

## Curriculum vitae Europass



### Informații personale

Nume / Prenume **Ioan Stefan VOICU**  
Adresă(e) Str. Gheorghe Polizu 1-7, 011061 București  
Telefon(oane)  
E-mail(uri) [stefan.voicu@upb.ro](mailto:stefan.voicu@upb.ro)  
Naționalitate(-ități) Romana  
Data nașterii

### Experiența profesională

Perioada	Sep. 2019 - Prezent
Funcția sau postul ocupat	<b>Profesor Universitar</b>
Activități și responsabilități principale	Activitate didactica la Departamentul de Chimie Analitica si Ingineria Mediului, activitate de cercetare in domeniul materialelor si proceselor membranare, Project Team Leader in cadrul Advanced Polymer Materials Group APMG-UPB
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	Oct. 2017 – Sep. 2019
Funcția sau postul ocupat	<b>Conferențiar Universitar</b>
Activități și responsabilități principale	Activitate didactica la Departamentul de Chimie Analitica si Ingineria Mediului, activitate de cercetare in domeniul materialelor si proceselor membranare, Project Team Leader in cadrul Advanced Polymer Materials Group APMG-UPB
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	Oct. 2011 – Sep. 2017
Funcția sau postul ocupat	<b>Sef de Lucrari</b>
Activități și responsabilități principale	Activitate didactica la Catedra de Chimie Analitica si Analiza Instrumentala, 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	Oct. 2009 – Sep. 2011
Funcția sau postul ocupat	<b>Asistent Universitar</b>
Activități și responsabilități principale	Activitate didactica la Catedra de Chimie Analitica si Analiza Instrumentala, 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	Sep. 2006 – Sep. 2009
Funcția sau postul ocupat	<b>Cercetator stiintific</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>Cercetator stiintific</b>
Activități și responsabilități principale	Activitate de cercetare in domeniul senzorialor – matrici polimerice 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 imprimati molecular
Numele și adresa angajatorului	<b>INCDCP-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, Avantec 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 'Contributions to the field of composite and derivatized polymeric membrane materials'
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti</b> <b>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: Nanoateriale membranare pe baza de polimeri conductivi si nanotuburi de carbon
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti</b> <b>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 polimerice functionalizate cu selectivitate dirijata Conducator stiintific: Prof. Dr. Ing. Gheorghe NECHIFOR
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti</b> <b>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: Matrici polimerice compozite pe baza de anilina si amino nanotuburi de carbon pentru detectie de dioxid de carbon Conducator stiintific: Prof. Dr. Ing. Gheorghe NECHIFOR
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti</b> <b>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 liganzi macroheterociclici Conducator stiintific: S.I. Dr. Ing. Cistian SIMION
Numele și tipul instituției de învățământ	<b>Universitatea Politehnica Bucuresti</b> <b>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</b> <b>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 water and health (organizat de European Membrane Society si Euromemhouse)
Numele și tipul instituției de învățământ	<b>Twente University, Enschede, Netherlands</b> <b>Membrane technology group</b>
Perioada	7-11 Septembrie 2008
Calificarea / diploma obținută	<b>Diploma de participare</b>

Disciplinele principale studiate /  
competențe profesionale dobândite  
Numele și tipul instituției de învățământ

A XXV-a Școală de vară a Societății Europene de Membrane, Membrane pentru procese de  
nanofiltrare

**Katholieke Universiteit Leuven, Belgia**  
**Centre for Surface Chemistry and Catalysis**

Perioada 10-14 Septembrie 2007

Calificarea / diploma obținută **Diploma de participare**

Disciplinele principale studiate /  
competențe profesionale dobândite  
Numele și tipul instituției de învățământ

A XXIV-a Școală de vară a Societății Europene de Membrane, Membrane pentru procese reactive

**Universita degli Studi di Genova, Italia**  
**Dipartimento di Chimica e Chimica Industriale**

### **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>Scriere</b>
Ascultare	Citire	Participare la conversație	Discurs oral	Exprimare scrisă
C2	C2	C2	C2	C1

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

### 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, Firas Kamar, Hussam AbdAlraheem, Abdul Rikabi, Viorica Panait, Lacramioara Naftanaila, 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, Madalina Dapcea, Bianca Harsana, Adriana Avram, Roxana Liliana Mihai);
- **Premii ale studentilor coordonati** la Sesiunile de Comunicari Stiintifice Studentesti: Iuliana Biru (premiul 1), Giorgiana Gheorghita (premiul 1), Claudia Ninciuleanu (premiul 2), Alina Dobrica (premiul 3), Bianca Harsana (mentiuine);
- **Cursuri** – Smart Polymer Membranes (Master Smart Polymers and Biopolymers, 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 membranologie (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 materials 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 'Invertase Immobilization 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 "Compusi macroheterociclici", 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;
- **Mentiuine** – 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-PRECISI-2018-24803, PN-III-P1-1.1-PRECISI-2018-24381, PN-III-P1-1.1-PRECISI-2018-23241, PN-III-P1-1.1-PRECISI-2018-22629, PN-III-P1-1.1-PRECISI-2018-22647, PN-III-P1-1.1-PRECISI-2017-20313, PN-III-

P1-1.1-PRECISI-2017-20060, PN-III-P1-1.1-PRECISI-2017-20060, PN-III-P1-1.1-PRECISI-2016-12861, PN-III-P1-1.1-PRECISI-2016-12462, PN-III-P1-1.1-PRECISI-2016-12464, PN-III-P1-1.1-PRECISI-2016-11593, PN-II-RU-PRECISI-2015-9-9859, PN-II-RU-PRECISI-2014-8-6547, PN-II-RU-PRECISI-2013-7-3873, PN-II-RU-PRECISI-2013-7-2348).

#### **Activitate editorială:**

- **Guest Editor, SN Applied Sciences Springer**, numar special „Synthesis and Manufacturing of Materials for the Future”;
- **Guest Editor, Coatings MDPI** (ISI IF 2.350), numar special propus „Membrane Processes for Water Purification”;
- **Guest Editor, Materials MDPI** (ISI IF 2.467), numar special propus „Advanced Composite Biomaterials”;
- **Membru al boardului editorial, Journal of Optoelectronics and Advanced Materials** (Thomson Reuters ISI IF 0.396), publicata de Institutul National pentru Optoelectronica;
- **Lead Guest Editor, Journal of Nanomaterials**, numar special propus “Graphene Based Composites: From Theories to Advanced Applications”;
- **Lead Guest Editor, Journal of Chemistry**;
- **Editor, vol. Gels Horizons, Springer**, (ed. V.K. Thakur, M.K. Thakur, S.I. Voicu), volum in pregatire.
- **Editor, Trans Tech Publishing**, Elvetia, 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.
- **Recenzor pentru 35 reviste cotate ISI cu factor de impact:** Cellulose (Springer), Scientific Reports (Nature), The Journal of Physical Chemistry (American Chemical Society), ACS Environmental Science and Technology (American Chemical Society), Current Opinion in Green and Sustainable Chemistry (Elsevier), Food Bioscience (Elsevier), Applied Surface Science (Elsevier), Compte Rendus du Chimie (Elsevier), Chinese Chemical Letters (Elsevier), Heliyon (Elsevier), Vacuum (Elsevier), International Journal of Biological Macromolecules (Elsevier), Environmental Technology (Springer), Journal of Nanostructure in Chemistry (Springer), Cellulose (Springer), Applied Water Science (Springer), Applied Physics A (Springer), Journal of Polymers and Environment (Springer), Journal of Adhesion Science and Technology (Taylor and Francis), Chemical Engineering Communications (Taylor and Francis), Journal of Chemistry (Hindawi), Romanian Reports in Physics (IFIN-HH), RSC Advances (Royal Society of Chemistry), ACS Journal of Physical Chemistry (American Chemical Society), Journal of Adhesion Science and Technology (Taylor and Francis), Materials Express (MEX), Chemical Engineering Communications (Taylor and Francis), Chinese Chemical Letters (Elsevier), ACS Applied Materials and Interfaces (American Chemical Society), Journal of Alloys and Compounds (Elsevier), Journal of Nanomaterials (Hindawi), Journal of Molecular Catalysis B (Elsevier), Journal of Membrane Science (Elsevier), Polymer Bulletin (Springer), Journal of Optoelectronics and Advanced Materials (INOE), Optoelectronics and Advanced Materials Rapid Communications (INOE).

#### **Afilieri la Societati Profesionale:**

American Chemical Society (din 2016), European Membrane Society (din 2007), European Desalination Society (din 2007), American Nano Society (din 2011), SPIE (2011), Societatea Romana de Biomateriale (din 2006), Societatea Romana de Chimie (din 2006).

#### **Alte activități profesionale:**

- **Membru al Senatului Universitar** al Universitatii Politehnica din Bucuresti (2020-2024);
- **Membru al Comisiei de etica si integritate academica** al Universitatii Politehnica din Bucuresti (2020-2024);
- **Membru al Consiliului Profesorat** al Facultății de Chimie Aplicată și Știința Materialelor (2012-2016);
- **Membru Comisia de Admitere**, Facultatea de Chimie Aplicata si Stiința Materialelor (2012-2014);
- **Secretarul General al Comitetului de Organizare** a celei de-a XXVII-a **Scoli de vara a European Membrane Society**, “Systems membranes-complex roadmaps toward functional devices and coupled processes”, Bucuresti, 14-19 iunie 2010;
- **Membru in Comitetul de Organizare al Conferintei Internationale de Chimie si Inginerie Chimica RICCCCE** (2011, 2013, 2017, 2019);
- **Membru in Comitetul de Organizare al Simpozionului International Bioremed 2015**, Baile Felix, Romania.

- **Expert pe termen lung** in proiectul e-Chimie POSDRU/87/1.3/S/ID 61839, Iul. 2011-Aug. 2012.
- **Chairmen Sesiunea comunicarii studentesti**, a celei de-a XXVII-a **Scoli de vara a European Membrane Society**, "Systems membranes-complex roadmaps toward functional devices and coupled processes", Bucuresti, 14-19 iunie 2010
- **Chairmen sesiune**, Conferinta Internationala RICCCE 2011 Simpozionul C. Luca, Sinaia, Septembrie 2011.
- **Chairman sesiune**, Conferinta EMN Meeting on Smart and Multifunctional Materials, Berlin, August 2016.

**Contracte/granturi de cercetare stiintifica (director/responsabil de proiect):**

- **Director**, Proiect RU-TE 20/2018 (Mai 2018 – Aprilie 2020), O noua generatie de sisteme membranare cu controlul vizual al eficientei procesului de separare bazat pe schimbarea culorii suprafetei membranei, finantat de UEFISCDI, 449500 RON. Proiectul isi propune dezvoltarea unei noi generatii de materiale membranare care sa indice eficienta procesului de separare prin schimbarea culorii suprafetei membranei.
- **Responsabil**, Proiect 39PCCDI/2018, Materiale inteligente pentru aplicatii medicale – subproiectul 'O noua generatie de membrane compozite cu grafene derivatizate pentru hemodializa', valoare totala subproiect 825205 RON, valoare UPB 624485 RON (≈ 135000 EUR). Proiectul isi propune dezvoltarea unei noi generatii de membrane compozite cu grafene functionalizate si derivatizate cu aplicatii in hemodializa de o zi.
- **Responsabil**, Proiect 15PCCDI/2018, Fabricarea, calibrarea si testarea de sisteme avansate de senzori pentru aplicatii in securitatea societata – subproiectul 'Design-ul, fabricarea si calibrarea matricilor de senzori chemorezistivi pentru detectia compusilor explozibili volatili', valoare totala subproiect 1433333 (≈ 135000 EUR), valoare UPB 300000 RON (≈ 65000 EUR).
- **Director**, Proiect RU-TE 303/2015 (Octombrie 2015 – Septembrie 2017), Reactoare membranare nanostructurate pentru derivatizarea si doparea nanotuburilor de carbon si grafenelor, finantat de UEFISCDI, 540500 RON. Proiectul isi propune dezvoltarea unei noi generatii de reactoare membranare polimerice pentru doparea si derivatizarea nanotuburilor de carbon si a grafenelor. Dupa 15 luni de implementare au fost publicate doua articole in reviste cotate ISI (FI 1,823, respectiv FI 4,219), un articol de tip proceeding indexat Scopus (prezentat la conferinta TechConnect Washington 2016), respectiv trei comunicari orale la conferinte internationale, toate trei invitate.
- **Responsabil**, Proiect PCCA 195/2014 (Septembrie 2014 – Septembrie 2017), Strategii terapeutice pentru imbunatatirea raspunsului de vindecare a osului prin utilizarea de implanturi pe baza de magneziu bioresorbabile cu acoperiri bioactive, finantat de UEFISCDI responsabil partener UPB, suma partener 300000 RON. Proiectul dezvolta o noua generatie de membrane functionalizate si derivatizate din polimeri biocompatibili si bioresorbabili, capabile sa favorizeze sudarea implantului metalic de os. In timpul derularii proiectului, rezultatele au fost diseminate prin publicarea unui articol cotate ISI la factor de impact 5,267 si doua comunicari orale la conferinte internationale, dintre care una invitata.
- **Director**, Grant Td 025/2007, Materiale functionalizate micro si nanostructurate pe baza de polimeri impregnati cu ciclodextrina cu aplicatii farmaceutice, finantat de CNCSIS, 79000 RON.
- **Director**, Grant Bd 013/2006, Materiale polimerice functionalizate cu selectivitate dirijata, finantat de CNCSIS, 34240 RON. Aceste doua granturi au reprezentat suportul financiar pentru activitatile de cercetare ale tezei de doctorat cu titlul "Materiale polimerice functionalizate cu selectivitate dirijata" si au fost finalizate cu publicarea a cinci articole in reviste cotate ISI cu factor de impact.

**Contracte/granturi de cercetare stiintifica (membru al colectivului de lucru):**

- **Pn.1** CEEX Modul 1 12/2005, Nanostructuri hibride organice-anorganice pe baza de serpentină și polimeri vinilici pentru obținerea de composite avansate (NAHANOSCA), 1580000 RON;
- **Pn.2** CEEX Modul 1 48/2005, Polimeri impregnati molecular – suport pentru constructia de biosenzori enzimatici destinati monitorizarii unor poluanti din ape, 1200000 RON;
- **Pn.3** CNCSIS (CEEX Modul II) ET146/2006, Membrane compozite selective pe baza de materiale functionalizate si polimeri impregnati (SECOFIM), 135000 RON;
- **Pn.4** CNMP-Program PN II, Modul IV Parteneriate, 71034-2007, Nanocompozite cu proprietati electrice si magnetice destinate proceselor separative de inalta selectivitate (NEMSEPEL), 2000000 RON;
- **Pn.5** CNMP-Program PN II, Modul IV Parteneriate, 71025-2007, Nanocompozite polimerice de tip polisulfona-polianilina utilizate in bioanaliza si bioseparari (NANOBIOPAS), 2000000 RON;

- **Pn.6** CNMP-Program PN II, Modul IV Parteneriate, 71063-2007, Materiale pe baza de calixarene cu proprietati de recunoastere a unor specii ionice si/sau moleculare de interes biologic si ecologic (CALIXMAT), 2000000 RON;
- **Pn.7** CNCIS Grant A, 359/2005 Materiale membranare cu selectivitate dirijata prin sisteme redox (MEMBREDOX);
- **Pi.1** Proiect intern Honeywell Int., Automation and Control Solutions, Sensors Laboratory Bucharest, I10185 (PG), Molecular Cooling (informatii financiare confidentiale);
- **Pi.2** Proiect intern Honeywell Int., Automation and Control Solutions, Sensors Laboratory Bucharest, D11997(GB9400), Functionalized surfaces (informatii financiare confidentiale);
- **Pi.3** Proiect intern Honeywell Int., Automation and Control Solutions, Sensors Laboratory Bucharest, D12022(AA1000), Oil monitoring systems (informatii financiare confidentiale);
- **Pi.4** Proiect intern Honeywell Int., Automation and Control Solutions, Sensors Laboratory Bucharest, I10185(GH1000), SAW Platform (informatii financiare confidentiale);
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## Anexe

Lista de lucrari

Bucuresti, 01.02.2022

Prof. Dr. Habil. Ing. Ioan Stefan VOICU





## Lista de lucrari

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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 BIOREMEDI 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 cercetarea stiintifica si invatamantul 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. Danciulescu, 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.
13. C. Trisca-Rusu, A.C. Nechifor, S. Mihai, C. Parvu, **S.I. Voicu**, G. Nechifor, *Polysulfone-functionalized multiwalled carbon nanotubes composite membranes for potential sensing applications*, Proceedings of International Semiconductors Conference (CAS), 2009, IEEE catalog number CFP08CAS-PRT, pg. 285-288, ISBN: 978-1-4244-4413-7, DOI: 10.1109/SMICND.2009.5336545.
14. C. Muscalu, R. David, S.A. Garea, A.C. Nechifor, D.I. Vaireanu, **S.I. Voicu**, G. Nechifor, *Polysulfone-polypyrrole ionic conductive composite membranes synthesized by phase inversion with chemical reaction*, Proceedings of International Semiconductors Conference (CAS), 2009, IEEE catalog number CFP08CAS-PRT, pg. 557-560, ISBN: 978-1-4244-4413-7, DOI: 10.1109/SMICND.2009.5336648.
15. **S.I. Voicu**, N.D. Stanciu, A.C. Nechifor, D.I. Vaireanu, G. Nechifor, *Polysulfone-doped polyaniline composite membranes. Synthesis and electrochemical characteristics*, Proceedings of International Semiconductors Conference (CAS), 2008, IEEE catalog number CFP08CAS-PRT, pg. 245-248, ISBN: 978-1-4244-2004-9, DOI: 10.1109/SMICND.2008.4703392.
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.