

**CATEDRA DE MASINI ELECTRICE,
MARKETING SI MANAGEMENT**

**DEPARTMENT OF ELECTRIC MACHINES,
MARKETING AND MANAGEMENT**

2000

**CATEDRA DE MASINI ELECTRICE, MARKETING SI MANAGEMENT
DEPARTMENT OF ELECTRIC MACHINES, MARKETING AND MANAGEMENT**

SEF DE CATEDRA / HEAD OF DEPARTMENT

Prof.Dr.Ing. BIRO Karoly

1. PERSONAL ACADEMIC SI DE CERCETARE / ACADEMIC AND RESEARCH STAFF

1.1. PERSONAL ACADEMIC / ACADEMIC STAFF

PROFESORI / FULL PROFESSORS

1. Prof.Dr.Ing. BIRO Karoly
2. Prof.Dr.Ing. Ioan-Adrian VIOREL
3. Prof.Dr.Ing. Vasile IANCU
4. Prof.Dr.Ing. Mircea M. RADULESCU
5. Prof.Dr.Ec. Alexandru CATANA
6. Prof.Dr.Ec. Doina CATANA

CONFERENTIARI / READERS (ASSOCIATE PROFESSORS)

Conf.Dr.Ing. Liviu MANDUC

SEFI DE LUCRARI (LECTORI) / SENIOR LECTURERS (ASSISTANT PROFESSORS)

1. Sef Lucr.Dr.Ing. Radu CIORBA
2. Sef Lucr.Dr.Ing. Horia HEDESIU
3. Sef Lucr.Dr.Ing. SZABO Lorand

ASISTENTI / ASSISTANTS

1. Asist.Dr.Ing. FORRAI Sandor
2. Asist.Ing. Claudia MARTIS
3. Asist.Ing. Mihaela RADU
4. Asist.Ing. BIRO Zoltan
5. Asist.Ec. Adina NEGRUSA

PREPARATORI / JUNIOR ASSISTANTS

1. Ec. Victor NASTASE

1.2. PERSONAL DE CERCETARE / RESEARCH STAFF

**FACULTATEA DE ELECTROTEHNICA
FACULTY OF ELECTRICAL ENGINEERING**

1. Ing. Ioana CHISU, doctorand cu frecventa / Ph.D. E.E. student
2. Ing. Ilinca TOMESCU, doctorand cu frecventa / Ph.D. E.E. student
3. Ing. Petru TRIF, doctorand cu frecventa / Ph.D. E.E. student
4. Ing. Marius HILMA, doctorand cu frecventa / Ph.D. E.E. student
5. Ing. Gabriel MOISA, doctorand cu frecventa / Ph.D. E.E. student
6. Ing. Alin POPAN, doctorand cu frecventa / Ph.D. E.E. student
7. Ing. Vasile BARZ, doctorand cu frecventa / Ph.D. E.E. student

1.3. CADRE DIDACTICE ASOCIATE / ASSOCIATE TEACHING STAFF

1. Dr.Ing. KOVACS Zoltan, cercetator principal I / senior scientific researcher
2. Ing. Lia CHIOREAN
3. Ing. Adela ORDEAN
4. Ec. Oana TORCATARU

2. PRINCIPALELE DOTARI ALE CATEDREI / MAIN EQUIPMENTS OF THE DEPARTMENT

1. Standuri de incercari industriale ale masinilor electrice / Benches for industrial testing of electric machines
2. Sistem de achizitii de date electrice, magnetice si mecanice cu calculator PC / PC-based data acquisition system for electrical, magnetic and mechanical quantities
3. Aparatura de inregistrare a marimilor electrice si mecanice / Equipments for registering of electrical and mechanical quantities
4. Standuri experimentale pentru micromotoare electrice si masini electrice speciale / Experimental set-ups for small electric motors and special electric machines
5. Grupuri inverter de tensiune - motor de c.a. si variator de tensiune de c.c. – motor de c.c. cu colector / Inverter-fed AC motors and chopper-fed DC commutator motors
6. Retea de calculatoare cu 6 posturi/ Computer network with 6 sites.

3. PARTICIPARI LA SCHIMBURI ACADEMICE INTERNATIONALE / INTERNATIONAL ACADEMIC EXCHANGES

3.1. PERSONALUL CATEDREI / DEPARTMENT STAFF

3.1.1. STAGII DE PROFESOR INVITAT / INVITED PROFESSOR MOBILITIES

1. Prof. **M. M. RADULESCU**, profesor invitat la Facolta di Ingegneria, Universita degli Studi di Cassino, Italia, martie 2000 / Invited Guest Professor at the Facolta di Ingegneria, Universita degli Studi di Cassino, Italy, March 2000;
2. Prof. **Alexandru Catana**, prof. **Doina Catana**, profesori invitati la Universite Mediterranee Aix Marseille II, Facultatea de Stiinte economice si gestiune, Aprilie 2000 / Invited Guest Professors at the Universite Mediterranee Aix Marseille II.

3.1.2. STAGII DE CERCETARE / RESEARCH MOBILITIES

3.1.3. MOBILITATI IN CADRUL PROGRAMULUI SOCRATES-ERASMUS / SOCRATES-ERASMUS PROGRAMME MOBILITIES

1. Prof. **M. M. RADULESCU**, mobilitate in calitate de Coordonator Institutional SOCRATES-ERASMUS invitat, in cadrul programului SOCRATES-ERASMUS 1999-2000, la Technische Universitat Braunschweig, Germania, mai 2000 / mobility as Invited SOCRATES-ERASMUS Institutional Coordinator, in the framework of SOCRATES-ERASMUS 1998-1999, at the Technische Universitat Braunschweig, Germany, May 2000.
2. Prof. **M. M. RADULESCU**, mobilitate in cadrul programului SOCRATES-ERASMUS 1999-2000 la Centre de Robotique, d'Electrotechnique et d'Automatique (CREA), Universite de Picardie 'Jules Verne', Amiens, Franta, iunie 2000, unde a sustinut prelegerea '*Petits moteurs a aimants permanents et commutation electronique*' pentru studenti postuniversitari / mobility in the framework of SOCRATES-ERASMUS 1999-2000 at the Centre de Robotique, d'Electrotechnique et d'Automatique (CREA), Universite de Picardie 'Jules Verne', Amiens, France, June 2000, where he taught the lecture '*Petits moteurs a aimants permanents et commutation electronique*' for postgraduate students;
3. Prof. **M. M. RADULESCU**, mobilitate in cadrul programului SOCRATES-ERASMUS 1999-2000, la Universitatea Cassino, Italia, mai 2000 / mobility in the framework of SOCRATES-ERASMUS 1998-1999, at the University of Cassino, Italy, may 2000.

3.1.4. PARTICIPARI LA CONFERINTE, SIMPOZIOANE ETC. INTERNATIONALE / PARTICIPATION IN INTERNATIONAL CONFERENCES, SIMPOSIA ETC.

1. Prof. **Biro Karoly**, asist. **Biro Zoltan**, participare la International Computer Science Conference, Micro CAD'2000, Miskolc, Ungaria / participation at the International Computer Science Conference, Micro CAD'2000, Miskolc, Hungary
2. Prof. **Biro Karoly**, prof. **Ioan-Adrian Viorel**, asist. **Biro Zoltan**, participare la Conferinta Internationala EPE-PEMC'00 Kosice, Republica Slovaca / participantion at EPE-PEMC'00 International Conference Kosice, Slovak Republic.
3. Prof. **Biro Karoly**, prof. **Ioan-Adrian Viorel**, asist. **Biro Zoltan**, participare la Conference on Electrical Machines, ICEM 2000, Espoo, Finlanda./ participation at Conference on Electrical Machines, ICEM 2000, Espoo, Finland
4. Prof. **Biro Karoly**, participare la Symposium on Inteligent Systems in Control and Measurement 2000, Veszprem, Ungaria / participation at the Symposium on Inteligent Systems in Control and Measurement , 2000, Veszprem, Hungary.
5. Prof. **Ioan-Adrian Viorel**, membru in "Steering Committee" la Conferinta Internationala EPE-PEMC'00 de la Kosice, Republica Slovaca / member in "Steering Committee" at EPE-PEMC'00 Int. Conf.Kosice, Slovak Republic.
6. Prof. **Ioan-Adrian Viorel**, membru in 6th Conference on Engineering of Modern Electric Systems EMES 2000, Oradea, Romania / member in the 6th Conference on Engineering of Modern Electric Systems EMES 2000, Oradea, Romania
7. Prof. **Ioan-Adrian Viorel**, presedinte la sectia L3.7 Topic 8-Electrical Machines and Actuators la EPE-PEMC 2000/ Chairman at section L3.7 Topic 8-Electrical Machines and Actuators at EPE-PEMC 2000.
8. Prof. **M.M. RADULESCU**, participare la *11^o Seminario Interattivo su Azionamenti Elettrici – Evoluzione Tecnologica e Problematiche Emergenti*, Bressanone, Italia, 19-21 martie 2000, pentru a prezenta 1 lucrare invitata / participation in the *11^o Seminario Interattivo su*

FACULTATEA DE ELECTROTEHNICA
FACULTY OF ELECTRICAL ENGINEERING

Azionamenti Elettrici – Evoluzione Tecnologica e Problematiche Emergenti, Bressanone, Italy, 19-21 March 2000 to present 1 Invited Lecture;

9. Prof. **M.M. RADULESCU**, participare la *7th International Conference on Optimization of Electrical and Electronic Equipment – OPTIM 2000*, Brasov, Romania, 11-12 mai 2000, ca membru in International Steering and Programme Committee si co-autor al unei lucrari prezentate / participation in the *7th International Conference on Optimization of Electrical and Electronic Equipment – OPTIM 2000*, Brasov, Romania, 11-12 May 2000, as a member of the International Steering and Programme Committee and co-author of 1 presented paper.
10. Prof. **M.M. RADULESCU**, membru in International Steering Committee of the *International XII Symposium on Micromachines & Servodrives*, Kamien Slaski, Polonia, 10-14 septembrie 2000 / Member of the International Steering Committee of the *International XII Symposium on Micromachines & Servodrives*, Kamien Slaski, Poland, 10-14 September 2000.
11. Prof. **Biro Karoly**, Ş.l. **Szabo Lorand**, participare la Conferința de energetică și electrotehnică ENELKO '2000, Cluj, 5-6 octombrie 2000 / participation at the ENELKO '2000 Conference on Energetics and electrotehnics, Cluj, 5-6 october 2000.
- 12.

3.2. PERSOANE DIN STRAINATATE / FOREIGN PERSONS

1. Assoc.Prof.Dr. **Iqbal HUSAIN** & Prof.Dr. **Nathan IDA**, Department of Electrical Engineering, University of Akron, OH, S.U.A. / mobilitate (10–17 mai 2000) la Universitatea Tehnica din Cluj-Napoca in calitate de Director si, respectiv Membru, al Programului International de Cercetare Stiintifica ECS-9702370, aprobat si finantat de National Science Foundation, S.U.A / mobility (10-17 May 2000) at the Technical University of Cluj-Napoca, as Director and Staff Member, respectively, of the National Science Foundation (USA) International Research Program ECS-9702370 .
2. Prof. **Kamiyama, Kenzo** de la Universitatea Utsunomiya, Japonia in septembrie 2000. Sustinerea unei prelegeri cu titlul de: *Aplication trends in high power AC drives in Japan*. / of the University of Utsunomiya, Japan in september 2000, presented a lecture on *Aplication trends in high power AC drives in Japan*
3. Prof.dr. **Thomas STEGER** & prof.dr. **Albrecht DURNHOFER**, de la Technische Universitat Chemnitz (5-10 octombrie 2000). Au prezentat o prelegere pe tema mixului de marketing în asigurări / de la Technische Universitat Chemnitz (5-10 October 2000). They presented a lecture on the marketing mix in the field of assurances.
4. Prof.dr. **Mark SPENCE**, de la Southern Connecticut State University (10-18 noiembrie 2000). A prezentat două prelegeri : "*How to start your own e-business*" și "*Marketing strategies*" / from Southern Connecticut State University (10-18 November 2000). He presented two lectues: "*How to start your own e-business*" and "*Marketing strategies*".

4. CONTRACTE DE CERCETARE STIINTIFICA / SCIENTIFIC RESEARCH CONTRACTS

1. *Realizarea unui estimator in timp real de cuplu util pentru masinile de curent alternativ trifazate /Real time torque-estimator for three-phase AC machines*, Contract de tip A nr: 37118/2000, nr. tema: 28, cod CNCSIS: 576. Director de proiect / Project manager: Prof. dr.ing. **Biro Karoly**..

FACULTATEA DE ELECTROTEHNICA
FACULTY OF ELECTRICAL ENGINEERING

2. *Masina electrica cu poli aparenti pe ambele armaturi si magneti permanenti in stator / Electrical machine with doubly salient poles on both armatures and permanent magnets in stator.* Contract de tip A, nr: 37118/2000, nr. Tema:16/ 663. Director de proiect / Project manager: Prof. dr.ing. **Ioan-Adrian Viorel**.
3. *Serie de motoare cu reluctanta variabila, proiectare si realizare prototipuri / Switched reluctance motors series, design and prototype construction,* Contract nr. 6113/2000 (ANSTI) Tema: B5. Director de proiect / Project manager: Prof. dr.ing. **Ioan-Adrian Viorel**.
4. *Actionari electrice automatizate cu performante energetice / Automated electric drives with high power efficiency,* Contract de tip D (cu finantare de la Banca Mondiala), Cod CNCSIS: 44064/23, 1999-2001. Director de proiect / Project manager.: Prof. dr.ing. **Biro Karoly**.
5. *Program complex de studii aprofundate/doctorat, de invatamant integrat cu cercetarea, in domeniul actionarilor electrice cu turatie variabila / Complex program for MS/Ph.D. of integrated education with research, in variable speed drives field.* Contract de tip D 106 (cu finantare de la Banca Mondiala) 2000-2002. Director de proiect / Project manager: Prof. dr.ing. **Ioan-Adrian Viorel**.
6. *Direct stator-flux and torque / thrust control of three-phase inverter-fed rotating / linear AC motor drives for industrial and traction applications -* Joint Research Project No. 33 / 2000 between Universita degli Studi di Cassino and Universitatea Tehnica din Cluj-Napoca within the framework of the Bilateral Scientific and Technological Cooperation (BSTC) Romania – Italy; Romanian Counterpart Project Manager: Prof. **M.M. RADULESCU**
7. *Algoritmi de estimare a turatiei masinii de inductie prin instrumentatie virtuala de timp real / Induction machine speed estimation algorithms using real-time virtual instrumentation –* grant in cadrul contractului de cercetare 6113/2000 intre Universitatea Tehnica Cluj-Napoca si ANSTI, tema B16, responsabil de grant / Project Manager: S.I.dr.ing. **HORIA HEDESIU**
8. *Controlul la distanta al masinilor electrice prin instrumentatie virtuala pe suport internet / Remote control of electric machines based on INTERNET virtual instrumentation, .* Contract de tip T (cu finantare de la Banca Mondiala) cod CNCSIS:82. Director de proiect / Project manager: S.I.dr.ing. **HORIA HEDESIU**
9. *Studiul teoretic si experimental al sistemelor de actionare cu micromotoare cu reluctanta variabila si magneti permanenti /Theoretical and experimental studies on swiched reluctance and permanent magnets micromotors drive sistem -* grant in cadrul contractului de cercetare 6113/2000 intre Universitatea Tehnica Cluj-Napoca si ANSTI, tema B19, responsabil de grant : asistent inginer **CLAUDIA MARTIS**.
10. *Proiectarea si simularea unui motor liniar pas cu pas hibrid modular /Design and simulation of the modular hybrid linear stepper motor -* Contract nr. 6113/2000 (ANSTI) Tema: B34, Director de proiect / Project manager: ing. **Jozsa Janos**, Îndrumător / Supervisor: Ş.I.dr.ing. **Szabo Lorand**.
11. *Stand de proba destinat incercarii masinilor electrice in diferite regimuri de lucru / Test bench for testing electrical machines in diferent regimes.* Contract nr. 6113/2000 (ANSTI) Tema: B28. Director de proiect / Project manager: Student **Dobai Jeno Barna**, Îndrumător / Supervisor: Prof.dr.ing. **Ioan-Adrian Viorel**.
12. *Masina electrica cu flux transversal algoritm de proiectare si model experimental / Single sided transverse flux motor, design algorithm and experimental model.* Contract de tip S, nr. 37118/2000 (ANSTI) Tema: B48. Director de proiect / Project manager: Ing. **Popan Alin Dragomir**, Îndrumător / Supervisor: Prof.dr.ing. **Ioan-Adrian Viorel**.

13. *Studiul compatibilitatii electromagnetice a sistemului de propulsie pentru un vehicul electric urban cu invertor PWM trifazat de tensiune si motor asincron /Study of the Electromagnetic compatibility of a propulsion system of an urban electric vehicle equipped with induction machine fed by a 3-phase PWM inverter.* Contract de tip S, nr. 37118/2000 (ANSTI) Tema: B32, Director de proiect / Project manager: Student **Baciu Lavinia**, Îndrumător / Supervisor: Prof.dr.ing. **M.M. RĂDULESCU**.
14. *Model de laborator pentru sistemul de propulsie al unui vehicul electric urban cu masina de inductie si invertor pwm trifazat de tensiune cu IGBT/Experimental set-up of a propulsion system of an urban electric vehicle equipped with induction machine fed by a 3-phase PWM inverter with IGBT.* Contract de tip S, nr. 37118/2000 (ANSTI) Tema: B51, Director de proiect / Project manager: Student **Munteanu Adina**, Îndrumător / Supervisor: Prof.dr.ing. **M.M. RĂDULESCU**.

5. ALTE TIPURI DE ACTIVITATI DE CERCETARE SI SPECIALIZARE /OTHER KINDS OF RESEARCH AND SPECIALIZATION ACTIVITIES

1. Organizarea Cursului Postuniversitar de Perfectionare pentru inginerii CN CFR SA 'Tehnologii moderne in tractiunea electrica feroviara', 28 august – 08 septembrie 2000, Cluj-Napoca. Director de Curs : Prof. **M.M. RADULESCU** / Organizing the Postgraduate Course for Romanian railway engineers 'Advanced technologies in electric railway traction', 28 August – 08 September 2000, Cluj-Napoca. Course Director : Prof. **M.M. RADULESCU**
2. Prof. dr.ing. **Ioan-Adrian Viorel**, referent stiintific oficial la 4 teze de doctorat la Universitatea Politehnica Timisoara si Universitatea Tehnica Cluj-Napoca / official scientific referent for 4 Ph.D. thesis at Polytechnic University of Timisoara and Technical University of Cluj-Napoca.
3. Prof.dr.ec. **Alexandru Catana**, referent stiintific oficial la teze de doctorat in economie: Universitatea de Vest, Timisoara, Facultatea de Stiinte economice, / official scientific referent for Ph.D. thesis in economy:1, West University of Timisoara, Economics Faculty,
4. Prof.dr.ec. **Doina Catana**, referent stiintific oficial la teze de doctorat in economie: Universitatea de Vest, Timisoara, Facultatea de Stiinte economice, / official scientific referent for Ph.D. thesis in economy:1, West University of Timisoara, Economics Faculty,
5. Prof. Dr.ing. **Biro Karoly**, referent stiintific oficial la 2 teze de doctorat la Universitatea Tehnica Cluj-Napoca / official scientific referent at 2 Ph.D. thesis at Technical University of Cluj-Napoca.

6. LUCRARI STIINTIFICE PUBLICATE IN REVISTE DE SPECIALITATE / SCIENTIFIC PAPERS PUBLISHED IN SPECIALISED PERIODICALS

1. **Catana Ghe.A., Catana Doina, Nastase Victor.** *Cat de mult se apeleaza la Marketing? Rezultate ale unui studiu empiric,/ How much we appeal to Marketing? Empiric studies results.* Tribuna Economica, nr.45/2000, pp. 15,16.
2. **Catana Doina, Catana, Ghe.A.,** *Managerial Culture Between the Globalisation's Challenges and Managerial Education Drama in Romania,* Rainer Hampp Verlag, Journal for East European Management Studies, vol.5, nr.3/2000 / *Managerial Culture Between the Globalisation's Challenges and Managerial Education Drama in Romania,* Rainer Hampp

7. LUCRARI STIINTIFICE PREZENTATE LA SIMPOZIOANE, CONFERINTE NATIONALE / SCIENTIFIC PAPERS PRESENTED AT NATIONAL SYMPOSIA, CONFERENCES

1. **M.M. Radulescu** - *Micromotoare magneto-electrice cu infasurare in intrefier si autocomutatie electronica / small permanent-magnet motors with airgap winding and electronic commutation*, Lucrare invitata la *Sesiunea de Comunicari Stiintifice 'Conversia Energiei si Electrotehno-logii'*, Institutul de Cercetari si Proiectari Electrotehnice – ICPE SA, Bucuresti, 22-23 iunie 2000 / Invited Lecture at the *Scientific Communications Session 'Energy Conversion and Electrotechnologies'*, Research Institute for Electrical Engineering – ICPE SA, Bucharest, 22-23 June 2000.
2. **Viorel, I.A., Popan, A., Radu Mihaela** – *"A Programming Package for Single-Sided Transverse Flux Motor Dimensioning"*, Oradea University Annals, 2000, in Press.
3. **Viorel, I.A.** - *Electrical machines transient regime computation, a personal point of view.* (in Romanian), Proc.of Scientific Seminar "Electrical machines and drives XXI", Timisoara, Romania, December 2000, pp 51-58.
4. **Biro, K.A., Iancu, V., Viorel, I.A.**, -*Induction machine parameters estimation based on catalogue data.* (in Romanian), Proc.of Scientific Seminar "Electrical machines and drives XXI", Timisoara, Romania, December 2000, pp 47-50;
5. **Szabó L. - Viorel I.A.** - Józsa J.: *Dynamic Simulation of a Novel Hybrid Linear Stepper Motor by Means of Matlab/Simulink®*, in curs de aparitie in Proceedings of the 6th Conference on Engineering of Modern Electric Systems, EMES `2000, Baile Felix.
6. **Szabó L. - Viorel I.A.** - Józsa J.: *Modalitatile de imbunatatire a eficientei motoarelor liniare pas cu pas hibride /Improvement modality of the efficiency linear step by step hybrid motors*, (in limba maghiara), Conferinta de energetica si electrotehnica ENELKO 2000, Cluj, pp. 50-56.
7. **Negrusa A.** – *' L'environnement culturel et la gestion internationale (co-autoare)*, a VI-a Conferinta Internationala a Retelei PGV, Iasi, Romania 21-24 Septembrie 2000.
8. **Negrusa A.** – *' L'evolution des valeurs de l'affaires et la religion'* (co-autoare), a VI-a Conferinta Internationala a Retelei PGV, Iasi, Romania 21-24 Septembrie 2000.
9. **Negrusa A.** – *' Unele aspecte privind managementul schimbarii /Some aspects regarding changing management '* (co-autoare), Sesiunea Jubiliara de Comunicari stiintifice cu participare internationala, Arad, 27-28 Octombrie 2000.
10. **Negrusa A.** – *' Unele aspecte privind perceptia culturii organizationale / some aspects regarding organization culture perception '* (co-autoare), Sesiunea Jubiliara de Comunicari stiintifice cu participare internationala, Arad, 27-28 Octombrie 2000.

8. LUCRARI STIINTIFICE PUBLICATE IN VOLUMELE UNOR CONFERINTE INTERNATIONALE / SCIENTIFIC PAPERS PUBLISHED IN THE PROCEEDINGS OF INTERNATIONAL CONFERENCES

1. **Viorel, I.A., Henneberger, G., Tomescu, Ilinca, Vintiloiu, Ioana**, -*A new approach to the computation of the switched reluctance motor dynamics.* Proceedings of ICEM'00, Helsinki, vol 3, pp1605-1608.
2. **Soran, I.F., Viorel, I.A., Chisu, Ioana**, -*Torque harmonics content at start and low speed operation of a switched reluctance motor.* Proceedings of ICEM'00, Helsinki, vol 4, pp

1961- 1964.

3. **Henneberger,G., Viorel,I.A., Blissenbach,R.,** -*Single-sided transverse flux motor.* Proceedings of EPE-PEMC'2000, Kosice, Slovak Republic, vol1,
4. **Viorel,I.A., Tomescu,Ilinca, Biro,K.A., Radu,Mihaela,** -*Radial-flux double salient machines time domain simulation.* Proceedings of EPE-PEMC'2000, Kosice, Slovak Republic, vol 5,
5. **Biro,K.A., Viorel,I.A., Iancu,V.,** - *Induction machine parameter estimation.* Proc. of MICROCAD'2000, Miskolc, Hungary, vol F (Electrotechnics-Electronics) pp.13-18.
6. **Viorel,I.A., Szabo,L.,** - *On the computation of the double-salient machines air-gap variable equivalent permeance.* Proc. of MICROCAD'2000, Miskolc, Hungary, vol F (Electrotechnics-Electronics) pp.89-94.
7. **M.M. Radulescu,** *advanced ac motor traction drives,* 11^o Seminario Interattivo su Azionamenti Elettrici – Evoluzione Tecnologica e Problematiche Emergenti (Bressanone, 19-21 marzo 2000), Bressanone, Italia, 2000, pp. 133-146.
8. **M.M. Radulescu, Claudia Martis, I. Husain,** *design and analysis of a small doubly-salient permanent-magnet motor,* Proceedings of the 7th International Conference on Optimization of Electric and Electronic Equipments (Brasov, 11-12 May 2000) Brasov, Romania, 2000, Vol. II, pp. 407-412.
9. **M.M. Radulescu, Claudia Martis, I. Husain,** *Performance analysis of a small electronically-commutated doubly-salient permanent-magnet motor,* Proceedings of the 37th International Intelligent Motion Conference (Nurnberg, 6-8 June 2000) Nurnberg, Germany, pp. 379-386.
10. **Claudia Martis, M.M. Radulescu, Z. Biro, K. Biro,** *Performance analysis and dsp-based control of a small electronically-commutated doubly-salient permanent-magnet motor,* Proceedings of the International Conference on Electrical Machines (Espoo, 28-30 August 2000) HUT, Finland, 2000, Vol. III, pp. 1370-1374.
11. **Viorel, I.A., Tomescu Ilinca, Biro, K., Radu Mihaela** – “*Radial-Flux Double-Salient Machines Time Domain Simulation*”, Proceedings of EPE-PEMC 2000, Kosice (Slovak Republic), in Press.
12. **Viorel I.A. - Szabó L.:** *On the Computation Of The Double-Salient Machines Air-Gap Variable Equivalent Permeance,* Proceedings of the International Computer Science Conference Micro CAD'2000, Miskolc, Ungaria, Section F (Electrotehnics-Electronics), pp. 89-94.

9. CARTI / BOOKS

12.1. AUTORI / AUTHORS

Viorel I.A. - Ivan D.M. - Szabó L.: *Metode numerice cu aplicatii in ingineria electrica / Numerical methods with application in electrical engineering,* Editura Universitatii din Oradea, 2000, (ISBN 973-8083-29-X)

9.2. REDACTORI / EDITORS

ELECTROMOTION – International Scientific Quarterly, Vol. 7 (2000), Editors : Prof. M. JUFER, Prof. R. MUNTEANU and Prof. **M.M. RADULESCU**) Mediamira Science Publisher, Cluj-Napoca, 2000, ISSN 1223-057X.

**10. TEZE DE DOCTORAT SUSTINUTE IN 2000 / DOCTORAL THESES CARRIED OUT IN
2000**

Petre Pavel Muresan: *Contributii la studiul alimentarii micromotoarelor cu magneti permanenti autocomutate / Contribution on autocommutated and permanent magnets micromotors supply*, conducator Prof. dr.ing. **Biro Karoly**.

11. DISTINCTII / AWARDS