

## **Curriculum Vitae**



Personal information

First name(s) / Surname | Teodor - Viorel CHELARU

E-mail teodor.chelaru@upb.ro

Nationality Romanian

Date of birth 24 Mars 1956

Work experience

Dates At present

Occupation or position held | Professor in Faculty of Aerospace Engineering, Manager Research Center for Aeronautics

and Space - CCAS

Main activities and Didactic activities, Research activities

responsibilities

Name and address of University POLITENICA of Bucharest, Splaiul Independentei 313, PC 060032, sector 6, Bucharest,

employer ROMANIA

Type of business or sector High Education

Dates December 2001 - October 2016

Occupation or position held | Senior Scientist

Main activities and Research Activity, Management Industrial programmes

responsibilities

Name and address of CN ROMARM SA, B-dul Timisoara nr. 5B, PC 77309, sector 6, Bucharest, ROMANIA

employer

Type of business or sector | Defence Industry

Dates December 2000 - December 2001

Occupation or position held | Strategy Advisor

Main activities and Coordinating Activities

responsibilities

Name and address of SC Arsenal SA, B-dul Timisoara nr. 5B, PC 77309, sector 6, Bucharest, ROMANIA

employer

Type of business or sector | Defence Industry

Dates July 1997 - December 2000

Occupation or position held | Head of research laboratory

Main activities and Research Activity

responsibilities

Name and address of | Electromecanica Plant – Research Center, Sos Ploiesti-Tirgoviste, km 8, Ploiesti, jud. Prahova

employer ROMANIA / MOD –UM 01819

Type of business or sector | Defence Industry

Dates **January 1984 - Jun 1997** 

Occupation or position held Head of research laboratory

Main activities and responsibilities

employer

Research Activity

Name and address of

Institutul de Cercetări si Proiectări Electromecanice - Research Center, Sos Ploiesti-

Tirgoviste, km 8, Ploiesti, jud. Prahova ROMANIA / MOD UM 02481- Ploiești

Type of business or sector

Defence Industry

Dates October 1981 - December 1983

Occupation or position held

Trainee Engineer

Main activities and responsibilities

**Design Activity** 

Name and address of

MOD UM 01918 Ploiești, Sos Ploiesti-Tirgoviste, km 8, Ploiesti, jud. Prahova ROMANIA

employer

Type of business or sector Defence Industry

> **Education and** training

> > **Dates** November 2014

Title of qualification

**Habilitation Thesis** 

awarded

covered

Dates December 1989 - May 1994

Title of qualification

**Doctoral Degree** 

awarded

Principal subjects/occupational skills Thesis "The studies of the dynamic flight for the guided missiles", scientific advisor: Professor M.M.

Name and type of organisation providing education and training

Polytechnic Institute of Bucharest, Aeronautical Faculty

Level in national or international classification

**Doctoral Studies** 

Dates

September 1976- Jun 1981

Title of qualification

Bachelor of Science

awarded

covered

Principal subjects/occupational skills

Mathematics, Physics, Technology, Design, Aerodynamics, Dynamics Flight, Rocket Motor, diploma work about "Missile with airplane configuration - cruise missile"

Name and type of

Polytechnic Institute of Bucharest, Aeronautical Faculty

organisation providing education and training

Level in national or international classification

**Higher Education** 

Personal skills and competences

> Romanian Mother tongue

Other language(s)

English, French, Russian

Α1

Self-assessment

European level (\*)

**English** 

French Russian

Understanding				Speaking				Writing	
	Listening		Reading	Sp	oken interaction	Sp	oken production		
B2	Advanced	В1	Advanced	B2	Advanced	В1	Advanced	B1	Advanced
В1	Advanced	В1	Advanced	В1	Advanced	A2	Beginner	A2	Beginner

Beginner

Α1

Beginner

Α1

Beginner

(\*) Common European Framework of Reference for Languages

Beginner

Beginner

Social skills and competences

Good team working

Organisational skills and competences

**Research Activity management:** from 2008 till present UPB-CCAS manager; form 2002 till 2016 Scientific Secretary of ROMARM Council; During the activity in ICPEM and ELECTROMECANICA Ploiesti head of research laboratory.

**Didactical Activity management:** from 2012 till 2016 Vice Dean charge with research and organizational activities. From 2008 to 2012 Scientific Secretary of Faculty Council.

Experience (including managerial experience) in management of national / international programme / projects:

Programme / Project	Function	Period:
PN2 , STAR. Suborbital Launch System	Project Manager	2017-2019
Developing - Flight Experiments SLD (Pn1)		
PN2 , Dom 8. Project Suborbital Testing System,	Project Manager	2014-2017
Developing Ground Infrastructure, Flight Tests-STS		
(Pn2)		
ESA project Study – concept, to achieve a	Responsible project	2014-2015
Small Orbital Launcher through zonal	UPB-CCAS	
cooperation – SOL (Pi1)		
STAR Programme, Project Suborbital Launcher for Test	Project Manager	2012-2014
- SLT ( <b>Pn3</b> )		
FP7, Space Project Operational Research Project on	Responsible project	2009 -2011
Hybrid Engine in Europe – ORPHEE ( <b>Pi2</b> )	from Romania	
PN2 , Dom 8. Project Rocket for satellite launching	Project Manager	2008-2011
of on low orbit – subsystems development,		
unconventional fuels - VLS-DS/CN (Pn5)	5 :	0000 0044
PN2 , Dom 3. Project Mobile system for fight against	Project Manager	2008-2011
fires developed in open space SMCI-SD (Pn6)  Bilateral cooperation CN ROMARM SA / ROXEL –	Despessible project for	2005 -
France Project GRAD BM (F2)	Responsible project for	2005 -
Bilateral cooperation CN ROMARM SA / Elbit –Israel	ballistic problems  Responsible project	2005 - 2013
Project – STAR 80 L (F1)	from CNR	2003 - 2013
Programme SECURITY project Laser guided reactive	Project Manager	Dec.2005 -Nov. 2006
projectile in support of anti-terror operations in	1 Tojoot Managor	D00.2000 140V. 2000
dense urban areas (Pn7)		
Programme RELANSIN, project Fire control system for	Project Manager	Sept. 2004 - Nov. 2006
the 273 cal. rocket with a range of min. 80 km. (Pn8)	.,	
MOD Programme MAGIC/LANCER (F3,F4)	Responsible project for	2003- 2004
	Dynamic Launch Zone	
MOD, Programme LAROM/ACCS (F5)	Responsible project for	2002-2004
	ballistic problems	
Programme RELANSIN, project General mechanical	Project Manager	Jan. 2001 – Jun 2003
assembly for the anti-hailstone rocket (Pn9)  Other research projects and contracts, as project manager		

Other research projects and contracts, as project manager / responsible and research conducted as job tasks are shown in Annex

Technical and Scientific In Field of Spacecraft: 1 international project (Pi1), 4 national projects (Pn1, Pn2, Pn3, Pn5), 2 Competences courses (Ca1, Ca3), 37 published papers (Ris1, Ris2, Ris3, Ris4, Ris5, Ris6, Ris7, Ris8, Ris9, Ris10, Rio1, Rio2, Rio3, Vis1, Vis3, Vis5, Vis7, Vis10, Vis12, Vis14, Vis15, Vis17, Vis18, Vis20, Vis22, Vis27, Vis31, Vi1, Vi2, Vi3, Vi5, Vi7, Vi8, Vi9, Vi10, Vi12, Vi15), 3 patent proposal (B1, B5. B6).

> In Field of Guided Missiles: participation in 2 international projects (F1, F3-F4), 7 national projects (Pn7, Pn12, F6-F10), 1 book (Cb3), 3 courses (Ca2, Ca4, Ca6), 1 project quide (I2), 13 published papers (Ris17, Ris20, Ris21, Rio5, Rno4, Rno5, Rno7, Vis28, Vi4, Vi17, Vi19, Vi20,

> In Field of Unmanned Aerial Vehicles: 5 national projects (Pn13, Pn14, Pn15, Pn19, Pn22), 2 books (Cb4, Cb5); 1 course (Ca5), 12 published papers (Ris13, Ris15, Ris16, Vis8, Vis23, Vis24, Vis25, Vis30, Vis32, Vis33, Vi11, Vi14)

> In Field of Unguided Rockets: participation in 2 international projects (F2, F5), 6 national projects (Pn6, Pn8, Pn9, Pn16, Pn17, Pn18), 2 books (Cb1, Cb2), 7 published papers (Ris18, Ris19, Rno2, Rno3, Vi13, Vi16, Vi18), 1 Utility model (A1)

In Field of Experimental Aerodynamic: coordination experimental programmes for 12 missiles configurations (Pn9, F8,...); 2 published papers (Ris12, Rno1)

## In Field on Rockets Motors and Reaction Control Systems:

1 international project (Pi2); 4 national projects (Pn1-RCS, Pn2 -RCS, Pn3-Rcs, PN5 - MR), 17 published papers (Ris11, Ris14, Rio4, Rno6, Vis2, Vis4, Vis6, Vis9, Vis11, Vis13, Vis16, Vis19, Vis21, Vis26, Vis29, Vis34, Vi6), 3 patent proposal (B2, B3, B4).

# Computer skills and competences

Structured languages FORTRAN, C, Programming environments: MATLAB, MATCAD, Office components, Microsoft Project (Project Manager); Knowledge database: RDB-ORACLE, DATATRIVE, Knowledge of basic software for obsolete computer systems: CORAL -INDEPENDENT; supermini VACS 11/730; server ALPHA 1000

### Didactical competences

Titular of the courses "Launchers and Launch Systems", "Dynamic Flight", "Aircraft Guidance", "Optimal Synthesis of Control Laws", "Spacecraft Dynamics", "Launchers and launch systems" in the Faculty of Aerospace Engineering from University POLITEHNICA of Bucharest.

# **Driving Licence**

Type B

### Additional Affiliations:

- **information** Romanian representative in ESA PB-LAU Future Launchers Preparatory Programme Group.
  - Industrial representative of Romania in NMSG (NATO Modeling and Simulating Group)
  - Industrial representative of Romania in WEAG (Western European Armaments Group) CEPA 15 (Common European Priority Areas) - Strategy Missiles, UAV's and Robotics;
  - Space University Administrative Committee (SUAC) from IAF (International Astronautical Federation)
  - Astronautically and Aeronautical Committee from Technical Division of Romanian Academy;
  - National Council for Attestation of University Titles, Diplomas and Certificates CNADTCU:
  - University Association for Science and Technology of Romania UASTRO

#### Annexes

Main Research Contributions (books, published papers, conferences proceedings, projects) in work list

Note - References in brackets correspond with the work list.

Date: 11.10.2018

Signature