

LISTA DE LUCRĂRI ȘTIINȚIFICE PUBLICATE
Prof.univ.Dr.MSc.Ing.OPRAN Constantin Gheorghe
Dosar abilitare

Universitatea POLITEHNICA din București
Facultatea Ingineria și Managementul Sistemelor Tehnologice
Departamentul Tehnologia Construcțiilor de Mașini

A. TEZA DE DOCTORAT

A1. „ *Cercetari privind prelucrarea prin electroeroziune a unor materiale ceramice* - sustinut la data de 26.06.1997, la Universitatea POLITEHNICA din București, cu diploma de doctor Seria P Nr. 0000885 aprobata prin Ordinul Ministrului Invatamantului nr.4268 din 23.07.1997

TEZA DE MASTER

Teza de Master European in Stiinte Tehnice: “ *Simularea productiei in intreprinderi organizate pe sectii si operand cu loturi*”; Master în Informatica si Automatizări, specialitatea Automatizări Industriale, Universitatea POLITEHNICĂ Torino, Italia.1992.

B. ARTICOLE

Ba. Articole publicate în Reviste de Specialitate indexate ISI

Ba.01. Opran C., Baritz M, Cotoros D. ; *The effects of some liquids of general use upon the shape and structure of the monthly worn contact lenses used for virtual confort*; pg. 1052-1059, vol. 4, Published 2010; Optoelectronics and advanced material-rapid communications. WOS: 000281114100034;

Ba.02. Grosu Elena, Nemes. E. Rapa M. **Opran C.** Petrescu T. *The role of multylayer photoselective foils in modifying optimal microclimate for technical cultures I* pg. 317-323, vol. 43, ISSN: 0025-5289, WOS:000244795000012;

Ba.03. OPRAN Constantin; COTOROS Diana; ROMAN Nadinne; REPANOVICI Angela; MICLAUS Roxana; *Research regarding the impact behaviour of some polymeric bio-composite products for orthopedic use*; Revista MATERIALE PLASTICE, VOL.54, NR.3/2017; 2017.

Bb. Articole publicate în Reviste de Specialitate indexate BDI

Bb.01. Simona Don, Teodora Brezeanu, Esofina Ristici, Cotirla, D. Savastru, M. Ristici, Eleonora Neme, Elena Grosu, **C. Opran**; Polarization changes on transmitted laser light by polyethylene film; Romanian J. Biophys., vol.16, nr. 1, pg. 63067, Bucharest, 2006

Bb.02. Opran, C., Teodorescu, F., Bivolaru, C. Impact behavior of sandwich composite polymeric products reinforced with glass fiber (2015) Academic Journal of Manufacturing Engineering, 12 (3), pp. 50-53.

Bb.03. Opran, C., Bivolaru, C., Murar, D., Vlase, A.; Researchs concerning the behaviour at impact of the polymeric composite sandwich structures with the simulation of finite element analysis; (2010) Academic Journal of Manufacturing Engineering, 8 (1), pp. 92-98. Cited 1 time.

Bb.04. Nita, A., **Opran, C.**, Murar, D., Bivolaru, C.; Charpy impact on the molded polymeric parts;(2010) Academic Journal of Manufacturing Engineering, 8 (1), pp. 85-91. Cited 2 times.

**Bd. Articole publicate în Volumele unor Conferințe
Științifice Internaționale indexate ISI**

Bd.01. Dobrescu, Tiberiu; Pascu, Nicoleta-Elisabeta; Jiga, Gabriel; **Opran, Constantin**; *Optimization Criteria of Plane Lapping Machines*; Procedia Engineering; Publisher ELSEVIER SCIENCE BV, SARA BURGERHARTSTRAAT 25, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS; ISSN: 1877-7058; 25TH DAAAM INTERNATIONAL SYMPOSIUM ON INTELLIGENT MANUFACTURING AND AUTOMATION, 2014
Book Series: Procedia Engineering Volume: 100 Pages: 428-434 Published: 2015;

Bd.01. **Opran, Constantin**; Pricop, Mircea; Teodoru, Constantin; *Researches on Design and Manufacturing of Innovative Double Gears Pumps*; Procedia Engineering; Publisher ELSEVIER SCIENCE BV, SARA BURGERHARTSTRAAT 25, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS; ISSN: 1877-7058; 25TH DAAAM INTERNATIONAL SYMPOSIUM ON INTELLIGENT MANUFACTURING AND AUTOMATION, 2014
Book Series: Procedia Engineering Volume: 100 Pages: 475-481 Published: 2015

Bd.03. Pascu, NE, Dobrescu T., **Opran C.**, Enciu, G.; *Realistic Scenes in CAD Application, in Procedia Engineering*; 24TH DAAAM INTERNATIONAL SYMPOSIUM ON INTELLIGENT MANUFACTURING AND AUTOMATION, 2013, pg. 304-309, published 2014, Univ. Zadar, Croatia, WOS: 000335859300041

Bd.04. Savastru, D., Savastru R., Lancranjan, I., Miclos, S. **Opran. C.**, *Numerical analysis of laser paint removal from various substrates*; Proceedings of SPIE, ROMOPTO 2012: Tenth Conference on Optocs: Micro-to nanophotonics III; vol. 8882, publused 2013, WOS: 000324588600028;

Bd.05. Miclos S., Savastru, D. Lancranjan, I., Savastru R., **Opran C.**; *Numerical Analysis of Grating and Prism Coupled Surface Plasmon Resonance*, pg: 48-51 in Progress in Electronic Research Symposium proceedings of PIERS 2013, Stockholm: Progress in electromagnetics research resonance, 2013, WOS: 000361384200007

Bd.06. Lancranjan I.I., Miclos S., Savastru D., Savastru R., **Opran C.**, *Mumerical simulation of a laser – acoustic lanmine detection system*; Poceedings of SPIE in Conference on Laser Sources and Applications; 2012, WOS: 000305709300034

Bd.07. **Constantin Opran**, Cătălina Bivolaru, Diana Murar; 2012; *Researches Concerning Structural and Mechanical Behavior of Sandwich Composite Polymeric Products*; Key Engineering Materials, Vol. 498 (2012), pp.151-160; Trans.Tech. Publications, Switzerland.(www.scientific.net); sources Behaviour of material and composites structure. WOS: 000302594700013

Bd.08. **Opran, C.** Blajina, O.; *Temperature field in EDM of ceramic composites*; pg. 1519-1520. Vol. 20. Annals of DAAAM for 2009 proceedings of the 20Th international DAAAM symposium. Vienna, WOS: 00028335600760

Bd.09. Nita, A. **Opran C.** *Testing charpy impact strengh of polymeric materials*. Vol 20, pg. 1529-1530, Annals of DAAAM for 2009 Proceedings of the 20th international DAAAM symposium, Vienna, WOS: 000282335600765

Bd.10. Cotoros, D; Baritz M. **Opran C.** ; *Aspects Concerning impact tests on composites for rigid implants*; pg. 1658-1661, published 2009 word congress of engineering. WOS: 000271615700308

Bd.11. Cotoros, D. Baritz M., **Opran C.** Leonardo S. Anca. S.; *Testing stand for antifrictions in biomechanics*; pg. 1763-1765, published in 2009; Word congress on engineering 2009; WOS: 000271615700327

Bd.12. **Opran C.**, Iliescu M.; *Mathematical model of temperature distribution field in electrical discharge machining of ceramics composites*, pg. : 176-179, published 2008,

MACMESE 2008 – 10th WSEAS International Conference on Mathematical and Computational methods in Science and Engineering. WOS: 000262436800042

Bd.13. Cortoros, D. Baritz, MI., **Opran, C.** ; *Dry testing method for heat exchangers*, pg. 1521-1524, Published 2008, Word congress of engineering 2008; WOS: 000259580600282

Bd.14. **Opran C.** Armeanu A.; *Elementary level in the functional-technological design*; pg. 93-100, published 2001, design research – theories and product modelling; WOS: 000172695600012

Be. Articole publicate în Volumele unor Conferințe Științifice Internaționale indexate BDI

Be.01. Constantin Opran; Mircea Pricop; Constantin Teodoru; 2015; *Researches on Design and Manufacturing of Innovative Double Gears Pumps*; Procedia Engineering 100 (2015) 475 – 481; Science Direct, www. sciencedirect.com; ELSEVIER Procedia Engineering, www.elsevier.com/locate/procedia; 25th DAAAM International Symposium on Intelligent Manufacturing and Automation, DAAAM 2014.

Be.02. OPRAN Constantin Gheorghe; PRICOP Mircea; TEODORU Constantin; 2015 *Research Regarding Adaptive Design of Gear Pumps used for Polymeric Products Engineering; Applied Mechanics and Materials Vol. 760 (2015) pp 601-606; (2015) Trans Tech Publications, Switzerland; doi:10.4028/www.scientific.net/AMM.760.601; POLCOM 2014- International Conference of Technology for Polymeric and Composites Products- Bucharest, Romania, 23 – 24 October, 2014 .*

Be.03. OPRAN Constantin Gheorghe; PRICOP Mircea; TEODORU Constantin; 2015; *Innovative Design of Polymeric Systems used in Manufacturing of Gear Pumps; Applied Mechanics and Materials Vol. 760 (2015) pp 607-612; (2015) Trans Tech Publications, Switzerland; doi:10.4028/www.scientific.net/AMM.760.607; POLCOM 2014- International Conference of Technology for Polymeric and Composites Products- Bucharest, Romania, 23 – 24 October, 2014.*

Be.04. Dobrescu, T., Pascu, N.-E., Jiga, G., **Opran, C.** *Optimization criteria of plane lapping machines* (2015) Procedia Engineering, 100 (January), pp. 428-434.

Be.05. RIZA Ion; **OPRAN Constantin Gheorghe**; *Methods and Special Functions Used in Diffusion Modelling*; Applied Mechanics and Materials; ISSN: 1662-7482, Vol. 865, doi:10.4028/www.scientific.net/AMM.865.64; 2017 Trans Tech Publications, Switzerland; 2017; pp.64-72.

Be.06. OPRAN Constantin Gheorghe, Balota Doru Andrei, Teodorescu Draghicescu Florin, Dobrescu Tiberiu Gabriel; *Modelling Assisted Injection Molding with Magnetic Field for Complex Polymeric Products*; Proceedings of 26th DAAAM International Symposium on Intelligent Manufacturing and Automation, DAAAM 2015; 2016; Curran Proceedings, New York, ISBN: 9781510818392; DOI:10.2507/26 th.daaam.proceedings.041; pp.0301-0310.

Be.07. Opran Constantin Gheorghe; Ghionea Ionut; Pricop Mircea; *Embedded modelling and simulation software system for adaptive engineering of hydraulic gear pumps*; Proceedings of 26th DAAAM International Symposium on Intelligent Manufacturing and Automation, DAAAM 2015; Curran Proceedings, New York, ISBN: 9781510818392; 2016; Doi:10.2507/26th.daaam.proceedings.042; pp.0311-0319.

Be.08. Constantin Gheorghe OPRAN; Alexandru PATRASCU; Florin Teodorescu-DRAGHICESCU; *Research regarding the moments regression relations at drilling mineral composite materials with 3% concentration of glass fiber*; Proceedings of The 6th International Conference on Advanced Composite Materials Engineering-COMAT 2016; 24-25 November 2016, Brasov, Romania; 2016; pp.157-162; 6pag; pp.157-162.

- Be.09.** Ion RIZA; Marius Constantin POPESCU; **Constantin OPRAN**; *Solutions with Bessel Functions on Diffusion Modeling in Relation with Distance*; Advanced Materials Research Vol. 1098 (2015); © (2015) Trans Tech Publications, Switzerland; doi:10.4028/www.scientific.net/AMR.1098.138; 2015; pp 138-143
- Be.10.** **Opran Constantin Gheorghe**, Teodorescu Draghicescu Florin, Gheorghe Tudor Vlad, Dobrescu Tiberiu Gabriel; 2014; *Optimization of Micro Injection Molding of Polymeric Medical Devices using Software Tools*; Procedia Engineering 69 (2014), ScienceDirect, Procedia Engineering; Published by Elsevier Ltd.; 2014; pp.340 – 346; www.sciencedirect.com; .
- Be.11.** RAICU Alexandra; RAICU Gabriel; **OPRAN Constantin**; 2015; *Cloud Community for Polymeric and Composites Simulations Products*; Applied Mechanics and Materials Vol. 760 (2015) pp 167-172; (2015) Trans Tech Publications, Switzerland; doi:10.4028/www.scientific.net/AMM.760.167; POLCOM 2014- International Conference of Technology for Polymeric and Composites Products-Bucharest, Romania, 23 – 24 October, 2014
- Be.12.** AMZA Gheorghe; NITOI Dan; AMZA Cătălin; APOSTOLESCU Zoia; **OPRAN Constantin**; 2015; *Ultrasonic System Design and Calculation for Polymer Metallization*; Applied Mechanics and Materials Vol. 760 (2015) pp 263-268; (2015) Trans Tech Publications, Switzerland; doi:10.4028/www.scientific.net/AMM.760.263; POLCOM 2014- International Conference of Technology for Polymeric and Composites Products- Bucharest, Romania, 23 – 24 October, 2014.
- Be.13.** TEODORESCU DRAGHICESCU Florin; **OPRAN Constantin Gheorghe**; 2015; *Sheet Moulding Compounds Of Large Auto Body Parts Made From Polymeric Composite*; Applied Mechanics and Materials Vol. 760 (2015) pp 501-506; (2015) Trans Tech Publications, Switzerland; doi:10.4028/www.scientific.net/AMM.760.501; POLCOM 2014- International Conference of Technology for Polymeric and Composites Products- Bucharest, Romania, 23 – 24 October, 2014.
- Be.14.** PUPAZA Cristina; GHICULESCU Daniel; **OPRAN Constantin Gheorghe**; 2015; *A Model Regarding Material Removal Using FEM at Ultrasonic Aided EDM of Metal Matrix Composites*; Applied Mechanics and Materials Vol. 760 (2015) pp 557-562; (2015) Trans Tech Publications, Switzerland; doi:10.4028/www.scientific.net/AMM.760.557; POLCOM 2014- International Conference of Technology for Polymeric and Composites Products- Bucharest, Romania, 23 – 24 October, 2014.
- Be.15.** **OPRAN Constantin**; PRICOP Mircea; TEODORU Constantin; 2014; *Embedded Engineering for Low Noie Gear Pumps*; DAAAM INTERNATIONAL SCIENTIFIC BOOK 2014, Chapter 13; Published by DAAAM International Vienna, Austria, EU; ISBN 978-3-901509-98-8; pp.163-170.
- Be.16.** **Constantin OPRAN**, Mihaela E. LUPEANU, Cătălina BIVOLARU; 2012; *MATHEMATICAL MODELS OF FORCE AND MOMENT IN MACHINING PRODUCTS MADE BY SANDWICH COMPOSITES POLYMERIC MATERIALS*; The 4th International Conference, "Advanced Composite Materials Engineering ", COMAT 2012, 18- 20 October 2012, Brasov, Romania; ISBN 978-973-131-164-7; pp.83-89
- Be.17.** Dan SAVASTRU; Roxana SAVASTRU; Ion LANCRANJAN ; Sorin MICLOS; **Constantin OPRAN**; 2013; *Numerical simulation of laser paint removal from various substrates*; ROMOPTO 2012; Tenth Conference on Optics: Micro- to Nanophotonics III, edited by Valentin I. Vlad Proc.of SPIE Vol. 8882, 88820S. © 2013 SPIE CCC code: 0277-786X/ 13/\$18. doi: 10.1117/12. 20320660; Proc. of SPIE Vol. 8882 88820S-1; pp.10 pag.
- Be.18.** **OPRAN CONSTANTIN**; TEODORESCU FLORIN; DOBRESCU TIBERIU; 2013; *Manufacturing technology by pressing the cylinder head covers composite polymer type SMC (Sheet Moulding Compounds) for the automotive industry of agriculture*; Recent Advanced in Industrial & Manufacturing Technologies, Proceedings of the 1st International Conference on

Industrial and Manufacturing Technologies (INMAT ' 13); Vouliagmeni, Athens, Greece ; May 14-16, 2013; pp. 144-147; (4 pag).

Be.19. VASILE BENDIC, CONSTANTIN OPRAN, NAE LAURENTIU, NICOLETA PASCU; 2013; *Demand and Offer Low Description of LCD Monitors by Multiple Equation Model*; Recent Advanced in Industrial & Manufacturing Technologies, Proceedings of the 1st International Conference on Industrial and Manufacturing Technologies (INMAT ' 13); Vouliagmeni, Athens, Greece ; May 14-16, 2013; pp.212-215. (4 pag).

Be.20. JIGA, Gheorghe Gabriel; DINU, Gabriela; VLASCEANU, Daniel; OPRAN, Constantin; 2012; *STUDY ON DYNAMIC PROPERTIES OF STRUCTURAL COMPOSITE SYSTEMS EQUIPPING SAFETY GUARDRAILS*; Annals of DAAAM for 2012 & Proceedings of the 23rd International DAAAM Symposium, Volume 23, No.1, ISSN 2304-1382; ISBN 978-3-901509-91-9, Ed. B. Katalinic, Published by DAAAM International, Vienna, Austria, EU, 2012; pp:0925-0928.

Be.21. OPRAN Constantin; DOBRESCU Tiberiu Gabriel; JIGA Gheorghe Gabriel; 2011; *Mathematical Models of Force and Torque in Drilling Polymeric Biocomposites Products*; Annals of DAAAM for 2012 & Proceedings of the 23rd International DAAAM Symposium, Volume 23, No.1, ISBN 978-3-901509-91-9, Published by DAAAM International, Vienna, Austria, 2012; pp:0637-0640

Be.22. DOBRESCU, Tiberiu Gabriel; PASCU, Nicoleta - Elisabeta; OPRAN, Constantin; BUCURESTEANU, Anca Monica; 2011; *SUBSURFACE DAMAGE IN GRINDING SILICON CERAMICS*; Annals of DAAAM for 2012 & Proceedings of the 23rd International DAAAM Symposium, Volume 23, No.1, ISSN 2304-1382; ISBN 978-3-901509-91-9, Ed. B. Katalinic, Published by DAAAM International, Vienna, Austria, EU, 2012; pp:0121-0124.

Be.23. Constantin OPRAN; Tiberiu DOBRESCU; 2011; *Temperature Behaviour at drilling biocomposite polymeric*; 22nd DAAM INTERNATIONAL; Austria, Vienna, 2011-11-23/26; pp.0481-0482.

Be.24. Constantin OPRAN; *Research concerning polymeric laminate composite materials products under impact conditions*; PROCEEDINGS CNC TEHNOLOGIES 2011; Fifth Edition; ISSN: 2068-2093; Politehnica Press; Bucharest; May 12-13; 2011; 5pag; pp.115-120.

Be.26. BIVOLARU Catalina; OPRAN Constantin; MURAR Diana; 2011; *Milling of polymeric sandwich composites products*; 22nd DAAM INTERNATIONAL; Austria, Vienna, 2011-11-23/26; pp.1295-1296.

Be.27. MURAR Diana; OPRAN Constantin; BIVOLARU Catalia; 2011; *Drilling of bio-composite polymeric products*; 22nd DAAM INTERNATIONAL; World Symposium, Austria, Vienna, 2011-11-23/26; pp.1297-1298.

Be.28. Dobrescu, T.G., Opran, C., Jiga, G.-G., Georgescu, L.E.; *Polishing of silicon wafers* (2011) Annals of DAAAM and Proceedings of the International DAAAM Symposium, pp. 439-440. Cited 1 time.

Be.29. Constantin OPRAN; Tiberiu DOBRESCU; 2011; *Temperature Behaviour at drilling biocomposite polymeric*; 22nd DAAM INTERNATIONAL; Austria, Vienna, 2011-11-23/26; pp.0481-0482.

Be.30. Opran, C.; *Energy risk management*; (2010) Proceedings of the International Conference on Risk Management, Assessment and Mitigation, RIMA '10, pp. 346-350.

C. CĂRȚI

Ca. Cărți publicate în Edituri Naționale cu ISBN și în edituri recunoscute CNCIS

Ca.01. OPRAN Constantin Gheorghe; 2011; *Tehnologii de vopsire pentru produse industriale*; Editura BREN; Bucuresti; ISBN 978-973-648-993-8; carte; pp183.

Ca.02. Constantin OPRAN; Nicolae VASILE; Virgil RACICOVSCHI; Paul PENCIOIU; Ion PAUNA; Maria CASARIU; Gheorghe MOHAN; *Biostructuri polimerice degradabile in mediu natural*; VASILE GOLDIS UNIVERSITY PRESS; ARAD , 2004; ISBN 973-664-041-8; pp.146..

Ca.03. Petre Lucian Seciu, Constantin Gheorghe OPRAN, Dana Cornelia SECIU; 2009; *Managementul proiectelor ingineresti*; ISBN 978-606-515-070-6; pp.452.

Ca.04. ENACHE Ștefănuță; OPRAN Constantin; STRĂJESCU Eugen; TĂNASE Ion; *Capacitatea de așchiere a sculelor așchietoare*; Editura Academiei; București, Romania. 2000; ISBN 973-27-0771-2; pp. 280.

Ca.05. BENDIC Vasile; OPRAN Constantin Gheorghe; *Managementul succesului in afaceri prin proiecte*; Editura BREN, Bucuresti, Romania; 2017; ISBN: 978-606-610-194-3; pp.202.

Cd. Cărți/cursuri pentru uzul studenților

Cd.01. OPRAN Constantin, Gheorghe; *Tehnologii de injecție în matriță produse polimerice*; Editura Bren; Bucuresti, Romania; 2016; ISBN; 978-606-610-201-8; pp.252; Punctaj: $252/(20)=12,6$

Cd.02. OPRAN Constantin; 2015; *Analiza financiara a proiectelor*; Editura comunicare.ro; ISBN 978-973-711-517-1; pp.319; Punctaj: $319/(20)=15,95$

Cd.03. Constantin OPRAN; Stan Sergiu; 2008; *Managementul proiectelor*; Editura BREN PROD srl, ISBN 978-973-648-833-7; pp.522; Punctaj: $522/(20 \times 2)=13,05$

Cd.04. Constantin OPRAN; *Managementul proiectelor*; Editura comunicare.ro; Bucuresti, Romania; 2014; ISBN:978-973-711-488-4; pp.322; Punctaj: $322/(20)=16,1$

Cd.05. Andrei DUMITRESCU, Constantin OPRAN; 2002; *Materiale polimerice, Caracterizare, Proprietati, prelucrare*; Oficiul de informare documentara pentru industrie, cercetare, management, ISBN 973-8001-32-3; pp. 137; Punctaj= $137/20 \times 2=3,42$

D. CULEGERI ȘI ÎNDRUMARE

Da. Lucrări publicate în Edituri Naționale cu ISBN

Da.01. OPRAN Constantin Gheorghe; *Tehnologia produselor din materiale avansate, Indrumar laborator*; Editura Bren; București, România; 2017; ISBN: 978-606-610-097-8; pp.158. Punctaj $158/(25)=6,32$

Da.01. 2) OPRAN Constantin Gheorghe; 2014; *Tehnologii de injecție in matrite, Indrumar de proiectare*; Editura Bren; pp.109; ISBN 978-606-610-085-4. Punctaj $109/(25)=4,36$

Da.01. OPRAN Constantin, STAN Sergiu, NASTASA Steluta, ABAZA Bogdan, *Managementul proiectelor-note de curs*; Editura comunicare.ro; 2002, ISBN 973-8376-16-5; pp.214, Punctaj = $214/2 \times 4=26,75$

Da.01. Marian GHEORGHE; Aurelian VLASE, Aurelian Visan; Ioan POPESCU; Napoleon Andrei; Iulian Luncas; Adrian MARINESCU; Niculae Ion Marinescu; Sergiu TONOIU; **Constantin OPRAN**; Catalin GHEORGHITA; Mihaela ILIESCU; Madalin Catana; ION Ion; Constantin DRAGHICI; Daniel GHICULESCU; *Tehnologia ; fabricarii produselor, Indrumar de laborator*; 2008; ISBN 978-973-648-818-4; pp.243. Punctaj=243/25x 17=0,57

Da.01. Aurelian VLASE; **Constantin OPRAN**; 2007; *Tehnologii de prelucrare pe masini de danturat - Indrumar de proiectare*, Editia a 2 a, revizuita si complectata ; Editura BREN ; ISBN 978-973-648-7840-8; pp.239 Punctaj = 239/25x2=4,78

F. CONTRACTE DE CERCETARE

Fa. Contracte Naționale/Internaționale realizate ca Responsabil /Director de Contract/Program/Proiect

- Fa.01.** Programul național CNCSIS, Proiect „Studii și cercetări privind proiectarea integrată a produsului, materialului, tehnologiei și sistemului tehnologic pentru produse din compozite polimerice injectate în matriță utilizând sisteme CAD-CAM-CIM cu tehnici de inginerie concurentă”, Contract Nr. 33,084/1999, 37.124/2000, 34.967/2001 – UPB; **Director de Proiect.**
- Fa.02.** Programul Național RELANSIN; Proiect „Sistem tehnologic integrat privind realizarea structurilor sandwich din compozite polimerice pentru industria auto”; Acronim STRIMSAN; Contract finanțare Nr. 1366-26.07.2001-UPB; **Director de Proiect.**
- Fa.03.** Programul Național CERES; Proiect „Cercetări fundamentale privind caracterizarea și realizarea tehnologică folosind sisteme expert a produselor biodegradabile din compozite polimerice, cu element de ranforsare din lemn”; Acronim CEFPLE; Contract finanțare Nr. 1366-26.07.2003-UPB; **Director de Proiect.**
- Fa.04.** Programul Național CERES; Proiect „Tehnici și tehnologii privind folii fotoselective de înaltă performanță pentru monitorizarea morfologică a produselor agricole”; Acronim TEFOMAP; Contract finanțare Nr. 4-148/12.11.2004-UPB; **Director de Proiect.**
- Fa.05.** Programul Național INFRAS; Proiect „Crearea și dezvoltarea în vederea acreditării a unui laborator de încercări pentru produse din compozite polimerice”; Acronim CELAPCOM; Contract finanțare Nr.237/12.10.2004-UPB; **Director de Proiect.**
- Fa.06.** Modernizarea tehnologiei de fabricație pentru cuplaje/semicuple mecanice destinate exportului; Program PNCDI-2-INOVARE; Acronim MOTECU; Contract ; 228/03.10.2008; **Director de Proiect.**
- Fa.07.** Program național PN II- INOVARE – Dezvoltare Produse-Sisteme-Tehnologii; Proiect “Pompe duble cu roti dintate PHD-GR1 realizate in constructie inovativa” Acronim PHD-00; Contract de finanțare Nr. 11DPST/20.08.2013; **Director de Proiect.**

G. ALTE LUCRĂRI ȘI CONTRIBUȚII ȘTIINȚIFICE

Ga. BREVETE INVENTII

Ga.1.OPRAN Constantin; GROSU Elena; RISTICI Esafia; ILIESCU Mihaela; NEMES Eleonora; DONTU Camelia; SPANU Paulina; PETRESU Teodor; CIOFU Ruxandra; 2009; *Folie multistrat fotoselectiva pentru acoperire de solarii si tunele*; Brevet de inventie Nr. 1222665 din 30.11.2009; Oficiul de stat pentru inventii si marci Romania.

Ga.2. CASARIU Maria; JOGA Aurora; PAUNA Ion; **OPRAN Gheorghe Constantin**; CURTESCU Mihai; 2008; Brevet de inventie Nr. 121742 din 28.03.2008; Titlul inventiei : *Procedeu de obtinere a compozitelor polimerice pe baza de fibre liberiene*; Oficiul de stat pentru inventii si marci, Romania. Medalie de AUR la EUREKA 2016 – Bruxelles 2016

Ga.3. GAVRILAS Ionel; **OPRAN Constantin**; SALCEANU Ion; TUDORACHE Anca; VASILE Gheorghe; 1992; *Dispozitiv de prelucrat prin electroeroziune*; Nr. Brevet 105668; 30.11.1992; Oficiul de stat pentru inventii si marci Romania.

Ga.4. GAVRILAS Ionel; **OPRAN Constantin**; STANESCU Anca; 1993; *Cap de prelucrat gauri poligonale*; Nr. Brevet 104062; 12.12. 1993; Oficiul de stat pentru inventii si marci Romania.

Ga.5. GAVRILAS Ionel; **OPRAN Constantin**; TEODORESCU Marius; 1985; *Dispozitiv de prelucrare orbitala prin electroeroziune*; Brevet nr: 88297; 30.12.1985; Oficiul de stat pentru inventii si marci Romania.

Gb. Crearea și dezvoltarea Laboratorului de Tehnologia Produselor Compozite (*LTPC*) din cadrul Catedrei Tehnologia Construcțiilor de Mașini, Facultatea Ingineria și Managementul Sistemelor Tehnologice, Universitatea POLITEHNICA din București, 2000. Responsabil laborator. Investitie din proiecte de cercetare, contracte de cercetare, sponsorizari – valoare 500.000 €.

Data: 26 iunie 2017

OPRAN Constantin Gheorghe
Prof.univ.Dr. MSc.Ing.

Semnătura