



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Iulia Andreea MOCANU (MIHAI)**
Address(es) **Bulevardul Iuliu Maniu, nr. 1-3, B201, Bucharest, Romania**
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Nationality **Romanian**

Date of birth **-**

Gender **Female**

Desired employment / Occupational field

Work experience

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| Dates | 2021 – present |
| Occupation or position held | <p>Associate Professor – Department of Telecommunications, Faculty of Electronics, Telecommunications and Information Technology, University Politehnica of Bucharest</p> <ul style="list-style-type: none">• Courses: Microwaves, Microwaves Circuits in English.• Coordinator professor for English diploma projects.• Research in metamaterial planar structure and their applications• Member in the Cost Action CA18223- SYMAT, CA 23125- TETRA• Member in the Department Telecommunications Council• Member in the Faculty Council• More than 50 ISI articles published, H-index 6• Project director for: Metamaterial microwave absorber for 5G applications, German Academic Exchange Services (DAAD), Research Stays for University Academics and Scientists, No. 91753806, 2019, 2020; Cuploare directive cu metamateriale pentru sisteme de telecomunicații de bandă dublă' GNAC ARUT 2023, Consolidator Grant (CG), Nr. 16/06.10.2023, 2023: 06.10.2023-31.12.2025.• I. Mocanu, "Microwave application guide", Editura Printech ISBN 978-606-23-0986-2, Cod CNC SIS 54, ISBN 978-606-23-1505-4, Bucuresti 2023.• G. Lojewski, N. Militaru, I. Mocanu, " Microwave Circuits ", Editura POLITEHNICA Press, Cod CNC SIS 19, ISBN 978-606-515-975-4, București, România, 2021. |

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 -Courses: High Frequency and Microwaves in English.

-Applications:

- 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.

-Coordinator professor for English diploma projects. The results have been published in two ISI papers, having two graduates as co-authors.

-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.

-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>

-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.

-Published

- 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

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| 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.</p> <p>-Short assignment expert for an OIPOS DRU project, INSEED, Strategic program to promote innovation in services through open, continuous education, POS DRU/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

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|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dates | 2011 |
| Title of qualification awarded | Ph.D. in Electronic Engineering and Telecommunications |
| Principal subjects/occupational skills covered | Dissertation: "The Use of Metamaterials in Microwaves– Study And Applications" Honours: Dissertation passed with Magna cum Laude |
| 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 | 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 | <ul style="list-style-type: none">➤ 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 | | | | |
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| Self-assessment | Understanding | | Speaking | | Writing |
| European level (*) | Listening | Reading | Spoken interaction | Spoken production | |
| English | C1 | C1 | C1 | C1 | C1 |
| French | B1 | B1 | A2 | A2 | A2 |
| Spanish | A2 | A2 | A1 | A1 | A1 |

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

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| 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 fifty English diploma projects. Specialist member and short assignment expert for different projects, including an OIPOS DRU project. Elected Member of the Telecommunications Department Council and Faculty Council |
| Technical skills and competences | <p>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.</p> <p>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, sensors.</p> <p>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).</p> <p>I am able to interpret measurements and reports for chromatic dispersion, OTDR analysis, scattering parameters measured on single and multimode optical fibers.</p> |
| Computer skills and competences | <p>I have a good knowledge of simulation programs for microwave circuits such as: Ansoft Designer, ADS, AWR and Sonnet.</p> <p>I am able to create / edit documents and presentations.</p> <p>I can use auxiliary programmes such as MathCAD for computations, Matlab for graphical representations and Visio for scheme drawing.</p> |
| 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 | <ul style="list-style-type: none"> • 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" |

14.11.2025