

C.1 CURRICULUM VITAE (max. 2 pages, using 11-point font size and 2 cm margins):**Personal information**

First name, Surname:	ION BOLDEA		
Date of birth:	January 07, 1945	Sex:	Masculin
Nationality:	Romanian		
Researcher unique identifier(s)(ORCID, Researcher ID etc.):	https://orcid.org/0000-0001-8612-3551 https://ieeexplore.ieee.org/author/37270081900 https://www.webofscience.com/wos/author/record/5857965 https://scholar.google.com/citations?user=QIynxaEAAAJ&hl=ro&oi=ao https://www.scopus.com/authid/detail.uri?authorId=7006760016		
URL for personal website (ifcase):	https://iee.upt.ro/ro/staff/profdring-ion-boldea		

Education

Year	Faculty/department - University/institution - Country
1973	Ph.D. in Electrical Engineering, Politehnica University of Timisoara, Romania,
1967	M.Sc. in Electrical Engineering, Polytechnic Institute „Traian Vuia”, Timișoara, Romania,

Positions - current and previous

(Academic sector/research institutes/industrial sector/public sector/other)

Year	Job title – Employer - Country
1991-present	Professor with the Department of Electrical Engineering, Faculty of Electrical and Power Engineering, Politehnica University of Timisoara, Romania (https://iee.upt.ro/ro/departamente/inginerie-electrica/professori)
1982-1991	Associate Professor with the Department of Electrical Engineering, Faculty of Electrical and Power Engineering, Politehnica University of Timisoara, Romania
1975-1982	Lecturer at Polytechnic Institute „Traian Vuia”, Timișoara (Educational activities related to Electric Machines)
1968-1975	Assistant Professor at Polytechnic Institute „Traian Vuia”, Timișoara (Educational activities related to Electric Machines)

Project management experience

(Academic sector/research institutes/industrial sector/public sector/other. Please list the most relevant.)

Year	Project owner - Project - Role - Funder
2009	Project Manager in “Energy Efficient Vehicles for Road Transport”, EE-VERT, European Framework project, co-financed by the European Commission, 7th Framework Programme

2019-2020	Power inverter for traction motors, nr. BC114/2019 – 2020, Hella, (projects with industry) (Member)
2023-2024	Research contract “Design and construction of a permanent magnet axial type electric motor for electric cars” with VITESCO (Member)

Other relevant professional experiences

(e.g. institutional responsibilities, organisation of scientific meetings, membership in academic societies, review boards, advisory boards, committees and major research or innovation collaborations, other commissions of trust in public or private sector)

Year	Description - Role
1977-present	Member of IEEE
1996	Fellow of IEEE
	Life Fellow of IEEE

2 Track record of the last 10 years, max. 2 pages, using 11-point font size and 2 cm margins

Honours:

- IEEE 2015 “Nikola Tesla” Award for “Contributions to the design and control of rotating and linear electric machines for industry applications”.

Publications

- **IEEE Xplore 88 scientific papers published between 2014-2024**, with a top ten of the most representative papers published between 2023-2024.
 1. K. Liao, W. Xu, J. Ge and I. Boldea, "Improved Position Sensorless Resonant Frequency Tracking Control Method for Linear Oscillatory Machine," in *IEEE Transactions on Industrial Electronics*, vol. 71, no. 4, pp. 4038-4048, April 2024, doi: 10.1109/TIE.2023.327325
 2. A. Mohammadi, Y. Chulaee, A. M. Cramer, I. Boldea and D. M. Ionel, "Parameter Identification, Non-linearity, and Harmonic Effects in a Vernier Machine of the MAGNUS Type," *2023 IEEE Energy Conversion Congress and Exposition (ECCE)*, Nashville, TN, USA, 2023, pp. 4286-4291, doi: 10.1109/ECCE53617.2023.10362809.
 3. D. D. Patel, I. Boldea and B. Fahimi, "Bonded Nd-PM Claw-Pole Synchronous Motor Drive for Traction Applications: Benefits and Challenges," *2023 IEEE Energy Conversion Congress and Exposition (ECCE)*, Nashville, TN, USA, 2023, pp. 4682-4689, doi: 10.1109/ECCE53617.2023.10362865.
 4. L. Huang, C. Wu, D. Zhou, F. Blaabjerg, I. Boldea and S. He, "A Decomposed Two-Port Network Impedance Modeling Method of Type-3 Wind Generation System with Grid-Forming Control," *2023 IEEE Energy Conversion Congress and Exposition (ECCE)*, Nashville, TN, USA, 2023, pp. 633-639, doi: 10.1109/ECCE53617.2023.10362378.
 5. K. Khodabux, A. D. Martin, L. -. D. Vitan, L. -. N. Tutelea, K. Busawon and I. Boldea, "Three-Phase Biaxial Excitation Synchronous Generator (BEGA) Intern-Fault Experimental Characterisation," *2023 22nd International Symposium on Power Electronics (Ee)*, Novi Sad, Serbia, 2023, pp. 01-06, doi: 10.1109/Ee59906.2023.10346163.
 6. I. Boldea, A. A. Popa and L. N. Tutelea, "MAGLEVs – an Overview in 2023," *2023 22nd*

International Symposium on Power Electronics (Ee), Novi Sad, Serbia, 2023, pp. 1-7, doi: 10.1109/Ee59906.2023.10346121.

7. I. Boldea, I. Torac, L. Tutelea, „100kW 6-12krpm ALA rotor traction motor: preliminary design with key electromagnetic FEM validation”, IEEE EUROCON 2023 - 20th International Conference on Smart Technologies, 2023
8. I. Torac, L. Tutelea, I. Boldea, „Linear Induction Motor (LIM) Integrated Propulsion and Levitation MAGLEV via Ladder Type Passive Track, 2023 14th International Symposium on Linear Drivers for Industry Applications (LDIA), Year: 2023
9. Ion Boldea; Ileana Torac; Lucian Tutelea ALA-rotor RSG 10MW, 480rpm-preliminary design with 2D key FEM validations, eE 22nd Symposium on power electronics, Novi Sad, Serbia, Oct. 26-28, 2023
10. Dănuț Vitan, Adrian Martin, Lucian Tutelea, Ion Boldea, Ileana Torac, Nicolae Muntean, “Supercapacitor City Minibus Bonded – NdFeB IPMSM Propulsion System: Design and System Modeling Methodology via a Case Study and Laboratory Experiments”, IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, VOL. 59, NO. 2, MARCH/APRIL 2023, pp. 1405-1417.

Books:

1. I. Boldea, L. Tutelea, „Reluctance electric machines”, CRC Press Taylor & Francis Group, London, UK, ISBN 978-1-4987-8233-3, 2019.
2. I. Boldea, L. Tutelea, „Electric Machines - steady State, Transients and design with Matlab”, CRC Press Taylor & Francis Group, (first edition - London, UK, ISBN 978-1-4200-5572-6, 2010), second edition - New York, vol. 1 ISBN 978-0-367-37471-6, vol.2 ISBN 978-0-367-37565-2, 2022.
3. I. Boldea, „Variable Speed Generators”, CRC Press Taylor & Francis Group, ISBN-13: 978-1498723572, 2nd edition (September 3, 2015)
4. I. Boldea, „Synchronous Generators (Electric Generators Handbook)”, ISBN-13: 978-1498723565, CRC Press; 2nd edition (September 29, 2015).
5. I. Boldea, „Induction Machines Handbook: Transients, Control Principles, Design and Testing” (Electric Power Engineering Series Book 6) 3rd Edition ISBN-13: 978-0367466183, 19, 2020.
6. I. Boldea, Syed A. Nasar, “Electric Drives”, 3rd Edition, CRC Press; 2022, ISBN-13: 978-1032339955.

Book chapter:

Electric Machines-UPT Selected Contribution, 2020

A paragraph summarizing which work has had the greatest importance and impact:

Prof. I. Boldea is a member of IEEE-IAS, IDC and EMC committees since 1992, IEEE-PELS Nominations Committee Member for 2013-2015, Associate Editor of the EPCS Journal (owned by Taylor and Francis) since 1977, Director and founder since 2001 of the Internet -only International "Journal of Electrical Engineering" -www.jee.ro- and General Chairman of International Conference OPTIM-1996, 1998, 2000, 2002, 2004, 2006, 2008, 2010, -www.info-optim.ro- technically sponsored by IEEE- IAS/IES/PES, IEEEExplore and ISI. Prof. I. Boldea has been consulting, lecturing, giving keynote addresses and holding intensive courses in USA, Europe and Asia for the last 25 years. He has been an IEEE- IAS Distinguished Lecturer since 2008 and lectured in this capacity in USA, Denmark, Italy, Brazil, etc.

Prof. I. Boldea published extensively in linear and rotary motion electric machines design and control and MAGLEVS, including more than 300 papers and 20 books in USA and UK (ISI Clarivate Hirsch Index: 42, with more than 6500 citations); he taught intensive courses repeatedly in the last 20 years in Europe Asia, USA and Brazil and presented keynote addresses at numerous IEEE sponsored international conferences.

He is the recipient of IEEE 2015 “Nikola Tesla” Award for “Contributions to the design and control of rotating and linear electric machines for industry applications”.