

PERSONAL INFORMATION

ANTONIAAC VASILE IULIAN



 313 Splaiul Independenței Street, build J, room JK109, Sector 6, Bucharest, Romania

 -  [REDACTED]

 [REDACTED]

Sex Male | Date of birth [REDACTED] Nationality Romanian

OCCUPATIONAL FIELD

Higher education – Scientific Research

Educational – 20 ani, Research - 24 ani

April 2020 – present

Director of Department SMMM

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania.

Management activities. Main activity are related to the international and national cooperation with other universities and research entities, organization of the scientific events and promotional activities.

Business or sector: Higher education – Administration and management.

May 2016 - present

Vice Dean

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania.

Management activities. Main activity are related to the international and national cooperation with other universities and research entities, organization of the scientific events and promotional activities.

Business or sector: Higher education – Administration and management.

May 2016 - present

Member in Doctoral School Council SIM-UPB

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania

Coordination and management activities related to the doctoral studies. Evaluation of the PhD students enrolled in the doctoral school.

Business or sector: Higher education – Administration and management.

May 2016 - present

Member in the Senate of the University POLITEHNICA of Bucharest

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania.

Specific activities for the members in the Senate of the University POLITEHNICA of Bucharest. Management activities.

Business or sector: Higher education – Administration and management.

WORK EXPERIENCE

April 2015 - present

Professor Habil

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania

Teaching courses: Introduction in the biomaterials domain, Biocompatibility, Research Projects Management, Metallic biomaterials, Prosthetic explants analysis, Instruments and medical devices.

Research activities.

Business or sector: Higher education – Scientific Research

February 2015 - present

Full Professor

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania

Teaching courses: Introduction in the biomaterials domain, Biocompatibility, Research Projects Management, Metallic biomaterials, Prosthetic explants analysis, Instruments and medical devices.

October 2013 – January 2015

Laboratory activities disciplines: Biocompatibility, Research Projects Management, Metallic biomaterials, Prosthetic exapllants analysis, Instruments and medical devices. Research on the production and investigation of biomaterials and medical devices.

Associated Professor

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania

Teaching courses: Introduction in the biomaterials domain, Biocompatibility, Research Projects Management, Metallic biomaterials, Prosthetic exapllants analysis, Instruments and medical devices. Laboratory activities disciplines: Biocompatibility, Research Projects Management, Metallic biomaterials, Prosthetic exapllants analysis, Instruments and medical devices. Research on the production and investigation of biomaterials and medical devices.

June 2002 – September 2013

Lecturer

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania

Elaboration of courses in the field of biomaterials: Introduction to biomaterials field, Biocompatibility, The management of research projects, Metallic biomaterials engineering, Medical engineering, Retrieval Analysis of Explants. Development of new directions of study. Organization of new teaching and research laboratories: Biomaterials laboratory (room JK 309), Interface phenomena laboratory (room JI 204) at University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy.

March 2000 – June 2002

Assistant Professor

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania

Teaching and research activities

March 2000 – June 2002

Chief Administrator

The Managerial Agency for Scientific Research, Innovation and Technological Transfer (AMCSIT) Politehnica; 313 Splaiul Independentei street, 060024, Bucharest, Romania

The management and marketing activities of scientific research, innovation and technology transfer in engineering and other related fields.

September 1999 – March 2002

Engineer

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, Department of Materials Science and Physical Metallurgy, 313 Splaiul Independentei Street, 060042, Bucharest, Romania

Teaching and research activities

EDUCATION AND TRAINING

April 2015

Habilitation Thesis

Romanian Ministry for Education and Research, CNCSIS Commission 7: Materials Engineering

Thesis title: Biomaterials used and Failure Analysis of Orthopedic Implants

Level in national or international classification: ISCED 6

June 2010 – March 2013

Postdoctoral degree

University POLITEHNICA of Bucharest, 313 Splaiul Independentei Street, 060042, Sector 6, Bucharest, Romania; Materials Science and Engineering field on "*The use of nanostructured alloys magnesium based to obtain biodegradable orthopedic implants*" Project POSDRU/89/1.5/S/54785, Postdoctoral Programme for Advanced Research in Nanomaterials Field, Sectorial Operational Programme Human Resources Development 2007–2013.

Theme: The use of nanostructured alloys magnesium based to obtain biodegradable orthopedic implants

Level in national or international classification: ISCED 6

September 2000 – January 2007

Doctoral degree in Materials Science

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, 313 Splaiul Independentei Street, 060042, Bucharest, Romania; Tel.: +4021-402 96 24; +4021-402 95 86, E-mail: sim@upb.ro; Website: <http://www.sim.pub.ro>

Thesis title "Contributions in metallic biomaterials domain used in the implementation of the femoral component of the total hip endoprosthesis"

Level in national or international classification: ISCED 6

September 1999 – June 2000

Master of Science

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, 313 Splaiul Independentei Street, 060042, Bucharest, Romania; Tel.: +4021-402 96 24; +4021-402 95 86, E-mail: sim@upb.ro; Website: <http://www.sim.pub.ro>

September 1998 – June 1999

Advanced Procedures for developing special alloys
Level in national or international classification: ISCED 6

Master of Science

Fine Structure of Materials Research Department, University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, 313 Splaiul Independentei Street, 060042, Bucharest, Romania; Tel.: +4021-402 96 24; +4021-402 95 86, E-mail: sim@upb.ro; Website: <http://www.sim.pub.ro>

Fine Structure of Materials

Level in national or international classification: ISCED 6

September 1990 – June 1998

Metallurgical Engineer, Bachelor Diploma

University POLITEHNICA of Bucharest, Faculty of Material Science and Engineering, 313 Splaiul Independentei Street, 060042, Bucharest, Romania; Tel.: +4021-402 96 24; +4021-402 95 86, E-mail: sim@upb.ro; Website: <http://www.sim.pub.ro>

Level in national or international classification: ISCED 5

September 1986 – June 1990

Baccalaureate Diploma

Mathematics-Physics High School "G. Bacovia" Bacau, Romania

Level in national or international classification: ISCED 3

PERSONAL SKILLS

Communication skills

Ability to work in team, I have worked in various interdisciplinary research teams. Intercultural skills: I have attended to international conferences and I established contacts and collaborations at national and international level materialized by working in international projects, research activities and collaborative scientific publications.

Organisational / managerial skills

1) Project manager or partner project manager in various national and international scientific projects (Example)

- Contract 271/2014, *Biodegradable Implants from Magnesium Alloys used in Foot and Ankle Surgery*, PN II, Domain 7, Project manager.

- Contract 132 /2014, *Magnetic biomimetic scaffolds as alternative strategy for bone tissue repair and engineering*, PN II, Domain 4, Partner responsible.

- Contract 72-192/01.10.2008, *Implante resorbabile utilizate in artroscopie realizate din biomateriale biomimetice* – PROGRAM 4; Domain 7, Project manager.

- Contract 72-180/01.10.2008, *Materiale nanostructurate pentru functionalizarea suprafetelor endoprotezelor articulare cu uzura redusa*, PROGRAM 4, Domain 7, Partner responsible.

- Contract 235/2006, *Biofunctionalizarea suprafetei implanturilor pentru osteosinteza*, CEEEX-RELANSIN Program, Project manager.

- FP7-NMP-2007-LARGE-1, Project no.293104: *Novel biofunctional polymer scaffolds and techniques for the regeneration and repair of degenerate intervertebral disc*, Acronym - Disc Regeneration; NMP-2007-LARGE-1, Collaborative Project; Large-scale integrating project; Work programme topics addressed: NMP-2007-2.3-1; Project manager: Prof. Luigi Ambrosio; *Partner responsible*.

2) Research center director, BIOMAT-UPB, 2002-2004.

3) Master's program coordination, Biomaterials, Department of Bioengineering and Biotechnology, University Politehnica of Bucharest, 2008-2012.

4) Member in the Board of the Faculty of Material Science and Engineering, Politehnica University of Bucharest, 2012-present.

5) Founded member of the Council of the Romanian Society for Biomaterials (SRB) since 2002, President of SRB (2010-2014).

6) Member of the Executive Board of the International Society for Ceramics in Medicine (2012-present).

7) Member of the following scientific societies: European Society for Biomaterials (SRB), Tissue Engineering and Regenerative Medicine International Society (TERMIS), International Society for Ceramics in Medicine (ISCM), American Society for Mechanical Engineering (ASME).

8) Honorary Member of the Adhesion Society, Ibero-American Group.

9) Conference Chairman - Training School: Advanced Techniques for Characterization Biomimetic and Novel Biomaterials, May 2012, University Politehnica of Bucharest, Romania; COST Action TD0903.

10) Conference Chairman, "6th International Conference - Biomaterials, Tissue Engineering & Medical Devices", BiomMedD'2014, Septembrie 2014, Constanta, Romania

11) Conference Chairman - 25th Symposium and Annual Meeting of the International Society for Ceramics in Medicine (BIOCERAMICS 25), Bucharest, Romania, November 2013.

12) BiomMedD V Editor, Volume 583, Key Engineering Materials, 2014, ISSN print 1013-9826, ISSN web 1662-9795; 29 articles.

13) BIOCERAMICS25 Editor, Volume 587 - Key Engineering Materials, 2014, ISSN print 1013-9826, ISSN web 1662-9795; 73 articles.

14) Book Editor, *Biologically responsive biomaterials for tissue engineering*, Series: Springer Series in Biomaterials Science and Engineering (254 pag.), Vol. 1, Ed. Springer, 2013, ISBN 978-1-4614-4327-8, ISBN 978-1-4614-4328-5 (eBook).

Member of the Organizing Committee, Scientific Committee and/or Chairman at many scientific events (selective list):

8th ScSB Conference, Sigulda, Latvia, 2015; Napoca Biodent 2015, Cluj-Napoca, Romania; International Conference on Biomaterials & Medical Devices BIOMMEDD'2014, Bucharest, Romania, 2014; 6th International Symposium Apatite and Correlative Biomaterials, Nantes, France, 2013; International Conference on Biomaterials&Medical Devices BIOMMEDD'2012, Constanta, Romania, 2012; International Conference E-Health and Bioengineering - EHB 2011, Iasi, Romania, 2011; 24th European Conference on Biomaterials, Dublin, Ireland, 2011; International Conference on Biomaterials & Medical Devices BIOMMEDD'2010, Sinaia, Romania, 2010; 22nd European Conference on Biomaterials, Lausanne, Switzerland, 2009; The First International Congress on Side Effects in Medicine (ICSEMED) Iasi, Romania, 2009; International Conference on Biomaterials & Medical Devices BIOMMEDD'2008, Bucuresti, Romania, 2008; National Symposium on Biomaterials, "Biomaterials and Medical-Surgical Applications", ed. VI, Cluj-Napoca, Romania, 2007; International Conference on Biomaterials & Medical Devices BIOMMEDD'2006, Iasi, Romania, 2006; International Congress of Dental Materials " Current Trends in the use of dental biomaterials" - Napoca Biodent, Cluj-Napoca, Romania, 2005; International Conference on Biomaterials & Medical Devices BIOMMEDD'2004, Bucharest, Romania, 2004.

Job-related skills

Exceptional technical skills: design, implementation, analysis, characterization and demonstration on the properties and characteristics of materials, nanomaterials, biomaterials and medical devices.

- Training courses: "Project Management Research", AMCSIT-Politehnica Bucharest, Romania (2002); "Advanced Summer Course in Cell-Materials Interactions", Porto, Portugal (2006); "UWEB Biomaterials Intensive Course", Washington University, Seattle, USA (2007);

- Specialization: "Metallurgy of metallic biomaterials", PX Tech, Chaux-du-Fonds, Switzerland (2004); "Methods for obtaining and characterization of dental alloys", PX Tech, Chaux-du-Fonds, Switzerland (2007)

Computer skills

Skills and competences to use the computer (Microsoft Office – Word, Excel, PowerPoint); Graphics processing (Corel Photo-Paint, Corel Draw, Adobe PhotoShop); Basic programming concepts.

Other skills

Editor-in-Chief: Materials Science Forum, publisher TTP, Switzerland.

Editorial Board Member: Bioactive Materials, Regenerative Biomaterials, Journal of Adhesion Science and Technology, Heliyon, Biomanufacturing Reviews, Engineering of Biomaterials, Biomaterials and Tissue Technology.

Reviewer of the international listed/indexed ISI journals and indexed BDI journal: Ceramic International, Journal of Materials Science: Materials in Medicine, Journal of Bioactive and Compatible Polymers, Materials Research Ibero-American Journal of Materials, Key Engineering Materials, Solid State Phenomena, International Journal of Adhesion and Adhesives, European Polymer Journal, Materials Chemistry and Physics, Biofabrication, Journal of Biomimetics, Biomaterials and Tissue Engineering.

Abstracts reviewer for various national and international conferences/meetings (selective list):

BIOMMEDD2014; 4th IEEE International Conference on E-Health and Bioengineering – EHB 2013; Bioceramics25 2013; BIOMMEDD2012; World Biomaterials Congress – WBC 2012; ADORT 2012; ISBEMP 2012; SNB 2011; BioRemed 2011; ESB 2011; EHB 2011; AMS 2011; Remedis 2011; BIOMMEDD2010; ESB 2010; ESB 2009; Remedis 2009; SNB 2009; World Biomaterials Congress – WBC 2008; BIOMMEDD2008; BIOMMEDD2006.

Scientific leading for students in the student scientific communications (an average of four scientific papers per year in the last 5 year). Technical assistance for various companies in the field of research activities (Romhandicap SA; Vodimedicor SRL; RODAX IMPEX SRL; MEDICAL ORTOVIT SRL; etc.)Design of metallic biomaterials processing technology in order to obtain implants for osteosynthesis (beneficiary SC ROMHANDICAP SA).

Driving licence

Driving licence category: B

ADDITIONAL INFORMATION

Publications
Presentations
Projects
Conferences
Seminars

Books and chapters in specialized books: 22; Handbooks/textbooks 5; Guidance laboratory/application: 2; Articles published in scientific journals (listed/indexed ISI Thomson Reuters): 104; Articles published in scientific journals BDI indexed (Scopus): 175; Citations in ISI journals: 1400 (h-index 23); Citations in Scopus/BDI journals: 1960 (h-index 25); Citations in GoogleScholar: 2401 (h-index 27); National and international invited papers: 51; Patents: 12; International research-development-innovation projects: 8 (5 as partner responsible); National research-development-innovation projects: 48 (14 as project manager; 12 as partner responsible, 22 as team member); Papers presented on various seminars/exhibitions, conferences: 251.

H-index ISI:23 ; H-index Scopus:25 ; H-index GS:27.

Representative books:

- Antoniac I., Handbook of Bioceramics and Biocomposites, Publisher Springer International Publishing Switzerland, 1386 pages, ISBN 978-3-319-12459-9, 2016.
- Antoniac I., Biologically Responsive Biomaterials for Tissue Engineering, Publisher Springer Science+Business Media New York, in Springer Series in Biomaterials Science and Engineering, 254 pages, ISBN 978-1-4899-9256-7, 2013.

Honours and awards

HONORS AND AWARDS

1. President of the International Society for Ceramics in Medicine (2012).
2. President of the Romanian Society for Biomaterials (2020-present)
3. Honorary member of the Adhesion Society, Ibero-American Group (2012-present)
4. SRB Excellence Award, Bucharest, Romania, 2012, given by SRB for the activity in the field of biomaterials during 2012.
5. BIOCERAMICS 28 Award, Charlotte, USA, 2016, given by ISCM for the activity in the field of bioceramics during 2016.
6. Poster Session Second Prize at the "International Conference 21st Scientific Days of the French Academy of Dental Biomaterials", 2004
7. Prize "Daniel Bunea" of Romanian Society for Biomaterials for the best romanian scientist in the field of biomaterials during the year 2005.
8. Gold Medal at "ECOINVENT2003 Salon of Inventions", Iasi, Romania
9. Poster Section First Prize at the Fifth National Symposium of Biomaterials: "Biomaterials and Medical-Surgical Applications", Iasi, Romania, 2005.

References

Prof.Dr. Nicholas Peppas (USA), Prof.Dr. David Williams (USA), Prof.Dr. James C. Kirkpatrick (Germany), Prof.dr.Guy Daculsi (France), Prof. Dr. Jose Miguel Martin Martinez (Spain), Prof.Dr. Roger Narayan (USA), Prof.Dr. Gultekin Goller (Turkey), Prof.dr. Lucien Reclaru (Switzerland), Prof.Dr. Matteo Santin (UK), Prof.Dr. Kunio Ishikawa (Japan), Prof.Dr. Nahum Frage (Israel), Prof.Dr. Jiang Chang (China), Prof.dr. Vlad Alexandru Ciurea (Romania), Prof.dr. Catalin Carstoiu (Romania), Prof.dr. Ioan Vida-Simiti (Romania), Prof.dr.Aurel Viorel Serban (Romania), Prof.dr.Mircea Tierean (Romania), Prof.Dr. Brandusa Ghiban (Romania).

ANNEXES

- copies of degrees and qualifications;
- publications and research activity list.