Lista de lucrări în domeniul de ştiinţă definit de disciplinele din postul scos la concurs

NUMELE ŞI PRENUMELE: KUTASI Dénes Nimród

I. LISTA PUBLICAȚIILOR RELEVANTE

1. **N. Kutasi,** E.Filep, L.Kenez: Heat transport modelling and adaptive model predictive control of the direct current plasma nitriding process, Journal of Control Engineering and Applied Informatics, Vol.19, No.4, pp.52-60.
2. L. Kenéz**, N. Kutasi**, E. Filep, L. Jakab-Farkas, L. Ferencz.: Anodic Plasma Nitriding in Hollow Cathode (HCAPN) HTM J. Heat Treatm. Mat. *73* (2018) 2, pp. 96-105, DOI:10.3139/105.110344.
3. L. R. Neukirchner, A. Magyar, A. Fodor, **N. D. Kutasi**, A. Kelemen: Constrained Predictive Control of Three-PhaseBuck Rectifiers, Acta Polytechnica Hungarica, Volume 17, Issue 1, 2020, DOI: 10.12700/APH.17.1.2020.1.3.
4. **N. Kutasi**, A. Kelemen, M. Imecs: Vector control of induction motor drives with predictive current controller, IEEE 6th International Conference on Computational Cybernetics 2008 ICCC2008, November 27-29, Stara Lesná, Slovakia.[CDROM], pp. 21-26, ISBN: 978-1-42442875-5.
5. **N. Kutasi**, A. Kelemen, M. Imecs: Constrained optimal control of three-phase AC-DC boost converters, IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2010, May 28-30 2010, Cluj-Napoca, Romania,TOME1, pp. 56-62, ISBN 978-1-4244-6722-8.
6. A. Kelemen, **N. Kutasi**, M. Imecs, I.I. Incze: Constrained frequency optimal direct power control of voltage-source PWM rectifiers, 14th IEEE International Conference on Intelligent Engineering Systems INES2010, Las Palmas of Gran Canaria, May 5-7, 2010, CD-ROM, ISBN 978-1-4244-7651-0.
7. **N. D. Kutasi** and L. Kenéz: Modelling for Control the Hollow Cathode Anodic Plasma Nitriding, 2019 27th Mediterranean Conference on Control and Automation (MED), Akko, Israel, 2019, pp. 262-266. doi: 10.1109/MED.2019.8798575
8. A. Kelemen, **N. Kutasi**, I. Székely: Voltage source induction heating Inverter-fast start-up considerations, 10th International Conference on Electrical and Electronic Equipment Optim2006 – Brasov, Romania, vol. II., pp. 79-85, ISBN 973-635-704-X, 978-973-635-704-6.
9. **D. N. Kutasi**: Online Emissivity Estimation of the Hollow Cathode and the Treated Part in the HC Plasma Nitriding Process, 2020 21th International Carpathian Control Conference (ICCC), High Tatras, Slovakia, 2020, pp. 1-5, doi: 10.1109/ICCC49264.2020.9257248.
10. **D. N. Kutasi**: Process Control with IIoT Capabilities of the Hollow Cathode Plasma Nitriding, 2019 20th International Carpathian Control Conference (ICCC), Krakow-Wieliczka, Poland, 2019, pp. 1-5, doi: 10.1109/CarpathianCC.2019.8765913.

II. LISTA COMPLETĂ DE PUBLICAȚII, CREAȚII, INVENȚII

A. Teza de doctorat.

Reglarea predictivă bazată pe model a convertoarelor electronice de putere. Universitatea Tehnică din Cluj-Napoca. Susținerea publică în data de 15.10.2010.
Calificativul: FB
Distincția: Cum Laude
Conducător de doctorat: Prof. Dr.-Ing. Imecs Mária

B. Cărti publicate

B1. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate la edituri recunoscute în străinătate.

Kutasi Dénes Nimród – Reglarea predictivă a convertoarelor electronice de putere, Globe Edit, 2018, ISBN: 978-613-8-24165-2.

B2. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS/CNCS.

Kutasi Dénes Nimród, Márton László Ferenc – Teoria Sistemelor, lucrări de laborator, Editura Scientia Cluj Napoca, ISBN: 978-973-1970-40-0, 2011.

B3. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate la alte edituri sau pe plan local.

B4. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

B5. Capitole de cărţi publicate în străinătate

Kelemen András, **Kutasi Dénes Nimród –** Capitolul: Modeling and analysis of the induction-heating converters, în cartea "*Advances in Induction and Microwave Heating"*, ISBN: *978-953-307-522-8*, Editura INTECH, 2011.

B6. Capitole de cărţi publicate în ţară

C. Lucrări ştiinţifice publicate

C1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. **N. Kutasi,** E.Filep, L.Kenez: Heat transport modelling and adaptive model predictive control of the direct current plasma nitriding process, Journal of Control Engineering and Applied Informatics, Vol.19, No.4 (2017), pp.52-60.
2. L. Kenéz**, N. Kutasi**, E. Filep, L. Jakab-Farkas, L. Ferencz.: Anodic Plasma Nitriding in Hollow Cathode (HCAPN) HTM J. Heat Treatm. Mat. *73* (2018) 2, pp. 96-105, DOI:10.3139/105.110344.
3. L. R. Neukirchner, A. Magyar, A. Fodor, **N. D. Kutasi**, A. Kelemen: Constrained Predictive Control of Three-PhaseBuck Rectifiers, Acta Polytechnica Hungarica, Volume 17, Issue 1, 2020, DOI: 10.12700/APH.17.1.2020.1.3.

C2. Lucrări ştiinţifice publicate în reviste indexate în baze de date internaţionale (indicaţi şi baza de date).

4. Kelemen, **N. Kutasi** – Induction heating voltage inverter with hybrid LLC rezonant load – the DQ modell, Pollack Periodica, Akadémiai Kiadó, Vol.2, No.1, pp. 27-37, HU ISSN 1788-1994. (Indexing and Abstracting Services: SCOPUS).
5. Kelemen, **N. Kutasi** – Describing function analysis of a voltage-source induction-heating inverter with pulse amplitude modulation, Acta Electrotehnica, Mediamira Science Publisher, vol.48, No.3, 2007, pp. 223-229, ISSN 1841-3323. Indexed by ROAD.
6. **N. Kutasi**, K. György, A. Kelemen – Constant-frequency constrained optimal direct power control of voltage-source PWM rectifiers, Acta Electrotehnica, Mediamira Science Publisher, vol.51, No.2, 2010, pp.138-144, ISSN 1841-3323. Indexed by ROAD.
7. **N. Kutasi**, A. Kelemen., M. Imecs, – Predictive Control of Voltage-Fed Induction Heating Inverters, Analele Univeristatii Craiova, Seria Inginerie Electrica, Nr. 34, Vol. 2, anul 2010, pp. 83-88, ISSN 1842-4805. (ICI Journals Master List / ICI World of Journals)
8. **N.Kutasi**, L.Kenez, E.Filep, I.Szollosi, L.J.Farkas – The design of an automated plasma diagnostic system and its application, Acta Universitatis Sapientiae, Electrical and Mechanical Engineering, 7 (2015).

   Abstracting & Indexing

   Baidu Scholar, CNKI Scholar (China National Knowledge Infrastructure), CNPIEC
   Dimensions, EBSCO Discovery Service, Google Scholar, J-Gate, JournalTOCs
   KESLI-NDSL (Korean National Discovery for Science Leaders), Naviga (Softweco)
   Primo Central (ExLibris), ProQuest (relevant databases), ReadCube
   Summon (Serials Solutions/ProQuest), TDNet, WanFang Data, WorldCat (OCLC)

9. E. Filep, L. Kenéz, **N. Kutasi**, L. Ferencz, - Formation Of Ammonia In A Linear Plasma Reactor, Studia Ubb Physica, Vol. 61 (LXI), 2, 2016, Pp. 39-48. (Indexing: http://studia.ubbcluj.ro/serii/physica/physica_eval_en.html)
10. Á. Fehér, **D. N. Kutasi** - Modelling and Control of Bounded Hybrid Systems in Power Electronics, Acta Universitatis Sapientiae, Electrical and Mechanical Engineering, 9 (2017) 33−42

    Abstracting & Indexing

    Baidu Scholar, CNKI Scholar (China National Knowledge Infrastructure), CNPIEC
    Dimensions, EBSCO Discovery Service, Google Scholar, J-Gate, JournalTOCs
    KESLI-NDSL (Korean National Discovery for Science Leaders), Naviga (Softweco)
    Primo Central (ExLibris), ProQuest (relevant databases), ReadCube
    Summon (Serials Solutions/ProQuest), TDNet, WanFang Data, WorldCat (OCLC)

11. E. Filep, L. Kenéz, **N. Kutasi –** Method for emissivity estimation of metals, Acta Materialia Transylvanica 1/1. (2018) 31–36. (Indexing: https://content.sciendo.com/view/journals/amt/amt-overview.xml)

C3. Lucrări ştiinţifice publicate în reviste din străinătate (altele decât cele menţionate anterior).

C4. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS/CNCS (altele decât cele din baze de date internaţionale).

C5. Lucrări ştiinţifice publicate în reviste, altele decât cele menţionate anterior

12. Kelemen, **N. Kutasi** – Lyapunov-based frequency-shift power control of induction-heating converters with hybrid resonant load, Acta Universitatis Sapientiae, Electrical and Mechanical Engineering, 1 (2009) , pp.41-52. ISSN 2065-5916.

13. L, Kenez, **N.Kutasi**, E.Filep, L.F. Jakab, I.A. Szocs – Heat Treatment of 16MnCr steel in a linear non-isoterm plasma reactor, Acta Universitatis Sapientiae, Electrical and Mechanical Engineering, 5 (2013).

.

14. E.Filep, **N.Kutasi**, L.Kenéz – The plasma reactor of the Sapientia University, Múzeumi Füzetek – Acta Scientiarium Transylvanica, Chimica, Vol.25/3, (2017), ISBN/ISSN:1842-5089

C6. Lucrări ştiinţifice publicate în volumele manifestărilor ştiinţifice

C.6.1. Conferinţe internaţionale cu proceedings în evidenţa IEEEXplore

15. **N. Kutasi**, A. Kelemen, M. Imecs – Vector control of induction motor drives with predictive current controller, IEEE 6th International Conference on Computational Cybernetics 2008 ICCC2008, November 27-29, Stara Lesná, Slovakia.[CDROM], pp. 21-26, ISBN: 978-1-42442875-5.
16. **N. Kutasi**, A. Kelemen, M. Imecs – Constrained optimal control of three-phase AC-DC boost converters, IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2010, May 28-30 2010, Cluj-Napoca, Romania,TOME1, pp. 56-62, ISBN 978-1-4244-6722-8.
17. A. Kelemen, **N. Kutasi**, M. Imecs, I.I. Incze –Constrained optimal direct power control of voltage-source PWM rectifiers, 14th IEEE International Conference on Intelligent Engineering Systems INES2010, Las Palmas of Gran Canaria, May 5-7, 2010, CD-ROM, ISBN 978-1-4244-7651-0.
18. A. Kelemen, **N. Kutasi**, I. Székely – Voltage source induction heating Inverter-fast start-up considerations, 10th International Conference on Electrical and Electronic Equipment Optim2006 – Brasov, Romania, vol. II., pp. 79-85, ISBN 973-635-704-X, 978-973-635-704-6.

19. **D. N. Kutasi**, Process Control with IIoT Capabilities of the Hollow Cathode Plasma Nitriding, 2019 20th International Carpathian Control Conference (ICCC), Krakow-Wieliczka, Poland, 2019, pp. 1-5. doi: 10.1109/CarpathianCC.2019.8765913
20. **N. D. Kutasi** and L. Kenéz, Modelling for Control the Hollow Cathode Anodic Plasma Nitriding,2019 27th Mediterranean Conference on Control and Automation (MED), Akko, Israel, 2019, pp. 262-266. doi: 10.1109/MED.2019.8798575
21. T.Kardos, **N.D.Kutasi**, KGyörgy: Control Strategies for HVAC systems, CINTI-MACRo 2019 IEEE Joint 19th International Symposium on Computational Intelligence and Informatics and 7th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics • November 14-16, 2019 • Szeged, Hungary, pp 65-69.
22. **D. N. Kutasi**: Online Emissivity Estimation of the Hollow Cathode and the Treated Part in the HC Plasma Nitriding Process, 2020 21th International Carpathian Control Conference (ICCC), High Tatras, Slovakia, 2020, pp. 1-5, doi: 10.1109/ICCC49264.2020.9257248.
23. **D. N. Kutasi**: Comparative Local Plasma Diagnostics Performed in DCPN and HCAPN Reactors, 20th IEEE International Symposium on Computational Intelligence and Informatics, CINTI-2020

C.6.2. Conferinţe sub egida IEEE

24. A. Kelemen, I. Székely, **N. Kutasi**, C. Gaspar – Minimum transistor loss control of an induction heating inverter with LLC resonant load – INES2004, Cluj-Napoca, Romania, pp. 509-514, ISBN: 973-662-120-0.

C.6.3. Conferinţe internaţionale în străinătate

25. L. David, D. Biro, **N. Kutasi**, P. B. Barna, M. Berger – Adaptive fuzzy-logic control in reactive magnetron sputtering process for thin film deposition, **3rd** COST-516 TRIBOLOGY SYMPOSIUM 18-19 May 2000, TEKNIKER, Eibar, Spain.
26. **N. Kutasi**, L. Márton – Fuzzy logic based-deposition rate control for TiN films, QA-Robotics Cluj-Napoca, Romania, 2000. pp. 179-185, ISBN: 973-686-056-6.
27. L. Márton., **N**. **Kutasi** – Genetic algorithm for process modelling and robot control, QA-Robotics 2000, Cluj-Napoca, Romania, pp. 179-185, ISBN: 973-686-056-6.
28. A. Kelemen , **N. Kutasi** , Sz. Mátyási – Control strategies for a voltage source induction heating inverter with hybrid LLC resonant load, ICCC2005 – Miskolc, Ungaria, pp. 63-70. ISBN: 963 661 644 2.
29. L. Máron, **N. Kutasi** – Practical identification method for Striebeck friction, 6th International Symposium of Hungarian Researchers, BMF 2005, Budapesta, Ungaria, 2005.
30. A. Kelemen, **N. Kutasi** – Induction heating voltage inverter with hybrid LLC rezonant load – the DQ modell, Second PhD Symposium of Engineering, 2006, octombrie 24, 25, Pécs, Ungaria, Academia de Stiinte din Ungaria.

31. **N. Kutasi,** A. Kelemen – Explicit model predictive control of three-phase PWM rectifier. Fifth International Phd&DLA Symposium, Pecs, Hungary, 19-20 October.pp.37. ISBN: 978-963-7298-34-9.
32. **N**. **Kutasi**, A. Kelemen, Sz. Matyasi, M. Imecs, – Hardware implementation of explicit mode-predictive control of three phase PWM rectifiers, ICCC2010 Eger, Hungary, 2010, pp. 133-136, ISBN 978-963-06-9289-2.

C.6.4. Conferinţe internaţionale în ţară

33. **N. Kutasi**, L. Márton – Control technologies and real time control laboratory – part II, International Carpathian Control Conference - ICCC08, Sinaia, Romania, May 25-28, 2008, pp. 343-350, ISBN: 978-973-746-897-0.
34. L. Márton, **N. Kutasi** – Control technologies and real time control laboratory – part I, International Carpathian Control Conference - ICCC08, Sinaia, Romania, May 25-28, 2008, pp. 412-418, ISBN: 978-973-746-897-0.
35. A. Kelemen, **N. Kutasi** – Power control methods of load-resonant induction heating converters, International Conference of Energetics and Electrical Engineering ENELKO2006, octombrie 20, 21, 22, Cluj-Napoca, Romania, pp: 41-49, ISSN: 1842-4546.
36. **N. Kutasi,** C. Melinda, A. Kelemen – Realtime implementation of the explicit model-predictive control for a programable logic controller, International Conference of Energetics and Electrical Engineering ENELKO2006, octombrie 20, 21, 22, Cluj-Napoca, Romania, pp. 56-65, ISSN: 1842-4546.
37. **N. Kutasi,** A. Kelemen – Predictive control algorithms for AC drives, 9th International Conference on Energetics, Electrical Engineering and Informatics ENELKO2007, octombrie 14-16, 2007, Oradea, Romania, pp. 104-113, ISSN: 1842-4546.
38. **N.Kutasi,** A. Kelemen – Predictive Control of the Power Electronic Converters: A Survey, MACRO2011 – International Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics, Tirgu Mures 2011, pp. 213-224. ISBN: 978-973-1970-54-7.
39. **N. Kutasi**, L.Kenéz, E.Filep, A.Kelemen, Sz.Mátyási – Pulsed power supply design for DC and active screen plasma nitriding, - MACRO2013 International Conference Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics Sapientia University, Tg. Mures 2013, pp. 115-122, ISSN 2247 0948.
40. A.Kelemen, **N.Kutasi**, K.György – Parameter estimation of induction heating load circuits - MACRO2013 International Conference Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics, Sapientia University, Tg. Mures 2013, pp. 123-134, ISSN 2247 0948.
41. **N.Kutasi**, L.Kenéz, E.Filep, I.Szöllösi, L. Jakab Farkas – The design of an automated plasma diagnostic system – from measurement to signal processing - MACRO2015 International Conference Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics, Sapientia University, Tg. Mures 2015, pp. 51-61, ISSN 2247 0948.
42. T,Kardos, D.N.Kutasi – Hybrid modelling and model based control of the four tank process – MACRO 2017, International Conference Conference on Recent

Achievements in Mechatronics, Automation, Computer Science and Robotics, Sapientia University, Tg. Mures 2017, pp. 51-61, ISSN 2247 0948.

C.6.5. Conferinţe naţionale

43. **N. Kutasi**, L. Márton – Fuzzy Logic based temperature control, 1st Scientific Conference RODOSZ, Cluj-Napoca, Romania, 2000, Editura Kriterion, Cluj-Napoca, pp. 131-142, ISBN: 973-26-0628-2.
44. L. Márton, **N. Kutasi** – Genetic algorithms for process control, 1st Scientific Conference RODOSZ, Cluj-Napoca, Romania, 2000, Editura Kriterion, Cluj-Napoca, pp. 143-166, ISBN: 973-26-0628-2.

D. Traduceri de cărţi, capitole de cărţi, alte lucrări ştiinţifice

E. Editare, coordonare de volume

F. Brevete de invenții și alte titluri de proprietate

Titlu: ***Inverter circuit for operating e.g. medium frequency-crucible furnace, has bridge circuits formed as full bridges, where inverter circuit provides single-phase energy for melting material and multi-phase energy for generating motor power***.

Patent Number(s): DE102006007818-A1 Inventor(s): RETTENMAIER H, BAUER M F, KELEMEN A, GASPAR C, KUTASI D N, MATYASI Z S Patent Assignee(s) and Codes(s):ITG INDUKTIONSANLAGEN GMBH (ITGI-Non-standard) Derwent Primary Accession Number: 2007-605674

G. Contracte de cercetare (menţionaţi calitatea de director sau membru)

G.1. CONTRACT DE CERCETARE ÎN CADRUL ACADEMIC

Nr.crt.	Denumirea temei	Beneficiar	An
1	"Realizarea experimentelor model pentru dezvoltarea straturilor TiAlCN aditivate cu MoS2"- *membru colaborator*. Contract Nr. 1339/05.10.2004, Director: Dr.Biró Domokos.	Institutul Programelor de Cercetare al Fundaţiei Sapientia	2005-2006
2	"Investigarea microstructurii straturilor nanocompozite TiAlCN aditivate cu MoS2 prin microscopie electronică"- *membru*. Contract Nr. 1281/25.10.2005 în cadrul Institutului Programelor de Cercetare al Fundaţiei Sapientia, 2005-2006, Director: Dr.Biró Domokos.	Institutul Programelor de Cercetare al Fundaţiei Sapientia	2005-2006
3	"Dezvoltarea straturilor tribologice TiAlCrN aditivate cu MoS2 si investigarea microstructurală XTEM"- *membru*. Contract Nr. 1032/15.11.2006 în cadrul Institutului Programelor de Cercetare al Fundaţiei Sapientia, 2006-2007, conducător: Dr. Biró Domokos.	Institutul Programelor de Cercetare al Fundaţiei Sapientia	2006-2007

4	"Realizarea reglării directe a puterii convertoarelor trifazate în regim de comutaţie prin metoda reglării predictive bazate pe model"-*membru* Contract Nr. 209/55 din 02.04.2009 Director: Dr. Kelemen Andras	Institutul Programelor de Cercetare al Fundaţiei Sapientia	2009
5	Cercetări de fizica plasmei folosind sonde tip Langmuir şi cercetări privind reglarea Fuzzy ai temperaturii piesei tratate termic precum şi creşterii stratului de penetrare în plasmă nitrurare cu ecran activ. Director: Dr. Kenéz Lajos	Institutul Programelor de Cercetare al Fundaţiei Sapientia	2011-2014
6	Transport de căldură și de material și controlul temperaturii pe bază de model în reactorul liniar non-izoterm de plasmă în cazul tratamentelor termice de tip DCPN și ASPN Director: Dr. Kenéz Lajos	Institutul Programelor de Cercetare al Fundaţiei Sapientia	2015-2016
8	Controlul procesului de nitrurare în plasma cu catod cilindric, cercetări privind diagnostizarea locală a plasmei în timpul nitrurării, studierea rolului atomilor de fier provenite în urma pulverizării catodului, în mecanismul de nitrurare anodic Director: Dr. Kutasi Dénes Nimród	Institutul Programelor de Cercetare al Fundaţiei Sapientia IPC: 13/18/17.05.2017	2017-2018

Contracte tip Tutor

7	Reglarea sistemelor hibride cu restricții, aplicații în electronica de putere (Korlátos hibrid rendszerek irányítása teljesítményelektronikai alkalmazásokkal) Tutor: Dr. Kutasi Dénes Nimród, Student: Fehér Áron	Collegium Talentum/Edutus Főiskola Nr.TB-03/839/0/2015	2015
9	Modelarea hibridă și reglarea pe bază de model al sistemelor industriale (Ipari folyamatok hibrid modellezése és modell alapú irányítása) Tutor: Dr. Kutasi Dénes Nimród, Student: Kardos Tamás	Collegium Talentum/Bethlen Gábor Alapkezelő ZRT Nr.6656/2018	2018-2019
10	Modelarea hibridă și reglarea pe bază de model al sistemelor industriale (Ipari folyamatok hibrid modellezése és modell alapú irányítása) Tutor: Dr. Kutasi Dénes Nimród, Student: Kardos Tamás	Collegium Talentum/Bethlen Gábor Alapkezelő ZRT Prelungire contract	2019-2020

G.2. CONTRACT DE CERCETARE ÎN CADRUL FIRMEI SC TETRONIC SRL

Nr.crt.	Denumirea Teme	Beneficiar	An

1	"Microreţele de tensiune continuă pentru integrarea optimală a surselor distribuite de energie" din cadrul programului CEEX-DCiDER, Contract nr. 109/10.10.2005 Subcontract nr.: 131/17.10.2005 Coordonator grant: Prof. Dr.-Ing. Mihaela Albu (UPB) Resp. Partener UPB: Prof. Dr.-Ing. Răzvan Măgureanu Resp. Partener UTCN: Prof. Dr.-Ing. Radu Munteanu Responsabil de temă şi colectiv de Electronică de putere şi acţionări electrice: prof. Maria IMECS	Universitatea Tehnică din Cluj-Napoca	2005-2006
2.	Contract de Cercetare dezvoltare dintre SC Tetronic SRL și Meier Prozesstechnik Gmbh Germania pentru dezvoltarea unei surse trifazate de tensiune de joasă frecvență pentru încălzirea rotoarelor în procesul de impregnare. Valoarea contractului 32000 Euro. Ctr.Nr.19/31.01.2006	Meier Prozesstehnik	2006
3.	Contract de Cercetare intern SC Tetronic SRL pentru dezvoltarea unei mașini de călire verticală. Valoare 34000 Lei (11900USD) Responsabil: Kutasi D. Nimród	SC Tetronic SRL	2013
4.	Contract de Cercetare-Dezvoltare intre firma Tetronic SRL și NFH KFT, Ungaria pentru dezvoltarea unei mașini de călire cu două posturi și alimentare automată cu roboți. Perioada de derulare 03.2016-03.2017. Responsabil: Kutasi D. Nimród	NFH KFT Ungaria	2016-2017
5.	Contract de Cercetare-Dezvoltare intre firmele Tetronic SRL și Isertech Gmbh pentru dezvoltarea unei mașini de călire automată. Perioada de derulare 11.2018-06.2019. Responsabil: Kutasi D. Nimród	Isertech Gmbh Germania	2018-2019
6.	Contract de Cercetare-Dezvoltare intre firmele Tetronic SRL și Corweld SRL pentru dezvoltarea unei instalații de încălzire prin inducție pentru asamblări la cald. Perioada de derulare 03.2020-09.2020. Responsabil: Kutasi D. Nimród	Corweld Kft. Ungaria	2020

G.2.1 Echipamente dezvoltate şi livrate în străinătate:

- 260 de echipamente de încălzire prin inducţie în gama de putere 8-1200kW şi gama de frecvenţe 1kHz-1000kHz (SC TETRONIC SRL).
- 6 bucăți de Maşini de călire Universală (Romania, Ungaria, Germania, Slovacia)
- 2 bucăți de Maşini de călire Orizontală

H. Creaţia artistică

H1 Participări la manifestaţii artistice internaţionale
H2. Participări la manifestaţii artistice naţionale
H3. Expoziţii, filme, spectacole, concerte, discuri de autor, opere internaţionale
H4. Expoziţii, filme, spectacole, concerte, discuri de autor, opere naţionale
H5. Produse cu drept de proprietate intelectuală în domeniul artistic

III. RECUNOAŞTEREA

I. Premii, distincţii.

PREMIUL TÂRGULUI INTERNAŢIONAL TEHNIC TIB2008 pentru produsul Convertizor de frecvenţă, realizat în cadrul firmei **TETRONIC SRL.**

J. Citări

Citari in carti, reviste si volume ale unor manifestari stiintifice (carti, ISI)

Nr.	Articol citat / Nr.Referinţă	Articol care citeaza
1	Vector control of induction motor drives with model based predictive current controller C6.1.15	Mariethoz, S., Domahidi, A. and Morari, M., 2012. High-bandwidth explicit model predictive control of electrical drives. IEEE Transactions on Industry Applications, 48(6), pp.1980-1992.
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K. Alte realizări semnificative.

K.1. Participare în comisii oficiale de doctorat

1. Membru de rezervă a comisiei de doctorat al tezei „Induction heating converter's design, control and modeling applied to continuous wire heating" elaborate de Guillermo Martín Segura (conducător ştiinţific Daniel Montesinos i Miracle) în cadrul Universitat Politècnica de Catalunya, Departament d'Enginyeria Elèctrica, Barcelona, martie 2012.

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