

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Alin-Constantin SAVA**
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E-mail alin.sava@mta.ro alinconstantin_sava@yahoo.com
Nationality Romanian
Date of birth January 24, 1981
Gender Male

Work experience

Dates from 01.10.2010 to present
Occupation or position held Assistant Professor, Faculty of Mechatronics and Integrated Armaments Systems, Department of Armaments Systems Engineering and Mechatronics
Main activities and responsibilities University education activities/ Scientific research/ Management duties of the department
Name and address of employer Military Technical Academy, 81-83, George Cosbuc Avenue, Bucharest, Romania
Type of business or sector Education and Scientific research for National Defence System

Dates From 15.02.2008 to 30.09.2010
Occupation or position held Head of the Department Laboratory, Faculty of Mechatronics and Integrated Armaments Systems, Department of Armaments Systems Engineering and Mechatronics
Main activities and responsibilities University education activities/ Scientific research/ Management of Laboratory
Name and address of employer Military Technical Academy, 81-83, George Cosbuc Avenue, Bucharest, Romania
Type of business or sector Education and Scientific research for National Defence System

Dates from 01.07.2006 to 15.02.2008
Occupation or position held Consulter in the International Relations Office and Public Relation Office. Direct subordination to the Rector (Commander) of the Military Technical Academy
Main activities and responsibilities Management of the agreements between universities, management of the education activities, of the scientific research activities. Identification and development of new partnerships at institutional level
Name and address of employer Military Technical Academy, 81-83, George Cosbuc Avenue, Bucharest, Romania
Type of business or sector Education and Scientific research for National Defence System

Dates from 19.08.2005 to 30.06.2006
Occupation or position held Head of the maintenance and reparation workshop for armament and ammunition
Main activities and responsibilities Activities of maintenance and logistics at the operational level

Name and address of employer	Ammunition Depot
Type of business or sector	Operational military unit, part of the National Defence System
Dates	from sep.2004 to present
Occupation or position held	Scientific researcher, Faculty of Mechatronics and Integrated Armaments Systems, Department of Armaments Systems Engineering and Mechatronics
Main activities and responsibilities	University activities/ Scientific research
Name and address of employer	Military Technical Academy, 81-83, George Cosbuc Avenue, Bucharest, Romania
Type of business or sector	Education and Scientific research for National Defence System
Dates	From Aug. 2004 to Sep. 2005
Occupation or position held	Senior student officer
Main activities and responsibilities	University education activities/ Scientific research
Name and address of employer	Military Technical Academy, 81-83, George Cosbuc Avenue, Bucharest, Romania
Type of business or sector	Education and Scientific research for National Defence System
Dates	from Mar. 2004 to Jun 2005
Occupation or position held	Scientific researcher
Main activities and responsibilities	Scientific research / University education activities
Name and address of employer	CATAUNYA Polytechnic University , 647, Av. Diagonal, Barcelona, Spain
Type of business or sector	Education and Scientific research
Dates	from Sep 2003 to Aug. 2004
Occupation or position held	Student
Main activities and responsibilities	University education activities/ Scientific research
Name and address of employer	Military Technical Academy, 81-83, George Cosbuc Avenue, Bucharest, Romania
Type of business or sector	Education and Scientific research for National Defence System
Education and training	
Dates	2013
Title of qualification awarded	Training Certificate
Principal subjects/occupational skills covered	Common Security and Defence Policy. European Union Foreign Affaires and Security Policy
Name and type of organisation providing education and training	European Security and Defence College, Brussels, Belgium
Level in national or international classification	ISCED 4
Dates	2013
Title of qualification awarded	Training Certificate
Principal subjects/occupational skills covered	Cooperation between universities Training in the frame of the Erasmus European Programme. Research issues
Name and type of organisation providing education and training	Royal Military Academy, Brussels, Belgium
Level in national or international classification	ISCED 4
Dates	2012
Title of qualification awarded	Diploma
Principal subjects/occupational skills covered	National Defence and Security Problems. European and Regional Critical Infrastructures
Name and type of organisation providing education and training	National Defence College, National Defence University, Bucharest, Romania

Level in national or international classification	ISCED 6
Dates	2012
Title of qualification awarded	Training Certificate
Principal subjects/occupational skills covered	Cooperation between universities Training in the frame of the Erasmus European Programme. Research issues
Name and type of organisation providing education and training	Royal Military Academy, Brussels, Belgium
Level in national or international classification	ISCED 4
Dates	From 2007 to 2011
Title of qualification awarded	PhD Studies. Engineering PhD. Diploma
Principal subjects/occupational skills covered	Mechanical engineering, aerospace engineering University education activities/ Scientific research
Name and type of organisation providing education and training	Military Technical Academy, 81-83, George Cosbuc Avenue, Bucharest, Romania
Level in national or international classification	ISCED 6
Dates	2011
Title of qualification awarded	Training Certificate
Principal subjects/occupational skills covered	Cooperation between universities Training in the frame of the Erasmus European Programme. Research issues
Name and type of organisation providing education and training	CATAUNYA Polytechnic University , 647, Av. Diagonal, Barcelona, Spain
Level in national or international classification	ISCED 4
Dates	2009
Title of qualification awarded	Foreign language competence Certificate
Principal subjects/occupational skills covered	French language competence according STANAG 6001 English language competence according STANAG 6001
Name and type of organisation providing education and training	Human Resource Management Department of the National Defence Ministry, National Defence University - Department for foreign languages
Level in national or international classification	ISCED 4
Dates	From 2009 to 2010
Title of qualification awarded	Foreign language competence Certificate / Training Certificate
Principal subjects/occupational skills covered	German language competence according STANAG 6001
Name and type of organisation providing education and training	Human Resource Management Department of the National Defence Ministry, National Defence University - Department for foreign languages
Level in national or international classification	ISCED 4
Dates	2006 - 2008
Title of qualification awarded	Master Diploma
Principal subjects/occupational skills covered	Noise and Vibrations Control. Research issues
Name and type of organisation providing education and training	Bucharest Polytechnic University
Level in national or international classification	ISCED 6

Dates 2008
 Title of qualification awarded Training Certificate
 Principal subjects/occupational skills covered Cooperation between universities Training in the frame of the Erasmus European Programme. Research issues
 Name and type of organisation providing education and training CATAUNYA Polytechnic University , 647, Av. Diagonal, Barcelona, Spain
 Level in national or international classification ISCED 4

Dates 2008
 Title of qualification awarded Training Certificate
 Principal subjects/occupational skills covered Axiomatic Design. Mechanical and Industrial Engineering. Selecting materials through axiomatic design
 Name and type of organisation providing education and training NOVA University, Lisbon, Portugal
 Level in national or international classification ISCED 4

Dates 2004
 Title of qualification awarded Training Certificate
 Principal subjects/occupational skills covered Industrial research stage. European Union and private companies grant
 Name and type of organisation providing education and training Physics and Nuclear Engineering Department. CATAUNYA Polytechnic University , 647, Av. Diagonal, Barcelona, Spain
 Level in national or international classification ISCED 4

Dates from 2000 to 2005
 Title of qualification awarded Training Certificate
 Principal subjects/occupational skills covered Psycho pedagogy
 Name and type of organisation providing education and training Teacher Training department. Bucharest University, Romania
 Level in national or international classification ISCED 4

Dates From 2000 to 2005
 Title of qualification awarded Diploma
 Principal subjects/occupational skills covered Armaments, equipment and artillery fire control systems
 Name and type of organisation providing education and training Military Technical Academy, Bucharest, Romania
 Level in national or international classification ISCED 6

Dates From 1995 to 1999
 Title of qualification awarded Diploma
 Principal subjects/occupational skills covered Mathematics and Physics profile
 Name and type of organisation providing education and training Military High School, Breaza, Romania
 Level in national or international classification ISCED 6

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level (*)

English

French

German

Spanish

Understanding		Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production	
C2		C2		C1		C1	
B2		C1		B1		B1	
B2		B2		B1		B1	
A2		A2		A1		A1	

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences

Communication ability, team spirit, adaptability, distributive attention

Organisational skills and competences

Good manager, intellectual effort capacity, working in stress environment, organisational abilities

Technical skills and competences

Computer skills and competences

Operating Systems: Windows NT/2K/XP/7/8
Software: LS-DYNA, SolidWorks, AutoCAD, ANSYS, Fluent, Mathcad, Matlab
Utility: MS Office 2010, Adobe Photo Shop, Ulead Video Studio

Artistic skills and competences

Satiric graphics, photo, video, music, piano

Other skills and competences

- Member of the Excellence Research Center CE*LEM*ATM from Military Technical Academy
- 60 national research programs and grants
- 18 papers presented at national and international conferences and symposiums (9 papers covered by ISI Proceedings)
- Abilities in the field of standardization

Driving licence

B, C+E -Category

Additional information

- Member of AGIR – Romanian Engineers Association
- ERASMUS Programme: student and teaching staff mobility
- my **PhD thesis** entitled „*Studies and research on achievement of artillery ammunition for close air defence of extremely important targets*”, I developed a new type of ammunition.

Research projects
(won by national competition)

- Special technologies for difficult workable materials manufacture needed for armors, with reinforced tools with NCB polycrystalline compacts, imposed by NATO requirements
- High-potential perforation ammunition,
- Design of a conventional warhead orientated for C4I systems blocking with EMP
- Advance research on inter-metallic nanostructures from carbon-aluminum composites
- Nanostructure materials with high characteristics and special destination
- Advance research on design a medium caliber anti-aircraft ammo,
- Studies, researches and implementation of systems that assist the MLRS launching from auto-stabilized platforms
- Modular optic-electronic system of warning, camouflage and protection against electromagnetic guided armament
- Nanostructure materials with performance features and special purpose
- Development of a laboratory test, evaluation and certification of the physical, chemical and stability of explosives for civil and military
- Development of a laboratory test, evaluation and certification of safety and performance of explosives for civil and military
- Center for Information derived geospatial data
- Research on electric propulsion system of a vehicle with wheels independent
- Modeling and realization of a component for generating a conventional battle for blocking electromagnetic pulse systems
- Equipment and systems biometric identification and authentication of persons for authorizing access to computer networks and major objectives
- Advanced research of interface metal nano compounds the aluminum - carbon fiber composites
- Innovative non-invasive investigation of morphological and functional alterations in joint pathology on acoustics vibration and thermal spectra
- Advanced research to achieve a medium-caliber anti-aircraft strikes equipped with munitions, intended to equip surface vessels
- Technology Platform EUROP -RO - the national synergistically to promote research and industry participation in FP7 Romanian and European partnership development in the field of robotics
- System synergistically to launch / recovery dynamics Satellite objects
- Research on the reduction of noise pollution in residential areas , road and rail traffic generated by placement of noise barriers
- Eco Thermal cutting heavy metals and high strength steels
- Hybrid system for generating electricity using renewable
- Complex system analysis and optimization of traffic in communication networks with technological diversity and convergence of services
- Ballistics System hail
- Installation of thermal electricity generation by thermal gasification of biomass
- Research on the areas of interest and technical solutions for the use of wind energy for electricity generation
- Easy Vehicle hovercraft
- Laser Technologies surface treatment products for special applications
- Processing Technology Wrought plates with explosives
- Kick with base bleed projectile, Cal. 130 mm
- Component projectile combat munitions for unguided rockets horse. 122 mm
- Electronic time Fuse for ammunition reactive horse. 122 mm
- Proximity Fuse radio for aviation bombs
- Machine gun . 5.56 mm, cal. compatible with NATO standard ammunition
- Centre of Excellence Laboratory of explosives and ammunition
- Specialized technologies for processing hard machinable materials for armor
- Process and unconventional means for firefighting
- Electronic Fuse reactive shot beating caliber 273 mm with minimum 80 km
- Component combat munitions reactive kick -range 273 mm caliber minimum 80 km
- Vector reactive carrier for 273 mm cal. missile with minimum 80 km range
- Process methodology and equipment for dynamic testing of various armor
- Method and device for determining the concentration of aerosols in the atmosphere disrupted the operation of the standard combat special effects
- Installation of launching rocket artillery caliber 273 mm minimum -range 80 km
- Container for storing, transporting and launching strikes reactive horse 273 mm

Papers
(part of them)

Books: Weapons Systems. Firing effects over the missiles launchers, Military Technical Academy Publishing House, 2012, ISBN 978-973-640-122-0

Ioan Vedinaş, Alin-Constantin Sava, Tudor Cherecheş – *New Technologies in Optoelectronics with Military Applications*, Proceedings of the The 15th International Conference „The Knowledge-Based Organization”, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania, November 26-28, 2009, pp. 305 – 309, ISSN: 1843-6722 (ISI ranked conference)

Dan Postolea, Ioan Vedinaş, Alin-Constantin Sava – *Current trends in developing non-lethal weapons*, Proceedings of the The 15th International Conference „The Knowledge-Based Organization”, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania, November 26-28, 2009, pp. 301 – 304, ISSN: 1843-6722 (ISI ranked conference)

G. Surdu, F. Moraru, G. Slămnouiu, P. Şomoiag, A.C. Sava – *Airflow parameters and drag coefficient modeling applied to 30mm caliber ammunitions in supersonic flow*, MTA Review, pp. 157-164, vol.XXI, NO.3/2011, ISSN 1843-3391 (B+ ranked journal)

A.C. Sava, T. Cherecheş, A. Aruş – *The stationary incident motion. modeling around the circle calculus*, International journal of modern manufacturing technologies, pp. 77-82, vol.1, no.1/2009, ISSN 2067-3604 (ISI ranked journal)

Alin-Constantin Sava, Tudor Cherecheş, Ioan Vedinaş, Cătălin Ionescu, Liviu Piticari – *Particularities regarding the Launching System of Ahead Projectiles*, Proceedings of the The 16th International Conference „The Knowledge-Based Organization”, “Nicolae Bălcescu” Land Forces Academy and the National Authority for Scientific Research, Sibiu, Romania, November 25-27, 2010, pp. 501 – 504, ISSN: 1843-682X (ISI ranked conference)

Alin-Constantin SAVA, Doru SAFTA, Ioan ION, Cătălin IONESCU – *Considerations on Terminal Ballistics of Ahead Type Projectiles*, Proceedings of the The 16th International Conference „The Knowledge-Based Organization”, “Nicolae Bălcescu” Land Forces Academy and the National Authority for Scientific Research, Sibiu, Romania, November 25-27, 2010, pp. 505 – 508, ISSN: 1843-682X (ISI ranked conference)

T. Cherecheş, Gh. Iubu, A.C. Sava – *Advanced hit efficiency and destruction technology aplication in sea border security*, Proceedings of the International Conference „New EU Member States and Security Research”, Aerospace and Defence Industries Association of Europe, Bucharest, Romania, November 23-24, 2006;

- Modeling around the circle of the stationary incident motion – A. Sava, T. Chereches – International conference on fluid mechanics and aerodynamics (FMA'08)-WSEAS – Rhodes – Greece
- Some aspects regarding the using of the dynamics arrays in the numerical simulation of the hydraulic and pneumatic devices – T. Chereches, A. Sava – International conference on fluid mechanics and aerodynamics (FMA'08)-WSEAS – Rhodes - Greece
- Dynamic behavior of helical gear-pair systems with backlash and periodic variation of mesh stiffness and mesh damping – M.Bugaru, A. Sava, T. Chereches – Machine-building and technosphere of the XXI Century, 2008 – Sevastopol, Ukraine
- Management of emergency situations resulting from technological hazard, natural catastrophes and terrorist attacks – S. Costinas, A. Sava, T. Chereches - International conference on sustainability in science engineering (SSE' 09)-WSEAS – Timisoara, Romania

Date: 03.05.2016

CPT. Assistant Professor Eng., PhD.
Alin-Constantin SAVA