



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Iulia Andreea MOCANU (MIHAI)**
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E-mail iulia.mocanu@upb.ro
Nationality Romanian
Date of birth 20 July 1983
Gender Female

Desired employment / Occupational field

Work experience

Dates	2021 – present
Occupation or position held	Associate Professor – Department of Telecommunications, Faculty of Electronics, Telecommunications and Information Technology, University Politehnica of Bucharest <ul style="list-style-type: none">• Courses: Microwaves, Microwaves Circuits in English.• Coordinator professor for three English diploma projects.• Research in artificial microwave transmission lines and their applications• Member in the Cost Action CA SYMAT• Member in the Department Telecommunications Council• Member in the Faculty Council
Name and address of employer	University POLITEHNICA of Bucharest, 313 Splaiul Independentei, District 6, Bucharest, Romania
Type of business or sector	Higher Education
Occupation or position held	Lecturer– Department of Telecommunications, Faculty of Electronics, Telecommunications and Information Technology, University Politehnica of Bucharest

Main activities and responsibilities	<p>-Courses: High Frequency and Microwaves in English.</p> <p>-Applications:</p> <ul style="list-style-type: none"> • High Frequency and Microwaves in English, • Microwaves in English and Romanian, • Circuits of Microwave in English and Romanian, • Communications on Optical Fibre (Master) in Romanian, • Transmission Media in Romanian. <p>-Coordinator professor for eleven English diploma projects. The results have been published in two ISI papers, having two graduates as co-authors Laura Manoliu, respectively Silviu Ciocan.</p> <p>-Research in artificial microwave transmission lines and their applications. A new type of an artificial transmission line inverter impedance is proposed having the main advantages of being compact, symmetric, using a minimum number of constitutive cells and exhibiting a dual band behaviour for two arbitrary frequencies. The results of the research activity have been presented at international conferences and have been published in proceedings and journals. A book has been published which gives an extensive and complete analytical characterization for the main types of left-handed transmission lines known in literature.</p> <p>-part of the newly activating research group from the Campus Center UPB, Laboratory 13 - Metamaterial Structures and Dielectrics with Special Properties: http://campus.pub.ro/website/metamaterial-structures-and-dielectrics-with-special-properties</p> <p>-Short assignment expert for an OIPOS DRU project, INSEED, Strategic program to promote innovation in services through open, continuous education, POSDRU/86/1.2/S/57748, 2010 – 2013.</p>
	<p>-Published</p> <ul style="list-style-type: none"> • A book „Introducere în studiul metamaterialelor- Linii de transmisiune artificiale, de tip „ Left-handed”, Iulia Mocanu, Editura Matrix Rom, București, 2017, ISBN 978-606-25-0381-9 • Microwave problem collection “Culegere de microunde”, Iulia Mocanu, Alina Badescu, Editura PRINTECH, ISBN 978-606-23-0189-7, Bucuresti 2014. • Laboratory guidebook, “Microwave Circuits – Laboratory Guidebook”, G. Lojewski, N. Militaru, H. Lupescu, I. Mocanu, A. Bădescu, Editura POLITEHNICA Press, ISBN 978-606-515-563-3, București, România, 2014
Name and address of employer	University POLITEHNICA of Bucharest, 313 Splaiul Independentei, District 6, Bucharest, Romania
Type of business or sector	Higher Education
Dates	2014 – 2015
Occupation or position held	Postdoctoral Research Scientist– University Politehnica of Bucharest
Main activities and responsibilities	<p>- Research in propagation through artificial microwave transmission lines, methods to transform dual-band metamaterial components in quad-band components and analysis of the frequency behaviour of these devices. The results have been presented at international conferences and have been published in proceedings and journals. A total of 7 articles published in ISI proceedings and journals.</p> <p>- Participation and paper presentation at International Conferences</p> <p>-The final postdoctoral report: <i>Microwave devices for telecommunications using artificial transmission lines</i></p>
Name and address of employer	University POLITEHNICA of Bucharest, 313 Splaiul Independentei, District 6, Bucharest, Romania

Type of business or sector	Research
Dates	2012 – 2013
Occupation or position held	Research Scientist– Microwave Group, IMT
Main activities and responsibilities	<p>-Research in coplanar artificial microwave transmission lines and their applications. The results have been presented at international conferences and have been published in proceedings and journals. A total of 10 articles published in ISI proceedings and journals.</p> <p>-Participation and paper presentation at International Conferences</p> <p>-Involved in research activities in the domain of designing metamaterial microwave devices</p> <p>-Measurements of the implemented devices with “On wafer” measurement system in the 0.1-110 GHz range (microwave network analyser from Anristu with SUSS Microtec Probe Station)</p>
Name and address of employer	National Institute for Research and Development in Microtechnologies -IMT Bucharest, 126A, Erou lancu Nicolae Street, 077190, Bucharest, ROMANIA
Type of business or sector	Research
Dates	2007-2012
Occupation or position held	Teaching Assistant– Microwave Group, Department of Telecommunications, Faculty of Electronics, Telecommunications and Information Technology, University Politehnica of Bucharest
Main activities and responsibilities	<p>-Applications:</p> <ul style="list-style-type: none"> • High Frequency and Microwaves in English, • Microwaves in English and Romanian, • Microwave Circuits in English and Romanian, • Communications on Optical Fiber (Master) in Romanian, • Transmission Media in Romanian <p>-Research in artificial microwave transmission lines and their applications. A new, general method to completely characterize the propagation phenomena along a left-handed transmission line is proposed and validated by simulation. It is used to investigate the behavior in frequency domain for different microwave devices and structures. The results have been presented at international conferences and have been published in proceedings and journals. A total of 8 papers were published as first author or co-author, 3 in ISI proceedings and journals.</p> <p>-Short assignment expert for an OIPOSDRU project, INSEED, Strategic program to promote innovation in services through open, continuous education, POSDRU/86/1.2/S/57748, 2010 – 2013</p> <p>-Specialist for the projects:</p> <ol style="list-style-type: none"> 1. Tunable selective structures with liquid crystals for microwave application, SCRILAM, PNCDI 2 72-230/2008, 2008 – 2011, researcher 2. Advanced processing of microwave and optical signals using structured materials with negative electromagnetic parameters, PRESTO, PNCDI 71-005/2007, 2007 – 2010, researcher 3. Radiating system – carrier pulse assembly for ultra-wide band communications onboard maritime ships, SIRADMAR, PNCDI 2 12-085/2008, 2008 – 2010, researcher <p>- Obtaining the PhD diploma with the thesis: <i>The use of Metamaterials in microwaves - Study and Applications</i></p>
Name and address of employer	University POLITEHNICA of Bucharest, 313 Splaiul Independentei, District 6, Bucharest, Romania
Type of business or sector	Higher Education

Education and training

Dates	2011
Title of qualification awarded	Ph.D. in Electronic Engineering and Telecommunications
Principal subjects/occupational skills covered	<p>Dissertation: “The Use of Metamaterials in Microwaves– Study And Applications”</p> <p>Honours: Dissertation passed with Magna cum Laude</p>

Name and type of organisation providing education and training | University POLITEHNICA of Bucharest
 Level in national or international classification | 472 place in the top 500 most prestigious universities in the world (top SCOPUS)

Dates | 2007

Title of qualification awarded | B.A. in Electronic Engineering

Principal subjects/occupational skills covered | Areas of Concentration: Electronic Engineering
 Minor: Mobile Communications and Satellites
 Thesis: "Accelerators with superconductive cavities"

Name and type of organisation providing education and training | University POLITEHNICA of Bucharest
 State University
 Level in national or international classification | 472 place in the top 500 most prestigious universities in the world (top SCOPUS)

Dates | 2007

Title of qualification awarded | European Computer Driving License Core, ECDL, no. RO 019664 per 05.04.2007

Principal subjects/occupational skills covered |

- IT Security
- Windows XP or Windows 7
- Word Processing Software - Office 2007
- Spreadsheets Software - Office 2007
- Developing and using Database (Access DB) - Office 2007
- Presentation and the effective use of Powerpoint - Office 2007
- Internet Explorer/Outlook - 2007

Name and type of organisation providing education and training | European Computer Driving License Core
 Level in national or international classification | International

Dates | 2004

Title of qualification awarded | Certificate in English-nr. 011499710 per 13.02.2004

Principal subjects/occupational skills covered | Level 2

Name and type of organisation providing education and training | University of Cambridge
 Level in national or international classification | International

Personal skills and competences

Mother tongue(s) | **Romanian**

Other language(s) | **English**

Self-assessment
European level ()*

English

French

Spanish

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

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

Social skills and competences	calm, ambition, perseverance, seriousness, patience, able to work in team, but also on my own
Organisational skills and competences	Coordinator professor for more than twenty English diploma projects. Specialist member and short assignment expert for different projects, including an OIPOS DRU project. Elected Member of the Telecommunications Department Council
Technical skills and competences	I have strong knowledge of microwave propagation phenomena on transmission lines, rectangular wave guides and artificial transmission lines. Also, I am familiar with propagation aspects that occur on single-mode and multi-mode optical fibers. I have investigated three main types of artificial transmission lines: CRLH, D-CRLH, E-CRLH and used their main properties for building innovative passive devices such as: branch-line couplers, rat-race couplers, power dividers, diplexers with dual or four band behavior. I have experience in using both simulation programs for microwave design (Sonnet, ADS, Ansoft Designer) and measuring tools for microwave devices and for optical fiber (OTDR, CD-OTDR). I am able to interpret measurements and reports for chromatic dispersion, OTDR analysis, scattering parameters measured on single and multimode optical fibers.
Computer skills and competences	I have a good knowledge of simulation programs for microwave circuits such as: Ansoft Designer, ADS, AWR and Sonnet. I am able to create / edit documents and presentations. I can use auxiliary programmes such as MathCAD for computations, Matlab for graphical representations and Visio for scheme drawing.
Artistic skills and competences	N/A
Other skills and competences	Reviewer for Progress in Electromagnetic Research (PIER, PIER B,C,M, PIER Letters) and for EuroCon 2013 Conference
Driving licence	B Category
Additional information	Attending Diploma at „NATO Advanced Research Workshop”, META 10, Cairo, 2010 Best papers Award ECAI Pitesti 2009 with paper "MICROWAVE PROPAGATION THROUGH SOME LEFT HANDED STRUCTURES" Best papers Award ECAI Pitesti 2009 with paper "MICROWAVE INVESTIGATION OF THE SCATTERING PARAMETERS FOR DIFFERENT TYPES OF METAMATERIALS"

20.04.2023