



Europass Curriculum Vitae

Personal Information

First name / Surname	VEDINAȘ Ioan
Address	11A Ornamentului St., Apt. 8, District 4, Bucharest, ROMANIA
Phone	Mobile: +40.721.205.900
Faxe	
E-mail	ivedinas@gmail.com
Date and place of birth	September 8, 1959, Tâșnad, Satu Mare, Romania
Nationality	Romanian
Marital status	Married
Gender	Male

Desired Employment / Occupational Field Work Experience

Dates:	30.11.2015 - Present
Employer	Military Technical Academy "Ferdinand I", Bucharest, Romania, Bd. George Coșbuc, nr. 39-49, 050141, Bucharest, Romania
Position	Full Professor – PhD Supervisorconducător de doctorat/Member of the Doctoral School Council (CSUD)))until 2023)/ Member of CSD (until 2019)
Main activities and responsibilities	eaching activities (lectures, seminars, laboratories) according to academic workload; scientific research; supervision of undergraduate, master's, graduation and doctoral theses; participation in national and international scientific activities; continuous professional development.: - Member of the Doctoral School Council (CSUD); - PhD supervisor in the field of Mechanical Engineering;
Activity sector	Higher military education (undergraduate and postgraduate), scientific research
Dates:	01.11.2010 – 30.11.2015
Employer	Military Technical Academy, Bucharest, Romania
Main activities and responsibilities	Dean / Full Professor – Faculty of Mechatronics and Integrated Weapon Systems eaching and research activities; supervision of bachelor's and master's theses; participation in national and international scientific events; professional development. • Dean of the Faculty of Mechatronics and Integrated Weapon Systems; • Member of the Doctoral School Council; • PhD supervisor in Mechanical Engineering; • Member of the Senate of the Military Technical Academy.
Activity sector	Higher military education and scientific research
Dates:	01.03.2007 – 30.10.2010
Employer	Military Technical Academy, Bucharest, Romania
Position	Head of Department / Full Professor – Department of Weapon Systems Engineering and Mechatronics
Main activities and responsibilities	Teaching and research activities; supervision of bachelor's and master's theses; participation in scientific events; professional development - Teaching and research activities; supervision of bachelor's and master's theses; participation in scientific events; professional development - Member of the Doctoral School Council; - PhD supervisor in Mechanical Engineering; - Member of the Senate of the Military Technical Academy;
Main activities and responsibilities	Higher military education (undergraduate and postgraduate), scientific research
Period	01.03.2003 - 01.03.2007
Employer	Military Technical Academy, Bucharest, Romania
Position	Associate Professor – Faculty of Integrated Weapon Systems
Main activities and responsibilities	Teaching and research activities; supervision of diploma and graduation papers; academic mentoring; participation in scientific events

Activity sector	Higher military education and scientific research
Period	01.10.1991 - 01.03.2003
Name and address of employer	Military Technical Academy, Bucharest, Romania
Occupation or position held:	Lecturer / Faculty of Armament, Missiles and Ammunition
Main activities	Design, testing, and evaluation of optical and optoelectronic equipment, fire control systems, and military hardware
Tipul activității sau sectorul de activitate	Învățământ militar superior (universitar și postuniversitar), cercetare științifică
Period	01.11.1986 - 01.12.1990
Employer	Research and Design Institute for Production Systems, Bucharest
Occupation or position held	Research Scientist c
Main activities	Design, testing, and evaluation of optical and optoelectronic equipment, fire control systems, and military hardware
Occupation or position held	Research Scientist
Period	01.09.1983 – 01.11.1985
Employer	Electromechanical Plant (Uzina Electromecanică), Ploiești
Occupation or position held	Technological Engineer
Tipul activității sau sectorul de activitate	Activități specifice producției de rachete și diverse alte produse Producție și cercetare științifică

Educație și formare

Dates	1995 –2002
Name and type of organisation:	Military Technical Academy, Bucharest (ISCED 6)
Title of qualification awarded:	PhD in "Mechanical Engineering"
Principal subjects/occupational skills covered:	Optical-mechanical and optoelectronic systems / Ballistic systems
Thesis Title::	<i>Contributions to the study of image stability through optical systems (ISCED 6)</i>
Dates	1998 - 2004
Name and type of organisation:	Ecological University, Faculty of Law, Bucharest (ISCED 5)
Title of qualification awarded:	Bachelor of Laws (LLB)
Principal subjects:	Intellectual Property Law, Environmental Law, Administrative Law, Labour Law, Criminal Law, Constitutional Law. ISCED 5
Dates	October 1991 – March 1992
Name and type of organisation	Military Technical Academy, Bucharest
Title of qualification awarded:	Postgraduate Diploma
Principal subjects/occupational skills covered:	Optical Equipment and Fire Control Systems
Level in national or international classification	ISCED 5, Short-term postgraduate studies
Dates	February 1991 – March 1991
Name and type of organisation	Military Technical Academy, Bucharest
Title of qualification awarded:	Postgraduate Certificate
Principal subjects/occupational skills covered:	Mini and Microcomputer Systems.
Name and type of organisation providing education	ISCED 5, Postgraduate Certificate
Dates	March 1986 – October 1986
Name and type of organisation	Ștefan Gheorghiu Academy Bucharest
Title of qualification awarded:	Postgraduate course graduation certificater
Principal subjects/occupational skills covered:e	Computer aided design
Name and type of organisation providing education:	ISCED 5, Short-term postgraduate studies
Dates:	1978 -1983
Name and type of organisation	Military Technical Academy

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Title of qualification awarded :	Engineer / Engineering Diploma – Artillery and Missiles Specialization																																								
Principal subjects/occupational skills covered:	Sisteme de armament, Aparatură optică și optoelectronică, Automatică, Balistică exterioară și dinamica zborului, Tehnologii speciale, Termodinamică, Teoria tragerilor și Sisteme de conducere a focului																																								
Name and type of organisation providing education	ISCED 5, Long-term university studies																																								
Personal skills and competencies																																									
Mother language	Romanian																																								
Foreign language(s) known																																									
Self-evaluation																																									
Nivel european (*)																																									
French language																																									
English language																																									
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	(*)Common European Framework of Reference for Languages Level																																								
Social skills and abilities	Organizer of various social activities. Team spirit and good communication skills acquired during training and education for the educational process. Capacity for institutional and personal representation in relations with domestic and foreign delegates.																																								
Organizational skills and abilities	Very good organizer and evaluator of teaching and scientific activities, very good teacher, activity with remarkable results in the Department of Armament Systems Engineering and Mechatronics, in the Faculty of Mechatronics and Integrated Armament Systems and within the Military Technical Academy. Skills in guiding, advising and controlling groups in carrying out professional activities. Skills in guiding and advising student groups in professional, cultural, tourism activities. Good experience in project management acquired through teaching and scientific research activities.																																								
Technical skills and abilities	Ability to use complex laboratory equipment, in the field of specialization, acquired during the preparation of the doctoral thesis and in solving scientific research issues from the contracts in which I was involved. Testing, evaluation and maintenance of weapons technology.																																								
Computer skills and abilities	Use of computer-aided design programs (ZEMAX, AutoCAD, Autodesk Mechanical Desktop); use of mathematical calculation programs (MATLAB); office automation (MS Office, etc.), skills acquired following completed advanced training courses and through self-training.																																								
Artistic skills and abilities																																									
Other skills and abilities	Other skills and abilities. Teaching activity - I was part of over 50 admission, graduation, and undergraduate committees within the Military Technical Academy; - I was and am the scientific supervisor of the diploma and dissertation works of over 60 students from the armament, missiles, and ammunition groups and postgraduate students; - I was part of the doctoral admission committees in 12 sessions and I was a member of over 150 examination and doctoral dissertation committees in A.T.M.; - I was president and official referee in the public defense committees of over 60 doctoral theses from the Military Technical Academy and the Politehnica University of Bucharest; - I prepared written assessments of the doctoral theses summaries for over 100 doctoral students from the Military Technical Academy and outside it;																																								

[Signature]

- Am participat la elaborarea planurilor de învățământ și a programelor analitice pentru promoțiile din academie, concomitent cu desfășurarea activităților didactice și rezolvarea sarcinilor specifice care au revenit departamentului și facultății;
- I participated in the development of educational planning documents (curriculums and analytical programs) within the department in which I worked and still work;
- I was an organizer and moderator for the specialty section of the student scientific communication sessions at A.T.M., as well as a member of the sections of the scientific communication sessions with international participation at A.T.M., after 1990;
- I was an organizer and moderator for the specialty section of the student scientific communication sessions at A.T.M., as well as a member of the sections of the scientific communication sessions with international participation at A.T.M., after 1990;
- I was the organizer on behalf of ATM of the International Exhibitions, EXPOMIL 2009, 2011, 2013 and Black Sea Defense & Aerospace 2012, 2014 on behalf of ATM;
- I participated in teaching and training mobilities within the Lifelong Learning LLP – ERASMUS teacher mobility program, at ENSTA Paris (June 2013, September 2014);
- I participated in teaching and training mobilities within the Lifelong Learning LLP – ERASMUS teacher mobility program, at ENSTA Paris (June 2013, September 2014);
- I made an important contribution to the development of periodic self-evaluation documentation for bachelor's and master's specializations within the departments, as well as ARACIS and European institutional accreditations.;
- I was part of the Committees for the preparation of self-evaluation reports for the bachelor's degree in the "Armament, Artillery Equipment and Fire Control Systems" study program and for the master's degree in the "Engineering for Special Mechanical Defense and Security Systems" study program.
- I was part of the Committees for the development of self-evaluation reports for the bachelor's degree in the faculty's study programs between 2010-2015 and of the Committees at the institutional level for the accreditation of ATM;
- There were 2 periods of 6 months between 2012 and 2013 in which I fulfilled the functions of Vice-Rector for Education and for Scientific Research and Doctoral Studies..

Cercetare științifică

- I participated in scientific events organized by educational and/or research institutions, from home and abroad, on which occasion I published over 90 articles and scientific communications in specialized journals and in the volumes of these scientific events.
- I was project director for 2 international projects, project manager for 5 scientific research contracts from the national research-development and innovation plan; I was a member of the research team for 2 international projects, I was project director for 5 research contracts from the sectoral plan of the Ministry of Education; I was or am part of the project team for over 20 scientific research projects from the national research-development and innovation plan and over 20 from the sectoral plan of the Ministry of Education and 15 Contracts with economic agents:- În scopul asigurării materialului bibliografic la disciplinele care au constituit nucleul noimei didactice în cadrul catedrei în care activam, am publicat 15 lucrări de specialitate și documentații de specialitate;
- I participated in the design, approval and homologation of over 50 special equipment products, of which over 10 entered the army.

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Additional Information



Anexe | Lista lucrărilor publicate și a contractelor de cercetare științifică

Professional relationships

- I was an organizer at Black Sea Defence & Aerospace 2012, 2014, Exhibition and Conference;
- I was a participant at EXPOMIL 2009, 2011, 2013, Bucharest;
- I was a co-chair at the International Congress "Laser Bucharest 2010";
- I was one of the organizers of the Scientific Communications Sessions with international participation at the Military Technical Academy after 1993;
- I participated as an expert in the expertization activity within the Ministry of National Defense;
- I am a member of the University-Enterprise Consortium for the field of "Armament, Missile and Ammunition Engineering";
- I am a member of A.G.I.R. and S.R.O. (Romanian Optoelectronics Society);
- I am vice-president of the appeals resolution committee in the field of Mechanical, Mechatronics and Robotics Engineering within the M.E.C.
- I am a judicial technical expert in the field of "Fine Mechanics and Nanotechnologies" since 2010 (6 specialized expertises), certified by the Ministry of Justice;
- I participated in various sessions in the evaluation of over 60 project proposals within the Research Program

Hobby

Sports: table tennis, tennis
Travel
Category B

References can be obtained from the following people::

Col.prof.univ.dr. eng. Vizitiu Iulian, rector of the Military Technical Academy, tel.0213354660/ 111;
Col.prof.univ.dr.eng. Șomoiaș Pamfil, Dean of the Military Technical Academy.

LIST OF WORKS

Dr. ing. VEDINAȘ I. Ioan

LIST OF REPRESENTATIVE WORKS

1. **I. Vedinaș**, C. Spulber, E. Crețu, O. Borcan – Optoelectronic equipment for amplification and conversion of infrared radiation, Military Technical Academy Publishing House, Bucharest, 2002, 223 pages, ISBN: 973-8290-63-5, paper proposed for the Scientific Award of the Romanian Academy for 2003;
2. L. Haller, B. Nedjar, Z. Moumni, **I. Vedinaș**, E. Trană - *A thermomechanical model accounting for the behavior of shape memory alloys in finite deformations*, Journal of Continuum Mechanics and Thermodynamics, DOI 10.1007/s00161-015-0431-8, WOS:000378783100003, ISI 2,529/**3,2748**;
3. A. Puncioiu, M. Truță, **I. Vedinaș**, Marinescu, M., Vinturiș, V. – *Analysis of heat conduction in a drum brake system of the wheeled armored personnel carriers*, Materials Science and Engineering, Volume 95, nov.2015, IOP Publishing Ltd, DOI.org/10.1088/1757-899X/95/1/012039, ISSN 2286-4369, ISI 0,49/**1,035**;
4. **I. Vedinaș**, G. Andrei – *Adaptive Interference Cancellation*, Proceedings of Papers the 5th International Conference on Telecommunications in Modern Satellite, Cable and Broadcasing Services, TELSINKS

- 2001, Published by IEEE, 2001, 73-76 pp., ISBN 0-7803-7228-X 86-80135-43-7, DOI 10.1109/TELSKS.2001.954852, IEEE Publisher, **2 citation**, ISI 0,31/**1,02**;
5. **I. Vedinaş**, E. Creţu, D. Postolea, G. Dobrescu – *The effects of the visible and infrared radiation spreading into aerosols on the atmospheric coherence diameter*, Romanian Journal of Optoelectronics, Volume 12, Issue 2, A Joint Publication of Optoelectronics-2001 and The Romanian Chapter of SPIE-The International Society for Optical Engineering, Bucharest, Romania, 2004, 35-55 pp., ISSN 1453-0600, ISI Proceedings 0,42/**0,93**;
 6. G. Surdu, G. Slămnioiu, A. Sava, **I. Vedinaş** - *Comparative evaluation of projectile's drag coefficient using analytical and numerical methods*, Review of the Air Force Academy No 1 (28) 2015, pp. 101-104, (BDI: *Index Copernicus*, *EBSCO*, *SCIPPIO*), **2 citation**;
 7. A. Puncioiu, A. Ştefan, M. Truţă, C. Pîrvulescu, **I. Vedinaş** - *Thermal calculation of a special vehicle drum brake system*, Review of the Land Force Academy, No 3 (79)/2015, ISSN 2247-840X (online), ISSN-L 1582-6384 (BDI: *EBSCO*, *ProQuest*), 388-394 pp., **1 citation**;
 8. **I. Vedinaş**, A. Sava, T. Cherecheş – *New Technologies in Optoelectronics with Military Applications*, KBO 2009, The 15TH International Conference, 26-28 noiembrie 2009, Sibiu, România, „Nicolae Bălcescu”, Land Forces Academy, Conference Proceedings 6, Section „*Applied Technical Sciences and Advanced Military Technologies*”, 305-309 pp. WOS:000277288700060, ISI Proceedings, ISI Proceedings, **0,4**;
 9. C. Moldoveanu, P. Şomoiaş, D. Postolea, **I. Vedinaş** - *Research Concerning the Radial Oscillations of the Weapons Systems Barrels*, Bulletin of the Polytechnic Institute of Iaşi published by the "Gh. Asachi" Technical University, Iaşi, Tomul LIV (LVIII), Fasc. 1, 2008, pag. 97-102, ISSN 1011-2855 (BDI: *CNCIS*, *Index Copernicus*, *DOAJ*, *PROQUEST*, *EBSCO*);
 10. **I. Vedinaş**, E. Sofron – *Quality Concepts and Standards in Optoelectronics*, *Research in Optoelectronics*, *Romanian Society of Optoelectronics*, Bucharest, 2000, 412-423 p., Published by IEEE, ISBN 973-9540-47-4, ISI Proceedings, 0,42/**1,24**, **2 citări**.
 11. Vlădescu B., Ştefan A., **Vedinaş, I.**, Bucur F., *Experimental and numerical determination of the hydrodynamic characteristics for a small-scale model of a submersed vehicle*, UPB Sci. Buletin, Series D, Vol 86. Iss 3, 2024, ISSN 1454-2358, Indexat SCOPUS.

DOCTORAL THESIS

"CONTRIBUTIONS ON IMAGE STABILITY THROUGH OPTICAL SYSTEMS", Military Technical Academy, June 2002, scientific supervisor gl.bg.(r) prof. univ. dr. eng. Emil CREŢU, with the distinction "Cum Laude"

PUBLISHED COURSES AND MANUALS

1. 1. A. Sava, E. Creţu, **I. Vedinaş**, C. Moldoveanu – Military optical equipment. Laboratory works, Bucharest, 2019, 100 pages.;
2. 2. E. Creţu, A. Sava, **I. Vedinaş**, C. Moldoveanu – Technical Optics. Laboratory Works, Bucharest, 2017, 50 pages, ISBN: 978-973-1944-34-0;
3. 3. C. Pleşa, **I. Vedinaş**, etc. – Evaluation of thermal imaging systems, Univers Ştiinţific Publishing House, Bucharest, 2010, 140 pages, ISBN: 978-973-1944-34-0;
4. 4. C. Pleşa, I. Vedinaş, etc. – Optoelectronic night vision systems with image intensifiers, Univers Ştiinţific Publishing House, 2008, 191 pages, ISBN: 978-973-8936-84-3;
5. 5. **I. Vedinaş**, E. Creţu – Elements of nanotechnology, Titu Maiorescu University Publishing House, 2007, 250 pages, ISBN: 978-973-569-953-6, 1 citation;
6. A. Roşca, **I. Vedinaş**, P. Şomoiaş – Automatic Armament. Principles of Calculation and Construction, Military Technical Academy Publishing House, Bucharest, 2007, 210 pages, ISBN (10) 973-640-110-3, ISBN (13) 978-973-640-110-7;

7. D. Homei, **I. Vedinaș**, ș.a. – Calculation and construction elements of artillery devices, Publishing House of the Military Technical Academy, Bucharest, 2006, 238 pages, ISBN (10) 973-640-106-5, ISBN (13) 978-973-640-106-0;
8. **I. Vedinaș**, ș.a. – Calculation and construction of laser rangefinders, Military Technical Academy Publishing House, Bucharest, 2005, 238 pages ISBN: 973-8290-86-4;
9. **I. Vedinaș**, E. Crețu – General Technology and Technological Innovation, BREN Publishing House, Bucharest, 2003, 248 pages, ISBN: 973-648-179-4;
10. **I. Vedinaș**, ș.a. – Optoelectronic equipment for amplification and conversion of infrared radiation, Military Technical Academy Publishing House, Bucharest, 2002, 223 pages ISBN: 973-8290-63-5;
11. **I. Vedinaș**, C. Spulber, E. Crețu, O. Borcan – Optoelectronic equipment for amplifying and converting infrared radiation, Military Technical Academy Publishing House, Bucharest, 2002, 223 pages, ISBN: 973-8290-63-5;
12. E. Crețu, **I. Vedinaș** ș.a., - Non-lethal and non-destructive weapons, Military Technical Academy Publishing House, Bucharest, 2001, 262 pages, ISBN: 973-8290-31-7;
13. E. Crețu, **I. Vedinaș**, ș.a. – Calculation and construction of optoelectronic devices, Military Technical Academy Publishing House, Bucharest, 2000, 408 pages, ISBN: 973-8290-05-8;
14. **I. Vedinaș**, L. Tomiuc, M. Tănase – Manual de reparații al corectorului mecanic al tunului a.a. cal. 30 mm navalizat, CM-436N, C.M.M., M.Ap.N, București, 1989, (330 pag. + 100 desene și scheme) ;
15. **I. Vedinaș**, etc. – Technical book of the LOG-2G device, (zero series), M.Ap.N., Bucharest, 1989 (50 pages);
16. **I. Vedinaș**, L. Tomiuc, M. Tănase – Repair instructions for the mechanical corrector of the 30 mm caliber anti-aircraft gun, CM-436, C.A.F.A., M.Ap.N., Bucharest, 1988, (250 pages).

PATENTS OF INVENTIONS

1. Patent no. 117942/2002 – Dioptic sight apparatus (*Aparat de ochire bioptic*) - Derwent Primary Accession Number: 2003-013252, International Patent Classification: F41G-001/35; G02B-023/10; G02B-023/14, Derwent Class Code(s): P81 (Optics (G02).); Q79 (Weapons, ammunition, blasting (F41, 2)); W07 (Electrical Military Equipment and Weapons); X26 (Lighting), Derwent Manual Code(s): W07-B01; X26-D;
2. Firing tables for firing 122 mm RAM II projectiles with increased recoil. Determination methodology - Patent no. 153/1503 of 1998;
3. Shooting targets for AGA cal. 40 mm. Determination methodology, Patent from 1994.

LUCRĂRI PUBLICATE ÎN REVISTE INDEXATE ISI/BDI SAU ÎN REVISTE DE SPECIALITATE

1. L. Haller, B. Nedjar, Z. Moummi, **I. Vedinaș**, E. Trană - *A thermomechanical model accounting for the behavior of shape memory alloys in finite deformations*, Journal of Continuum Mechanics and Thermodynamics, 2016, DOI 10.1007/s00161-015-0431-8, WOS:000378783100003, ISI 2,529/3,2748;
2. G.B. Pulpea, **I. Vedinaș**, T. Zecheru, E. Trană, R. Ștefănoiu, T. Rotariu - *Thermal systems capabilities using infrared obscurants*, Journal of Optoelectronics and Advanced Materials, Vol. 19, ISSN 1454- 4164, ISI 0.42/0,62;
3. A. Sava, Gh. Bârsan, **I. Vedinaș**, I. Piticari - *The impact of kinetic projectiles of 76 mm cal. ahead type artillery ammunition on the lifting surface of the aerospace vehicles*, **Land Forces Academy Review; Sibiu** Vol. 21, ISS. 1., (2016): pp. 92-98, WOS:000297596200087;
4. D. Zvîncu, L. Haller, D. Nistoran, **I. Vedinaș** - *Determinations of some firing effects of small caliber weapons*, MTA Review, Volum XXVII, No 4/2015, ISSN 1843-3391 (BDI:Ulrich, Index Copernicus, CNCSIS);
5. Gh. Pulpea, **I. Vedinaș**, L. Haller, *The first steps in developing a pyrotehmic obscurant system*, MTA Review, Vol. XXVI, No.3, Sep. 2016, pp. 249-262, ISSN 1843-3391;

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6. L. Haller, B. Nedjar, Z. Moumni, **I. Vedinaş**, E. Trană - *A thermomechanical model accounting for the behavior of shape memory alloys in finite deformations*, Continuum Mechanics and Thermodynamics, vol. 95, 2015, ISSN 0935-1175 (Print) 1432-0959 (Online), 1-19 pp;
7. A. Puncioiu, M. Truță, **I. Vedinaş**, Marinescu, M., Vinturiş, V. - *Analysis of heat conduction in a drum brake system of the wheeled armored personnel carriers*, Materials Science and Engineering, Volume 95, nov.2015, IOP Publishing Ltd, ISSN 2286-4369, DOI.org/10.1088/1757-899X/95/1/012039, ISI 0,49/**1,035**;
8. G. Andrei, **I. Vedinaş** - *Adaptive Interference Cancellation*, Proceedings of Papers the 5th International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services, TELSINKS 2001, Published by IEEE, 2001, 73-76 pp., ISBN 0-7803-7228-X 86-80135-43-7, DOI 10.1109/TELSKS.2001.954852, IEEE Publisher, DOI 10.1109/TELSKS.2001.954852, IEEE Publisher, ISI 0,31/**1,02**;
9. **I. Vedinaş**, E. Crețu, D. Postolea, G. Dobrescu - *The effects of the visible and infrared radiation spreading into aerosols on the atmospheric coherence diameter*, Romanian Journal of Optoelectronics, Volume 12, Issue 2, A Joint Publication of Optoelectronics-2001 and The Romanian Chapter of SPIE-The International Society for Optical Engineering, Bucharest, Romania, 2004, 35-55 pp., ISSN 1453-0600, ISI Proceedings 0,42/**0,93**;
10. **I. Vedinaş**, P. Șomoiaș - *About the jumping angle of infantry rifle*, Revista „Bolyai Szemle, Defence University, Budapest, Hungary, 2004, BDI, ISSN 1416-1443;
11. L. Haller, A. Mandache-Dodoiu, D. Zvincu, M. Cîrmaci, B. Pulpea, **I. Vedinaş** - *Specific Regulations for Urban Military Operations*, MTA REVIEW, No. 2, pp. 123-140, Jun. 2016 Military Technical Academy, Publishing House, Bucharest, ISSN 1843-3391 (BDI: Ulrich, Index Copernicus, CNCSIS);
12. A. Puncioiu, A. Ștefan, M. Truță, **I. Vedinaş** - *The study of special vehicle braking system mechanical stress*, MTA REVIEW, Military Technical Academy, Publishing House, Bucharest, 2015, ISSN 1843-3391 (BDI: Ulrich, Index Copernicus, CNCSIS);
13. G.D. Nistoran, **I. Vedinaş**, A. Sava, L. Haller - *An evaluation method for the effectiveness of a muzzle brake during a small arms firings*, MTA Review, Volum XXI, No 4/2015, ISSN 1843-3391 (BDI: Ulrich, Index Copernicus, CNCSIS);
14. A. Puncioiu, **I. Vedinaş**, M. Truță - *Overheating analysis of the special vehicles braking systems*, Review of the Air Force Academy Vol XIII, No 1(28)/2015, ISSN-L: 1842-9238, ISSN 2069-4733 (online), (BDI: Index Copernicus, EBSCO, SCIPPIO);
15. G. Surdu, G. Slămnioiu, A. Sava, **I. Vedinaş** - *Comparative evaluation of projectile's drag coefficient using analytical and numerical methods*, Review of the Air Force Academy No 1 (28) 2015, pp. 101-104, (BDI: Index Copernicus, EBSCO, SCIPPIO), **2 citări**;
16. A. Puncioiu, A. Ștefan, M. Truță, C. Pîrvulescu, **I. Vedinaş** - *Thermal calculation of a special vehicle drum brake system*, Review of the Land Force Academy, No 3 (79)/2015, ISSN 2247-840X (online), ISSN-L 1582-6384 (BDI: EBSCO, ProQuest), 388-394 pp., **1 citare**;
17. A. Sava, Gh. Bârsan, **I. Vedinaş**, I.L. Piticari - *The impact of kinetic projectiles of 76 mm cal. ahead type artillery ammunition on the lifting surface of the aerospace vehicles*, Review of the Land Force Academy 2016, Vol. 21 Issue 1, (BDI: EBSCO, ProQuest), pp.92-98;
18. G.D. Nistoran, **I. Vedinaş**, P. Șomoiaș, M.V. Cîrmaci - *Study regarding propagation and attenuation of a shockwave at the impact with a duraluminium target*, Review of the Land Force Academy nr. 4(76)/2014, pag. 412-423, ISSN-L 1582-6384 (BDI: EBSCO, ProQuest);
19. C. Moldoveanu, P. Șomoiaș, V. Tudor, **I. Vedinaş** - *Research concerning the oscillations of the weapons systems barrels*, pag. 83-87, ISSN 1843-6722, KBO 2010, Sibiu, ISI Proceedings, **0,3**;
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2. E. Creţu, **I. Vedinaş**, "The stability of the visual field of the optoelectronic night apparatus used in the fire control system", 2nd Conference Barrel Weapon Systems, Bmo, 1997, pp. 265-270;
3. G.I. Andrei, **I. Vedinaş** - Adaptive interference cancellation, Telecommunications in Modern Satellite, Cable and Broadcasting Service, 2001. TELSIKS 2001, 5th International Conference on (Volume:1), NIS, 2001; ISI Proceedings, **2 citări**;
4. A. Puncioiu, A., **I. Vedinaş**, V. Vinturiş, The study of special vehicle braking system working temperatures The 21th International Scientific Conference Knowledge-Based Organization, Volume 21, Issue 3, Pages 878–882, ISSN (Online) 1843-6722, DOI 10.1515/kbo-2015-0149, WOS:000379493200149, November 2015, ISI Proceedings, **0,4**;
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6. G. Surdu, **I. Vedinaş**, Georgică Slămnioiu, Şomoiaş Pamfil - Projectile's drag coefficient evaluation for small finite differences of his geometrical dimensions using analytical methods, International conference of scientific paper AFASES 2015, Braşov, 28-30 May 2015, **2 citări**;
6. . P. Şomoiaş, **I. Vedinaş**, C.E. Moldoveanu, H. Daude - Evaluation of Unguided Missile Trajectories Deviations, 1st International Conference New Challenges in Aerospace Sciences "NCAS 2013", Bucureşti, 7-8 noiembrie 2013;
7. C.E. Moldoveanu, P. Şomoiaş, **I. Vedinaş**, P. Ferrier - Researches Concerning Aircraft Wake Vortex, 1st International Conference New Challenges in Aerospace Sciences "NCAS 2013", Bucharest, 7-8 november 2013;
8. C. Moldoveanu, P. Şomoiaş, V.C. Tudor, **I. Vedinaş** - Research concerning the oscillations of the weapons systems barrels, Proceedings of the 16th International Conference – The Knowledge-Based Organization, Applied Technical Sciences and Advanced Military Technologies, Land Forces Academy, 25-27 November 2010, pag. 83-87, ISSN 1843-6722 (ISI Proceedings);
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2. A. Puncioiu, **I. Vedinaș** - *The influence of socio-economic and technological transformations on braking systems for equipping the special vehicles*, Conference (VIII) The impact of socio-economic

and technological transformations at national, European and global levels, South Region - Muntenia, Duplex Bucharest - Pitești June 25, 2015, BDI;

3. **I. Vedinaș**, D.A. Goga, Ș. Ilie, M. Ilie - *Portable electronic detector for explosives*, *National Multidisciplinary Conference Ed.2 Cugir (AGIR, UT Cluj)*, 10 Sept. 2014, ISBN 978-973-126-614;
4. D. Nistoran, **I. Vedinaș**, C. Cureau - *Aspects of the influence of barrel vibrations on the accuracy of shooting with small-caliber weapon systems*, *Ed.4 Cugir (AGIR, UT Cluj)*, September 9, 2016, ISBN 978-973-126-614;
5. D. Nistoran, **I. Vedinaș**, P. Șomoiaș - *Schlieren flow visualization during small firearms shootings*, Conferința Internațională "Effective Methods of Management and Research in Higher Education", Noiembrie 2016, București, România, BDI;
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RESEARCH-DEVELOPMENT PROJECTS

1. INTERNATIONAL PROJECTS

1. *Doctoral and postdoctoral studies Horizon 2020: promoting the national interest through excellence, competitiveness and responsibility in Romanian fundamental and applied scientific research*, contract no. POSDRU/159/1.5/S/140106, (2014-2015), scientific responsible Col.prof.univ.dr.ing. Ioan Vedinaș (May-October 2014), project value 568,789 lei = 150,000 euros, scientific research expert (October 2014-September 2015);
2. *Development of an operational system of higher education qualifications in Romania - DOCIS*, Contract no. POSDRU/2/1.2/S/2 (2009-2010), project financed by the European Social Fund and the Government of Romania through the Sectoral Operational Programme Human Resources Development (POSDRU), , competition, partners: National Agency for Higher Education Qualifications and Partnership with the Economic and Social Environment (ACPART) Romania, National Commission for Professional Qualifications (CNCP) France, University of Bucharest, Polytechnic University of Bucharest, value 17,000,000 lei (4,000,000 Euro), member and short-term expert for the description of the qualification corresponding to the study programme "Armament, artillery equipment and SCF";

2. NATIONAL LEVEL PROJECTS

1. *A thermomechanical model accounting for the behavior of shape memory alloys in finite deformations*, PN-III-P1-1.1-PRECISI2016-11809, L. Haller, **I. Vedinaș**, valoare 6000 lei, 2016;
2. *Small-caliber ballistic system, rapidly convertible for lethal and non-lethal actions-CONPOSE*, Contract no. 297/2014/UEFISCDI, (2014-2016), PNCDI II, competition, value 792,500 lei (180,000 Euro), project director Lt. Col. Assoc. Univ. Dr. Eng. Cîrmaci-Matei Marius Valeriu, member of the research team;
3. *Explosion protection system for equipping vehicles, CREWPROTECT*, Contract no. 278/2014/UEFISCDI (2014-2016), PNCDI II, competition, value 350,000 lei (80,000 Euro), project director mr.conf.univ.dr.ing. Adrian ROTARIU, member of the research team;
4. *Complex systems with deformable structure intended for ballistic protection of armored vehicles involved in asymmetric conflicts – ARMPROT*, Financing Contract no. 305/2014/UEFISCDI, competition, value 165,000 lei, member of the research team;
5. *Development of a sensor for multiple and selective detection of representative explosives – SENSOREX ATM – PARTNER*, Financing Contract No. PN-II-PT-PCCA-2013-4-0474/UEFISCDI, value 65,000 lei, member of the project team, 2014;
6. *Center for information derived from geospatial data*, Contract 312/2006, CEEX Program, PNCDI, competition, value 75,000 lei, member of the research team, 2006-2008;

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7. *Innovative method of non-invasive investigation of morphofunctional alterations in joint pathology based on vibroacoustic and thermal spectra, Contract no. 118/2006, CEEX Program 2006, competition, value 265,000 lei, member of the research team, 2006-2008;*
8. *Technological platform EUROP_RO - national synergetic framework for promoting the participation of Romanian industry research in FP7 and the development of the European partnership in the field of ROBOTICS, contract no. 126 / 2006, project manager, value 10,000 lei 2006-2008.*
9. CEEX Program - Multipurpose Air Microvehicle Cumulus 2, contract no. 8/2005, member of the research team, value 165,000 lei, 2005-2007;
10. CEEX Program - Mini-platform system for combating CBRN aggressions – Nimbus, Contract no. 30R/2005, value 150,000 lei, member of the research team, 2005-2007;
11. CEEX Program - Integrated technological system for optimizing bearing performance in transient regime, contract no. 2/2005, member of the research team, value 47,000 lei 2005-2007;
12. Security Program 2005, Self-propelled, multi-role launch system for research, control, development, and transformation of meteorological phenomena, Contract no. 21R/2005, member of the research team, value 200,000 lei, 2005-2006;
13. *Container for storing, transporting and launching reactive strikes, cal. 273 mm, with a minimum range of 80 km, Contract no. 1973/2004, (2006), PNCDI, RELANSIN Program, competition, value 384,500 lei (100,000 Euro), project director Lt. Col. Assoc. Univ. Dr. Eng. Adrian COMAN, member of the research team;*
14. RELANSIN Program Reactive strike caliber 273 mm, Contract no. 1779/2004, member of the research team, value 100,000 lei, 2004-2006;
15. RELANSIN Program Modernized reactive engine for AG-7, Contract no. 1975/2004, member of the research team, value 50,000 lei 2004-2005;
16. RELANSIN Program Ammunition with increased penetration potential, Contract no. 1979/2004, value 100,000 lei, member of the research team, 2004-2005;
17. RELANSIN Program Pyrotechnic compositions for infantry bullets, with delayed tracer, NATO compatible, Contract no. 1465/2001, value 50,000 lei, member of the research team, 2001-2003;
18. RELANSIN Program Manufacturing of diazodinitrophenol for military use, Contract 1466/2001, value 50,000 lei Member of the research team, 2001-2003;
19. *Specialized individual microcomputer for artillery firing – mCISTA, Contract no. 1492/2001, (2001-2003) PNCDI, RELANSIN Program, competition, value: 89,000 lei (30,000 Euro), project director Lt. cdor. assoc. univ. dr. eng. Vasile NUȚU, member of the research team;*
20. RELANSIN Program Atmospheric communications system with laser diodes – SCAL, Contract no. 53/2002, value 50,000 lei, project manager, 2002-2004;
21. *Carrying out verification of the ballistic protection level of some windows, A-1135 /1999, beneficiary M.Ap.N., value 20,000 lei, member of the research team, 1999;*
22. *Research and design of the 40 mm caliber explosive grenade launcher, adaptable to portable weapons – beneficiary Ministry of National Defense – 1997 (value lei 60 million/2970 lei/USD=20000 euros), member of the research team;*
23. *Determination of recoil elements by the ultra-fast cinematography method of firing with the 100 mm caliber AT gun – beneficiary I.C.S.I.T.E.M. Bucharest –1997 (value lei 27 million/2919 lei/USD=9500 euros), member of the research team;*
24. *Contributions to the preparation of the firing table for S-5 M missiles fired with T.I. device – beneficiary General Inspectorate of Artillery – 1997 (value lei 58 million/2970lei/USD=19500 euros), member of the research team;*
25. *Experimental determination of the movement elements on the launcher when firing with the A-90 product by high-speed cinematography – beneficiary U.M.02648 Bucharest – 1998 (value lei 80 million/ lei 7570/USD), member of the research team;*
26. *Studies and research on the prospective development of optical and electro-optical equipment for our armed forces – beneficiary: General Staff – 1998 (value lei 60 million/ lei 7630/USD=10000 euros));*
27. *Research in the field of using thermal radiation in optoelectronic devices – beneficiary I.F.T.A.R. Măgurele-1998 (value lei 48 million/ 7980lei/USD=10000 euros), member of the research team;*

30. *Experimental tests and interpretation of results when firing with the R.A.M. product – beneficiary General Inspectorate of Artillery-1998 (value lei 80 million/ 7850lei/USD=10000 euros), member of the research team;*
31. *Research, design and development of a bioptic sight for portable weapons – beneficiary Ministry of National Defense-1999 (value lei 114 million/ 14630lei/USD=8000 euros), member of the research team;*
32. *Research, design and production of anti-radiation protection glasses used in technology and industry – beneficiary National Agency for Science, Technology and Innovation – 1999 (value lei 80 million/ 15610lei/USD=5000 euros), member of the research team;*
33. *Creation and experimentation of an anti-laser protection glass for the AOZTL sight integrated into the fire control system – beneficiary Regia Arsenalul Armatei Bucharest –1999 (value lei 62 million/ 16930lei/USD=3600 euros), member of the research team;*
34. *Scientific research contract S142/1996, phase 4, Determining the influence of gas chamber pressure on the operation of the weapon's automatic mechanism, beneficiary C.N. ROMARM (S.C. Uzina Mecanică Cugir), member of the research team, 1995; (value lei 60 million lei/USD=30,000 euros), member of the research team;*
35. *The program for lifting the R.A.M II product drawing board, Beneficiary M.Ap.N.- C.N. ROMARM (S.C. Tohan Mechanical Plant), member of the research team, 1995, (value lei 100 million lei/USD=60000 euros), member of the research team;*
36. *Bioptic sighting device for portable weapons – beneficiary M.Ap.N. – RATMIL-ICSITEM Bucharest, member of the research team, 1994-1995, (value lei 50,000 lei lei/USD=30,000 euros);*
37. *Drawing boards for the AGA 40 product, beneficiary M.Ap. N. – RATMIL - (S.C. Uzina Mecanică Cugir), member of the research team, 1994, (value lei 160 million lei/USD=95,000 euros);*
38. *Aiming device with integrated laser rangefinder AOTLI T-30 (ME,P), beneficiary M.Ap.N.- RATMIL, member of the research team, 1989-1990, (value lei 3 million lei/USD=1,500,000 euros);*
39. *CINEPOLIGON for training pistol shooting (ME,P), beneficiary Ministry of Interior, member of the research team, 1989-1990 (value lei 0.8 million lei/USD=400,000 euros);*
40. *LOG-2G double magnification spotting scope, (ME, P, SZ), beneficiary, M.Ap.N. – I.O.R., member of the research team, 1988-1989, (value lei 5 million lei/USD=2.5 million euros);*
41. *Additional device for aiming compensation with the IOAG-7 elevation, responsible for the international project, beneficiary RATMIL-METROM Braşov, 1988, (value lei 0.3 million lei/USD=150,000 euros);*
42. *PKT machine gun – modified, mounted on the evacuation and repair conveyor - TER 85 (SZ approval), beneficiary, M.Ap.N. – RATMIL, project manager, 1987, (value lei 0.1 million lei/USD=50,000 euros);*
43. *Optical elevation for the 100 mm anti-tank gun (mod. SZ) - IOTAT 100 (SZ), beneficiary, M.Ap.N. – I.O.R., member of the research team, 1987, (value lei 4 million lei/USD=2 million euros);*
44. *The sight with integrated laser rangefinder of the fire control system on the P-125 tank, recipient M.Ap.N., member of the research team, 1987, (value lei 6 million lei/USD=3 million euros);*
45. *Laser emission modules with solid active medium (rangefinders), integrated (ME,P), IFTAR Măgurele beneficiary, member of the research team, 1985-1986, (value lei 2 million lei/USD);*
46. *High-purity distilled water production system used in aviation batteries, beneficiary Uzina Electromecanica Ploieşti, 1984, member of the research team;*
47. *Semi-automatic dispenser for Zn and Ag powders used in aviation batteries, beneficiary Uzina Electromecanica Ploieşti, 1984, member of the research team;*
48. *Machine for cutting and stretching Ag rheophores, made of sheet metal, used in aviation batteries, beneficiary Uzina Electromecanica Ploieşti, 1985, member of the research team;*
49. *SDV homologation for A90 and A91 aerial missiles, beneficiary Uzina Electromecanica Ploieşti, 1985, member of the research team.*

3. PROJECTS IN THE SECTORAL RESEARCH PLAN OF THE MAPN

1. *Caliber 40x46 mm non-lethal grenade strikes, Contract no. A 3923 01.07.2014/SC UPS Dragomireşti S.A., value 25,000 lei, member of the project team;*

Herminia

2. *Research on increasing the safety level when firing infantry weapons at the Domnești polygon, pos. 36, Sectoral research and development plan for military equipment and technologies for 2014, 2015 of the Ministry of National Defense, member of the project team;*
3. *Research on estimating the service life of the 100 mm gun barrel on the TR-85 M1 tank and the 100 mm anti-tank gun barrel md. 1977, pos. 61, Sectoral research and development plan for military equipment and technologies for 2014, 2015 of the Ministry of Defense, member of the project team;*
4. *Testing 100 mm hits with a cumulative projectile with the BK-412R MLR with a GPV-2R warhead to establish the causes that led to the operation in the barrel of the tank's cannon, Sectoral Research and Development Plan for Military Equipment and Technologies for 2011-2014 of the Ministry of Defense, member of the project team;*
5. *Effects of armament and ammunition from the Romanian Army's endowment in the urban environment (on different types of construction materials), contract CR-1314-2013, 2015, value 21,000 lei, member of the project team;*
6. *Conversion of the 7.62 mm machine gun with fixed stock to be able to throw plastic or rubber bullets, PSCD 2006, member of the project team;*
7. *Night vision devices for individual infantry weapons, pos. 113, Sectoral Research and Development Plan for Military Equipment and Technologies for 2008 (PSCD), Ministry of National Defense, 2008, member of the research team;*
8. *Integration of an independent day/night observation subsystem and combat action management for "SIOBLIN" armored commanders on the HUMWY multi-purpose vehicle, pos. 362, Sectoral Research and Development Plan for Military Equipment and Technologies for 2007 (PSCD), Ministry of Defense, 2007, member of the research team, value: 285,000 lei □ 70,000 Euro;*
9. *Binocular night vision device for the driver – ORT 9308, testing-evaluation, PSCD 2006, project manager;*
10. *Research and design of the 40 mm caliber explosive grenade launcher, adaptable to portable weapons – beneficiary Ministry of National Defense, 1997, member of the research team;*
11. *Modeling and simulation of the turbulent wake of aircraft in order to safely optimize the minimum time between two takeoffs/landings, item 96, Sectoral Research and Development Plan for Military Equipment and Technologies for 2014 of the Ministry of Defense, member of the research team;*
12. *Research on estimating the service life of the 100 mm gun barrel on the TR-85M1 tank and the 100 mm anti-tank gun barrel, model 1977, contract CR-1271, PSCD 2015, value 7500 lei, member of the project team;*
13. *Research on the constructive modification of the 152 mm caliber projectile in order to obtain a 152 mm caliber active-reactive projectile with the aim of increasing the range, pos. 153, Sectoral research and development plan for military equipment and technologies for 2012 of the Ministry of Defense, member of the research team, value: 4000 lei □ 900 Euro;*
13. *Testing 100 mm hits with a cumulative projectile with the BK-412R MLR with a GPV-2R warhead to establish the causes that led to the functioning of the tank's cannon in the barrel, pos. 165, pos. 192 and pos. 182, Sectoral Research and Development Plan for Military Equipment and Technologies for 2009, 2010 and 2011 (PSCD), Ministry of National Defense, 2009 - 2011, member of the research team, value: 14,000 lei □ 3,500 Euro;*
14. *Night vision devices for individual infantry weapons, pos. 113, Sectoral Research and Development Plan for Military Equipment and Technologies for 2008 (PSCD), Ministry of National Defense, 2008, member of the research team, value: 1,000 lei lei □ 250 Euro;*
15. *Installation of 12.7 mm machine guns (DSKM) on HUMWY armored vehicles, pos. 366, Sectoral Research and Development Plan for Military Equipment and Technologies for 2007 (PSCD), Ministry of Defense, 2007, member of the research team, value: 3000 lei □ 750 Euro;*

7. OTHER RESEARCH WORKS

1. *Procedure for determining the accuracy and correctness of shooting with a 7.62 mm machine gun mounted on a weapons platform, contract A 8958 of 05. 10. 2011/ SC Pro Optică SA, value 4212 lei, member of the research team;*

2. *Development testing and evaluation of the 40x46 mm TP-T caliber shot with inert grenade, contract A 8956 of 05.10.2011/SC UPS Dragomirești SA, value 10764 lei, member of the research team;*
3. *Disposable disruptor – phase: Industrial prototype, contract A 7351 of 22.10. 2012/ SC UPS Dragomirești, value 10000 lei, member of the research team;*
4. *Research on increasing the safety level of infantry weapons firing at the Domnești shooting range, value 10,000 lei, CR-1272 /2015 ;*
6. *Testing and evaluation of the automatic electronic detector for remote detection of explosives MEXD-100, A 578/24.01.2013/S.C. Mira Technologies Group SRL ;*
7. *Specialized technical expertise of powders and ammunition elements - File no. 18513/313/2012, D. Goga, C. Barbu, I. Vedinaș, C. Enache, value 3000 lei, contract A 785/10.02.2014;*
8. *Technical expertise regarding the establishment of the new value of the asset "B33-ZIMBRU armored amphibious transporter" on the date of the insured event, File no. 49045/3/2009 Bucharest Court of Appeal;*
9. *Specialized technical expertise of powders and ammunition elements, File no. 18513/313/2012, Bucharest Court of Appeal;*
10. *I. Vedinaș, D. Goga, C. Enache - Technical expertise regarding the identification and provenance of objects (82 mm artillery shell, pistol magazine, metal rod and plastic container) seized by the police during the cleaning of a well located on the Buzău - Pogoanele road, Military Prosecutor's Office attached to the Bucharest Territorial Military Tribunal, Criminal File no. 123/P/2012*
11. *Judicial technical expertise, technical expertise -10 expertises – High Court of Justice, Bucharest Court of Appeal, District Court 4 and 5, 2005-2015;*
12. *I. Vedinaș, L. Anton, A. Stoica – The results of the scientific research from MTA in the context of the university scientific research, ICOMIL 2005, Bucharest.*

I declare on my own responsibility that the data presented is in accordance with reality.

Date of completion: 15.05.2025

Signature,


