



<https://nicolaescuioan.github.io/Nicolaescu-Ioan/>

Personal information

First name(s) / Surname(s) **Ioan NICOLAESCU**

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E-mail ioan.nicolaescu@mta.ro;

Nationality Romanian

Date of birth 22.05.1960

Gender male

Desired employment / Occupational field **Engineering/Professor**

Work experience 41 years

Dates **2017 - up to present**

Occupation or position held CSUD Director 2018-2021, Doctoral School Director 2017-2018 / Professor at the Department of Electronic Systems and Military Equipment;

Main activities and responsibilities Management/ University education activities/Scientific research activities/ Students supervising/ Management of educational activities

Educational activities:

- Bachelor's degree: Radio wave propagation and antennas, Friend-foe identification, warning and recognition systems and Diploma projects supervision;

- Master's degree: Antennas and radio wave propagation through different transmission media, Electromagnetic compatibility and numerical methods in the theory of the electromagnetic field and electromagnetic waves, Integration of airspace with the communications, navigation and surveillance system and Methodology of scientific research and technological development;

- Doctorate: Methodology of scientific research.

Supervision of 8 doctoral students who obtained the title of doctor in the field of Electronic Engineering, Telecommunications and Information Technologies (ATM, ACTTM, DGArm, SMFA and STS)

Chairman of the International Communications Conference in the period 2017-2022

IOSUD ATM accreditation

Name and address of employer Military Technical Academy, George Coşbuc Avenue no.39-49, Bucharest, Romania

Type of business or sector Education/Scientific research

Dates **2008 - 2016**

Occupation or position held Vice-rector for education / Professor at the Communications and Military Electronic Systems Department;

Main activities and responsibilities	Management/ University education activities/Scientific research activities/ Students supervising/Management of educational activities Courses at: - Military Technical Academy "Ferdinand I": Antennas and Radio Wave Propagation, Radar Systems, Information Systems, Radio Communication Systems, Electromagnetic Compatibility - Air Force Academy of Braşov - Radiolocation Bases -2016 - Organization of courses in partnership with Delft University of Technology - Organization of scientific events, such as the Communications and ECAI international conferences - Participation in doctoral theses defense committees at: ENSTA Brest, Politehnica University of Bucharest, "Gheorghe Asachi" Technical University of Iaşi, "Alexandru Ioan Cuza" University of Iaşi, Technical University of Cluj-Napoca - Establishment of an AFCEA section in the MTA - Supervision activities for foreign students at Military Schools - Saint Cyr, France - Coordination of 6 doctoral students who obtained the title of doctor in field of Electronic Engineering, Telecommunications and Information Technologies (ATM, DGArm, NATO- SHAPE J6 Cyberspace) - member of COST Action IC1102 "Versatile, Integrated, and Signal-aware Technologies for Antennas (VISTA)", in which 28 countries were involved - "Invited speaker" at the first European Defense Conference organized in Warsaw (2011) - Member of the National Council for the Attestation of University Titles, Diplomas and Certificates (CNATDCU) and evaluator within the Romanian Agency for Quality Assurance in Higher Education (ARACIS)
Name and address of employer	Military Technical Academy, George Coşbuc Avenue no.39-49, Bucharest, Romania
Type of business or sector	Education/Scientific research
Dates	2004 - 2008
Occupation or position held	Dean of Faculty of Military Electronic and Computer Science Systems, Professor at the Communications and Military Electronic Systems Department;
Main activities and responsibilities	Management/University education activities/Scientific research activities/Students supervising/Management of educational activities • Accreditation of the ESEM Bachelor's Degree Specialization • Proposal and accreditation of the Master's degree program: Electronic Systems for Border Security, transformed into Communication Systems Engineering and Electronic Security • Development of the educational offer in the field of doctoral studies: study of the radar cross section, radio communication systems, radar imagery, broadband antennas, broadband systems etc. • Train young teachers through doctoral programs in order to take over some courses • Participate in the ACPART-DOCIS program, as a short-term expert, and defining professional and transversal competencies for the undergraduate university degree programs Communications and ESEM • Supervise of foreign students from the Military Schools - Saint Cyr, France • Invited paper within the European program "COoperation in Science and Technology" (COST) 284 - "Innovative Antennas for Emerging Terrestrial and Space-based Applications", • Member of the Management Committee, at the European COST programs "Antenna Systems & Sensors for Information Society Technologies (ASSIST)", in which 27 countries participated • "Invited speaker" at the conference "Microwave Radar Remote Sensing" held in Kiev (2008) • Member of the National Council for the Attestation of University Titles, Diplomas and Certificates (CNATDCU) and evaluator for the Romanian Agency for Quality Assurance in Higher Education (ARACIS)

Name and address of employer	Military Technical Academy, George Coșbuc Avenue no.39-49, Bucharest, Romania
Type of business or sector	Education/Scientific research
Dates	From 2003 –to 2004
Occupation or position held	Professor at the Department of Radiolocation and Missiles Guidance
Main activities and responsibilities	University education activities/Scientific research activities/Students supervising/Management of educational activities
Name and address of employer	Military Technical Academy, George Coșbuc Avenue no.39-49, Bucharest, Romania
Type of business or sector	Education/Scientific research
Dates	From January 2002 –to April 2003
Occupation or position held	researcher Delft University of Technology, The Netherlands,
Main activities and responsibilities	Scientific research activities: - Study of broadband antennas - Characterization of the near-field antenna system and development of a procedure to remove the influence of the “reference” antenna - Development of a signal-matched filter procedure to remove the signal delay within the antenna system, for a stepped frequency continuous wave radar - Development of a calibrating procedure for the SFCW radar - Development and implementation of a “Synthetic Aperture Radar” (SAR) type procedure for improving the horizontal resolution of the radar and increasing the signal-to-noise ratio - Development of a procedure for reducing the clutter
Name and address of employer	Delft University of Technology, The Netherlands
Type of business or sector	Scientific research
Dates	From 2001 –to 2002
Occupation or position held	professor at the Department of Radiolocation and Missiles Guidance;
Main activities and responsibilities	University education activities/Scientific research activities/Students supervising/Management of educational activities
Name and address of employer	Military Technical Academy, George Coșbuc Avenue no.39-49, Bucharest, Romania
Type of business or sector	Education/Scientific research
Dates	From 1997 – up to 2001
Occupation or position held	Associate Professor at the Department of Radiolocation and Missiles Guidance;
Main activities and responsibilities	University education activities/Scientific research activities/Students supervising Courses: - Military Technical Academy "Ferdinand I": Antennas and radio wave propagation, Radar systems, Information systems, - Department of Telecommunications and Transport Electronics of the Politehnica University of Bucharest at the course Antennas and microwaves - 1997-1998
Name and address of employer	Military Technical Academy, George Coșbuc Avenue no.39-49, Bucharest, Romania
Type of business or sector	Education/Scientific research
Dates	From 1995 – up to 1997
Occupation or position held	Lecturer, Faculty of Electronics and Informatics, Military Technical Academy
Main activities and responsibilities	University education activities/Scientific research activities/Students supervising
Name and address of employer	Military Technical Academy, George Coșbuc Avenue no.39-49, Bucharest, Romania
Type of business or sector	Education/Scientific research
Dates	From 1985 –to 1995

Occupation or position held	Researcher at Center of Studies and Research for Electronics and Informatics;
Main activities and responsibilities	Teaching activities: - Military Technical Academy "Ferdinand I": Antennas and radio wave propagation, Radar systems - Academy of Economic Studies - Department of Economic Informatics - the courses: Assembly Language, Evolved Languages and Data Structures (1992-1994) Scientific research activities - Designing, manufacturing and testing of an angular position transducer for a radar station (used in the TRASEDA product, innovation certificate) - prototype - Designing, manufacturing and testing of a television target tracking system - laboratory model - Designing and optimization of radio-absorbing materials, using a program package created in the C++ language (1 patent) - Increasing the ellipticity coefficient of helical antennas by choosing the feeding point (the antennas were used in SAIRL products homologated at prototype level) - Designing, manufacturing and testing of an antenna in the 2-18 GHz band (for a warning system placed on board of an aircraft) - Designing, manufacturing and testing of a microwave assembly for the reception of circularly polarized, continuous wave and pulsed modulated signals in the 12-16 GHz band (patent, used in SAIRL products)

Name and address of employer	Military Technical Academy, George Coșbuc Avenue no. 39-49, Bucharest, Romania
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Type of business or sector	Education/Scientific research
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Dates	From 1984 – up to 1985
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Occupation or position held	1985 project engineer at the research department of a military workshop;
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Main activities and responsibilities	-design and implementation of a radio-interceptor 8-12 GHz band; -documentation of performance benchmarks of repair work
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Name and address of employer	Air Forces Headquarter
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Type of business or sector	Engineering Design
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Education and training

National Defence College	2009
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Title of qualification awarded	Graduation certificate
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Principal subjects/occupational skills covered	Security and good governance
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Name and type of organisation providing education and training	National Defense University
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Level in national or international classification	
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Dates	18-22.04.2005
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Title of qualification awarded	Graduation certificate
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Principal subjects/occupational skills covered	NATO – Intelligence Warning Systems
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Name and type of organisation providing education and training	NATO School, Oberammergau, Germany
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Level in national or international classification	
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Dates	September – October 2004
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Title of qualification awarded	
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Principal subjects/occupational skills covered	Research stage
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Name and type of organisation providing education and training	Delft University of Technology, The Netherlands				
Level in national or international classification					
Dates	May – October 2000				
Title of qualification awarded	Certificate				
Principal subjects/occupational skills covered	System Engineering				
Name and type of organisation providing education and training	Cranfield University, Royal Military College of Science, United Kingdom				
Level in national or international classification					
Dates	From 1991- up to 1997				
Title of qualification awarded	PhD, Electronic Engineering and Telecommunication (scientific domain)				
Principal subjects/occupational skills covered					
Name and type of organisation providing education and training	Military Technical Academy				
Level in national or international classification	ISCED 6				
Dates	From 1987- up to 1992				
Title of qualification awarded	Economist				
Principal subjects/occupational skills covered	Economical Informatics				
Name and type of organisation providing education and training	Academy of Economical Studies, Faculty of Cybernetics, Statistics and Economical Informatics				
Level in national or international classification	ISCED 6				
Dates	From 1979 – up to 1984				
Title of qualification awarded	Engineer, Communications and Military Electronic Systems Department				
Principal subjects/occupational skills covered	Radio Communications, Microwaves, Antennas and propagation , Information systems, Radar				
Name and type of organisation providing education and training	Military Technical Academy				
Level in national or international classification	ISCED 5				
Dates	From 1975 –to 1979				
Title of qualification awarded	High-school diploma, Physics-Mathematics (profile)				
Principal subjects/occupational skills covered	Mathematics, Physics,				
Name and type of organisation providing education and training	Military High School “Stefan cel Mare” (Campulung Moldovenesc)				
Level in national or international classification	ISCED 3				
Personal skills and competences					
Mother tongue(s)	Romanian				
Other language(s)					
Self-assessment	Understanding		Speaking		Writing
<i>European level (*)</i>	Listening	Reading	Spoken interaction	Spoken production	
English	C1 -	C1 -	C1 -	C1 -	C1 -

French

B2

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B1

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B1

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B1

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B1

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Common European Framework of Reference for Languages

Social skills and competences

Team leader spirit, very good communication capacity, long term working tasks assignments

Organisational skills and competences

Large experience as a team leader, Critical decision capabilities

Technical skills and competences

Very good skills and competences in the field of antennas and propagation, radio communications systems, information systems, ground penetrating radar, radar systems, MIMO, RCS,

Computer skills and competences

Engineering software: HFSS, Matlab, Mathcad, C++,
Common software: Windows, Microsoft Office, Microsoft Project, Microsoft Visio
Dedicated software in the field of propagation analysis, wireless networks and antennas design

Other information

Research projects:

- 4 international research projects;
 - 5 national projects as project director (1 interdisciplinary platform project – no academy funds were transferred);
 - 1 national project as project manager;
 - over 20 projects as a member of research teams.
- 6 patents and one application under examination
4 innovation patents

Publications: over 40 papers published in ISI journals, ISI Proceedings and IEEE Xplore and INSPEC; 9 books, one book chapter and one book published by John Wiley & Sons, Inc.;

- chair or co-chair of conference sections
- reviewer/referent for: EuMW 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2018, 2019, 2020, PIERS, Microwave Magazine, Wireless Personal Communications Kluwer Academic Publisher, First International Conference on Cybernetics and Information Technology, Systems and Applications CITSA, Florida, USA
- “invited speaker” at the European Defense Conference 2011
- chair of the Communications 2010 conference <http://www.comms.ro/>
- chair of the Communications 2012 conference <http://www.comms.ro/>
- chair of the Communications 2014 conference <http://www.comms.ro/>
- chair of the Communications conference 2016 <http://www.comms.ro/>
- chair of the Communications 2018 conference <http://www.comms.ro/>
- chair of the Communications 2020 conference <http://www.comms.ro/>
- chair of the Communications 2022 conference <http://www.comms.ro/>
- TPC member of IEEE BlackSeaCom <http://www.ieee-blackseacom.org/2015/tpcmembers.html>
- IEEE Antennas and Propagation Society, Communications Society;
- AFCEA.
- member of the COST Management Committee - Antenna Systems & Sensors for Information Society Technologies (ASSIST) http://www.cost.eu/COST_Actions/ict/IC0603?management
- TPC member of the EuCAP 2016 Conference, Davos, Switzerland

Member of professional associations:

- European Microwave Association EuMA A 1331;
- “invited speaker” at MRRS, Kiev
- IEEE Antennas and Propagation Society, Communications Society;
- AFCEA.
- member of the COST Management Committee - Antenna Systems & Sensors for Information Society Technologies (ASSIST) http://www.cost.eu/COST_Actions/ict/IC0603?management

- member of the Management Committee COST Action IC1102 Versatile, Integrated, and Signal-aware Technologies for Antennas (VISTA)
http://www.cost.eu/COST_Actions/ict/IC1102?management;
- ARACIS evaluator
- special session organizer at the 7th International Conference on Electronics, Computers and Artificial Intelligence ECAI 2015 AFCEA – Wireless Systems for Defense
- local organizer of the 6th edition of the COST VISTA2014-Bucharest Management Committee and Working Group Meeting and Workshop
<http://www.cost-vista.eu/events/6th-management-committee-and-working-group-meeting-and-workshop/>
- member of the International Steering Committee at the 9th International Conference on Electronics, Computers and Artificial Intelligence ECAI 2017
- member of the International Steering Committee at the 10th International Conference on Electronics, Computers and Artificial Intelligence ECAI 2018
- member of the International Steering Committee at the 11th International Conference on Electronics, Computers and Artificial Intelligence ECAI 2019
- member of the International Steering Committee at the International Conference on Electronics, Computers and Artificial Intelligence ECAI editions 2019-2024
- local arrangement chair - iWAT 2020 <http://iwat2020.org/>
- over 590 citations in the Google Scholar database
(<https://scholar.google.com/citations?user=AyLk8VwAAAAJ&hl=en>)

H index 15

-Co-editor of the special issue "Remote Sensors, Control, and Telemetry" of the ISI Sensors journal
https://www.mdpi.com/journal/sensors/special_issues/iWAT2020

Doctoral supervisor: 14 specialists completed their studies and obtained the title of doctor in the field of Electronic Engineering, Telecommunications and Information Technology: Lieutenant-general dr. eng. Catalin Moraru, col. dr.eng. Marian Buric, col. dr. eng. Ioan Palade, col. dr. eng. Mihai Enache, maj. dr.eng. George Cașu, col. dr. eng. Ionuț-Valentin Grecu, maj. dr. eng. Dan Mototolea, col. dr. eng. Ștefan Dan Stoica, lt.col. dr. eng. Marius Gabriel Țurcan, maj. lecturer dr. eng. Leontin Tuță, dr. eng. Emil Teodoru, maj. dr. eng. Daniel-Nicușor Depărățeanu, lt.col. dr. eng. Alexandru Aloman, maj. dr. eng. Cristian Leca.

Due to the exceptional results obtained in military, didactic and technical-scientific activity, he was decorated with numerous orders and medals, as follows:

- Honorary Emblem of the Land Forces (23.04.2016);
- Emblem of Merit "Military Science" (01.12.2008);
- Honorary Sign in the Service of the Fatherland for Officers for 25 Years of Activity (12.11.2008).
- Honorary Emblem of the Romanian Army (25.10.2007);
- Honorary Sign in the Service of the Army for Officers for 20 Years of Activity (30.10.2003).
- Order "Military Merit" 3rd Class (21.12.1998).

References

https://ro.espacenet.com/searchResults?ST=singleline&locale=ro_RO&submitted=true&DB=&query=Nicolaescu+Ioan&Submit=C%C4%82UTARE
<https://scholar.google.ro/citations?user=AyLk8VwAAAAJ&hl=ro>
<https://ieeexplore.ieee.org/author/37540348500>
<https://orcid.org/0000-0002-6040-8169>
<https://www.researchgate.net/profile/Ioan-Nicolaescu>
<https://prabook.com/web/ioan.nicolaescu/477876>
<https://www.scopus.com/authid/detail.uri?authorId=16025227800>
 ***Academia Tehnică Militară: 1949-1999. Ed. ATM, București, 1999.
 ***Academia Tehnică Militară: 1949-2009. Ed. ATM, București, 2009.
 ***Academia Tehnică Militară „Ferdinand I”: 70 de ani de excelență în învățământul politehnic militar:1949-2019. Ed. ATM, București, 2019.
 Muraru, A. (coordonator). Radarul românesc. O istorie vie. Ed. AGIR, 2019

International research projects

Nr crt	Title	Additional information
1.	Stepped Frequency Continuous Wave Radar for landmines detection	STW-DEL4663/DET 5637, 2002-2003
2.	GPR antennas- Advanced Relocatable Multisensor system for buried landmine detection, Delft University of Technology, The Netherlands,	STW-DEL4663/DET 5637, 2004
3.	Development of guidelines for the design and implementation of ADL architectures	The Netherlands' MoD
4.	Innovative Antennas for Emerging Terrestrial and Spaced based Applications- Cost 284	http://www.cost.eu/COST_Actions/ict/284
5.	Antenna Systems & Sensors for Information Society Technologies (ASSIST) COST Action IC 0603	http://www.cost.eu/COST_Actions/ict/IC0603?management
6.	Versatile, Integrated, and Signal-aware Technologies for Antennas (VISTA) ICT COST Action IC1102	http://www.cost.eu/COST_Actions/ict/IC1102?management

List of research projects as project director/project manager

Nr crt	PROJECT NAME	CONTRACT	QUALITY	BENEFICIAR
1.	Microwave components manufactured from advanced materials with military applications	2140/13.10.2004, 2004-2006	Director of the project	Program Relansin
2.	Security assurance of military installations by decreasing the radar cross section using radioabsorbing materials.	25 R/09.12.2005	Director of the project	Program Security
3.	Microwave integrated subassemblies on ZST substrate to miniaturize portable communications and teledetection equipment and systems	24R/09.12.2005	Director of the project	Program Security
4.	Advanced materials, sensors, technologies and infrastructures for C4I systems for security management	Ministry of education order no. 4873 from 08.08.2006	Director of the project	Program interdisciplinary research platforms
5.	Wave propagation through high dielectric constant materials with applications in manufacturing of antennas and sensors for information society technologies	Contract 12-078, 2008	Director of the project	Program PNII
6.	Advanced antennas for space communications	Contract 63/2013	Project manager for MTA	Program PNII

National research-development projects

No.	PROJECT NAME	CONTRACT NUMBER	QUALITY	BENEFICIARY
1.	Experimental researches to obtain the pattern of the warning device and determination of the warning device directivity characteristic	S 568/1989	responsible	Electromecanica Ploiești
2.	Electrical measurements and technological study of the wide azimuth pattern antenna	S 1795/1991	responsible	S.C. Aerostar Bacău
3.	Azimuthally antenna characteristic wide - ACAL station radar warning by irradiation (SARLL) mounted on aircraft	S 993/1993	responsible	S.C. Aerostar Bacău

4.	Radioabsorbing materials technology and military objectives	S-232/1996	responsible	Armaments Department
5.	Station warning radar and laser irradiation mounted on ship	S-3314/1989	Team member	Navy
6.	Measurements impedance antenna and power amplifier circuit design and adaptation of them	S-3249/1989	Team member	Electromecanic a Ploiești
7.	Warning radar system and laser irradiation mounted on tank	S-3315/1989	Team member	Land Force Staff
8.	Documenting prototype and zero series product Sara	S-782/1990	Team member	S.C. Electromagnetic a S.A.
9.	Documenting prototype and zero series product Gryphon	S-781/1990	Team member	S.C. Electromagnetic a S.A.
10.	Simulator - tester for Traseda-TESIM equipment	S-535/1991	Team member	Air Force Staff
11.	2-18 GHz band detector - modulator	S- 1393/1991	Team member	S.C. Electromagnetic a S.A.
12.	SAIRL Product	S-238/1994	Team member	Land Force Staff
13.	Proximity fuse aviation bombs	S-239 /1994	Team member	Air Force Staff
14.	Electronic time fuse for reactive ammunition caliber 122 mm	719-2000 Oct. 2000 – 2003	Team member	Relansin Program
15.	Radio proximity fuse for ammunition withdrawn from pipes rifled cal.98-155 mm	713-2000 Oct. 2000 – 2003	Team member	Relansin Program
16.	Radio proximity fuse for aviation bombs	1228/2001 Jan. 2001 – 2004	Team member	Relansin Program
17.	Electronic fuse for 273 mm caliber thrower, minimum range 80 km	Contract no. 1777/2003 march 2003 – 2005	Team member	Relansin Program
18.	Concept study " Air defense missile system with medium and large range"	Contract nr. A2 3556/2003 pe 2003 Aug. 2003 – Oct. 2003	Team member	Sectoral Plan of Armaments Department
19.	Radio proximity fuse for bombs thrower	Contract no. 1667/2003 march 2003 – 2005	Scientific research team member	Relansin Program
20.	Radar camouflage systems based polymer matrix composite materials and reinforced textiles	C109/2006	Scientific research team member	CEEX Program

Local plan research-development projects

No.	PROJECT NAME	PERIOD	QUALITY
1.	Radio-interceptor in 8-12 GHz frequency band	1985	responsible
2.	Automated tracking system of targets by television	1986	responsible
3.	Angular transmitter by position	1987	responsible
4.	Anechoic chamber for precision measurements performing in microwave domain	1987-1989	responsible
5.	Parabolic antenna for reception of the satellite transmitted emissions	1990-1991	responsible
6.	SARA product functionality checking Tester	1992-1993	responsible

Patents

1. Scheianu Dumitru, Runcan Ioan, Țăranu Gheorghe, Nicolaescu Ioan, ș.a., Material for microwave absorbing screen, Patent no.101855 din 25.05.1990.
2. Runcan Ioan, Nicolaescu Ioan, ș.a., Screen for microwave absorption and attenuation, Patent no.101856 din 25.05.1990.
3. Runcan Ioan, Nicolaescu Ioan, Compositions of microwave absorbing screen putties, Patent no.106749 din 31.05.1993.
4. Nicolaescu Ioan, ș.a., Microwave absorbing screen based on ferrites, Patent no.106817 din 31.05.1993.
5. Nicolaescu Ioan, ș.a., Microwave ensemble for detection and reception of continuous and pulse signals with circular polarization, in banda 12-18 GHz, Patent no.109691 din 28.04.1995.
6. Nicolaescu Ioan, Multilayered radioabsorbing material with electrical and magnetical losses, Patent no .00118154 / 2003
7. Banciu Marian Gabriel, Nedelcu Liviu, Geambașu Cezar Dragoș, Trupină Lucian Militaru Nicolae Gheorghe, Nicolaescu Ioan, Antenă de microunde cu rezonatori din materiale dielectrice diferite Patent application no. 131974 (A0) / 30.06.2017

International awards

1. Scheianu Dumitru, Runcam Ioan, Țăranu Gheorghe, Nicolaescu Ioan, ș.a., Matériel pour les écrans absorbants de micro-ondes, Le 46-eme Salon Mondial de L'Innovation, de la Recherche et des Nouvelles Technologies, Brussels Eureka, Belgique, 1997, Medaille d'or.
2. Nicolaescu Ioan, ș.a., Ensemble de micro-ondes pour la reception des signaux a polarisation circulaire, continue et en impulsions, dans la bande 12-16 GHz, Le 46-eme Salon Mondial de L'Innovation, de la Recherche et des Nouvelles Technologies, Brussels Eureka, Belgique, 1997, Medaille d'or.
3. Runcan Ioan, Nicolaescu Ioan, ș.a., Compositions de mastices absorbants de micro-ondes, Le 48-eme Salon Mondial de L'Innovation, de la Recherche et des Nouvelles Technologies, Brussels Eureka, Belgique, 1999, Medaille d'Argent.
4. Nicolaescu Ioan, ș.a., Ecran absorbant de micro-ondes a base de ferrites, Le 48-eme Salon Mondial de L'Innovation, de la Recherche et des Nouvelles Technologies, Brussels Eureka, Belgique, 1999, Medaille d'or.

LIST OF WORKS

B. DOCTORAL THESIS

Title of the doctoral thesis: Contributions to the study and development of radio-absorbing materials in the microwave domain

Field: Electronic Engineering and Telecommunications

Doctoral supervisor: gl.bg. (r) prof. dr. ing. Tudor NICULESCU

C. PATENTS AND OTHER INDUSTRIAL PROPERTY TITLES

PATENTS

1. **Nicolaescu Ioan**, Material radioabsorbant cu pierderi electrice și magnetice, Brevet de invenție no .00118154 / 2003.
2. **Nicolaescu Ioan**, Runcan Ioan, Țăranu Gheorghe, Digulescu Petre, Eremia Cristian, Niculițov Valentin, Luță Nicolae, Ecran absorbant de microunde pe bază de ferite, Brevet de invenție nr. 106817 din 31.05.1993.
3. Runcan Ioan Francisc; **Nicolaescu Ioan**; Digulescu Petre; Nicolițov Valentin, Compoziții de chituri absorbante de microunde, Brevet de invenție nr. 106749 din 31.05.1993.
4. **Nicolaescu Ioan**; Runcan Ioan Francisc; Niculescu Tudor; Țăranu Gheorghe; Eremia Cristian, Ansamblu de microunde pentru recepția și detecția semnalelor cu polarizare circulară, continue și în impulsuri, în banda 12-18 GHz, Brevet de invenție nr. 109691 din 28.04.1995.
5. Runcan Ioan, **Nicolaescu Ioan**, Scheianu Dumitru, Țăranu Gheorghe, Digulescu Petre, Niculițov Valentin, Luță Nicolae, Eremia Cristian, Panou pentru dispersia și atenuarea microundelor, Brevet de invenție nr. 101856 din 25.05.1990.
6. Scheianu Dumitru, Runcan Ioan, Țăranu Gheorghe, **Nicolaescu Ioan**, Eremia Cristian, Niculițov Valentin, Luță Nicolae, Tasciuc Mihai, Material pentru ecrane absorbante de microunde, Brevet de invenție nr. 101855 din 25.05.1990.

INNOVATIONS

1. **Nicolaescu Ioan**, ș.a., Sistem electronic pentru conversia informației de la selsine transmițătoare, Certificat de inovație Nr. 46 din 14.03.1986.
2. Starparu Marcel, **Nicolaescu Ioan**, ș.a., Interfață pentru cuplarea complexului de rachete la un microcalculator IBM-PC, Certificat de inovație Nr. 9 din 10.05.1996.
3. Gherasim Zenovic, Negru Radu, **Nicolaescu Ioan**, ș.a., Echipament pentru modernizarea obiectului 1 R.L. -25, Certificat de inovație Nr. 75 din 03.02.1988.
4. Gherasim Zenovic, **Nicolaescu Ioan**, Negru Radu, ș.a., Instalație pentru conducerea automată a obiectului 1 R.L. -25, Certificat de inovație Nr. 277 din 22.06.1988.

D. BOOKS AND BOOK CHAPTERS

1. Răzvan D. Tamaș, Alina Bădescu, Tudor Palade, Florin Alexa and Ioan Nicolaescu, Antennas and Propagation, MDPI, Switzerland, ISBN 978-3-0365-1828-2 (Hbk), 2021
2. Ahmet Serdar Turk, P. van Genderen, A.Yarovoy and I. **Nicolaescu**, GPR Hardware - Stepped-frequency continuous-wave radar, 19 pag (64-83), capitol în lucrarea Subsurface Sensing , Ahmet Serdar Turk, Ali Koksall Hocaoglu, and Alexey A.Vertiy, John Wiley & Sons, Inc., Hoboken, New Jersey, U.S.A., August 2011, ISBN: 978-0-470-13388-0, 920 pag.

3. Buric Marian, **Nicolaescu** Ioan, Sisteme de radiocomunicații în standard TETRA, Editura Academiei Tehnice Militare, București, 2012, ISBN 978-973-640-211-1, 327p.
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