



## Curriculum vitae Europass

### Informații personale

Nume / Prenume **Ioan Stefan VOICU**  
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Naționalitate(-tăți) Romana  
Data nașterii

### Experiența profesională

Perioada	Sep. 2019 - Prezent
Funcția sau postul ocupat	<b>Profesor Universitar</b>
Activități și responsabilități principale	Activitate didactică la Departamentul de Chimie Analitică și Ingineria Mediului, activitate de cercetare în domeniul materialelor și proceselor membranare, Project Team Leader în cadrul Advanced Polymer Materials Group APMG-UPB
Numele și adresa angajatorului	<b>Universitatea Politehnică București</b> <b>Facultatea de Chimie Aplicată și Știința Materialelor</b> <a href="http://www.chim.upb.ro">www.chim.upb.ro</a> , Str. Gheorghe Polizu 1-7, 011061 București, România
Tipul activității	Universitate publică, învățământ, cercetare
Perioada	Oct. 2017 – Sep. 2019
Funcția sau postul ocupat	<b>Conferențiar Universitar</b>
Activități și responsabilități principale	Activitate didactică la Departamentul de Chimie Analitică și Ingineria Mediului, activitate de cercetare în domeniul materialelor și proceselor membranare, Project Team Leader în cadrul Advanced Polymer Materials Group APMG-UPB
Numele și adresa angajatorului	<b>Universitatea Politehnică București</b> <b>Facultatea de Chimie Aplicată și Știința Materialelor</b> <a href="http://www.chim.upb.ro">www.chim.upb.ro</a> , Str. Gheorghe Polizu 1-7, 011061 București, România
Tipul activității	Universitate publică, învățământ, cercetare
Perioada	Oct. 2011 – Sep. 2017
Funcția sau postul ocupat	<b>Sef de Lucrari</b>
Activități și responsabilități principale	Activitate didactică la Catedra de Chimie Analitică și Analiza Instrumentală, activitate de cercetare în domeniul materialelor și proceselor membranare
Numele și adresa angajatorului	<b>Universitatea Politehnică București</b> <b>Facultatea de Chimie Aplicată și Știința Materialelor</b> <a href="http://www.chim.upb.ro">www.chim.upb.ro</a> , Str. Gheorghe Polizu 1-7, 011061 București, România
Tipul activității	Universitate publică, învățământ, cercetare
Perioada	Oct. 2009 – Sep. 2011
Funcția sau postul ocupat	<b>Asistent Universitar</b>
Activități și responsabilități principale	Activitate didactică la Catedra de Chimie Analitică și Analiza Instrumentală, activitate de cercetare în domeniul materialelor și proceselor membranare

Numele și adresa angajatorului	<b>Universitatea Politehnica Bucuresti</b> <b>Facultatea de Chimie Aplicata si Stiinta Materialelor</b> <a href="http://www.chim.upb.ro">www.chim.upb.ro</a> , Str. Gheorghe Polizu 1-7, 011061 Bucuresti, Romania
Tipul activității	Universitate publica, invatamant, cercetare
Perioada	Sep. 2006 – Sep. 2009
Funcția sau postul ocupat	<b>Cercetatorstiintific</b>
Activități și responsabilități principale	Activitate de cercetare in domeniul materialelor si proceselor membranare
Numele și adresa angajatorului	<b>Universitatea Politehnica Bucuresti</b> <b>Facultatea de Chimie Aplicata si Stiinta Materialelor</b> <a href="http://www.chim.upb.ro">www.chim.upb.ro</a> , Str. Gheorghe Polizu 1-7, 011061 Bucuresti, Romania
Tipul activității	Universitate publica, invatamant, cercetare
Perioada	Apr. 2006 – Dec. 2007
Funcția sau postul ocupat	<b>Cercetatorstiintific</b>
Activități și responsabilități principale	Activitate de cercetare in domeniul senzorilor – matricipolimerice compozite senzitive pentru senzori de gaze
Numele și adresa angajatorului	<b>Honeywell Romania SRL</b> <b>Sensors and Wireless Laboratory Bucharest</b> <a href="http://www.honeywell.ro">www.honeywell.ro</a> , Calea Floreasca 49B, 014462 Bucuresti, Romania
Tipul activității	Companie multinationala, cercetare
Perioada	Ian. 2006 – Oct. 2006
Funcția sau postul ocupat	<b>Asistent de cercetare</b>
Activități și responsabilități principale	Activitate de cercetare in domeniul sintezei si caracterizarii polimerilor imprantati molecular
Numele și adresa angajatorului	<b>INCDP-ICECHIM</b> <b>Departamentul polimeri</b> <a href="http://www.icechim.ro">www.icechim.ro</a> , Splaiul Independentei 202, Bucuresti, Romania
Tipul activității	Institut public, cercetare
Perioada	Noi. 2003 – Oct. 2004
Funcția sau postul ocupat	<b>Reprezentant de marketing si vanzari</b>
Activități și responsabilități principale	Reprezentant de marketing si vanzari pentru firmele General Electric Plastics, General Electric – Bayer Silicones, Du Pont de Nemour, Avanteq si Basell Polyolefines
Numele și adresa angajatorului	<b>AECTRA SRL</b> <a href="http://www.aectra.ro">www.aectra.ro</a> , Sos Odai 341-345, 013604 Bucuresti, Romania
Tipul activității	Societate multinationala, vanzari

## Educație și formare

Perioada	Iul. 2016
Calificarea / diploma obținută	<b>Abilitare in domeniul Inginerie Chimica</b> , Nr. 4835/11.08.2016 emis de Ministerul Educatiei Nationale si Cercetarii Stiintifice
Disciplinele principale studiate / competențe profesionale dobândite	Teza de Abilitare 'Contribution to the field of composite and derivatized polymeric membrane materials'

Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti Facultatea de Chimie Aplicata si Stiinta Materialelor</b>
Perioada	Apr. 2010 – Mar. 2013
Calificarea / diploma obținută	<b>Stagiu postdoctoral</b>
Disciplinele principale studiate / competențe profesionale dobândite	Titlul temei de cercetare: Nanoaterialemembranare pe baza de polimeri conductivi si nanotuburi de carbon
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti Facultatea de Chimie Aplicata si Stiinta Materialelor</b>
Perioada	Noi. 2005 – Sep.2008
Calificarea / diploma obținută	<b>Doctorat/Diploma de doctor</b>
Disciplinele principale studiate / competențe profesionale dobândite	Titlul tezei de doctorat: Materiale polimericefunctionalizate cu selectivitate dirijata Conducatorstiintific: Prof. Dr. Ing. Gheorghe NECHIFOR
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti Facultatea de Chimie Aplicata si Stiinta Materialelor</b>
Perioada	Oct. 2005 – Iul. 2007
Calificarea / diploma obținută	<b>Masterat/Diploma de master</b>
Disciplinele principale studiate / competențe profesionale dobândite	Titlul lucrarii de dizertatie: Matricipolimerice compozite pe baza de anilina si aminonanotuburi de carbon pentru detectie de dioxid de carbon Conducatorstiintific: Prof. Dr. Ing. Gheorghe NECHIFOR
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti Facultatea de Chimie Aplicata si Stiinta Materialelor</b>
Perioada	Oct. 2000 – Iul. 2005
Calificarea / diploma obținută	<b>Inginer chimist – Tehnologia compusilor organici/Diploma de inginer</b>
Disciplinele principale studiate / competențe profesionale dobândite	Titlul lucrarii de diploma: Sinteza de liganzimacroheterociclici Conducatorstiintific: S.I. Dr. Ing. Cistian SIMION
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti Facultatea de Chimie Industriala</b>
Perioada	14-19 Iunie 2010
Calificarea / diploma obținută	<b>Diploma de participare</b>
Disciplinele principale studiate / competențe profesionale dobândite	A XXVII-a Scoala de vara a Societatii Europene de Membrane, Membrane pentru procese de nanofiltrare
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti, Romania Facultatea de Chimie Aplicata si Stiinta Materialelor</b>
Perioada	7-16 Aprilie 2010
Calificarea / diploma obținută	<b>Diploma de participare</b>
Disciplinele principale studiate / competențe profesionale dobândite	Nanomemcourse – Nanomaterials for waterandhealth (organizat de European Membrane Society si Euromemhouse)
Numele și tipul instituției de învățământ	<b>Twente University, Enschede, Netherlands Membrane technologygroup</b>
Perioada	7-11 Septembrie 2008

Calificarea / diploma obținută	<b>Diploma de participare</b>
Disciplinele principale studiate / competențe profesionale dobândite	A XXV-a Scoala de vara a Societatii Europene de Membrane, Membrane pentru procese de nanofiltrare
Numele și tipul instituției de învățământ	<b>Katholieke Universiteit Leuven, Belgia Centre for Surface Chemistry and Catalysis</b>
Perioada	10-14 Septembrie 2007
Calificarea / diploma obținută	<b>Diploma de participare</b>
Disciplinele principale studiate / competențe profesionale dobândite	A XXIV-a Scoala de vara a Societatii Europene de Membrane, Membrane pentru procese reactive
Numele și tipul instituției de învățământ	<b>Universita degli Studi di Genova, Italia Dipartimento di Chimica e Chimica Industriale</b>

### **Aptitudini și competențe personale**

Limba(i) maternă(e) **Limba Romana**

Limba(i) străină(e) cunoscută(e)

Autoevaluare

*Nivel european (\*)*

**Limba Engleza**

<b>Înțelegere</b>		<b>Vorbire</b>		<b>Sciere</b>
Ascultare	Citire	Participare la conversație	Discurs oral	Exprimare scrisă
C2	C2	C2	C2	C1

(\*) Nivelul Cadrului European Comun de Referință Pentru Limbi Străine

## Informații suplimentare

### Activitate didactică:

- **Coordonare teze de doctorat** – 9 doctoranzi in stagi (Oana Muhulet, Nitu Sabina, Flaviu Dacinoi, Cristina Tuncel, Cristiana Bindar, Diana Becheru, Marcela Palla, Andreea Iordache, Elly Gloria Popescu);
- **Tutoriat doctoranzi** – 14 teze de doctorat (Alexandra Ivan, Vlad Luntraru, Sergiu Sava, Cristina Baicea, Livia Gugoasa, Ionut Zaharia, Valeriu Danciulescu, Mircea Segarceanu, Firaskamar, HussamAbdAlraheem, Abdul Rikabi, Viorica Panait, LacramioaraNaftanaila, Octavian Dorca);
- **Coordonare lucrari de disertatie masteranzi** – 15 teze de dizertatie (Daniela Valentina Isaia, Alina Dobrica, Andreea Turcu, Paul George Ilie, Oana Muhulet, Alexandru Muhulet, Patricia Sapunaru, Crina Sarbu, Roxana Condruz, Andreea Nedelcu, Andreea Stefan, Bianca Bejan, Bianca Harsana, Adriana Avram, Aura Pica);
- **Coordonare lucrari de licenta** – 16 lucrari de licenta (Ioana Mosor, Adriana Nicolae, Sonia Ene, Liviu Iacoblovici, Andreea Iordache, Andreea Nedelcu, Giorgiana Gheorghita, Cornelia Dumitrache, Farcasanu Larisa, Andrei Taradaciuc, Elena Comanici, Andreea Raileanu, Florea Constantin, MadalinaDapcea, Bianca Harsana, Adriana Avram, Roxana Liliana Mihai);
- **Premii ale studentilorcoordonati** la Sesiunile de Comunicari Stiintifice Studentesti: Iuliana Biru (premiul 1), Giorgiana Gheorghita (premiul 1), Claudia Ninciuleanu (premiul 2), Alina Dobrica (premiul 3), Bianca Harsana (mentiuene);
- **Cursuri** – SmartPolymerMembranes (Master SmartPolymersandBiopolymers, An I, din 2018), Membrane polimerice (Master SIPOL, An I, in perioada 2010-2017), Tehnici membranare in analiza alimentelor (Licenta CEPA, An III, in perioada 2012-2017); Elemente de membranalogie (Master SCIVEC, in perioada 2010-2013); Controlul calitatii materialelor anorganice (Master PC-CCP, in perioada 2010-2012);
- **Laboratoare** – Chimie analitica si analiza instrumentala (Licenta Inginerie chimica, An I, in perioada 2007-2017), Membrane polimerice (Master SIPOL, An I, in perioada 2010-2017), Tehnici membranare in analiza alimentelor (Licenta CEPA, An III, in perioada 2012-2017); Analiza probelor biologice (Licenta Facultatea de Inginerie Medicala, An II, in anul universitar 2016-2018).

### Premii si distinctii:

- **Highly Cited Paper** in Ianuarie-Decembrie 2018 pentru 'V.K. Thakur, S.I. Voicu\*, Recent Advances in Cellulose and Chitosan Membranes for Water Purification: A Concise Review, Carbohydrate Polymers, 2016, 146, 148-165, DOI: 10.1016/j.carbpol.2016.03.030', in the top 1% of its academic field, according to Thomson Reuters ISI.
- **Highly Cited Paper** in November/December 2016 for M. Miculescu, V.K. Thakur, F. Miculescu, S.I. Voicu, Graphene based polymer nanocomposite membranes: A Review, Polymers for Advanced Technologies, 2016, 27(7), 844-859, DOI: 10.1002/pat.3751, according to Thomson Reuters ISI;
- **Excellence Award – ROMAT 2018** for relevant contribution into the field of material science and engineering, acordat in anul 2018;
- **Premiul 'In Tempore Opportuno'**, acordat de Universitatea Politehnica din Bucuresti, in anul 2011;
- **Best Paper Award**, acordat de IEEE International Conference of Semiconductors, pentru lucrarea 'Invertaselmobilization onto Dispersed Magnetic Particles. Synthesis and Characterization, autori V.I. Luntraru, V. Danciulescu, A.C. Nechifor, S.I. Voicu, G. Nechifor';
- **Oral Presentation Award**, 2010, European Membrane Society Summer School, Lucrarea: Polysulfone composite membranes with applications in electronics;
- **Premiul I** – Sesiunea de comunicari a cercurilor stiintifice studentesti, Universitatea Politehnica Bucuresti, Facultatea de Chimie Industriala, Sectiunea chimie organica, Lucrarea "Compusimacroheterociclici", 2005;
- **Premiul III** – Sesiunea de comunicari a cercurilor stiintifice studentesti, Universitatea Politehnica Bucuresti, Facultatea de Chimie Industriala, Sectiunea chimie organica, Lucrarea "Sinteza organica in apa", 2003;
- **Mentiuere** – Sesiunea de comunicari a cercurilor stiintifice studentesti, Universitatea Politehnica Bucuresti, Facultatea de Chimie Industriala, Sectiunea chimie-fizica, Lucrarea "Reactii de electropolimerizare a pirolului cu aplicabilitate in obtinerea de acumulatori de tip metal-polimer", 2002;
- **Premii UEFISCDI pentru rezultatele cercetarii - 16** (PN-III-P1-1.1-PFE-CI/2016-01000, PN-III-P1-1.1-PFE-CI/2016-01001, PN-III-P1-1.1-

## Lista de lucrari

### Patente

1. B.C. Serban, **S.I. Voicu**, S.D. Costea, C. Cobianu, Matrix nanocomposite sensing film for SAW/BAW based hydrogen sulphide sensor and method for making same, US Patent Office, US 7,695,993 B2, Derwent Primary Accession Number: 2009-R27632 [46].
2. B.C. Serban, V.G. Dumitru, C. Cobianu, S.D. Costea, N. Varachiu, **S.I. Voicu**, Methods for use of a sensitive layer for hydrogen sulphide detection with SAW/BAW devices, US Patent Office, US 7,867,552 B2, Derwent Primary Accession Number: 2009-R27545 [05].
3. B.C. Serban, C. Cobianu, M. Bercu, N. Varachiu, M. Mihaila, C. Bostan, **S.I. Voicu**, Matrix nanocomposite containing aminocarbon nanotubes for carbon dioxide sensor detection, US Patent Office, US 7,913,541 B2, Derwent Primary Accession Number: 2008-N35121 [74].

### Carti capitole in carti internationale

1. V.K. Thakur, M.K. Thakur, **S.I. Voicu** Ed., *Polymer Gels Perspectives and Applications*, Springer, 414 pages, 978-981-10-6079-3.
2. I.V. Antoniac, S. Cavalu, **S.I. Voicu** Ed., *Biomaterials and Regenerative Medicine (Key Engineering Materials)*, Trans Tech Publication, 2016, 334 pag., ISBN 978-3-03835-567-0.

3. **S.I. Voicu\***, "Pharmaceutical applications of polymeric membranes" in "Handbook of Pharmaceutical Polymers: Processing and Applications", **John Wiley & Sons**, 2015, pp. 173-194, ISBN 978-1-119-04138-2.
4. **S.I. Voicu\***, M. Sandru, "Composite hybride membrane materials for artificial organs" in "Handbook of Bioceramics and Biocomposites", **Springer** 2015, pp. 407-429, ISBN 978-3-319-12459-9.
5. A.M. Pandele, C. Tuncel (Netoiu), **S.I. Voicu**, *Polymeric Composite Membranes Enabled by Carbon Nanotubes and Graphene for Water Purification*, Materials Science and Technology, **Wiley-VCH Verlag GmbH & Co. KGaA**, 2019, DOI:10.1002/9783527603978.mst0454
6. Miculescu F., Mocanu A.C., Stan G.E., Maidaniuc A., Miculescu M., **Voicu S.I.**, Antoniac I., *Bioceramics derived from marble and sea shells as potential bone substitution materials*, Bioceramics and Biocomposites: From Research to Clinical Practice, **Wiley**, April 2019, ISBN 978-1-119-04934-0
7. M.C. Corobea, Z. Vuluga, D. Florea, F. Miculescu, **S.I. Voicu\***, *Composites and nanocomposites based on Polylactic acid obtaining in Handbook of Composites from renewable Polymers*, **John Wiley & Sons**, February 2017, ISBN 978-1-119-22383-2.
8. F. Miculescu, A. Maidaniuc, G.E. Stan, M. Miculescu, **S.I. Voicu**, L.T.Ciocan, *Thermal degradation and morphological characteristics of bone products*, in *Reactions and Mechanisms in Thermal Analysis of Advanced Materials*, **John Wiley & Sons**, 2015, pp. 393-410, ISBN 978-1-119-11757-5.
9. F. Miculescu, A. Maidaniuc, G.E. Stan, M. Miculescu, **S.I. Voicu**, A. Cîmpean, V. Mitran and D. Batalu, *Tuning Hydroxyapatite Particles' Characteristics for Solid Freeform Fabrication of Bone Scaffolds in Advanced Composites Materials*, **John Wiley & Sons**, 2016, pp. 321-398, ISBN: 978-1-119-24253-6.
10. F. Miculescu, A.-C. Mocanu, A. Maidaniuc, C.-A. Dascalu, M. Miculescu, **S.I. Voicu**, R.-C. Ciocoiu, *Biomimetic calcium phosphates derived from marine and land bioresources, in Hydroxyapatite - Advances in Composite Nanomaterials, Biomedical Applications and Its Technological Facets*, **InTech**, 2018, pp.89-108, ISBN 978-953-51-3804-4.

### Articole in reviste ISI cu factor de impact

1. S.I. Voicu, V.K. Thakur, *Aminopropyltriethoxysilane As A Linker for Cellulose-Based Functional Materials: New Horizons and Future Challenges*, **Current Opinion in Green and Sustainable Chemistry, Invited Paper**, 2021.
2. I. Chiulan, E.B. Heggset, S.I. Voicu, G. Chinga-Carrasco, *Photopolymerization of biobased polymers in a biomedical engineering perspective*, **Biomacromolecules**, 2021.
3. M. Oprea, **S.I. Voicu\***, *Cellulose Composites with Graphene for Tissue Engineering Applications*, **Materials**, 2020, 13(23), 5347.
4. A.M. Pandele, O.S. Serbanescu, **S.I. Voicu\***, *Polysulfone composite membranes with carbon nanotubes or graphene. Synthesis and applications*, *Coatings*, 10(7) 2020, 609.
5. O.S. Serbanescu, **S.I. Voicu\***, V.K. Thakur, *Polysulfone functionalized membranes: Properties and challenges*, **Materials Today Chemistry**, 2020,100302.
6. A.M. Pandele, H. Iovu, C. Orbeci, C. Tuncel, A. Niculescu, C. Deleanu, **S.I. Voicu\***, *Surface Modified Cellulose Acetate Membranes for the Reactive Retention of Tetracycline*, **Separation and Purification Technology**, **249** (2020) 117145.
7. M. Oprea, **S.I. Voicu\***, *Recent advances in composites based on cellulose derivatives for biomedical applications*, **Carbohydrate Polymers**, **247**, 2020, 116683.
8. M. Oprea, **S.I. Voicu\***, *Recent advances in applications of cellulose derivatives-based composite membranes with hydroxyapatite*, **Materials**, 2020, 13, 2481; doi:10.3390/ma13112481.

9. O.S. Sebanescu, A.M. Pandele, F. Miculescu, **S.I. Voicu\***, *Synthesis and characterization of cellulose acetate membranes with self-indicating properties by changing the membrane surface color for separation of Gd (III)*, **Coatings**, **2020**, *10*, 468; doi:10.3390/coatings10050468.
10. C.-A. Dascalu, F. Miculescu, A.-C. Mocanu, A. E. Constantinescu, T. M. Butte, A. M. Pandele, R.-C. Ciocoiu, **S.I. Voicu**, L.T. Ciocan, *Novel Synthesis of Core-Shell Biomaterials from Polymeric Filaments with Bioceramic Coating for Biomedical Applications*, **Coatings**, **2020**, *10*, 283; doi:10.3390/coatings10030283.
11. A. Muhulet, C. Tuncel, F. Miculescu, A.M. Pandele, C. Bobirica, C. Orbeci, L. Bobirica, A. Palla-Papavlu, **S.I. Voicu\***, *Synthesis and characterization of polysulfone-doped TiO<sub>2</sub> MWCNT composite membranes by sonochemical method*, **Applied Physics A**, **2020**, 126:233 <https://doi.org/10.1007/s00339-020-3408-9>.
12. A. Maidaniuc, F. Miculescu, R.C. Ciocoiu, T. Butte, I. Pasuk, G.E. Stan, **S.I. Voicu**, L.T. Ciocan, *Effect of the processing parameters on surface, physico-chemical and mechanical features of bioceramics synthesized from abundant carp bones*, **Ceramics International**, **46**, 2020, 10159 – 10171.
13. A.M. Pandele, A. Constantinescu, I.C. Radu, F. Miculescu, **S.I. Voicu\***, L.T. Ciocan, *Synthesis and characterization of PLA - microstructured hydroxyapatite composite films*, **Materials**, **2020**, *13*, 274; doi:10.3390/ma13020274.
14. R. Zhao, S. Chen, W. Zhao, L. Yang, B. Yuan, S.I. **Voicu**, I.V. Antoniac, X. Yang, X. Zhu, X. Zhang, *A bioceramic scaffold composed of strontium-doped three-dimensional hydroxyapatite whiskers for enhanced bone regeneration in osteoporotic defects*, **Theranostics** **2020**, *10*(4): 1572-1589. doi: 10.7150/thno.40103.
15. C.-A. Dascălu, A. Maidaniuc, A.M. Pandele, **S.I. Voicu**, T. Machedon-Pisu, G.E. Stan, A. Cîmpean, V. Mitran, I.V. Antoniac, F. Miculescu, *Synthesis and characterization of biocompatible polymer-ceramic film structures as favorable interface in guided bone regeneration*, **Applied Surface Science** **494** (2019) 335-352, doi: 10.1016/j.apsusc.2019.07.098
16. M.D. Raicopol, C. Andronescu, **S.I. Voicu**, E. Vasile, A.M. Pandele, *Cellulose acetate/layered double hydroxide adsorptive membranes for efficient removal of pharmaceutical environmental contaminants*, **Carbohydrate Polymers** **214** (2019) 204-212, doi: 10.1016/j.carbpol.2019.03.042
17. V. Satulu, B. Mitu, A.M. Pandele, **S.I. Voicu**, L. Kravets, G. Dinescu, *Composite polyethylene terephthalate track membranes with thin teflon-like layers: Preparation and surface properties*, **Applied Surface Science** **476** (2019) 452–459, doi: 10.1016/j.apsusc.2019.01.109.
18. A.-C. Mocanu, G.E. Stan, A. Maidaniuc, M. Miculescu, I.V. Antoniac, R.-C. Ciocoiu, **S.I. Voicu**, Valentina Mitran, Anișoara Cîmpean, Florin Miculescu, *Naturally-Derived Biphasic Calcium Phosphates through Increased Phosphorus-Based Reagent Amounts for Biomedical Applications*, **Materials** **2019**, *12*, 381, doi:10.3390/ma12030381
19. A. Muhulet, F. Miculescu, **S.I. Voicu\***, F. Schütt, V.K. Thakur, Y.K. Mishra, *Fundamentals and Scopes of Doped Carbon Nanotubes Towards Energy and Biosensing Applications*, **Materials Today Energy** **9** (2018) 154-186, doi: 10.1016/j.mtener.2018.05.002.
20. F. Miculescu, A. Maidaniuc, M. Miculescu, N.D. Batalu, R.C. Ciocoiu, **S.I. Voicu\***, G.E. Stan, V.K. Thakur, *Synthesis and Characterization of Jellified Composites from Bovine Bone-Derived Hydroxyapatite and Starch as Precursors for Robocasting*, **ACS OMEGA**, **3**(1), 1338-1349, 2018, DOI: 10.1021/acsomega.7b01855, WOS:000427933200143.
21. A.M. Pandele, P. Neacsu, A. Cîmpean, A.I. Staras, F. Miculescu, A. Iordache, **S.I. Voicu\***, V.K. Thakur, O.D. Toader, *Cellulose acetate membranes functionalized with resveratrol by covalent immobilization for improved*



- Osseointegration*, **Applied Surface Science**, 438, 2-13, 2018, DOI: 10.1016/j.apsusc.2017.11.102, WOS:000425731200002.
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### **Comunicariorale**

1. New generation of membrane systems with visual control of separation process efficiency based on modification of membrane color surface, **7<sup>th</sup> Asian Conference on Coordination Chemistry - ACCC7, Kuala Lumpur, Malaysia, 15-18 October 2019.**
2. Advanced Functional Polymeric Membranes for Biomedical Applications, International Seminar on Biomaterials and Regenerative Medicine, **Craiova, Romania, 26-28 September 2019.**
3. Polysulfone-doped carbon nanotubes composite membranes for the removal of pharmaceutical effluents, 10<sup>th</sup> International Conference on Environmental Engineering and Management - ICEEM 10, **Iasi, Romania, 18-21 September 2019.**
4. Functionalization of Cellulose Acetate Membranes with Aminopropyl Triethoxy Silane. Synthesis, Characterization and Applications, Romanian International Conference for Chemistry and Chemical Engineering, **Poiana Brasov, Romania, 6-9 September 2017, Keynote Speaker.**
5. Functionalized carbon nanotubes for gas sensors, Meeting on Carbon Nanostructures, **Rome, Italy, 13-17 May 2019, Invited Speaker**
6. Biomedical Applications of Polymeric Membranes, Southwest Jiaotong University, Faculty of Medicine, **Chengdu, China, 02 April 2019, Invited Talk.**
7. Biomedical Applications of Polymeric Membranes, Sichuan University, Centre for Biomaterials, **Chengdu, China, 27 March 2019, Invited Talk.**
8. Polymeric membranes with self-indicator properties for separation efficiency, **11th International Conference on Materials Science & Engineering Bramat 2019, Brasov, Romania, 13-16 March 2019.**
9. New method for cellulose acetate membranes covalent functionalization using aminopropyl triethoxy silane as linker, Collaborative Conference on Materials Science and Technology, **Beijing, China, 23-28 September 2018**
10. Reactive Retention Of Tetracycline Onto Functionalized Cellulose Acetate Membranes, MELPRO 2018, **Prague, Czech Republic, 12-17 May 2018**
11. Functionalized cellulose acetate membranes. Synthesis, characterization and applications, ROMAT, **Bucharest, Romania, 16-18 November 2018, Invited Speaker**
12. Functionalized Cellulose Acetate Membranes as Coatings for Biomedical Applications, European Conference on Nanofilms, **Cranfield, United Kingdom, 20-22 March 2018.**

13. Applications of composite membranes with carbon nanotubes in environmental decontamination, Romanian International Conference for Chemistry and Chemical Engineering, [Poiana Brasov, Romania](#), 6-9 September 2017, Keynote Speaker.
14. Synthesis and Characterization of Polyetherimide-Doped Carbon Nanotubes With Ruthenium Oxide Or Titanium Dioxide Composite Membranes, International Conference on Composites/Nano Engineering ICCE-25, [Rome, Italy](#), 16-22 July 2017.
15. Biomedical applications of polymeric membranes, Technologies for the fabrication and characterization of 3D scaffolds for tissue engineering NoRoTech, [Bucharest, Romania](#), 8-9 June 2017.
16. Sonochemical synthesis of doped-carbon nanotubes-composite polymeric membranes as membrane reactors, Frontiers Forum on Nano science and Technology, FFSCI 2017, [Dubrovnik, Croatia](#), 4-7 May 2017, Invited Speaker.
17. Composite polymeric membranes with carbon nanotubes, graphenes and silica nanowires. Synthesis, comparison and applications, Engineering with Membranes 2017, [Singapore, Singapore](#), 26-28 April 2017.
18. Resveratrol covalent immobilization onto cellulose acetate membranes for improved Osseointegration, **10th International Conference on Materials Science & Engineering** Bramat 2017, Transilvania University of Brasov, [Brasov, Romania](#), 8-11 March 2017.
19. Bioactive compounds covalent immobilization onto cellulose acetate membranes for biomedical applications, 7th International Conference "Biomaterials, Tissue Engineering & Medical Devices" BIOMMEDD 2016, [Constanta, Romania](#), 15-17 September 2016, Invited Speaker.
20. Hybrid organic polymer – carbon nanotubes composite membranes, Synthesis and applications, EMN Smart and Multifunctional Materials, [Berlin, Germany](#), August 2016, Invited Speaker.
21. Hybrid Composite Polymeric Membranes with Carbon Nanotubes for Biomedical Applications, International Conference of 3D Modelling Techniques for BioMedical Engineering (MOBILE 2016), University Politehnica of Bucharest, [Bucharest, Romania](#), 13-14 June 2016, Invited Speaker.
22. Composite polymeric membranes with graphenes. Synthesis, characterization and applications, EMN Meeting on Membranes, [Dubai, United Arab Emirates](#), 5-8 April 2016, Invited Speaker.
23. The influence of filler in composite cellulose acetate membranes for proteins recovery, International Seminar on Biomaterials & Regenerative Medicine BIOREMED 2015, on September 17-20, 2015, [Oradea, Romania](#).
24. Cellulose derivatives-based membranes for biomedical applications, 6th International Conference "Biomaterials, Tissue Engineering & Medical Devices" Biommedd 2014, [Constanta, Romania](#), 15-18 September 2014.
25. The use of polysulfone-carbon nanotubes composite membranes in heavy metals removal, Romanian International Conference for Chemistry and Chemical Engineering, [Sinaia, Romania](#), 7-10 September 2011.
26. Polysulfone-carbon nanotubes composite membranes, C. Luca Symposium, Romanian International Conference for Chemistry and Chemical Engineering, [Sinaia, Romania](#), 7-10 September 2011.
27. *Covalent enzyme immobilization onto carbon nanotubes using a membrane reactor*, SPIE Microtechnologies, Nanotechnology section, [Prague, Czech Republic](#), 17-21 April 2011.
28. Polysulfone composite membranes with applications in electronics, XXVII Summer School of the European Membrane Society, [Bucharest, Romania](#), 14-19 June, 2010.
29. Polysulfone composite membranes for biomedical applications, Diaspora in cercetare stiintifici in vatomantul superior din Romania - "Solutii Durabile la Provocari Emergente in Agricultura-Alimentatie cu Implicatii in Medicina Umana", Institutul National de Stiinte Biologice, 21-24 septembrie 2010, [Bucuresti, Romania](#).

30. Polysulfone membrane reactor for carbon nanotubes functionalization, Network Young Membranes, [Meze, France](#), September 2-4, 2009.
31. Polysulfone-doped polyaniline composite membranes. Synthesis and electrochemical characteristics, International Semiconductors Conference (CAS), [Sinaia, Romania](#), October 11-13, 2008.

#### **Articole de tip proceeding indexate ISI sau Scopus**

1. **S.I. Voicu**, A. Muhulet, M. Miculescu, F. Miculescu and S. Vizireanu, *Polysulfone Membrane Reactors for Derivatization of Carbon Nanotubes*, Proceedings of TechConnect World Conference, Washington, 2016.
2. F. Miculescu, A. Maidaniuc, **S.I. Voicu**, M. Miculescu, D. Batalu, *Strategies for production of naturally-derived calcium phosphates particles*, Proceedings of TechConnect World Conference, Washington, 2016.
3. **S.I. Voicu**, *The influence of filler in composite cellulose acetate membranes for proteins recovery*, Key Engineering Materials, Vol. 695, pp 267-272, doi: 10.4028/www.scientific.net/KEM.695.267.
4. M.V. Ghica, A-A. Watzlawek, E. Olaret, **S. Voicu**, S. Marin, M.M. Marin, E. Danila, A.G. Simonca, M.G. Albu, C. Chelaru, C.E. Dinu-Pîrvu, *Collagen-niflumic acid spongy matrices for bone repairing*, Key Engineering Materials, Vol. 695, pp 170-177, doi:10.4028/www.scientific.net/KEM.695.170.
5. **S.I. Voicu**, A. Muhulet, I.V. Antoniac, M.S. Corobea, *Cellulose derivatives based membranes for biomedical applications*, Key Engineering Materials, Vol. 638, pp 27-30, doi: 10.4028/www.scientific.net/KEM.638.27.
6. A.C. Nechifor, A. Ivan, **S.I. Voicu**, V. Danculescu, R. Trusca, *In Situ Generation of Polyaniline Inside Zeolite Pores for Retention of Ions and for Controlled Drug Delivery*, Key Engineering Materials, Vol. 583, pp 91-94, doi: 10.4028/www.scientific.net/KEM.583.91.
7. **S.I. Voicu**, I. Antoniac, L. Naftanaila, G. Nechifor, *The Functionalization of Remaining Solvent in Polymeric Membrane Pores for Biomedical Applications*, Key Engineering Materials, Vol. 583, pp 87-90, doi: 10.4028/www.scientific.net/KEM.583.87.
8. **S.I. Voicu**, A.C. Nechifor, O. Gales, G. Nechifor, *Covalent enzyme immobilization onto carbon nanotubes using a membrane reactor*, *Bioelectronics, Biomedical, and Bioinspired Systems V; and Nanotechnology V*, Proceedings of SPIE Vol. 8068 (SPIE, Bellingham, WA 2011) 80680Y, 2011.
9. C. Baicea, A. Ivan, C. Trisca-Rusu, A.C. Nechifor, D.I. Vaireanu, **S.I. Voicu**, G. Nechifor, *Ionic conductive silica-polypyrrole composites obtained by in-situ polymerization*, Proceedings of International Semiconductors Conference (CAS), 2010, pg. 359-362, ISBN: 978-1-4244-5783-0, DOI: 10.1109/SMICND.2010.5650655.
10. V. Luntraru, V. Danculescu, A.C. Nechifor, **S.I. Voicu**, G. Nechifor, *Invertase immobilization onto dispersed magnetic particles. Synthesis and characterization*, Proceedings of International Semiconductors Conference (CAS), 2010, pg: 309-312, ISBN: 978-1-4244-5783-0, DOI:10.1109/SMICND.2010.5650721.
11. S. Sava, L. Iarca, C. Trisca-Rusu, A.C. Nechifor, **S.I. Voicu**, G. Nechifor, *New method for tio2 covalent-ionic functionalization with different molecules for induced properties*, Proceedings of International Semiconductors Conference (CAS), 2010, pg. 321-324, ISBN: 978-1-4244-5783-0, DOI: 10.1109/SMICND.2010.5650685.
12. C. Trisca-Rusu, A.C. Nechifor, **S.I. Voicu**, G. Nechifor, *Covalently immobilized crown ethers onto polysulfone membranes as materials for sensors*, Proceedings of International Semiconductors Conference (CAS), 2010, pg 205-208, ISBN: 978-1-4244-5783-0, DOI: 10.1109/SMICND.2010.5649081.
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16. B. Serban, M. Bercu, **S. Voicu**, M. Mihaila, G. Nechifor, C. Cobianu, *Calixarene-Doped Polyaniline for Applications in Sensing*, Proceedings of International Semiconductors Conference (CAS), 2006, IEEE catalog number 06TH8867, pg. 257-260, ISBN: 1-4244-0109-7, DOI: 10.1109/SMICND.2006.283991.