Alborg, Denmark (2007); in Barcelona, Spain (2009); in Birmingham, UK (2011).
 - International Power Electronics and Motion Control Conference (EPE-PEMC) in Portoroz, Slovenia (2006); in Poznan, Poland (2008); in Ohrid Republic, Macedonia (2010); in Novi Sad, Serbia (2012); PEMC in Antalya, Turkey (2014); PEMC 2021, online.
- Member of International Scientific Committee for Conferences:
 - AEP 2002, AEP 2003, AEP 2004; BEC 2003, PEC 2000, PEC 2001, PEC 2002, PEC 2003, PEC 2004.
 - EPE PEMC 1996 Hungary; EPE PEMC 1998 the Czech Republic, EPE PEMC 2000 Slovakia, EPE PEMC 2002 Croatia, EPE PEMC 2004 Latvia, EPE PEMC 2006 Slovenia, EPE PEMC 2008 Poland, EPE PEMC 2010 Macedonia, EPE PEMC 2012 Serbia, PEMC 2014 Turkey.
 - EPE 1997 Norway, EPE 1999 Switzerland, EPE 2001 Austria, EPE 2003 France, EPE 2005 Germany, EPE 2007 Denmark, EPE 2009 Spain, EPE 2013 France, EPE 2014 Finland, EPE 2015 Switzerland, EPE 2016, Karlsruhe, Germany, EPE 2017 Warsaw, Poland, EPE 2018 Riga, Latvia, EPE 2019 Genova, Italy, EPE 2020 virtual.

10. Most significant publications and patents in the last three years:

Publications

1. Stepins, D., Ašmanis, A., Ašmanis, G., Ribickis, L., Audze, J. **Effect of Shielding and Component Placement in DM EMI Filters on a Power Supply's Conducted EMI.** In: Proceedings of the 20th European Conference on Power Electronics and Applications, Latvia, Riga, 17-21 September, 2018. Piscataway: IEEE, 2018, pp.P1-P5.
2. Patļins, A., Kuņicina, N., Zabašta, A., Ribickis, L. **Innovative Sensor System Case Study Integration in Students Training Program for Sustainable Education of Electrical Engineers.** In: Proceeding of EPE'18 ECCE Europe, Latvia, Riga, 18-20 September, 2018. Riga: 2018, pp.1-10. ISBN 9789075815290.
3. Gorobecs, M., Ribickis, L., Ļevčenkova, A., Beināroviča, A. **Machine Learning Algorithm of Immune Neuro-Fuzzy Anticollision Embedded System for Autonomous Unmanned Aerial Vehicles Team.** In: 2nd International Conference on Applications of Intelligent Systems (APPIS 2019): Proceedings. ACM International Conference Proceedings Series, Spānija, 7.-9. janvāris, 2019. New York: ACM, 2019, 1.-8.lpp. ISBN 978-1-4503-6085-2. Pieejams: DOI:10.1145/3309772.3309797
4. Šenfēlds, A., Avotiņš, A., Ribickis, L., Apse-Apsītis, P. **DC microgrid for robotic manufacturing – field demonstration and laboratory experience.** In: 17th International Conference on Renewable Energies and Power Quality (ICREPQ'19), Renewable Energy and Power Quality Journal 17, pp. 194-197, Spānija, aprīlis 2019. Pieejams: ISSN: 2172038X, DOI: 10.24084/repqj17.260.
5. Shch. Arhun, Yu. Borodenko, A. Hnatov, A. Popova, H. Hnatova, N. Kunicina, A. Ziravecka, A. Zabasta, Ribickis, L. **Choice of parameters for the hybrid vehicle's traction electrodrive diagnostic system,** 2020, submitted in *Latvijas Fizikas un Tehnisko Zinātņu Žurnāls*.
6. Bogdanovs, A., Krievs, O., Ribickis, L., Pforr, J. **Fuzzy Logic Current Balancing Controller Implementation in an Automotive Multi-Phase DC Converter with Coupled Inductors.** No: 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON 2020): Conference Proceedings, Latvija, Riga, 5.-7. novembris, 2020. Piscataway: IEEE, 2020, 1.-10.lpp.
7. Suzdaļenko, A., Zaķis, J., Suskis, P., Ribickis, L. **Bidirectional Single-Loop Current Sensorless Control Applied to NPC Multi-Level Converter Considering Conduction Losses.** International Journal of Power Electronics and Drive Systems, 2020, Vol. 11, No. 4, 1945.-1957.lpp. ISSN 2088-8694. e-ISSN 2722-256X.
8. Zabašta, A., Kuņicina, N., Ribickis, L., Peuteman, J., Kazymyr, V., Hvesenya, S., Hnatov, A., Paliyeva, T. **Research on cross-domain study curricula in cyber-physical systems: A Case Study of Belarusian and Ukrainian Universities.** Education Sciences, 2020, 10(10), pp. 1-17, 282. Pieejams: <https://doi.org/10.3390/educsci10100282>

9. Ašmanis, G., Stepins, D., Ašmanis, A., Ribickis, L. **Measuring Impedances of DC-Biased Inductors by Using Vector Network Analyzers. International Journal of Electronics and Telecommunications** 2019, Vol.65 No.3, 375.-380.lpp. e-ISSN 2300-1933. Pieejams: doi:10.24425/ijet.2019.129788
10. Bormanis, O., Ribickis, L. **Review of Burn-In for Production of Reliable Power Electronic Applications.** No: 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTU CON2019): Proceedings, Latvija, Rīga, 7.-9. oktobris, 2019. Piscataway: IEEE, 2019, \${pageFrom}.-\${pageTo}.lpp.

Patents

1. Apse-Apsītis P., Avotiņš A., Ribickis L. System and Method for Monitoring Real Power Consumption – International patent, No. WO 2013/093554 A1, 27 June 2013
2. Levcenkovs A., Gorobecs M., Rankis I., Ribickis L., Balckara N., Potapovs A., Alps I., Korago I., Vinokurovs V. Device for Safe Passing of Motor Vehicle Over Level Crossing Using Satellite Navigation Systems – International patent, No. WO 2013/013728, 31 January 2013
3. Apse-Apsītis P., Ribickis L. Robotic snake-like movement device – International patent, No. WO 2012/059791, 10 May 2012
4. Diļevs G., Levins N., Pugačevs V., Ribickis L., Jākobsons E. Vēja elektroiekārta. – LV patents, Nr.14470, 2012.

L.Ribickis