

# Virgiliu FIREȚEANU

---

<b>Date personale</b>	
<b>Adresa, telefon, email</b>	Acasa: 060792 Bucuresti, Romania birou: 313 Splaiul Independentei, sect. 6, 060042 Bucuresti, Romania
<b>Studii superioare</b>	1965 – 1970, Institutul Politehnic București, Facultatea de Electrotehnică
<b>Doctorat</b>	Titlul tezei: Îmbunătățirea performanțelor sistemelor de pompare electromagnetice a metalelor topite Titlul: Doctor inginer, Institutul Politehnic din București, 1980
<b>Experiența didactică</b>	1970 – 2019 Institutul Politehnic București – Facultatea de Electrotehnică / Universitatea POLITEHNICA din București, Facultatea de Inginerie Electrică <b>Profesor titular</b> 1992 - 2014 <b>Conducător doctorat</b> din 1994 <b>Discipline predate in anul universitar 2012 - 2013</b> Modele în Element Finit ale Mașinilor Electrice Modele Numerice în Simularea Sistemelor Electrice Senzori și Traductoare – Modele Numerice Procesarea Electromagnetică a Materialelor

**Experiența de  
cercetare**

Pentru perioadele 1995 – 2008 și 2014 - 2022 a se consulta pagina web [http://www.epm\\_nm.ee.pub.ro](http://www.epm_nm.ee.pub.ro)

Lucrări publicate în perioada 2009-2013

[1] V. Fireteanu, P. Taras, M. Popa and S. Pasca: Transient Magnetic – Transient Thermal Finite Element Multiphysic Model of Forming Coil and Workpiece Heating in Magneto-forming Processes, Proc. of EPM2009 Congress, Dresden, Germany

[2] P. Taras and V. Fireteanu: Computer-Aided Analysis of High Speed Scanning Induction Systems for Rail Heating before Hardening, Proc. of EPM2009 Congress, Dresden, Germany

[3] V. Fireteanu, M. Popa and P. Taras: Magneto-harmonic – Transient thermal – Translating motion Finite Element Analysis of Scanning Induction Heating of Sheets in Transversal Flux, Proc. of ISEF2009 Conference, Arras, France

[4] F. Gheorghe and V. Fireteanu : Finite Element Analysis of an Electromagnetic Linear Displacement Transducer, Proc. of ISEF2009 Conference, Arras, France

[5] O. Nebi, V. Fireteanu: Finite element analysis of an eddy current heater for wind or water kinetic energy conversion into heat, ICREPQ-2010, Granada, Spain

[6] J. Etay, V. Fireteanu, Y. Fautrelle, C. Roman: Electromagnetic Pumping of Molten Salts, OPTIM-2010 Conference, Brasov, Romania

[7] P. Taras, V. Fireteanu: Inductors for high speed continuous induction heating of rails, HES-2010 Conference, Padua, Italy

[8] V. Fireteanu, P. Taras: Teaching Dynamics, Transients and Steady States of Salient Poles Synchronous Motor through Finite Element Models, ICEM-2010 Conference, Roma, Italy

[9] S. Pasca, V. Fireteanu: FE Analysis of Successive Induction Heating and Magnetoforming of Thin Magnetic Steel Sheets, IGTE-2010 Symposium, Graz, Austria

[10] F. Gheorghe, V. Fireteanu: Finite Element Analysis, Experimental Validation and Optimization of an Electromagnetic Linear Displacement Transducer, ISEEE 2010 Conference, Galati, Romania

[11] P. Taras, V. Fireteanu: Multiphysic Magnetothermal with FLUX, Flux Users Conference 2010, Geneva, Switzerland

[12] C. Roman, V. Fireteanu, J. Etay, Y. Fautrelle: An overview on solar energy and associated molten salts electromagnetic pumping technologies, EEEIC-2011 Conference, Rome, Italy

[13] A. Ceban, V. Fireteanu, R. Romary, R. Pusca, P. Taras: Finite Element Diagnosis of Induction Motor Rotor Faults based on the Low Frequency Harmonics of the Near-Magnetic Field, SDEMPED-2011 Conference, Bologna, Italy

[14] V. Fireteanu, P. Taras, R. Romary, R. Pusca, A. Ceban : Effects of Rotor Faults on Operation Parameters and on Low Frequency Harmonics of the Magnetic Field Outside Induction Motors, Proceedings of International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering, ISEF 2011, Madeira, Portugal

3) C. Roman, V. Fireteanu, J. Etay, Y. Fautrelle : An overview on solar energy and associated molten salts electromagnetic pumping technologies, Proceedings of International Conference on Environment and Electrical Engineering, EEEIC 2011, Rome, Italy.

4) C. Roman, J. Etay, Y. Fautrelle, V. Fireteanu : Study on electromagnetic

[15] C. Roman, J. Etay, Y. Fautrelle, V. Fireteanu : Study on electromagnetic pumping systems for molten salts based on finite element models, Proceedings of International Conference on Environment and Electrical Engineering, Proceedings of ELECTRIMACS 2011 Conference, Cergy-Pontoise, France.

[16] C. Roman, V. Fireteanu, The 3D multiphysic model and finite element analysis of conduction electromagnetic pumping system of molten salts : Proceedings of Advanced Topics in Electrical Engineering, ATEE 2011, Bucharest, Romania.

[17] M. Stamate, P. Taras, V. Fireteanu : Non-intrusive measurement of induction systems active power through the proximate electromagnetic field, Proceedings of Advanced Topics in Electrical Engineering, ATEE 2011, Bucharest, Romania.

[18] M. Stamate, P. Taras, V. Fireteanu : Non-Intrusive Measurement of Induction Heating Systems Active Power through the Proximate Magnetic Field, Electrical and Electronic Engineering. 2011; 1(2): 66-71, 2011 Scientific & Academic Publishing.

[19] V. Fireteanu, P. Taras: Diagnosis of Induction Motor Rotor Faults Based on Finite Element Evaluation of Voltage Harmonics of Coil Sensors, Proc. of Sensor and Applications Symposium 2012, 7-9 February, Brescia, Italy

[20] V. Fireteanu, P. Taras, M. Stamate: Finite Element Analysis and Diagnosis of the One Broken Bar Fault in the Squirrel Cage Induction Motors, Proc. of OPTIM2012 Conference, 24-26 May, Moieciu-Brasov, Romania

[21] V. Fireteanu, P. Taras: Finite Element Models of the Transient Heating of Squirrel-Cage Rotor During Induction Motors Startup, Proc. of SPEEDAM2012 Conference, 20-22 June, Sorrento, Italy

[22] V. Fireteanu, P. Taras: Influence of the Magnetic Steel Encasing of Induction Motors on the Efficiency of the Rotor Faults Diagnosis based on the Harmonics of the Coil Sensors Output Voltage, Proc. of ICEM2012 Conference, 2-5 September, Marseille, France

[23] C. Roman, V. Fireteanu, S. Vitry, F. Rey: Transient Magnetic – Translating Motion Finite Element Model of the Annular Linear Induction Pump, Proc. of ICATE2012 Conference, 25-27 October, Craiova, Romania

[24] V. Fireteanu, M. Popa, S. Pasca, P. Taras: Transversal flux scanning induction heating of magnetic nonlinear steel sheets with temperature dependent properties, Proc. of EPM 2012 Conference, 22-26 October, Beijing, China

[25] P. Taras, V. Fireteanu: Finite Element Analysis of Continuous Induction Reheating of Hot Steel Long Products, Proc. of EPM 2012 Conference, 22-26 October, Beijing, China

[26] C. Roman, M. Dumont, Y. Fautrelle, V. Fireteanu, S. Vitry, F. Rey : Study of the Influence of Traveling Field Frequency and Wave Length on Pressure – Flow Rate Characteristic and Modeling of MHD Coupling in Annular Linear Induction Pump, Proc. of EPM 2012 Conference, 22-26 October, Beijing, China

<p><b>Limbi straine</b></p>	<p>[27] V. Fireteanu, R. Romary, S. Ait-Amar, R. Pusca: Finite element analysis of the rotor faults in squirrel cage induction motors and of the mechanical power evaluation through the neighboring magnetic field, Applied Computational Electromagnetics Society (ACES) Newsletter, Vol. 27, no. 4, December 2012</p> <p>[28] R. Pusca, R. Romary, V. Fireteanu, and A. Ceban, Finite element analysis and experimental study of the near-magnetic field for detection of rotor faults in induction motors," <i>Progress In Electromagnetics Research B</i>, Vol. 50" <i>Progress In Electromagnetics Research B</i>, Vol. 50, 37-59, 2013</p> <p>[29] C. Roman, V. Fireteanu, Y. Fautrelle, M. Dumont, S. Vitry, F. Rey : Study of the Electromagnetic Phenomena in the Annular Linear Induction Pump based on 3D Finite Element Models, Proc. of ATEE 2013 Conference, 23-24 May, Bucharest, Romania</p> <p>[30] A-I. Constantin, V. Fireteanu, V. Leconte: Effects of the Short-Circuit Faults in the Stator Winding of Induction Motors and Fault Detection through the Magnetic Field Harmonics, Proc. of ATEE 2013 Conference, 23-24 May, Bucharest, Romania</p> <p>[31] V. Fireteanu, Ph. Roehr: Finite Element Analysis of the Transverse Flux Induction Heating of Moving Magnetic Steel Sheets, Proc. of ATEE 2013 Conference, 23-24 May, Bucharest, Romania</p> <p>[32] R. Pusca, R. Romary, V. Fireteanu: Finite Element Analysis of Electromagnetic and Mechanical Effects of Rotor Faults in Induction Motors, Proc. of ECAI 2013 Conference, 27-29 June 2013, Pitesti, Romania</p> <p>[33] V. Fireteanu, A-I. Constantin, R. Romary, R. Pusca, S. Ait-Amar: Finite Element Investigation of the Short-Circuit Fault in the Stator Winding of Induction Motors and Harmonics of the Neighboring Magnetic Field, Proc. of SDEMPED 2013 Conference, 27-30 August, Valencia, Spain</p> <p>[34] V. Fireteanu, P. Lombard: Transverse Flux Induction Heating of the Magnetic Nonlinear Sheets, the Non-magnetic Sheet Model and the Influence of the Sheet Lateral Sides Screening on the Transversal Heating Non-uniformity, ISEF 2013 Conference, 12-14 September, Ohrid, Macedonia</p> <p>[35] V. Fireteanu: Detection of the Short-Circuit Faults in the Stator Winding of Induction Motors based on Harmonics of the Neighboring Magnetic Field, Sensors and their Applications XII 2013, IOP Conference, 16-18 September, Dubrovnik, Croatia</p> <p>Franceza (foarte bine) Engleza (bine) Rusa (bine)</p>
-----------------------------	---