

INFORMAȚII PERSONALE

Raluca-Ioana van Staden

<http://www.patlab.ro>

| Naționalitatea: Romana
Nume inaintea casatoriei: Stefan

EXPERIENȚA PROFESIONALĂ

- Din 1.03.2007 - Profesor, CSI, Sef al Laboratorului de Electrochimie si PATLAB, Institutul National de Cercetare pentru Electrochimie si Materie Condensata.
Cercetare, Director si coordonator de proiecte nationale si internationale, managementul laboratorului, indrumator pentru tineri cercetatori – masteranzi, doctoranzi
- 03.2015-07.2016 Director Stiintific al Institutului National de Cercetare pentru Electrochimie si Materie Condensata
- Din 15.12.2013 Profesor – conducator de doctorat la Universitatea Politehnica din Bucuresti
Conducator stiintific pentru doctoranzi.
- 1 Ian 06 - 31 Aug 06 Profesor de Chimie Analitica si Bioanaliza
Universitatea din Pretoria, Pretoria (Africa de Sud)
Educatie - conducator stiintific pentru master, doctorat, postdoc. Coordonator de curs, predare cursuri si laboratoare anii I-IV de studiu. Cercetare - coordonatoarea grupului de cercetare in bioanaliza si enantioanaliza in domeniile clinic si farmaceutic. Management - membra a Comitetului de Cercetare al Catedrei de Chimie. Mentor pentru tinerii cercetatori din catedra, in programe oferite de universitate si Royal Society of Chemistry.
- 1 Feb 98 - 31 Dec 00 Postdoc
Universitatea din Pretoria , Pretoria (Africa de Sud)
Educatie - predare de cursuri la anii II si IV, conducator stiintific de master si doctorat, membru in comisii de doctorat. Cercetare - in domeniul analizei farmaceutice, biomedicale si sisteme in flux.
- 1 Oct 92 - 31 Ian 98 Preparador si asistent universitar
Universitatea din Bucuresti , Bucuresti (România)
Educatie - curs anul IV, laboratoare anii I-IV, coordonare lucrari de licenta si master. Cercetare - in domeniile analizei clinice si farmaceutice.

EDUCAȚIE ȘI FORMARE

- 1 Oct 87 - 1 Iul 92 **Diploma de Chimist - sef de promotie**
Universitatea din Bucuresti, Bucuresti (România)
Chimie, specializarea chimie analitica. Sefa de promotie, Facultatea de Chimie, Specializarea – Chimie.
- 1 Mar 95 - 27 Mar 97 **Doctor in Chimie**
Universitatea din Bucuresti, Bucuresti (România)
Chimie, specializarea Chimie analitica
- 1 Oct 91 - 1 Iul 96 **Licentiat in pian si educatie muzicala**
Universitatea Nationala de Muzica din Bucuresti, Bucuresti (România)
Pian si educatie muzicala
- 1 Oct 96 - 1 Iul 97 **Master in limbaj si stil compozitional**
Universitatea Nationala de Muzica din Bucuresti, Bucuresti (România)
Compozitie muzicala
- 29 Iul 2013 **Dr Habilitas in Chimie /al doilea doctorat. Drept de conducere a tezelor de doctorat (Universitatea Politehnica din Bucuresti).**
Universitatea Politehnica din Bucuresti

COMPETENTE PERSONALE

Limba(i) maternă(e) Română

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
Engleză	C2	C2	C2	C2	C2
Afrikaans	B1	B1	B1	B1	B1

Niveluri: A1/2: Utilizator elementar - B1/2: Utilizator independent - C1/2: Utilizator experimentat
Cadrul european comun de referință pentru limbi străine

Competențe de comunicare Buna experienta in comunicarea stiintei.

Competențe organizaționale/manageriale

Sunt manager a unei echipe de cercetare din 2001. La universitatea din Pretoria am avut 15 studenti in echipa (din toate nivelele de studii), acum am 7 studenti la nivel de licenta, master, doctorat. Sunt managerul laboratorului in care lucrez. Am fost secretara Comisiei V1 Aspecte generale ale chimie analitice din cadrul IUPAC in perioada 1999-2001. Fac parte din comitetul executiv al Diviziei de Senzori din cadrul ECS, USA. Sunt Presedinta Grupului de Studiu de Bioanaliza din cadrul Diviziei de Chimie Analitica a EUCHEMs. **Sunt Presedinta Grupului de studiu Bioanaliza din cadrul Diviziei de Chimie Analitica a EUCHEMs. Sunt Presedinta Filialei Internationale din Romania a Societatii Americane de Chimie.** Conduc proiecte de cercetare nationale si internationale.

Competențe dobândite la locul de muncă

Am facut parte din Comitetul de cercetare al Catedrei de Chimie din cadrul Universitatii din Pretoria. Fac parte din Comitetul stiintific al Institutului de Cercetare pentru Electrochimie si Materie Condensata.

Competențe informatice

MSWord, Corel si Sigma Plot.

ANEXE

1. PUBLICATII -
2. PARTICIPARI LA CONFERINTE
3. CONDUCATOR STIINTIFIC
4. MEMBRU IN BIROURI NATIONALE/INTERNATIONALE
5. MEMBRU AL COLECTIVELOR DE REDACTIE
6. VIZITE LA UNIVERSITATI CA PROFESOR/CERCETATOR
7. MANAGEMENT SI ADMINISTRATIE
8. REFERENT
9. PREMII
10. ALTE ACTIVITATI PROFESIONALE
11. PROIECTE DE CERCETARE
12. ACTIVITATE DIDACTICA

1. Publicatii – PESTE 380 LUCRARI IN REVISTE ISI

1.1. Lucrari publicate in reviste ISI (h=27, 3723 citari, conform SCOPUS ; h=25, 3232 citari, conform Web of Science, h=34, 5195 citari conform Google Scholar)

Selectie :

304. Chiral single-walled carbon nanotubes – as chiral selectors in multimode enantioselective sensors
R.I. Stefan-van Staden, I.R. Comnea
Chirality, 33(1), 51-58, 2021
305. No Association between 25-Hydroxyvitamin D and Insulin Resistance or Thyroid Hormone Concentrations in a Romanian Observational Study.
RA Stoica, C Guja, A Pantea-Stoian, RI Stefan-van Staden, I Popa-Tudor, SD Stefan, R Ancuceanu, C Serafinceanu, C Ionescu Tirgoviste,
Medicina, 2021, 57(25) 57010025
306. Electroanalysis of interleukins 1 β , 6, and 12 in biological samples using a needle stochastic sensor based on nanodiamond paste
RM Ilie-Mihai, SS Gheorghe, RI Stefan-van Staden, A Bratei
Electroanalysis, 33(1), 6-10, 2021
307. Sulphur Doped Graphenes – as New Materials for the Design of 3D-Needle Stochastic Sensors
RM Ilie-Mihai, RI Stefan-van Staden, A Lungu-Moscalu, S Gurzu, F Pogacean, SM Pruneanu
J Electrochem Soc, 168(3), 037509, 2021
308. Disposable Stochastic Sensor Based on Deposition of a Nanolayer of Silver on Silk for Molecular Recognition of Specific Biomarkers
RI Stefan-van Staden, SS Gheorghe, RM Ilie-Mihai, M Badulescu
J Electrochem Soc , 168(3), 037515, 2021
309. Characterization of low-cost, robust, graphene-based amperometric dot microsensors for the determination of dopamine
van Staden, RI Stefan-van Staden
Anal Lett, 54(18), 2921-2928, 2021
310. 3D Stochastic microsensors for molecular recognition and determination of heregulin- α in biological samples
RI Stefan-van Staden, C Cioates Negut, SS Gheorghe, A. Ciorita
Anal Bioanal Chem, 413(13), 3487-3492, 2021
311. Recent developments in electrochemical sensors for the determination of polycyclic aromatic hydrocarbons (PAHs) from water samples
IR Stancu, JF van Staden, RI Stefan-van Staden
J Electrochem Soc., 168(4), 047504, 2021
312. Some people and places important in the history of analytical chemistry in Romania
RI Stefan-van Staden, V. David, D. Thorburn Burns
Revista de Chimie, 72(2), 147-155, 2021
313. Determination of dopamine in whole blood samples using a new electrochemical sensor based on graphene
SS Gheorghe, RM Ilie-Mihai, RI Stefan-van Staden
U.P.B. Sci. Bull., 83(4), 145-150, 2021
314. Application of a tetraamino cobalt(II) phthalocyanine modified screen printed carbon electrode for the sensitive electrochemical determination of L-dopa in pharmaceutical and biological samples
R State, JF van Staden, C Stefanov, RI Stefan-van Staden
Electroanalysis, 33(7), 1778-1788, 2021
315. Recent trends in supramolecular recognition using electrochemical sensors.
C Cioates Negut, RI Stefan-van Staden
J Electrochem Soc., 168 (6), 067517, 2021
316. Nitrogen, sulfur co-doped graphene as efficient electrode material for L-cysteine detection
C. Varodi, F. Pogăcean, A. Ciorită, O. Pană, B. Cozar, T. Radu, M. Coroș, R.I. Ștefan-van Staden, S. Pruneanu
Chemosensors, 9(6), 146, 2021.
317. Stochastic biosensors based on N and S-doped graphene for the enantioanalysis of aspartic acid in biological samples
RI Stefan-van Staden, DC Gheorghe, RM Ilie-Mihai, L Barbu-Tudoran, SM Pruneanu
RSC Adv., 11, 23301-23309, 2021
318. Subclinical hypothyroidism has no association with insulin resistance indices in adult females: A case-control study
RA Stoica, R Ancuceanu, SD Stefan, A Pantea Stoian, C Guja, RI Stefan-van Staden, I Popa-Tudor, C Serafinceanu, C Ionescu-Tirgoviste
Experimental Therapeutics Medicine, 22, 1033, 2021
319. Simultaneous determination of levodopa and dopamine from biological samples using 3D printed stochastic microsensors
C Cioates Negut, Sorin Sebastian Gheorghe, RI Stefan-van Staden, JF van Staden
J Pharm Biomed Anal, 205, 114292, 2021
320. Fast screening method based on disposable stochastic sensor for sensitive detection of heregulin- α in biological samples

- RI Stefan-van Staden, SS Gheorghe, C Cioates Negut, M Badulescu
Life, 11, 894, 2021
321. Fast screening method of biological samples based on needle stochastic sensors for early detection of gastric cancer
RM Ilie-Mihai, DC Gheorghe, RI Stefan-van Staden, A Lungu-Moscalu, SM Pruneanu, JF van Staden
Rev de Chimie, 72(4), 22-34, 2021
322. Hydrothermal synthesis of nitrogen, boron co-doped graphene with enhanced electro-catalytic activity for cymoxanil detection
C Varodi, F Pogăcean, M Coros, L Magerusan, RI Stefan van Staden, S Pruneanu
Sensors, 21, 6630, 2021 <https://doi.org/10.3390/s21196630>
323. Mussel Shells - a Valuable Calcium Resource for Pharmaceutical Industry
M Mititelu, G Stanciu, D Drăgănescu, AC Ioniță, SM Neacșu, M Dinu, RI Stefan-van Staden, E Moroșan
Marine Drugs, 20(1), 25, 2022
324. Disposable stochastic sensors obtained using nanolayer deposition of copper, graphene, and copper-graphene composite on silk, for biomedical analysis
C Cioates Negut, RI Stefan-van Staden, M Badulescu, B Bița
Anal Bioanal Chem, 414(5), 1797–1807, 2022
325. Review. Recent trends on the electrochemical sensors used for the determination of tartrazine and Sunset Yellow FCF from food and beverage products
R Georgescu State, JF van Staden, RI Stefan-van Staden
J Electrochem Soc., 169, 017509, 2022
326. Enantioanalysis of aspartic acid using 3D stochastic sensors
IM Bogeia, RI Stefan-van Staden, DC Gheorghe, RM Ilie-Mihai
Anal.Lett, 55(1), 85-92, 2022
327. Stochastic microsensors based on carbon nanotubes decorated with Cu and Au nanoparticles, for molecular recognition of isocitrate dehydrogenases 1 and 2 in biological samples
RI Stefan-van Staden, C Cioates Negut, SS Gheorghe, P Sfirloaga
Nanomaterials, 12(3), 460, 2022
328. 2D Disposable Stochastic Sensors for Molecular Recognition and Quantification of Maspin in Biological Samples
RI Stefan-van Staden, RM Ilie-Mihai, DC Gheorghe, IM Bogeia, M Badulescu
Microchimica Acta, 189, 101, 2022
329. Stochastic Sensors for the Enantioselective Determination of Serine in Blood for the Early Diagnosis of Breast Cancer
OR Musat, RI Stefan-van Staden
Anal. Lett., 55(13), 2124-2131, 2022
330. Stochastic microsensors based on modified graphene for pattern recognition of maspin in biological samples
RI Stefan-van Staden, IM Bogeia, RM Ilie-Mihai, DC Gheorghe, M Coros, SM Pruneanu
Anal Bioanal Chem, 414(12), 3667-3673, 2022
331. Facile detection of naphthalene with a 5,10,15,20-tetrakis(4-methoxyphenyl)-21H,23H-porphine nickel (II)/N-(1-Naphthyl) ethylenediamine dihydrochloride renewable graphene oxide paste electrode
IR Cornea-Stancu, JF van Staden, RI Stefan-van Staden
J Electrochem Soc, 169, 037527, 2022
332. Recent Electrochemical Methods Proposed for the Detection of Hepatitis C Virus. A Minireview
RM Ilie-Mihai, R.I. Stefan-van Staden, J.F. van Staden, H.Y. Aboul-Enein
Revista de Chimie, 73(2), 1-16, 2022
333. Progress in electroanalysis of p53, CEA and CA19-9. A minireview.
RM Ilie-Mihai, RI Stefan-van Staden, JF van Staden
J Electrochem Soc., 169 (3), 037518, 2022
334. Fast screening method for early diagnostic of gastric cancer based on utilization of a chitosan – S-doped graphene - based needle stochastic sensors
RM Ilie-Mihai, DC Gheorghe, RI Stefan-van Staden, A Lungu-Moscalu, JF van Staden
J Pharm Biomed Anal, 214, 114725, 2022
335. Challenges in Biomedical Analysis - From Classical Sensors to Stochastic Sensors
RI Stefan-van Staden
ECS Sensors Plus, 1, 011603, 2022
336. In-House Validated Map of Lymph Node Stations in a Prospective Cohort of Colorectal Cancer. A Tool for a Better Preoperative Staging
P. Simu, I. Jung, L. Baniias, Z.Z. Fulop, T. Bara, I. Simu, S. Andone, RI Stefan-van Staden, C.B. Satala, I. Halmaciu, S. Gurzu
J Oncology, Article ID 1788004, 10 pages, 2022
337. Disposable stochastic sensors for fast analysis of ibuprofen, ketoprofen, and flurbiprofen in their topical pharmaceutical formulations
BM Țuchiu, RI Stefan-van Staden, M Bădulescu, JF van Staden
J.Pharm.Biomed.Anal., 215, 114758, 2022.
338. Interleukin-8, CXCL10, CXCL11 and their role in insulin resistance in adult females with subclinical hypothyroidism and prediabetes
RA Stoica, N Drăgana, R Ancuceanu, OI Geicu, C Guja, A Pantea-Stoian, DC Gheorghe, RI Stefan-van Staden, C Serafinceanu, A Costache, C Ionescu-Tîrgoviște

Journal of Clinical and Translational Endocrinology, 28, 100299, 2022.

339. NS Decorated Graphenes Modified with 2,3,7,8,12,13,17,18-Octaethyl-21H,23H-Porphine Manganese (III) Chloride Based 3D Needle Stochastic Sensors for Enantioanalysis of Arginine - a Key Factor in the Metabolomics and Early Detection of Gastric Cancer
RI Stefan-van Staden, MI Bogeia, RM Ilie-Mihai, DC Gheorghe, HY Aboul-Enein, M Coros, SM Pruneanu
Anal. Bioanal.Chem., 414(22), 6521–6530, 2022
340. Determination of D-serine from whole blood samples using an electrochemical sensor based on zinc (II)-5(4-carboxyphenyl)-10,15,20-tris(4phenoxyphenyl)porphyrine
OR Musat, RM Ilie-Mihai, RI Stefan-van Staden
Sci Bull UPB, 84(4), 139-148, 2022
341. Determination of p53 from whole blood samples using an electrochemical sensor based on graphene decorated with N and S
IM Bogeia, RM Ilie-Mihai, RI Stefan-van Staden
Sci Bull UPB, 84(3), 121-130, 2022
342. Nanographene based electrochemical sensors for ultrasensitive determination of sorbic acid from bread and mayonnaise
RI Stefan-van Staden, AR Niculae, JF van Staden, P Sfirloaga, R State
Anal Bioanal Chem, 414(23), 6813–6824, 2022
343. Mini-Review–Electrochemical sensors used for the determination of some antifungal azoles
BM Tuchi, RI Stefan-van Staden, J (Koo) F van Staden
ECS Sensors Plus, 1(3), 030601, 2022
344. Sulfur-doped graphene based electrochemical sensors for fast and sensitive determination of (R)-(+)-Limonene from beverages
AR Niculae, RI Stefan-van Staden, JF van Staden, R Georgescu State
Sensors, 22(15), 5851 <https://doi.org/10.3390/s22155851>, 2022
345. Ultrafast screening of whole blood for early prediction of diabetes by fractalkine detection
RI Stefan-van Staden, DC Gheorghe, RA Stoica
Sensors & Diagnostics, 1(5), 977-982, 2022
346. Highly sensitive electrochemical detection of azithromycin with graphene-modified electrode
F Pogăcean, C Varodi, L Măgerușan, RI Stefan-van Staden, S Pruneanu
Sensors, 22(16), 6181, 2022 <https://doi.org/10.3390/s22166181>
347. Carbon Nanopowder Based Stochastic Sensor for Ultrasensitive assay of CA 15-3, CEA and HER2 in whole blood
RI Stefan-van Staden, OR Musat, DC Gheorghe, RM Ilie-Mihai, JKF van Staden
Nanomaterials, 12, 3111, 2022. <https://doi.org/10.3390/>
348. V-set and immunoglobulin domain containing 1 (VSG1) as an emerging target for epithelial–mesenchymal transition of gastric cancer
CB Satală, I Jung, Z. Kovacs, RI Stefan-van Staden, T Bara, C Molnar, AI Patrichi, S. Gurzu
Scientific Reports, 12, 16241, 2022
349. Simultaneous analysis of MLH1, MSH2, MSH6, PMS2 and KRAS in patients with gastric and colon cancer using stochastic sensors
RI Stefan-van Staden, DC Gheorghe, F Pogăcean, S Pruneanu
Chemosensors, 10(10), 380, 2022 <https://doi.org/10.3390/chemosensors10100380>
350. Ultrasensitive assay of HER-1, HER-2, and heregulin- α in whole blood
RI Stefan-van Staden, OR Musat, DC Gheorghe, RM Ilie-Mihai
Talanta Open, 6, 100151, 2022
351. N-methylfulleropyrrolidine based multimode sensor for determination of butoconazole nitrate
BM Tuchi, RI Stefan-van Staden, JF van Staden, HY Aboul-Enein
ACS Omega, 7(46), 42537–42544, 2022
352. Molecular Recognition and Quantification of MLH1, MSH2, MSH6, PMS2 and KRAS in biological samples
RI Stefan-van Staden, RM Ilie-Mihai, M Coros, SM Pruneanu
ECS Sensors Plus, 1, 031606, 2022
353. Molecular recognition and quantification of HER-3, HER-4 and HRG- α in whole blood and tissue samples using stochastic sensors
DC Gheorghe, Raluca-Ioana Stefan-van Staden
Micromachine, 13(10), 1749, 2022. <https://doi.org/10.3390/mi13101749>
354. An Approach to the Simultaneous Determination of a Panel of Five Biomarkers for the Early Detection of Brain Cancer Using the Stochastic Method
C Cioates Negut, RI Stefan-van Staden, P Sfirloaga
Chemistry, 4(4), 1382–1394, 2022. <https://doi.org/10.3390/chemistry4040090>
355. Mini-review: Electrochemical sensors used for the determination of water- and fat-soluble vitamins: B, D, K
DC Gheorghe, RI Stefan-van Staden, JF van Staden
Crit. Rev. Anal. Chem., 00, 000, 2023
356. Recent trends in ibuprofen and ketoprofen electrochemical quantification – a review
BM Tuchi, RI Stefan-van Staden, JF van Staden

- Crit Rev Anal Chem, 00, 000, 2023
357. Minireview: current trends, and future challenges for the determination of patulin in food products
C Cioates Negut, RI Stefan-van Staden, JF van Staden
Anal Lett, 56(1), 25-41, 2023
 358. Review- recent developments in electrochemical detection of atrazine
IR Comnea-Stancu, JF van Staden, RI Stefan-van Staden
Anal Lett, 00, 000, 2023
 359. Simultaneous molecular recognition of IL-2, IL-4, and TNF- α in biological samples
C Cioates Negut, RI Stefan-van Staden, P Sfirloaga
Electroanalysis, 00, 000, 2023
 360. Simultaneous detection of anthracene and phenanthrene using a poly-Alizarin Red S/carbon paste electrode
IR Comnea-Stancu, JF van Staden, RI Stefan-van Staden, RN State
Chemosphere, 310, 136909, 2023
 361. Effect of cooking and preserving on the heavy metals content of seafood, tuna and poultry
IA Chera-Anghel, RI Stefan-van Staden
Food Chem, 407, 135158, 2023
 362. Gold nanoparticles/nanographene-based 3D sensors integrated in mini-platforms for thiamine detection
DC Gheorghe, JF van Staden, RI Stefan-van Staden, P. Sfirloaga
Sensors, 23(1), 344, 2023. <https://doi.org/10.3390/s23010344>
 363. Portable device based on the utilization of a 2D disposable paper stochastic sensor for fast ultrasensitive screening of food samples for bisphenols
RI Stefan-van Staden, IA Chera-Anghel, JF van Staden, DC Gheorghe, M Badulescu
Sensors, 23(1), 314, 2023. <https://doi.org/10.3390/s23010314>, 2023

1.2. Carti si capitole in carti, peste 15, din care:

1. *"Quality and Reliability in Analytical Chemistry"*
H.Y. Aboul-Enein, **R.I. Stefan** and G.E. Baiulescu
CRC Press, Boca Raton, Florida, USA, 28 September 2000.
2. *"Electrochemical Sensors in Bioanalysis"*
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Marcel Dekker Inc., New York, USA, 2001.
3. *"Laboratory Auditing for Quality and Regulatory Compliance"*
D.C. Springer, **R.I. Stefan** and J.F. van Staden
Taylor and Francis, New York, USA, 2005.
4. *"Recent developments of chemiluminescence sensors"* (Chapter 20)
X.R. Zhang, A.M. Garcia-Campana, W.R.G. Baeyens, **R.I. Stefan**,
H.Y. Aboul-Enein and J.F. van Staden
in CHEMILUMINESCENCE IN ANALYTICAL CHEMISTRY.
A.M. Garcia-Campana and W.R.G. Baeyens (Editors)
Marcel Dekker, Inc., New York. USA, 2001.
5. *"Sequential Injection Analysis in HPLC"* (Chapter) in
ENCYCLOPEDIA OF CHROMATOGRAPHY
R.I. Stefan, H.Y. Aboul-Enein and J.F. van Staden
Jack Cazes (Editor)
Marcel Dekker, Inc., New York. USA, 2001.
6. *"Enantioselective Electrochemical Sensors"* (Chapter) in
SENSORS UPDATE, Volume 10
R.I. Stefan, H.Y. Aboul-Enein and J.F. van Staden
H. Baltes, G.K. Fedder, G. Korvink (Editors)

- Wiley-VCH ,Weinheim , Germany, 2001.
7. "Biosensors Technology" (Chapter 21) in
EWEING'S ANALYTICAL INSTRUMENTATION HANDBOOK
R.I. Stefan, H.Y. Aboul-Enein and J.F. van Staden
Jack Cazes (Editor)
Marcel Dekker, Inc., New York. USA, 2004.
 8. "Enantioselective Biosensors"
(Chapter 13) in
CHIRAL SEPARATION TECHNIQUES. A PRACTICAL APPROACH.
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
G. Subramanian (Editor)
Wiley-VCH ,Weinheim , Germany, 2006.
 9. "Enantioselective, Potentiometric Membrane Electrodes. Design, mechanism of potential development and applications for pharmaceutical and biomedical analysis" (Chapter 3) in
ELECTROCHEMICAL SENSOR ANALYSIS
R.I. Stefan-van Staden
S. Alegret, A Merkoci (Editors)
Elsevier, 2007.
 10. "Enantioanalysis of S-Captopril using an enantioselective, potentiometric membrane electrode" (Procedure 3) in
ELECTROCHEMICAL SENSOR ANALYSIS
R.I. Stefan-van Staden, J.F. van Staden and H.Y. Aboul-Enein
S Alegret, A Merkoci (Eds)
Elsevier, Amsterdam, The Netherlands, (ISBN: 978-0-444-53053) 2007.
 11. "Electrochemical biosensors based on screen-printed electrodes. Applications for environmental and food analysis" (Chapter) in
RECENT ADVANCES IN ANALYTICAL ELECTROCHEMISTRY
M. Tudorache, C. Bala and R.I. Stefan
K.I. Ozoemena (Editor)
Research Signpost, (978-81-7895-274-1) 2007.
 12. "Mechanism of potential development for potentiometric sensors, based on modeling of interaction between electrochemically active compounds from the membrane and analyte" (Chapter) in
CHEMICAL SENSORS: SIMULATION AND MODELING
R.I. Stefan-van Staden
G. Korotcenkov (Editor)
Momentum Press, LLC, 2013.
 13. "Electrochemical Sensors Based on Nanostructured Materials" (Chapter) in
HANDBOOK OF NANO-ELECTROCHEMISTRY. ELECTROCHEMICAL SYNTHESIS METHODS, PROPERTIES AND CHARACTERIZATION TECHNIQUES
I. Moldoveanu, R.I. Stefan-van Staden, J.F. van Staden
Mahmood Aliofkhaezai, Abdel Salam Hamdy Makhlof (Editors)
Springer International Publishing Switzerland, 2015. (ISBN: 978-3-319-15207-3)
 14. New Trends in Enantioanalysis of Pharmaceutical Compounds using Electrochemical Sensors (Chapter) in
Recent Advances in Analytical Techniques Vol. 2. Novel Developments in Pharmaceutical and Biomedical Analysis
R.I Stefan-van Staden
Atta-ur-Rahman, Sibel A. Ozkan, Rida Ahmed(Eds.)
Bentham, 2018 (ISSN: 2542-5617) (Print)
 15. Single-walled carbon nanotubes based sensors for biomedical analysis (Chapter 7) in
Advances in Chemistry Research, Volume 74
C. Cioates Negut and R.-I. Stefan-van Staden
James C. Taylor (Ed.)

- Nova, Science and Technology, 2022 (ISBN: 979-8-88697-212-2)
16. Functionalized Chitosan and Biomedical Devices (Chapter 5) in **Chitosan Nanocomposites-Bionanomechanical Applications**
D.C. Gheorghe, R.M. Ilie-Mihai, C. Cioates Negut, R.I. Stefan-van Staden
Sarat Kumar Swain (Ed.)
Springer Nature, Singapore, 2023
 17. Graphene-based nanocomposites for H₂O₂ sensing (Chapter 10) in **Graphene-based nanocomposite sensors**
R Georgescu State, IR Comnea-Stancu, RI Stefan-van Staden, JF van Staden
Royal Society of Chemistry, 2023.
 18. Graphene-based Nanocomposites for Hormone Detection (Chapter 19) in **Graphene-based nanocomposite sensors**
RM Ilie-Mihai, DC Gheorghe, RI Stefan-van Staden
Royal Society of Chemistry, 2023.

1.3 Brevete

1. Procedeu de realizare a senzorilor stocastici pe baza de porfirine si pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular
Raluca-Ioana van Staden, Eugenia Lenuta Fagadar-Cosma
Nr 123101/Octombrie 2010.
2. STOC- μ SENS-CMD
Raluca-Ioana van Staden, Jacobus Frederick van Staden
Nr 125050/Decembrie 2010.
3. DOT senzor enantioselectiv si procedeu de realizare a acestuia
Raluca-Ioana van Staden, Jacobus Frederick van Staden
Nr 126158/Iulie 2016.
4. Disposable multimode minicell
Raluca-Ioana van Staden, Jacobus Frederick van Staden
Nr. RO131898B1/2021.

2. Participari la conferinte

Lucrari invitate:	peste 50
Prezentari orale trimise:	peste 200
Postere trimises:	peste 300

Presedinte de sectiune pentru maim ult de 20 de sesiuni:

Presedinte de sesiune:

- KAC'2001, 7th International Symposium on Kinetics in Analytical Chemistry, Bucharest, Romania. 21-23 September 2001.
- 37th SACI Convention. Chemistry for a better life. Pretoria, South Africa. 4 - 9 July 2004.
- 13 IMCS'2010. 13th International Meeting on Chemical Sensors. Perth, Australia. 11-14 July 2010.
- 222nd Meeting of ECS, PRIME 2012 PACIFIC RIM MEETING ON ELECTROCHEMICAL AND SOLID-STATE SCIENCE, Honolulu, Hawaii, USA. 7 - 12 October 2012.
- 223rd Meeting of ECS, Toronto, Canada, May 2013.
- 225th Meeting of ECS, Orlando, USA, May 2014.
- 227th Meeting Chicago, USA, May 2015.
- 228th Meeting Phoenix, USA, October 2015.
- 229th Meeting of ECS, San Diego, USA, May-June 2016
- 234th Meeting of ECS, Cancun, Mexic, October 2018
- 235th Meeting of ECS, Dallas, USA, May-June 2019

3. Indrumator stiintific pentru BSc, Master, Doctorat, Postdoc

3.1. Studenti care au terminat studiile.

Numele studentului	Titlu/Titlu tezei/data obtinerii titlului/universitatea	Indrumator	Co-indrumator	Durata studiului (ani)
AAlecu	BSc/Utilization of ion-selective, membrane electrodes in pharmaceutical analysis/1995	RI Stefan	GE Baiulescu	2
FD Munteanu	BSc/Lauryl sulfate as new ligand in the design of ion-selective, membrane electrodes/1996	RI Stefan	GE Baiulescu	2
C Radoi	BSc/Determination of Vitamin C in fruits using HPLC/1996	RI Stefan	-	2
G Mangiurea	BSc/Determination of antiarrhythmic drugs using ion-selective membrane electrodes/1997	RI Stefan	-	2
J Mangiurea	BSc/In vitro dissolution tests of pharmaceutical products using ion-selective membrane electrodes/1997	RI Stefan	-	2
M Diaconu	BSc/Determination of antidepressive drugs using ion-selective, membrane electrodes/1997	RI Stefan	-	2
AAlecu	MSc/Ion-selective membrane electrodes: membrane potential development/1996	RI Stefan	GE Baiulescu	1
K Naidoo	MSc/Electrochemical behaviour of boron-doped diamond electrodes/2001	RI Stefan	JF van Staden	2/Distinction
MG Mashamba	MSc/Process potentiometric sequential injection titrations/2002	JF van Staden	RI Stefan	2
RG Bokretson	MSc/On-line process control in pharmaceutical industry/2003	RI Stefan	JF van Staden	1/Distinction
SG Bairu	MSc/Diamond paste based electrodes for inorganic analysis/2003	RI Stefan	JF van Staden	1/Distinction
ZO Tesfaldet	MSc/Sequential injection analysis of cations in pharmaceutical products/2005	JF van Staden	RI Stefan	2/Distinction
TR Mashile	MSc/Enantioanalysis of pharmaceutical compounds/2006	RI Stefan	-	1/Distinction
L Holo	MSc/Enantioselective, potentiometric membrane electrodes for enantioanalysis of amino acids of clinical and pharmaceutical importance/2006	RI Stefan	-	1/Distinction
LA Gugoasa	MSc/Biosensors based on DNA for the assay of neurotransmitters/2012	A Ciucu	RI van Staden	2
RM Nejem	PhD/ Enantioselective sensors and biosensors for clinical analysis/2004	RI Stefan	-	3/Excellent
I Moldoveanu	PhD/Screenng systems for early detection of cancer and hepatitis/2015	RI van Staden	-	3/Excellent
LA Gugoasa	PhD/Multimode screening systems for obesity/2015	RI van Staden	-	3/Excellent
Ionela Raluca Comnea	PhD/Screening systems for early detection of lung cancer	RI van Staden	-	3/Excellent
Ahmed Jassim Muklive Al-Ogaidi	PhD/Fast detection of colon cancer biomarkers	RI van Staden	-	3/Excellent
Amalia Gabriela Diaconeasa	PhD/Detection of specific biomarkers for ageing related illnesses	RI van Staden	-	3/Excellent
Grigorina Mitrofan	PhD/Investigation of thyroid function and its associated pathologies using stochastic sensing	RI van Staden	-	3/Excellent
KI Ozoemena	Postdoc (Claude Harris Leon Foundation fellowship)/Design and construction of novel ion and enantioselective membranes for the development of high performance electrochemical sensors	RI Stefan	-	1
AA Rat'ko	Postdoc/Studies on the behaviour of enantioselective, potentiometric membrane electrodes	RI Stefan	-	2
B Lal	Postdoc/Enantioselective, potentiometric membrane electrodes based on fullerenes	RI Stefan	-	2
K Sharma	Postdoc/Computational studies of molecular interactions	RI Stefan	-	1

B Calenic	Postdoc/Tissue engineered oral mucosa developed from keratinocyte stem cells using specific substrate topographies	RI van Staden	-	2
Ruxandra Ilie	PhD/Detection of biomarkers specific to gastric cancer	RI van Staden	-	3/Summa Cum Laude
Ioana Popa	PhD/Detection of biomarkers associated to early onset of diabetes	RI van Staden	-	3/Summa Cum Laude
Mariana Mincu	PhD/Stochastic sensors for environmental monitoring	RI van Staden	-	2/Summa Cum Laude
Alexandrina Lungu	PhD/Modern analytical methods for environmental analysis	RI van Staden	-	3/Summa Cum Laude
Sebastian Gheorghe	PhD/Detection of biomarkers specific to brain cancer	RI van Staden	-	3/Summa Cum Laude
Mihaela Iuliana Boguea	PhD/Detection of gastric cancer	RI van Staden	-	3/Summa Cum Laude

3.2. Studenti doctoranzi la Universitatea Politehnica din Bucuresti

Numele studentului	Titlu/Titlul tezei	Date of start
Oana Raluca Musat	PhD/Innovative methods for diagnosing breast cancer	October 2019
Irina Alina Anghel-Chera	PhD/Modern methods of determination of influence of pollutants on human body	October 2019
Alexandru Adrian Bratei	PhD/A modern approach of pathology and clinical analysis	October 2020
Bianca Maria Tuchiu	PhD/A modern approach of pharmaceutical analysis	October 2020
Damaris Cristina Gheorghe	PhD/Innovative methods in clinical analysis	October 2021
Andreea Elena Sandu (m. Dorneanu)	PhD/Innovative methods for determination of substances from marine sources used in therapeutics	October 2021
Andreea Dragoi (m. Branza)	PhD/Modern methods of analysis of marine extracts used in cosmetic and pharmaceutical products	October 2021
Rasit Ergun Yukmel	PhD/Development of new instrumentation for the screening of biological, food, and environmental samples	October 2021
Popa Maria-Lavinia	PhD/Quality control and testing of the protection equipments	October 2021
Andreea-Roxana Nicolae	PhD/Fast screening tests of food for increasing the security of food	October 2021
Catalina Cioates-Negut	Postdoc/Screening methods for diagnosis of brain cancer	August 2020

4. Membru in Societati nationale si internationale

- Reprezentant al Romaniei in Divizia de Chimie Analitica, EUCHEMs
- Membra a Academiei Romano-Americane de Stiinte si Arte
- Leader al Bioanalytical Study Group din cadrul Diviziei de Chimie Analitica, EUCHEMs
- Electrochemistry Society, USA – membru, membru al Comitetului Executiv si Member-at-Large in Divizia de Senzori, din Octombrie 2012
- Presedinta a Filialei Internationale din Romania a Societatii Americane de Chimie (Romania Chapter of American Chemical Society)
- 2020 Fellow al Societatii Americane de Chimie
- Societatea SIGMA XI, The scientific research honor society - membru
- Societatea de Chimie din Romania - membru
- International Society of Electrochemistry - membru
- International Society of Bioelectrochemistry - membru
- The South African Chemical Institute - membru

- American Chemical Society - membru
- The Israeli Metrological Society - membru
- **IUPAC – Fellow.**
- **Secretara, Comisia V.1, Aspecte generale ale chimiei analitice, IUPAC 1999-2001.**
- Phoenix – Romanian Association of University Chemists – - membru fondator.
- Romanian Society of Analytical Chemistry - fost membru.

Rol in Comitete Stiintifice:

- Comitet stiintific al The XIIIth National Conference on Analytical Chemistry, Craiova, Romania, 1996.
- Comitet stiintific al Chemometrics Workshop, Timisoara, Romania, 1997.
- Comitet stiintific al The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, 1998.
- Co-secretara, 7th International Conference on Kinetics in Analytical Chemistry, Bucharest, Romania, 2001.
- Co-secretara, ICFA'2003, Merida, Venezuela, 2003.
- Membra a comitetului de program al 10th International Meeting on Chemical Sensors, July 11-14, 2004. Tsukuba, Japan.
- Chair si membra a comitetului stiintific – SENSOR DEVICES 2010, Venetia, Italia, iulie 2010; SENSOR DEVICE 2011, Nice, France, august 2011; SENSOR DEVICES 2012, Roma, Italia, august 2012; SENSOR DEVICES 2013, Barcelona, Spain.
- Chairman, RO'ICAC 2012, 1st International Conference on Analytical Chemistry, Targoviste, Romania, 2012.
- Chairman, RO'ICAC 2014, 2nd International Conference on Analytical Chemistry, Targoviste, Romania, 2014.
- Chairman, RO'ICAC 2016, 3rd International Conference on Analytical Chemistry, Iasi, Romania, 2016.
- Chairman, RO'ICAC 2018, 4th International Conference on Analytical Chemistry, Bucuresti, Romania, 2018.
- Membra in Advisory Board, Euroanalysis 2022, Olanda

5. Membra a birourilor editoriale

- Din 2000 "Preparative Biochemistry & Biotechnology" (Taylor and Francis)
- Din 2003 "Sensor Letters" (American Scientific Publishers)
- Din 2005 "Sensors & Transducers Journal"
- Senior Member al International Advisory Board of "Encyclopedia of Sensors" (American Scientific Publishers, 2004)
- Din 2012 "International Journal on Advances in Systems and Measurements" (IARIA Journals)
- Din 2012 "Journal of Membrane and Separation Technology" (Life Sciences, Global)
- Din 2019 "Egyptian Pharmaceutical Journal" (Wolter Kluwer Health/MedKnow)
- **Guest Editor** – Revista "Sensors" (IF = 3.031) pentru un numar special cu titlul "Graphene-Based Sensors for Pharmaceutical and Biomedical Analysis".
- **Din 2020, "Sensors" (IF=3.031)**
- **Din 2020, Analytical Letters, Taylor & Francis**
- **Editor pentru chimie analitica si bioanaliza: Revista - Coagent Chemistry, Taylor & Francis**
- **Din 2021, "ECS Sensors Plus"**
- **Guest Editor** – for "Sensors" for the special issue: "Graphene-Based Sensors for Pharmaceutical and Biomedical Analysis".
- **Editor for analytical chemistry and bioanalysis: Coagent Chemistry, Taylor & Francis until 2021**
- **Guest Editor** – Journal of Oncology 2020/2021
- **Guest Editor** – Frontiers in Oncology 2020/2021
- **Guest Editor** – Life 2021/2022
- **Guest Editor** – Journal of the Electrochemical Society for the issue: Women in Electrochemistry, 2021
- **Din 2022 – Academic Editor, Journal of Oncology, 2022**

6. Vizite la universitati ca profesor/cercetator si colaborari

6.1. Vizite la universitati:

- University "Tor Vergata", Rome (Italy), 1996
- Universitatea Yamagata (Japonia), 2015 – Conferinta de presa impreuna cu rectorul universitatii.
- University of Antwerpen (Belgium), 1998
- University of Vienna (Austria), 1999, 2000.

- Universitatea din Bucuresti (Romania), 2000, 2001, 2002, 2004, 2005.
- UC at Berkeley, USA, 2011

6.2. Colaborari:

- King Faisal Hospital and Research Centre, Ryad, Saudi Arabia
- University of Yamagata, Japan
- University of Nicosia, Cyprus
- Universitatea din Chisinau, Republica Moldova
- Universitatea din Viena, Austria
- Universitatea Tehnica din Viena, Austria
- Universitatea Politehnica din Timisoara
- UMF "Carol Davila"
- UMF "Targu Mures"
- ICECHIM
- Institutul de Chimie al Academiei Romane, Timisoara
- Institutul National de Cercetari Izotopice si Tehnologii Moleculare, Cluj-Napoca

7. Management si administratie

- **Secretara a Comisiei V.1 General Aspects of Analytical Chemistry, IUPAC, 1998-2001.**
- **Leader al Bioanalytical Study Group din cadrul Diviziei de Chimie Analitica, EUCHEMs**
- Coordonator de curs/Universitatea din Pretoria CMY 200 – 2002, 2005.
- Organizator in colaborare cu SwissLab a doua seminarii: SPR & Biosensors seminar (26/03/2003, 11/2004) si Corrosion and Battery seminar (27/03/2003).
- Membra a comitetelor de cercetare si social ale Catedrei de Chimie din cadrul Universitatii din Pretoria.
- Organizatoare/initiatoare a Zilei Cercetarii in Cadra de Chimie din cadrul Universitatii din Pretoria, 2005 si 2006
- Sef de Laborator al Laboratorului de Electrochimie si PATLAB Bucuresti, INCEMC, Timisoara, din 2007.
- Director stiintific al INCEMC, Timisoara, 03.2014-07.2015.
- **Electrochemistry Society, USA – membru, membru al Comitetului Executiv si Member-at-Large in Divizia de Senzori, din Octombrie 2012**
- **Presedinta a Romanian Chapter of American Chemical Society**

8. Referent

Referent pentru reviste ISI, cum ar fi: Talanta, Sensors and Actuators B, Journal of American Chemical Society, Bioelectrochemistry, Chirality, Electrochemical Communications, Journal of Electroanalytical Chemistry, Journal of Solid State Electrochemistry, Electrochimica Acta, Luminescence, Trends in Biotechnology, Process Biochemistry, Analytica Chimica Acta, Analytical and Bioanalytical Chemistry, Analytical Letters, Biosensors & Bioelectronics, Chromatographia, Biomedical Chromatography, Sensors, Journal of Pharmaceutical and Biomedical Analysis, Central European Journal of Chemistry, Central European Journal of Chemistry, The Analyst, Water SA, Applied Surface Sciences, Chemistry and Ecology Reviews, Desalination, International Journal of Physical Sciences, Revista de Chimie (Bucharest), Acta Chimica Slovenica, South African Journal of Chemistry.

Membru in comisii de doctorat:

- Universitatea "Politehnica", Bucuresti, Romania
- Universitatea de Medicina si Farmacie "Carol Davila", Bucuresti
- Universitatea din Pretoria, Africa de Sud
- Universitatea Rhodes, Africa de Sud
- Universitatea "Gheorghe Asachi", Iasi, Romania

9. Premii si titluri

Peste 50 premii si titluri nationale si internationale din care:

1997 - **Wilhelm Simon award** - a six month Scholarship, by the ICSC - World Laboratory Lausanne, Switzerland

1999 - **IUPAC award for Young Scientist**

2001 - **Exceptional Young Researcher, University of Pretoria**
 2002 - **President Award, National Research Foundation, South Africa**
 2002 - **Raikes Medal, South African Chemical Institute**
 2003 - together with Dr KI Ozoemena, **Claude Harris Leon Foundation award**
 2004 – **one of the 5 finalist for the Women in Science award – South Africa**
 2009 – Premiul II, Sectiunea Cercetare, Gala Premiilor in Educatie, Fundatia Dinu Patriciu
 2010 – **Cetatean de onoare al Orasului Campulung-Muscel**
 2010 – **Cetatean de onoare al judetului Arges**
 2011, 2012 – Placheta Orasului Campulung-Muscel
 2010 – Diploma de Excelenta pentru activitatea de inventica, ANCS
 2010 – Diploma de Excelenta pentru reprezentarea cu success a Romaniei la Salonul International de Inventii de la Geneva, 2010, ANCS
 2012 – Medalia omagiala a salonului PRO INVENT, **Ordinul Stiintific Gogu Constantinescu in grad de Comandor si medalia Gogu Constantinescu pentru rezultate remarcabile obtinute in activitatea de cercetare stiintifica, de promovare a inventicii, precum si pentru contributia la recunoasterea internationala a creativitatii romanesti.**
 2012 – Membru de onoare al Asociatiei Bolnavilor de Cancer
 2013 – Membru de onoare al Ligii Studentilor Romani din Strainatate
 2013 – Premiu She Business pentru inovare
 2017 - Premiul Radar de Media pentru Cercetare Stiintifica
 2019 - **Medalia Gheorghe Spacu si Premiul Societatii Romane de Chimie pentru inalta recunoastere nationala si internationala**
 2020-ACS FELLOW

10. Alte activitati profesionale

- Expert evaluator si membra in panel pentru ANCS, UEFISCDI - Romania, National Research Foundation- Africa de Sud, Bulgarian National Research Found, Portugalia, Czech Republic – research projects.
- **de Beers Research Center, Johannesburg, February 2001** - Invited lecture.
- **SACI, Raikes Medal Lecture, February 2003.**
- **TEDx Bucuresti 2010; TEDx Eroilor Cluj-Napoca 2011.**
- Conferinte invitate la diferite universitati, **University of Vienna; Wits University; Universitatea din Bucuresti; University of Antwerpen; Universitatea Babes Bolyai, Cluj; Centrul de Senzori si Actuatori, UC at Berkeley, USA.**
- Membra in juriu pentru concursul national de fotografie: **SA Science Lens, South Africa; Gala Premiilor in Educatie, Sectiunea Cercetatorului Anului, Fundatia Dinu Patriciu, 2011; Studentul anului - organizat de Liga Studentilor Romani din Strainatate; Bursele L-Oreal Unesco Romania, 2012; membra in juriul pentru acordarea premiului pentru cel mai bun poster – sectiunea senzori la conferintele Societatii de Electrochimie (SUA); membra in juriul pentru acordarea premiilor pentru cele mai bune lucrari prezentate in cadrul conferintei SmaSys, 2015, Japonia.**
- **Cursuri tinute la invitatie unor societati profesionale: Octombrie 2011 – doua cursuri (domeniul senzori electrochimici pentru analiza clinica si farmaceutica) sustinute la invitatie ACS si ECS la San Francisco, USA; Mai 2012 – curs (in domeniul enantionalizei clinice) sustinut la invitatie ECS la Seattle (USA); Septembrie 2012 – curs (in domeniul calitatii si fiabilitatii in analiza chimica) sustinut la invitatie DAC a EUCHEM la Belgrad (Serbia) in cadrul conferintei EUROANALYSIS; Mai 2016 – curs (in domeniul micro si nanosenzorilor) sustinut la invitatie ECS (Denver, USA).**
- **Invitata pentru interviuri in direct la SABC Africa, programul 180 degrees si Radio fm 95.9mHz - Johannesburg, 26 July 2004, Africa de Sud.**
- **Invitata pentru interviu la Radio Romania Actualitati, Cultural, TVR, ProTV, Realitatea, Trinitas, B1, Antena, Kanal D, TVRM, Money Channel .**
- **Recitaluri de pian:** Bucuresti, Timisoara, Campulung-Muscel, Piatra Neamt, San Francisco (USA), Linz (Austria).

- Compozitiile muzicale au fost difuzate la Radio Romania Cultural.

11. Proiecte de cercetare

Proiecte nationale:

Director de proiect:

- PNII, Parteneriate in domenii prioritare, "Senzori si microsenzori bazati pe porfirine pentru analiza compusilor farmaceutici, a compusilor de importanta clinica si a alimentelor", CNMP, perioada octombrie 2007 – septembrie 2010, 2.000.000lei. – 14 lucrari publicate si doua brevete de inventie premiate la saloanele internationale de inventii si inovatii cu medalii de aur si premii speciale, printre care si Premiul OMPI pentru cea mai buna femeie inventator la Salonul de inventii si inovatii de la geneva, 2010.
- PNII, Idei, "Microsenzorii stocastici ca noi instrumente de masurare a substantelor de importanta biologica" UEFISCDI, perioada octombrie 2011 – septembrie 2014, 1.250.000lei – 27 lucrari publicate
- PNII, Parteneriate, Senzori multimode pentru analiza biomedicala, UEFISCDI, 2014-2017, 1.000.000lei – 20 lucrari publicate
- PNIII – PCE – 2017-2019 – Diagnosticul precoce al diabetului, 850.000lei – 10 lucrari publicate
- PNIII-PCCF-2018-2022 – Diagnosticarea precoce a cancerului gastric superior, 8.500.000lei – 71 lucrari publicate si un brevet acordat

Responsabil de proiect:

- PED 102/2017, 2017-2018, Senzori bazati pe graphene pentru determinarea timpurie a leucemiilor, 300.000lei – 5 lucrari publicate

Proiecte internationale:

Director de proiect:

- "Electrochemical sensors for bioanalysis", grant acordat de Fundatia Nationala de Cercetare din Africa de Sud, perioada 2001-2006, 130 lucrari publicate
- ERC-like project, "Stochastic approach for early diagnosis of cancer", UEFISCDI, perioada iulie 2012 – iunie 2014, 1.500.000lei – 25 lucrari publicate
- Bilateral Romania-Cipru, „Enantioanaliza compusilor de importanta clinica utilizand microsenzorii si cromatografia electrocinetica micelara”, mai 2010-aprilie 2012, ANCS – 4 lucrari publicate
- Bilateral Romania-Cipru, „Enantioanaliza compusilor de importanta clinica utilizand lichide ionice, 2014-2015, ANCS – 4 lucrari publicate
- Bilateral Romania-Republica Moldova, „Detectie si inhibare a cancerului la nivel molecular”, septembrie 2010-noiembrie 2012, ANCS. – 2 lucrari publicate

Responsabil de proiect:

- FP7, DENAMIC, „Developmental neurotoxicity assessment of mixtures in children”, EC, 70000Euro – 8 lucrari publicate

12. Activitate didactica

Cursuri/seminarii/laboratoare:

- 12.1. Facultatea de Chimie, Universitatea Bucuresti 1992-1998 – Curs de metode de separare si analiza de urme (anul IV, sectia Chimie), laboratoare anii I-V.
- 12.2. Departamentul de Chimie, Universitatea din Pretoria 2000-2006 – Cursuri, seminarii, laboratoare in domeniile chimie generala si chimie analitica, anul I – chimie, biochimie, inginerie (clase cu 50 – 700 studenti); Curs de chimie analitica, anul II (coordonatorul cursurilor de chimie la anul II de studii); Curs de senzori electrochimici si bioanaliza la anul IV (Hons).
- 12.3. Indrumator pentru lucrarile de diploma si MSc – Facultatea de Chimie, Universitatea din Bucuresti 1992-1998.
- 12.4. Indrumator pentru MSc si conducator de doctorat – Universitatea din Pretoria 1999-2006.
- 12.5. Din decembrie 2013, conducator de doctorat - Universitatea Politehnica din Bucuresti.

Sase cursuri internationale de o zi, cu tematica analizei chimice, bioanalizei, senzorilor, biosenzorilor, fiabilitatii in chimia analitica, tinute la invitatia Societatii Americane de Chimie, Societatii de Electrochimie din SUA, Diviziei de Chimie Analitica a EUCHEMs – pentru masteranzi, doctoranzi si tineri cercetatori. Cursurile au fost tinute la San Francisco, Berkeley, San Diego, Seattle, Zagreb (in cadrul conferintei EUROANALYSIS) si Istanbul (in cadrul conferintei EUROANALYSIS).

Publicatii: Caiete de lucrari practice pentru studenti, anii I si II – chimie analitica – publicate de Editura Universitatii din Pretoria.