

INFORMAȚII PERSONALE

Blejan Marian



 Intrarea Amara, nr. 2, București, Romania

 +4 021 336 3991  +4 0742 112 189

 [marian.blejan@gmail.com](mailto:marian.blejan@gmail.com)

 [blejan.go.ro](http://blejan.go.ro)

 Yahoo blejan

Sexul masculin | Data nașterii 16/01/1963 | Naționalitatea română

EXPERIENȚA PROFESIONALĂ

2004 - prezent

**Cercetător științific gradul 1 din anul 2017**

INSTITUTUL DE CERCETARI PENTRU HIDRAULICA SI PNEUMATICA INOE 2000-IHP, Str. Cuțitul de Argint, 14, București-Sector 4, București, 040558, București, România, <http://ihp.ro>

▪ Șef Laborator Cercetare Echipamente Mecatronice si Robotica  
**Tipul sau sectorul de activitate** Cercetare-dezvoltare si engineering in domeniul hidraulicii si pneumaticii

2003 - 2004

**Inginer**

TehnoEM Electronica Aplicată, București, România

▪ Proiectare și punere în funcțiune a echipamentelor de cântărire și dozare automată, informatizarea fluxuri de producție  
**Tipul sau sectorul de activitate** Industria metalurgică, construcții industriale, industria lemnului, industria cimentului și a materialelor de construcții

2002 - 2003

**Inginer**

TRION Company, București, România

▪ Proiectare hardware-software, punere în funcțiune a sistemelor cu microcontroler  
**Tipul sau sectorul de activitate** Cercetare-dezvoltare in domeniul bunurilor de larg consum: centrale murale cu gaz, aparate fiscale pentru taximetre, cronotahografe, clocitori automate etc

2001 - 2002

**Proiectant sisteme informatice**

SAR Consult, București, România – filiala Lykketronic A/S, Stengårdsvej 20, 9670 Løgstør, Danemarca, [www.lykketronic.dk](http://www.lykketronic.dk)

▪ Proiectare hardware-software, punere în funcțiune a sistemelor cu microcontroler

**Tipul sau sectorul de activitate** Echipamente electronice pentru agricultură

1990 - 2001

**Cercetător științific gradul 3**

INSTITUTUL DE CERCETARI PENTRU HIDRAULICA SI PNEUMATICA INOE 2000-IHP, Str. Cuțitul de Argint, 14, București-Sector 4, București, 040558, București, România, <http://ihp.ro>

▪ Cercetător științific  
**Tipul sau sectorul de activitate** Cercetare-dezvoltare si engineering in domeniul hidraulicii si pneumaticii

1987 - 1990

**Inginer**

Întreprinderea de motoare electrice, Pitești, România

▪ Inginer stagiar la departamentul mecanic-șef și proiectare  
**Tipul sau sectorul de activitate** Întreținere și reparații echipamente industriale controlate cu automate programabile, proiectarea modulelor electronice destinate controlului motoarelor electrice

EDUCAȚIE ȘI FORMARE

- 2006 - 2011 **Doctor inginer**  
 Universitatea Politehnica, București, Facultatea de inginerie mecanică și mecatronică, Departamentul de mecanică de precizie și mecatronică
  - Sisteme informatice destinate acționărilor electrohidraulice de precizie
- 1982 - 1987 **Inginer**  
 Universitatea Politehnica, București, Facultatea de electronică și telecomunicații
  - Electronica aplicată

COMPETENTE PERSONALE

Limba(i) maternă(e) Româna

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
Engleză	B2	C2	B2	B2	C2

Niveluri: A1/A2: Utilizator elementar - B1/B2: Utilizator independent - C1/C2: Utilizator experimentat  
 Cadrul european comun de referință pentru limbi străine

Alte competențe ▪ Certificat de atestare emis de compania ZUKEN-REDAC pentru proiectarea modulelor electronice cu CADSTAR

Permis de conducere A, B

INFORMATII SUPLIMENTARE

Conferințe Anexa 1  
 Brevete de invenții Anexa 2

## ANEXA 1

1. "Acordarea optima a unui sistem de reglare a pozitiei cu distribuitor proportional" - lucrare prezentata la COMEFIN, sectia "Roboti", 1995.
2. "Sisteme electrohidraulice de reglare a presiunii" - lucrare prezentata la HERVEX '97
3. "Sisteme de reglare hidraulice" - lucrare prezentata la simpozionul "Elemente si sisteme fluidice, pneumatice si hidraulice de automatizare" - Ploiesti '97
4. "Bloc de comanda pentru motoare pas cu pas"- lucrare prezentata la seminarul "Hidraulica la zi" - IHP - Bucuresti 5.03.1998
5. "Servoamplifier for Proportional Hydraulic Valves Used in Automatization Systems" - 2-nd Symposium Microelectronics Tehnology and Microsystems, Lviv, June 15-17, 1998.
6. "Positioning systems tuning interface using proportional hydraulic drivers" – The 4<sup>TH</sup> INTERNATIONAL SYMPOSIUM for INFORMATICS AND TEHNOLOGY IN ELECTRONIC MODULES DOMAIN, September 22-24, 1998 Bucuresti, Romania.
7. "Electronic module for the force proportional electromagnets testing" – The 4<sup>TH</sup> INTERNATIONAL SYMPOSIUM for INFORMATICS AND TEHNOLOGY IN ELECTRONIC MODULES DOMAIN, September 22-24, 1998 Bucuresti, Romania.
8. "Pressure inductive transducer with built-in signal conditioning circuit" – XXII IMAPS-Poland Conference, Zakopane, 1-3 October 1998.
9. "Tehnologii informatice utilizate in hidraulica" – HERVEX, 1998.
10. "Intelligent Signal Conditioner for LVDT Sensors" – MTM'99, Kosice, Slovacia.
11. "Force transducer with integrated electronics for hydraulic cylinder" – Proceeding of the 2<sup>nd</sup> International Conference on Recent Advances in Mechatronics – ICRAM '99 Istanbul, Turcia.
12. "Numerical control system based on standard hardware and software platform" - The 5<sup>TH</sup> INTERNATIONAL SYMPOSIUM for INFORMATICS AND TEHNOLOGY IN ELECTRONIC MODULES DOMAIN, September 23-26, 1999 Bucuresti, Romania.
13. "Reducerea zgomotului electric intr-un sistem de achizitie de date utilizat intr-un detector optoelectronic" – Hervex '99, Rm. Valcea, Romania.
14. "Influenta factorilor geometrice ai reperelor functionale asupra performantelor supapei hidraulice prtionale N.I.-DN 6" - Simpozionul Hidrodinamică, Mașini , Instalații și Acționări – 27 – 28 Mai, 1999, Timișoara.
15. "Computer assisted electropneumatocal system for compensate the SAG of an optoelectronic detector" – The 6th Symposium of Optoelectronics SIOEL'99, September 22-24, 1999, Bucharest, Romania.
16. "Sistem de reglare automata a pozitiei" – HERVEX, 2000.
17. "Informatics system for pneumatically accuracy applications" – MICROELECTRONICS TEHNOLOGIES AND MICROSYSTEMS, 26-27 octombrie, 2000, Zwickau, Ukraina.
18. "Metoda si dispozitiv de probare pentru verificarea rezistentei corpului acumulatorului" – HERVEX, 2004.
19. "Modul de interfata senzor LVDT semnal analogic, magistrala seriala RS232(485) – HERVEX, 2004.
20. "Flow and temperature measurement, using a ultrasonic sensor driven by a  $\mu\text{C}$ " – MENER, 2004.
21. "Mechatronic system for access control" – MENER, 2004.
22. "Mechatronic system for vibration test of module" – MENER, 2004.
23. "Generarea si amplificarea vibratiilor" – HERVEX, 2005.
24. "Sistem informatizat de monitorizare a procesului de fabricatie asociat sistemului de management al calitatii in cadrul intreprinderii" – HERVEX, 2005.
25. "Masurarea debitului cu traductoare ultrasonic" – HERVEX, 2005.
26. "Stand informatizat de probare motoare hidraulice lente" – HERVEX, 2005.
27. "Mechatronic system for air pressure control" – ISSE 2006, 29<sup>th</sup> International Spring Seminar on Electronics Technology, May 10-14, 2006, St. Marienthal Germany.
28. "Regulatoare automate de viteza (RAV) pentru turbine hidraulice de putere (0,1 – 10MW)" – HERVEX, 2006
29. "Ultrasonic flowmeter" – ISSE 2006.
30. "Mechatronic module for monitoring the hydraulic parameters of the industrial production equipment" – ISSE 2007, 30th International Spring Seminar on Electronics Technology, Emerging Technologies for Electronics Packaging, May 9-13, 2007 Cluj-Napoca ROMANIA
31. "Virtual instrument designed for dynamic test of electrohydraulic devices" – ISSE 2007, 30th International Spring Seminar on Electronics Technology, Emerging Technologies for Electronics Packaging, May 9-13, 2007 Cluj-Napoca ROMANIA
32. "Mechatronic control system for a hydraulic rubber press" - ISSE 2007, 30th International Spring Seminar on Electronics Technology, Emerging Technologies for Electronics Packaging, May 9-13, 2007 Cluj-Napoca ROMANIA
33. "Informatics platform for determining the dynamic performances of a two stages servo valve" - ISC 2007, June 11-13, 2007, Delft University of Technology, Delft, The Netherlands
34. VIRTUAL INSTRUMENT DESIGNED FOR DYNAMIC TESTS OF ELECTRO-HYDRAULIC DEVICES, ISSE 2007, 30th International Spring Seminar on Electronics Technology, Emerging Technologies for Electronics Packaging, May 9-13, 2007 Cluj-Napoca ROMANIA
35. MECHATRONICS SYSTEMS FOR RECOVERING KINEMATIC ENERGY OF THE HYBRID-DRIVE MOTOR VEHICLES, OPTIROB 2007 – 2-ND INTERNATIONAL CONFERENCE "OPTIMIZATION OF THE ROBOTS AND MANIPULATORS"
36. TEHNICI INFORMATICE DESTINATE ANSAMBLURILOR MECATRONICE DE MONITORIZARE A PARAMETRILOR UTILAJELOR HIDROPNEUMATICE, HERVEX 2007
37. SISTEME CU MICROCONTROLERE DESTINATE AUTOMATIZARILOR HIDRAULICE, HERVEX 2007
38. SOLUTIE PENTRU REALIZAREA AMPLIFICATOARELOR DE MASURA, HERVEX 2007
39. INSTALAȚIE DE UDARE PRIN PICURARE PENTRU SERĂ, HERVEX 2007
40. "Experimental Research upon Accommodating the Functional Parameters of a Laser Controlled System Designed for a Grading Machinery with the Actual Operating Conditions of the Grading Machinery" – ATOM-N 2008, 4<sup>th</sup> edition, Constanta, Romania
41. "Signal conditioner for LVDT displacement sensors" – ATOM-N 2008, 4<sup>th</sup> edition, Constanta, Romania
42. "Mechatronic module for monitoring the hydraulic fluid parameters" – ATOM-N 2008, 4<sup>th</sup> edition, Constanta, Romania
43. Signal conditioner for piezoelectric force sensors , Marian BLEJAN, Ioana ILIE , Bogdan LUPU · Mircea COMES – ISSE 2008, Budapesta
44. P. Drumea, M.Blejan, A.Mirea, I.Ilie – Mechatronics module for monitoring the hydraulic parameters of the industrial production equipments – SITME 2007

45. P. Drumea, M. Blejan, I. Ilie, G. Matache, Al. Marin - The experimental results from dynamic tests of electrohydraulic devices - Conference Excellence Research- A way to E.R.A., Brasov 2007
46. Teodor Costinel Popescu , Marian Blejan, Gheorghe Sovăială – “Experimental research upon accommodating the functional parameters of a laser controlled system designed for a grading machinery with the actual operating conditions of the grading machinery” , ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS AND NANOTECHNOLOGIES - ATOM-N 2008 - 28-31 August, Constanta, Romania
47. Marian Blejan, Ioana Ilie, Mircea Comes, Bogdan Lupu - "Signal conditioner for LVDT displacement sensors", ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS AND NANOTECHNOLOGIES - ATOM-N 2008 - 28-31 August, Constanta, Romania
48. Marian Blejan, Petrin Drumea, Ioana Ilie - " Mechatronic module for monitoring the hydraulic fluid parameters", ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS AND NANOTECHNOLOGIES - ATOM-N 2008 - 28-31 August, Constanta, Romania
49. Marian Blejan, Petrin Drumea, Ioana Ilie – “DIGITAL INTERFACE FOR PIEZOELECTRIC FORCE SENSORS”, International Conference 6th Workshop on European Scientific and Industrial Collaboration on promoting Advanced Technologies in Manufacturing WESIC'08 Bucharest, 25-26 September 2008
50. Marian Blejan, Petrin Drumea, Ioana Ilie – “Mechatronic module for monitoring the hydraulic parameters of industrial equipment”, International Conference 6th Workshop on European Scientific and Industrial Collaboration on promoting Advanced Technologies in Manufacturing WESIC'08 Bucharest, 25-26 September 2008
51. Marian Blejan, Bogdan Lupu – “Data Acquisition and Control Unit for Electro Hydraulic Applications”, ISSE 2009 Conference, Brno, Czech Republic on May 13-17, 2009
52. M. Blejan, B. Lupu, I. Dutu, D. Rotaru, T. C. Popescu - "Electronic oscillator for a hydraulic flow divider" , International Spring Seminar on Electronics Technology - ISSE , 2009 DOI: 10.1109/ISSE.2009.5207014
53. T.C. Popescu, M. Blejan and D.Rotaru, “Research Activities Regarding Secondary and Primary Adjustment in Fluid Power Systems.” 7th International Fluid Power Conference Aachen „Efficiency through Fluid Power”, Scientific Poster Session, Aachen, Germany, 22-24 March 2010
54. M. Blejan, M. Comes, and R. Radoi – „Ultrasonic sensors network for determining spatial position of a moving object”, 33rd International Spring Seminar on Electronics Technology, ISSE 2010, WARSAW, POLAND May 12-16,2010
55. Andrei Drumea, Paul Svasta, Marian Blejan - “Modelling and simulation of an inductive displacement sensor for mechatronic systems” , International Spring Seminar on Electronics Technology - ISSE , 2010 DOI: 10.1109/ISSE.2010.5547312
56. Marian BLEJAN, Ioana ILIE and Mircea COMES - " A mechatronics approach to hydraulic drive for applications in robotics", ISBN 978-1-84626-xxx-x Proceedings of 2010 International Conference on Optimisation of the Robots and Manipulators, Calimanesti, Romania, 28-30 May, 2010, pp. xxx-xxx
57. Marian BLEJAN, Mircea COMES – “MECHATRONIC MODULE FOR MONITORING DUAL AXIS TILT”, HERVEX, November 2010, 18th Edition, CALIMANESTI - CACIULATA, 10 - 12 NOVEMBER 2010, INTERNATIONAL SALON
58. Marian Blejan, Petrin Drumea, Mircea Comes - "Integration of the Hydraulic Linear Axes in a Computerized System" 3rd International Conference on Innovations, Recent Trends and Challenges in Mechatronics, Mechanical Engineering and New High-Tech Products Development, 22 - 23 September 2011, Bucharest, Romania – MECAHITTECH 2011
59. PhD. Eng. Marian BLEJAN, Prof. PhD. Eng. Petrin DRUMEA, Prof. PhD. Eng. Mircea COMES - "MULTI-TIER APPLICATIONS FOR MONITORING AND CONTROLLING OF HYDRAULIC AXES" - Proceedings of 2011 International Salon of Hydraulics and Pneumatics - HERVEX, 9-11 Nov. Calimanesti-Caciulata, Romania. ISSN 1454-8003 , pp 232-239
60. PhD. Eng. Radu Iulian RADOI, PhD. Eng. Iulian DUTU, PhD. Eng. Marian BLEJAN - “STAND AND EQUIPMENTS FOR DETERMINING THE DYNAMIC PERFORMANCES OF ELECTROHYDRAULIC PROPORTIONAL DIRECTIONAL CONTROL VALVES” Proceedings of 2011 International Salon of Hydraulics and Pneumatics - HERVEX, 9-11 Nov. Calimanesti-Caciulata, Romania. ISSN 1454-8003 , pp 365-372
61. Marian Blejan, Alexandru Feodorov And Petrin Drumea, Elmar Dorgeloh (Hydraulics And Pneumatics Research Institute, Development and Assessment Institute in Waste Water Technology) - Computerized testing methodology on occupational levels for competence based qualifications in the hydraulic and pneumatic drives - 2012 IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2012 - THETA 18 - May 24-26 2012, Cluj-Napoca, Romania, Print ISBN: 978-1-4673-0701-7, Digital Object Identifier : 10.1109/AQTR.2012.6237733, Conference Publications on Pages: 362 - 366
62. Andrei Drumea , Marian Blejan - "Differential inductive displacement sensor with integrated electronics and infrared communication capabilities" , The 6th edition of the International Conference "Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies" , 23 - 26 August 2012, Constanta, Romania
63. Drumea, Andrei ; Blejan, Marian – “Design, implementation and testing of an electrohydraulic system for automated winding machine for aluminum wire rods” , International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 2013, Digital Object Identifier: 10.1109/ECAI.2013.6636184 , Publication Year: 2013 , Page(s): 1 – 4 , IEEE CONFERENCE PUBLICATIONS
64. INNOVATIVE SOLUTION OF ENERGY EFFICIENCY AND MANAGEMENT FOR THE PRODUCTION OF ALUMINUM WIRES, T. C. Popescu, M. Blejan, D. Vasiliu - 14th International Multidisciplinary Scientific GeoConference SGEM 2014, www.sgem.org, SGEM2014 Conference Proceedings, ISBN 978-619-7105-15-5 / ISSN 1314-2704, June 19-25, 2014, Book 4, Vol. 1, 315-322 pp - DOI: 10.5593/SGEM2014/B41/S17.041
65. Use of Common PLCs for Closed Loop Hydraulic Drives, MARIAN BLEJAN, IOANA ILIE, ANDREI DRUMEA - IFK 21014, 24th - 26th MARCH 2014, 9TH INTERNATIONAL FLUID POWER CONFERENCE, Aachen, Germania.
66. SEMI-AUTOMATIC ELECTRO HYDRAULIC ACTUATION SYSTEM FOR THE MECHANISMS OF A MACHINE FOR WASHING PHOTOVOLTAIC SOLAR PANELS (Papers SGEM2015) T. C.Popescu, R. Radoi, M. Blejan - DOI: 10.5593/SGEM2015/B41/S17.065 References: 15th International Multidisciplinary Scientific GeoConference SGEM 2015, www.sgem.org, SGEM2015 Conference Proceedings, ISBN 978-619-7105-38-4 / ISSN 1314-2704, June 18-24, 2015, Book4, 503-510 pp
67. CONSIDERATIONS ON THE EXPERIMENTAL TESTING MEANS OF AXIAL HYDRAULIC TURBINE MODELS (Papers SGEM2015) T.C. Popescu, R. Radoi, M. Blejan, S. Nicolae - DOI: 10.5593/SGEM2015/B41/S17.018 References: 15th International Multidisciplinary Scientific GeoConference SGEM 2015, www.sgem.org, SGEM2015 Conference Proceedings, ISBN 978-619-7105-38-4 / ISSN 1314-2704, June 18-24, 2015, Book4, 137-144 pp
68. Marian Blejan, Ioana Ilie, Comeliu Cristescu - Electronics for Electro-Hydraulic Actuation System - SIITME 2015, 22-25 Oct. 2015, Brasov, Romania, Page(s): 267 – 272, DOI: 10.1109/SIITME.2015.7342338
69. ELECTROHYDRAULIC POSITIONING SYSTEM WITH ON-OFF DIRECTIONAL VALVE FOR APPLICATIONS THAT DO NOT REQUIRE HIGH PRECISION - CYLINDER 2015, WROCLAW, POLAND
70. PLC CONTROLLED ELECTRO-HYDRAULIC LINEAR AXIS - CYLINDER 2015, WROCLAW, POLAND

## ANEXA 2

1. AUTOMATIC WATERING FORECASTING AND WARNING INSTALLATION ; Bibliographic data: RO121999 (B1) — 2008-10-30 ; Inventor(s): NICOLESCU CONSTANTIN [RO]; BLEJAN MARIAN [RO]; POPESCU COSTINEL [RO] ; Classification international: A01G25/16; G01F23/14
2. ELECTRO-HYDRAULICALLY CONTROLLED PNEUMATIC VALVE ; Bibliographic data: RO122651 (B1) — 2009-10-30 ; Inventor(s): DRUMEA PETRIN [RO]; IONI E NICULAE [RO]; DUMITRESCU LILIANA [RO]; BLEJAN MARIAN [RO] ; Classification international: F16K31/06; G05B11/38
3. ELECTROPNEUMATIC PERFUSION DEVICE ; Bibliographic data: RO122709 (B1) — 2009-12-30 ; Inventor(s): DRUMEA PETRIN [RO]; IONI E NICULAE [RO]; COMES MIRCEA [RO]; BLEJAN MARIAN [RO]; DU U IULIAN [RO] ; Classification international: A61M5/00
4. TORQUE AND SPEED MEASURING DEVICE ; Bibliographic data: RO122931 (B1) — 2010-04-30 ; Inventor(s): DRUMEA PETRIN [RO]; IONITAE NICULAE [RO]; COMES MIRCEA [RO]; BLEJAN MARIAN [RO]; DUTU IULIAN CLAUDIU [RO] ; Classification international: G01L3/10; G01L3/20
5. INSTALLATION FOR AUTOMATION AND MONITORING OF DRIP IRRIGATION ; Bibliographic data: RO123240 (B1) — 2011-04-29 ; Inventor(s): NICOLESCU CONSTANTIN [RO]; POPESCU GHEORGHE [RO]; BLEJAN MARIAN [RO]; GASCA GHEORGHE [RO]; BIOLAN ILIE [RO] ; Classification international: A01G25/16
6. EQUIPMENT FOR MEASURING CERTAIN PARAMETERS OF A SPRINKLING DEVICE ; Bibliographic data: RO126711 (A2) — 2011-09-30 ; Inventor(s): NICOLESCU CONSTANTIN [RO]; BLEJAN MARIAN [RO]; SOVOIALA GHEORGHE [RO] ; Classification international: G01P21/02
7. HYDRAULIC SERVO VALVE ; Bibliographic data: RO129390 (A2) — 2014-04-30 ; Inventor(s): IONITA NICULAE [RO]; POPESCU TEODOR COSTINEL [RO]; ENACHE LIVIU [RO]; BLEJAN MARIAN [RO] ; Classification international: F15B13/043; F16K11/00
8. HYDRAULIC ACCELERATION SYSTEM FOR MOTOR VEHICLES ; Bibliographic data: RO129544 (A2) — 2014-06-30 ; Inventor(s): IONITA NICULAE [RO]; BLEJAN MARIAN [RO]; CRISTESCU CORNELIU [RO]; POPESCU COSTINEL [RO] ; Classification international: B60K26/04; B60K31/06; B60K31/10
9. PARALLEL DISPLACEMENT ELECTROHYDRAULIC UNIT WITH FUNCTIONAL SYMMETRY ; Bibliographic data: RO123620 (B1) — 2014-10-30 ; Inventor(s): IONITA NICULAE [RO]; COMES MIRCEA [RO]; BLEJAN MARIAN [RO]; RADOI RADU-IULIAN [RO] ; Classification international: F15B1/033
10. Measuring method for interface linear variable differential transformer and rotating variable differential transformer type sensors, involves supplying sensor with digital signals in reverse phase and calculating output signal ; Patent Number: RO125871-A2 -- 30 Nov 2010 ; Inventor(s): BLEJAN M; ILIE I; COMES M ; Accession Number: DIIDW:2010Q11838 ; IPC: G01D-005/12; G06F-003/00
11. AUTOMATIC ELECTROHYDRAULIC SYSTEM FOR DRIVING THE UNWINDING HEAD OF A WINDER IN A WIRE ROLLING MILL ; Bibliographic data: RO130675 (A2) — 2015-11-27 ; BLEJAN MARIAN [RO]; DRUMEA PETRIN [RO]; ILIE IOANA [RO] + ; international: B21B37/46