

## INFORMAȚII PERSONALE

## Raluca-Ioana van Staden



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Data nasterii: 16.07.1969 | Naționalitatea: Romana

Nume inaintea casatoriei: Stefan

## EXPERIENȚA PROFESIONALĂ

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- 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 Preparator 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 II 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
  13. ACTIVITATI ARTISTICE

### 1. Publicatii

#### 1.1. Lucrari publicate in reviste ISI (h=22, 2028 citari, conform SCOPUS)

1. Carbonic anhydrase inhibitors. Novel coordination compounds of Pd(II), Pt(II) and Ni(II) with 6-ethoxy-benzothiazole-2-sulfonamide  
M. Andruh, E. Cristurean, R. Stefan and C.T. Supuran  
*Rev. Roum. Chim.*, 36(4-7), 727-740, 1991.
2. Carbonic anhydrase inhibitors. Complexes of ethoxzolamide with lanthanides are powerful inhibitors of isozymes I and II  
C.T. Supuran, R. Stefan, Gh. Manole, I. Puscas and M. Andruh  
*Rev. Roum. Chim.*, 36(9-10), 1175-1190, 1991.
3. Penbutolol selective membrane sensor  
M.S. Ionescu, R.I. Stefan, G.E. Baiulescu, A.A. Bunaciu, V.V. Cosofret and H.Y. Aboul-Enein  
*Anal. Lett.*, 26(10), 2095-2105, 1993.
4. Mianserin ion-selective membrane electrode and its pharmaceutical applications  
A.A. Bunaciu, M.S. Ionescu, R.I. Stefan, I.Ioan and H.Y. Aboul-Enein  
*Anal. Lett.*, 27(9), 1647-1658, 1994.
5. Imipramine-selective membrane electrode. Its utilization to imipramine tablets control.  
R.I. Stefan, G.E. Baiulescu, M.S. Ionescu, I. Enachescu, A.A. Bunaciu and V.V. Cosofret  
*Rev. Chim. (Bucharest)*, 45(10), 837-843, 1994.
6. Solvent extraction of amino acids with crown ethers and Cryptand 222  
L. Muthac, D.O. Popescu and R.I. Stefan  
*Anal. Lett.*, 28(5), 835-843, 1995.
7. Mexiletine selective membrane electrode and its pharmaceutical applications  
R.I. Stefan and M.S. Ionescu  
*Anal. Lett.*, 28(6), 991-1004, 1995.
8. Metomidate-sensing electrode and its pharmaceutical applications  
R.I. Stefan and H.Y. Aboul-Enein  
*Anal. Lett.*, 29(1), 35-42, 1996.
9. Moclobemide selective membrane electrode and its pharmaceutical applications  
R.I. Stefan, G.E. Baiulescu and H.Y. Aboul-Enein  
*Talanta*, 43(7), 1171-1175, 1996.
10. Disopyramide-selective membrane electrode  
R.I. Stefan and H.Y. Aboul-Enein  
*Anal. Lett.*, 29(13), 2333-2346, 1996.
11. Amiodarone-selective membrane electrode  
R.I. Stefan, H.Y. Aboul-Enein and G.E. Baiulescu  
*Sens. Actuators B*, 37(3), 141-144, 1996.
12. Flecainide-selective membrane electrodes  
R.I. Stefan, G.E. Baiulescu and H.Y. Aboul-Enein  
*Analisis*, 25(2), 39-42, 1997.
13. Ion-selective membrane electrodes: membrane configuration  
R.I. Stefan and H.Y. Aboul-Enein  
*Instrum. Sci. & Technol.*, 25(2), 169-173, 1997.
14. Tamoxifen-selective membrane electrodes  
R.I. Stefan, G.E. Baiulescu and H.Y. Aboul-Enein  
*Pharmazie*, 52(10), 780-783, 1997.
15. Lauryl sulphate as counter ion for construction of ion-selective membrane electrodes for moclobemide and disopyramide  
R.I. Stefan  
*Anal. Chim. Acta*, 350(1-2), 105-108, 1997.
16. Ion-selective membrane electrodes in pharmaceutical analysis  
R.I. Stefan, G.E. Baiulescu and H.Y. Aboul-Enein  
*Crit. Rev. Anal. Chem.*, 27(4), 307-321, 1997.
17. Taxol-selective membrane electrodes  
R.I. Stefan and H.Y. Aboul-Enein  
*J. Anal. Chem.*, 53(6), 551-553, 1998.

18. Validation criteria for developing ion-selective membrane electrodes for analysis of pharmaceuticals  
R.I. Stefan and H.Y. Aboul-Enein  
Accred. Qual. Assur., 3, 194-196, 1998.
19. A new construction for a potentiometric, enantioselective membrane electrode and use for L-proline assay  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
Anal. Lett., 31(11), 1787-1794, 1998.
20. Enantioselective sensors and biosensors in the analysis of chiral drugs  
H.Y. Aboul-Enein and R.I. Stefan  
Crit. Rev. Anal. Chem., 28(3), 259-266, 1998.
21. The opportunity to use amperometric biosensors for enantioselective analysis of angiotensin converting enzyme inhibitors  
R.I. Stefan, G.L. Radu, H.Y. Aboul-Enein and G.E. Baiulescu  
Current Trends Anal. Chem., 1(1), 135-138, 1998.
22. Biosensors for the enantioselective analysis of S-enalapril and S-ramipril  
R.I. Stefan, H.Y. Aboul-Enein and G.L. Radu  
Prep. Biochem. & Biotechnol., 28(4), 305-312, 1998.
23. Ion-selective membrane electrodes based on ion-pair complexes: correlation between slopes and stability of ion-pair complexes  
R.I. Stefan and H.Y. Aboul-Enein  
Instrum. Sci. & Technol., 27(2), 105-110, 1999.
24. A new construction for a potentiometric, enantioselective membrane electrode. Its utilization to the S-captopril assay.  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
Talanta, 48(5), 1139-1143, 1999.
25. Potentiometric, enantioselective membrane electrodes for S-enalapril assay  
H.Y. Aboul-Enein, R.I. Stefan and J.F. van Staden  
Analisis, 27(1), 53-56, 1999.
26. Analysis of L- and D-ascorbic acid in fruits and fruit drinks by HPLC  
H.Y. Aboul-Enein, I.A. Al-Duraibi, R.I. Stefan, C. Radoi and A. Avramescu  
Seminars in Food Analysis, 4(1), 31-37, 1999.
27. Biosensors for the enantioselective analysis of S-perindopril  
H.Y. Aboul-Enein, R.I. Stefan and G.L. Radu  
Prep. Biochem. & Biotechnol., 29(1), 55-61, 1999.
28. The construction of an amperometric immunosensor for the thyroid hormone (+)-3,3',5-triiodo-L-thyronine (T<sub>3</sub>)  
H.Y. Aboul-Enein, R.I. Stefan, G.L. Radu and G.E. Baiulescu  
Anal. Lett., 32(3), 447-455, 1999.
29. Analysis of several angiotensin-converting enzyme inhibitors using potentiometric, enantioselective membrane electrodes  
H.Y. Aboul-Enein, R.I. Stefan and J.F. van Staden  
Anal. Lett., 32(4), 623-632, 1999.
30. Biosensor for the enantioselective analysis of S-clazapril, S-trandolapril and S-pentopril  
H.Y. Aboul-Enein, R.I. Stefan and G.L. Radu  
Pharm. Developm. Technol., 4(2), 251-255, 1999.
31. Determination of S-perindopril using a flow injection system with an amperometric biosensor  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
Sens. Actuators B, 54(3), 261-265, 1999.
32. On-line monitoring of calcium in natural and borehole water with a flow injection system using a calcium-selective membrane electrode  
J.F. van Staden and R.I. Stefan  
S. Afr. J. Chem., 52(1), 24-26, 1999.
33. The opportunity to use ion-selective membrane electrodes for dissolution tests  
H.Y. Aboul-Enein and R.I. Stefan  
Instrum. Sci. & Technol., 27(2), 89-93, 1999.
34. Electrochemical sensor arrays  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
Crit. Rev. Anal. Chem., 29(2), 133-153, 1999.
35. Estimation of uncertainties in clinical analysis  
R.I. Stefan, G.E. Baiulescu, H.Y. Aboul-Enein and J.F. van Staden  
Accred. Qual. Assur., 4(6), 225-229, 1999.

36. Detection of S-enantiomer of cilazapril, pentopril and trandolapril using potentiometric, enantioselective membrane electrode  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Electroanalysis*, 11(3), 192-194, 1999.
37. Enantioselective membrane electrode for S-ramipril assay  
R.I. Stefan, J.F. van Staden, G.E. Baiulescu and H.Y. Aboul-Enein  
*Chemia Analytyczna*, 44(3), 417-422, 1999.
38. S-perindopril assay using a potentiometric, enantioselective membrane electrode  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Chirality*, 11(8), 631-634, 1999.
39. The reliability of the sampling process for the trace atmospheric constituents  
R.I. Stefan, H.Y. Aboul-Enein and G.E. Baiulescu  
*Saudi Pharm. J.*, 7(2), 103-110, 1999.
40. Determination of fluoride in toothpaste, effluents streams and natural and borehole water using a flow injection system with a fluoride-selective membrane electrode  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Pharm. Acta Helv.*, 73(6), 307-310, 1999.
41. Analysis of chiral drugs with enantioselective biosensors. An overview.  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Electroanalysis*, 11(16), 1233-1235, 1999.
42. Simultaneous flow injection analysis of calcium and fluoride in natural and borehole water with conventional ion-selective electrodes in series  
J.F. van Staden and R.I. Stefan  
*Talanta*, 49(5), 1017-1022, 1999.
43. Chemiluminescence-based (bio)sensors  
H.Y. Aboul-Enein, R.I. Stefan and J.F. van Staden  
*Crit. Rev. Anal. Chem.*, 29(4), 323-331, 1999.
44. Nicolae Teclu one of the founders of the spectrometric techniques  
G.E. Baiulescu and R.I. Stefan  
*NOESIS*, 24, 159-163, 1999.
45. Immunosensors in clinical analysis  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Fresenius J. Anal. Chem.*, 366(6/7), 659-668, 2000.
46. Amperometric biosensors based on D-amino acid oxidase for R-perindopril assay  
J.F. van Staden, R.I. Stefan and H.Y. Aboul-Enein  
*Fresenius J. Anal. Chem.*, 367(2), 178-180, 2000.
47. Simultaneous determination of S- and R-captopril using sequential injection analysis  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Talanta*, 51(5), 969-975, 2000.
48. An amperometric biosensors/SIA system for the simultaneous determination of S- and R-captopril  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Biosens. Bioelectron.*, 15(1-2), 1-5, 2000.
49. Evaluation of different SIA systems using an electrochemical sensor as detector  
J.F. van Staden, R.I. Stefan and S. Birghila  
*Talanta*, 52(1), 3-11, 2000.
50. Determination of urinary oxalate using oxalate-selective membrane electrodes  
R.I. Stefan, I. Draghici and G.E. Baiulescu  
*Sens. Actuators B*, 65(1-3), 250-252, 2000.
51. On-line assay of S-captopril using an amperometric biosensor/SIA system  
J.F. van Staden, R.I. Stefan and H.Y. Aboul-Enein  
*Anal. Chim. Acta*, 411(1-2), 51-56, 2000.
52. Design and use of electrochemical sensors in enantioselective high throughput screening of drugs  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Combinatorial Chemistry & High Throughput Screening*, 6(3), 445-454, 2000.
53. Recent developments and applications of chemiluminescence sensors  
R.I. Stefan, H.Y. Aboul-Enein, J.F. van Staden, X.R. Zhang, A.M. Garcia-Campana and W.R.G. Bayens  
*Crit. Rev. Anal. Chem.*, 30(4), 271-289, 2000.

54. Molecular recognition in chiral discrimination  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Crystal Engineering*, 4, 113-118, 2001.
55. Maltodextrins as new chiral selectors in potentiometric enantioselective, membrane electrodes design  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Fresenius J. Anal. Chem.*, 370(1), 33-37, 2001.
56. Selectivity in analytical chemistry. Recommendations for its use.  
J. Vessman, R.I. Stefan, J.F. van Staden, A. Fajgel, K. Danzer, W. Lindner, H. Muller and D.T. Burns  
*Pure and Appl. Chem.*, 73(8), 1381-1386, 2001.
57. A bienzymatic amperometric sensor for proteins assay in milk  
R.I. Stefan, M.A. Makhafola and J.F. van Staden  
*Prep. Biochem. Biotechnol.*, 32(2), 135-142, 2002.
58. On-line determination of hydrochloric acid in process effluent streams by potentiometric sequential injection acid-base titration  
J.F. van Staden, M.G. Mashamba and R.I. Stefan  
*S. Afr. J. Chem.*, 55, 39-51, 2002.
59. Biosensors for the enantioselective analysis of the thyroid hormones L-triiodothyronine (T<sub>3</sub>) and L-tetraiodothyronine (T<sub>4</sub>)  
H.Y. Aboul-Enein, R.I. Stefan, S. Litescu and G.L. Radu  
*J. Immunoassay Immunochem.*, 23(2), 181-190, 2002.
60. On-line simultaneous determination of S- and R-perindopril using amperometric biosensors as detectors in flow systems  
R.I. Stefan, J.F. van Staden, L.V. Mulaudzi and H.Y. Aboul-Enein  
*Anal. Chim. Acta*, 467, 189-195, 2002.
61. On-line speciation of iron(II) and iron(III) using a spectrophotometric sequential injection system  
L.V. Mulaudzi, J.F. van Staden and R.I. Stefan  
*Anal. Chim. Acta*, 467, 35-49, 2002.
62. The construction of an amperometric immunosensor for the thyroid hormone (+)-3,3,5,5-tetraiodo-L-thyronine  
R.I. Stefan and H.Y. Aboul-Enein  
*J. Immunoassay Immunochem.*, 23(4), 429-437, 2002.
63. On-line monitoring of R-captopril using an amperometric biosensor/SIA system  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Instrum. Sci. & Technol.*, 30(3), 243-250, 2002.
64. Speciation of chromium(III) and chromium(VI) by use of a spectrophotometric sequential injection system  
L.V. Mulaudzi, J.F. van Staden and R.I. Stefan  
*Anal. Chim. Acta*, 467, 51-60, 2002.
65. Information essential for characterizing a flow-based analytical system  
E.A.G. Zagatto, J.F. van Staden, N. Maniasso, G.D. Marshall and R.I. Stefan  
*Pure and Appl. Chem.*, 74, 585-592, 2002.
66. On-line dilution and determination of the amount of concentrated hydrochloric acid in the final products from a hydrochloric acid production plant using a sequential injection titration system  
J.F. van Staden, M.G. Mashamba and R.I. Stefan  
*Talanta*, 58(6), 1089-1094, 2002.
67. Determination of the total acidity in soft drinks using potentiometric sequential injection titration analysis  
J.F. van Staden, M.G. Mashamba and R.I. Stefan  
*Talanta*, 58(6), 1109-1114, 2002.
68. New horizons in sequential injection kinetic analysis  
J.F. van Staden and R.I. Stefan  
*Anal. Bioanal. Chem.*, 374, 3-12, 2002.
69. An on-line potentiometric sequential injection titration process analyzer for the determination of acetic acid  
J.F. van Staden, M.G. Mashamba and R.I. Stefan  
*Anal. Bioanal. Chem.*, 374, 141-144, 2002.
70. Estimation of uncertainties for the application of electrochemical sensors in clinical analysis  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
*Accred. Qual. Assur.*, 8(2), 86-89, 2003.
71. Immunosensor for the determination of azidothymidine. Its utilization as detector in a sequential injection analysis system.  
R.I. Stefan, R.G. Bokretsjon, J.F. van Staden and H.Y. Aboul-Enein  
*Talanta*, 59(5), 883-887, 2003.



72. Determination of L- and D-enantiomers of carnitine using amperometric biosensors  
R.I. Stefan, R.G. Bokretsjon, J.F. van Staden and H.Y. Aboul-Enein  
*Anal. Lett.*, 36(6), 1089-1100, 2003.
73. Polycrystalline diamond based electrochemical sensors and their applications in inorganic and organic analysis  
S.G. Bairu, R.I. Stefan and J.F. van Staden  
*Crit. Rev. Anal. Chem.*, 33(2), 145-153, 2003.
74. Diamond paste based electrodes for the determination of iodide in vitamins and table salt  
R.I. Stefan, S.G. Bairu and J.F. van Staden  
*Anal. Lett.*, 36(8), 1493-1500, 2003.
75. Biosensors for enantioselective analysis of S-captopril  
R.I. Stefan, C. Bala and H.Y. Aboul-Enein  
*Sens. Actuators B*, 92(1-2), 228-231, 2003.
76. Diamond paste based electrodes for the determination of Cr(VI) at trace levels  
R.I. Stefan and S.G. Bairu  
*Instrum. Sci. & Technol.*, 31(3), 261-167, 2003.
77. Determination of creatine and creatinine using a diamond paste based electrode  
R.I. Stefan and R.G. Bokretsjon  
*Instrum. Sci. & Technol.*, 31(2), 183-188, 2003.
78. Biosensors for the determination of ortho-acetyl-L-carnitine. Their utilization as detectors in a sequential injection analysis system  
R.I. Stefan, R.G. Bokretsjon, J.F. van Staden and H.Y. Aboul-Enein  
*Prep. Biochem. Biotechnol.*, 33(3), 163-171, 2003.
79. Diamond paste based immunosensor for the determination of azidothymidine  
R.I. Stefan and R.G. Bokretsjon  
*J. Immunoassay Immunochem.*, 24(3), 319-324, 2003.
80. Determination of L- and D-enantiomers of methotrexate using amperometric biosensors  
R.I. Stefan, R.G. Bokretsjon, J.F. van Staden and H.Y. Aboul-Enein  
*Talanta*, 60(5), 983-990, 2003.
81. On-line speciation of bromine and bromide by using sequential injection analysis with spectrophotometric detection  
J.F. van Staden, L.V. Mulaudzi and R.I. Stefan  
*Anal. Bioanal. Chem.*, 375(8), 1074-1082, 2003.
82. Diamond paste based electrodes for the determination of Cr(III) in pharmaceutical compounds  
R.I. Stefan, S.G. Bairu and J.F. van Staden  
*Anal. Bioanal. Chem.*, 376(6), 844-847, 2003.
83. Simultaneous determination of creatine and creatinine using amperometric biosensors  
R.I. Stefan, R.G. Bokretsjon, J.F. van Staden and H.Y. Aboul-Enein  
*Talanta*, 60(6), 1223-1228, 2003.
84. Simultaneous determination of L- and D-carnitine using a sequential injection analysis/amperometric biosensors system  
R.I. Stefan, R.G. Bokretsjon, J.F. van Staden and H.Y. Aboul-Enein  
*J. Pharm. Biomed. Anal.*, 33(2), 323-328, 2003.
85. Biosensors for the enantioselective analysis of pipecolic acid  
R.I. Stefan, R.M. Nejem, J.F. van Staden and H.Y. Aboul-Enein  
*Sens. Actuators B*, 94(3), 271-275, 2003.
86. Simultaneous determination of L- and D-methotrexate using a sequential injection analysis/amperometric biosensors system  
R.I. Stefan, R.G. Bokretsjon, J.F. van Staden and H.Y. Aboul-Enein  
*Biosens. Bioelectron.*, 19(3), 261-267, 2003.
87. Determination of Fe(III) in water samples using diamond paste based electrodes  
R.I. Stefan, S.G. Bairu and J.F. van Staden  
*Instrum. Sci. & Technol.*, 31(4), 411-416, 2003.
88. Determination of L- and D-pipecolic acid using diamond paste based amperometric biosensors  
R.I. Stefan and R.M. Nejem  
*Anal. Lett.*, 36(12), 2635-2644, 2003.
89. Monocrystalline diamond paste based electrodes and their applications for the determination of Fe(II) in vitamins  
R.I. Stefan and S.G. Bairu  
*Analytical Chemistry*, 75(20), 5394-5398, 2003.

90. New enantioselective, potentiometric membrane electrodes based on C<sub>70</sub> fullerenes as chiral selectors  
R.I. Stefan  
Sensor Letters, 1(1), 71-74, 2003.
91. Speciation of Mn(II) and Mn(VII) by on-line spectrophotometric sequential injection analysis  
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298. Disposable Stochastic Sensors Based on Nanolayer Deposition(s) of Silver, and AgC Composite on Plastic for the Assay of  $\alpha$ -Amylase in Whole Blood and Saliva  
RI Stefan-van Staden, A. Moscalu-Lungu, M. Badulescu  
Nanomaterials, 10(8), 1528, 2020
299. Electroanalysis of interleukins 1 $\beta$ , 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  
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300. Needle stochastic sensors for on-site fast recognition and quantification of biomarkers for gastric cancer in biological samples  
RI Stefan-van Staden, RM Ilie-Mihai, F Pogăcean, SM Pruneanu  
New J Chem, 44(46), 20203-20211, 2020
301. Comparison study of HER-2 status in gastric carcinoma samples, using two commercial antibodies  
CB Satala, I Jung, RI Stefan van Staden, Z Kovacs, C Molnar, T Bara, Z Fulop, S Gurzu  
Journal of Oncology, Article ID 8860174, 10 pages, 2020, <https://doi.org/10.1155/2020/8860174>
302. Validation of a screening test, based on simultaneous detection of CEA, CA19-9 and p53, for fast diagnosis of gastric cancer. A pilot study.  
RI Stefan-van Staden, RM Ilie-Mihai, DC Gheorghe, S Gurzu  
Journal of Gastrointestinal & Digestive System, 10:7, 2020
303. Sensing and interaction of His-tagged CA19-9 antigen with graphene-modified electrodes  
M Mic, C Varodi, F Pogăcean, C Socaci, M Coros, RI Stefan-van Staden, S Pruneanu  
Chemosensors, 8(4), 112, 2020 doi: 10.3390/chemosensors8040112
304. Chiral single-walled carbon nanotubes II 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 $\beta$ , 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 II as New Materials for the Design of 3D-Needle Stochastic Sensors  
RM Ilie-Mihai, RI Stefan-van Staden, A Lungu-Moscalu, S Gurzu, F Pogăcean, 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  
JF van Staden, RI Stefan-van Staden  
*Anal Lett*, 00, 000, 2021
310. 3D Stochastic microsensors for molecular recognition and determination of heregulin- $\alpha$  in biological samples  
RI Stefan-van Staden, C Ciocates Negut, SS Gheorghe  
*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. Enantioanalysis of aspartic acid using 3D stochastic sensors  
IM Bogea, RI Stefan-van Staden, DC Gheorghe, RM Ilie-Mihai  
*Anal.Lett*, 00, 000, 2021
314. 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.*, 00, 000, 2021
315. 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
316. Nitrogen, sulfur co-doped graphene as efficient electrode material for L-cysteine detection  
C. Varodi, F. Pogăcean, A. Clorijă, O. Pană, B. Cozar, T. Radu, M. Coroș, R.I. Ștefan-van Staden, S. Pruneanu  
*Chemosensors*, 9, 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. Hypothyroidism has no association with insulin resistance indices in Romanian 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

## 1.2. Carti si capitolu in carti

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  
**EWING'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 NANOELECTROCHEMISTRY. ELECTROCHEMICAL SYNTHESIS METHODS, PROPERTIES AND CHARACTERIZATION TECHNIQUES**  
 I. Moldoveanu, **R.I. Stefan-van Staden**, J.F. van Staden  
 Mahmood Aliofkhaezai, Abdel Salam Hamdy Makhlouf (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**  
**RI Stefan-van Staden**  
 Atta-ur-Rahman, Sibel A. Ozkan, Rida Ahmed(Eds.)  
 Bentham, 2018 (ISSN: 2542-5617) (Print)

**1.3 Brevete**

1. Procedeu de realizare a senzozilor 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- $\mu$ 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.

**2. Participari la conferinte**

Lucrari invitate: peste 30  
 Prezentari orale trimise: peste 150  
 Postere trimises: peste 300

Presedinte de sectiune:

Session Chair:

- KACI2001, 7<sup>th</sup> International Symposium on Kinetics in Analytical Chemistry, Bucharest, Romania. 21-23 September 2001.
- 37<sup>th</sup> SACI Convention. Chemistry for a better life. Pretoria, South Africa. 4 - 9 July 2004.
- 13 IMCS2010. 13<sup>th</sup> International Meeting on Chemical Sensors. Perth, Australia. 11-14 July 2010.
- 222<sup>nd</sup> Meeting of ECS, PRIME 2012 PACIFIC RIM MEETING ON ELECTROCHEMICAL AND SOLID-STATE SCIENCE, Honolulu, Hawaii, USA. 7 - 12 October 2012.
- 223<sup>rd</sup> Meeting of ECS, Toronto, Canada, May 2013.
- 225<sup>th</sup> Meeting of ECS, Orlando, USA, May 2014.
- 227<sup>th</sup> Meeting Chicago, USA, May 2015.
- 228<sup>th</sup> Meeting Phoenix, USA, October 2015.
- 229<sup>th</sup> Meeting of ECS, San Diego, USA, May-June 2016
- 234<sup>th</sup> Meeting of ECS, Cancun, Mexic, October 2018
- 235<sup>th</sup> Meeting of ECS, Dallas, USA, May-June 2019

**O SELECTIE A PREZENTARILOR:**
**2.1. Lucrari invitate**



1. *Estimation of uncertainties in clinical analysis*  
**R.I. Stefan**, G.E. Baiulescu, H.Y. Aboul-Enein, J.F. van Staden  
 The Twelfth International Conference of the Israel Society for Quality, Jerusalem, Israel, 1-3 December 1998. (Keynote lecture)
2. *The influence of matrix additives on ion-selective membrane electrodes response*  
**R.I. Stefan**, J.F. van Staden, H.Y. Aboul-Enein, G.E. Baiulescu  
 Pittoon 2000, New Orleans, LA, USA, 12-17 March 2000. (Keynote lecture)
3. *Electrochemical sensors and kinetics in analytical chemistry*  
**R.I. Stefan**, J.F. van Staden  
 KAO2001, 7<sup>th</sup> International Symposium on Kinetics in Analytical Chemistry, Bucharest, Romania. 21-23 September 2001. (Keynote lecture)
4. *New horizons in sequential injection kinetic analysis*  
**J.F. van Staden**, R.I. Stefan  
 KAC2001, 7<sup>th</sup> International Symposium on Kinetics in Analytical Chemistry, Bucharest, Romania. 26 - 29 September 2001. (Plenary lecture)
5. *Chiral recognition using potentiometric, enantioselective membrane electrodes*  
**R.I. Stefan**  
 IMCS2002, 9<sup>th</sup> International Meeting on Chemical Sensors, Boston, USA, 7-10 July 2002 (Plenary lecture)
6. *Fullerenes and their derivatives as new chiral selectors for the design of electrochemical sensors.*  
**R.I. Stefan**  
 Euroanalysis XII, Division of Analytical Chemistry of the Federation of European Chemical Societies and Gesellschaft Deutcher Chemiker, Dortmund, Germany. 8 - 13 September 2002. (Keynote lecture)
7. *Multicomponent analysis using electrochemical sensors in flow systems.*  
**R.I. Stefan**, J.F. van Staden  
 ICFIAI2003, 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques, Merida, Venezuela. 7 - 13 December 2003. (Plenary lecture)
8. *Chemical speciation by sequential injection analysis (SIA) with spectrophotometric detection*  
**J.F. van Staden** and R.I. Stefan  
 ICFIAI2003, 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques, Merida, Venezuela. 7 - 13 December 2003. (Plenary lecture)
9. *Process analytical technology (PAT) as an environmental tool. Does it fulfill the expectations?*  
**J.F. van Staden**, **R.I. Stefan-van Staden**  
 3<sup>rd</sup> Black Basin Conference on Analytical Chemistry, 12<sup>th</sup>-14<sup>th</sup> of September 2005, Constantza, Romania
10. *Stochastic Microsensors for Molecular Diagnosis*  
**R.I. Stefan-van Staden**  
 13 IMCS2010, 13<sup>th</sup> International Meeting on Chemical Sensors, Perth, Australia. 11-14 July 2010 (Keynote lecture)
11. *Early detection of cancer - a chance for life*  
**R.I. Stefan-van Staden**  
 Chronic Diseases, Bucharest, Romania. 22-23 September 2010 (Plenary lecture)
12. *Multimode sensors for pharmaceutical analysis*  
**R.I. Stefan-van Staden**  
 1<sup>st</sup> World Drug Discovery online Conference, Huston, TX, USA, October 20-22, 2011 (Keynote lecture)
13. *New electrochemical sensors for biomedical investigations*  
**R.I. Stefan-van Staden**  
 220<sup>th</sup> ECS Meeting & Electrochemical Energy Summit, Boston, MA, USA, October 9-14, 2011 (Keynote lecture)
14. *Stochastic dot microsensors for the assay of dopamine in pharmaceutical samples and biological fluids*  
**R.I. Stefan-van Staden**  
 2<sup>nd</sup> World Drug Discovery online Conference, Huston, TX, USA, October 16-18, 2012 (Keynote lecture)
15. *New trends in food analysis*  
**R.I. Stefan-van Staden**  
 Challenges in Food Analysis, International Workshop, Constantza, Romania, May 31 // June 1, 2013 (plenary lecture)
16. *Stochastic microsensors based on nanostructured materials used in the screening of whole blood for Hepatitis B*  
**R.I. Stefan-van Staden**, Iuliana Moldoveanu  
 224<sup>th</sup> ECS Meeting & Electrochemical Energy Summit, San Francisco, CA, USA, October 26-November 1, 2013 (Keynote lecture)
17. *Stochastic and multimode sensors based on porphyrins. New trends and applications in biomedical analysis.*  
**R.I. Stefan-van Staden**  
 8<sup>th</sup> International Conference on Porphyrins and Phthalocyanines (ICPP-8), Istanbul, Turkey, June 22-27, 2014 (Keynote lecture)
18. *Stochastic sensors - new tools for screening in biomedical analysis*  
**R.I. Stefan-van Staden**

The 3<sup>rd</sup> International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IIC-ANMBES 2014<sup>0</sup>, Brasov, Romania, June 13-15, 2014 (Plenary lecture)

19. Novel stochastic sensor for simultaneous assay of neurotransmitters  
R.I. Stefan-van Staden, I. Mărbăveanu, J.F. van Staden  
French-Romanian Meeting-FRM, Brasov, Romania, June 15, 2014 (Invited lecture)
20. Utilization of macromolecular compounds for the molecular recognition of substances of clinical interest  
R.I. Stefan-van Staden  
A XXV-a sesiune de comunicări științifice PROGRES ÎN ȘTIINȚA COMPUSILOR ORGANICI ȘI MACROMOLECULARI, Iasi, Romania, September 24-26, 2015 (Keynote lecture)
21. New Stochastic Sensors Based on Nanostructured Materials for Fast Screening of Biological Fluids for Cancer Biomarkers  
R.I. Stefan-van Staden  
3rd International Conference on Smart Systems Engineering 2015 (SmaSys 2015), Yonezawa, Japan, October 8-9, 2015 (Keynote lecture)
22. A new approach in biomedical analysis  
R.I. van Staden.  
International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences IIC-ANMBES 2016<sup>1</sup>, Brasov, Romania, 29 June- 1 July 2016 (Key note presentation)
23. Point-of-care screening tools for cancer  
R.I. van Staden  
229th ECS MEETING, May 29-June 2, 2016, San Diego, CA, USA (Invited lecture)
24. Stochastic sensors as screening tools for biomedical analysis  
R.I. Stefan-van Staden  
ETCMOS 2017, Warsaw, Poland, May 28-30, 2017 (Keynote lecture)
25. Molecular Diagnosis II a Chance for Life  
Raluca-Ioana Stefan-van Staden  
41<sup>st</sup> ARA Congress, August 1-5, 2017, Sinaia, Romania (Keynote lecture)
26. SCREENING-UL LA NIVEL MOLECULAR II O SANSA LA VIATA!  
R.I. Stefan-van Staden  
Zilele Academice Iesene, Iasi, Romania, 5-6 Octombrie 2017, (Opening Plenary Lecture)
27. STOC<sub>μ</sub>SENS-MD II A TEST FOR LIFE  
R.I. Stefan-van Staden  
10<sup>th</sup> Synevo Clinica Research Symposium, Bucharest, Romania November 9, 2018 (Plenary lecture)
28. Supramolecular Assemblies Recognized Gastric Cancer Biomarkers in Biological Fluids  
R.I. Stefan-van Staden  
235th Meeting of ECS, Dallas, USA, May-June 2019 (Invited lecture)
29. Stochastic sensors as screening tools for fast and early detection of illnesses  
R.I. Stefan-van Staden  
235th Meeting of ECS, Dallas, USA, May-June 2019 (Invited lecture)
30. New Trends in Molecular Recognition of Substances of Biological Importance  
R.I. Stefan-van Staden  
EUROANALYSIS, Istanbul, Turkey, September, 2019 (Invited lecture)

#### a. Prezentari orale

1. *Mianserin Ion Selective Membrane Electrode and Its Pharmaceutical Applications*  
M.S. Ionescu, R.I. Stefan, A.A. Bunaciu, V.V. Cosofret  
The Xth National Conference on Analytical Chemistry, Jassy, Romania, 19-20 September, 1991.
2. *Penbutolol Selective Membrane Sensor*  
M.S. Ionescu, R.I. Stefan, G.E. Baiulescu, A.A. Bunaciu, V.V. Cosofret, H.Y. Aboul-Enein  
The XIth National Conference on Analytical Chemistry, Cluj-Napoca, Romania, 24-25 September 1992.
3. *Moclobemide Selective Membrane Electrode and Its Pharmaceutical Applications*  
R.I. Stefan, G.E. Baiulescu  
National Symposium of Electrochemical Sensors and Biosensors, Cluj-Napoca, Romania, 28-29 September 1995.
4. *The Utilization of Ion-Selective Membrane Electrodes for the in vitro Dissolution Test of Pharmaceutical Compounds*  
R.I. Stefan  
The Drugs Research Between Information and Life Sciences. First International Conference, Bucharest, Romania, 3-4 October 1996.
5. *Utilization of Lauryl Sulphate for the Construction of Membrane of Ion-Selective Electrodes*  
R.I. Stefan  
The XXII<sup>nd</sup> National Conference on Chemistry (1996), Olanesti, Romania, 23-24 October 1996.

6. *Taxol - Selective Membrane Electrodes*  
R.I. Stefan, H.Y. Aboul-Enein  
International Congress on Analytical Chemistry, Moscow, Russia, 15-21 June 1997.
7. *Ion-Selective Membrane Electrodes: Correlation Between Their Response and Stability of Ion Pair Complexes*  
R.I. Stefan  
Workshop - Chemometrics, Timisoara, Romania, 25-26 September 1997.
8. *Biosensors for enantioselective analysis*  
R.I. Stefan, G.L. Radu, H.Y. Aboul-Enein  
The XXIIIrd National Conference on Chemistry, Caciulata, Romania, 8-10 October 1997.
9. *Nicolae Teclu One of the Founders of Spectrometric Techniques*  
G.E. Baiulescu, R.I. Stefan  
Romanian Academy. The Session of Scientific Communications, Bucharest, Romania, 6 November 1997.
10. *Enantioselective biosensors in the analysis of chiral drugs*  
R.I. Stefan, H.Y. Aboul-Enein, J.F. van Staden  
10<sup>th</sup> International Symposium on Chiral Discrimination, ISCD'98, Vienna, Austria, 30 August - 2 September 1998.
11. *Simultaneous determination of substances using flow injection systems with multi sensor ion-selective electrodes in array*  
J.F. van Staden, R.I. Stefan  
7<sup>th</sup> International Chemistry Conference in Africa, Durban, South Africa, 6-10 July 1998.
12. *Role of ion-selective membrane electrodes in pharmaceutical analysis*  
R.I. Stefan, J.F. van Staden  
Analitika '98, Midrand, South Africa, 12-14 October 1998.
13. *New construction for potentiometric, enantioselective membrane electrodes*  
R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein, G.E. Baiulescu  
Pittcon'99, Orlando, Florida, USA, 7-12 March 1999.
14. *Simultaneous detection of enantiomers using amperometric biosensors in flow injection systems*  
J.F. van Staden, R.I. Stefan, H.Y. Aboul-Enein, G.E. Baiulescu  
Pittcon'99, Orlando, Florida, USA, 7-12 March 1999.
15. *Flow injection systems for enantioselective analysis of chiral drugs*  
R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein  
1999 International Conference on Flow Injection Analysis, Prague, Czech Republic, June 1999.
16. *Sandwiching in sequential injection analysis*  
J.F. van Staden, R.I. Stefan, S. Birghila  
1999 International Conference on Flow Injection Analysis, Prague, Czech Republic, June 1999.
17. *Immunoassay using sensor/SIA systems*  
R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein  
8<sup>th</sup> International Conference on Flow Analysis, Warsaw, Poland, 25-29 June 2000.
18. *Bienzymatic sensor for proteins assay in milk*  
R.I. Stefan, M. Makhafofa, J.F. van Staden  
8<sup>th</sup> International Conference on Flow Analysis, Warsaw, Poland, 25-29 June 2000.
19. *Molecular recognition in chiral discrimination*  
R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein  
INDABA III, Workshop on Symmetry and Structure: Symmetry Breaking, Chirality and Disorder in Molecules and Crystals, Skukuza, Kruger National Park, South Africa, 6-11 August 2000.
20. *Immunoassay using sensor/SIA systems*  
R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein  
Euroanalysis XI, Lisbon, Portugal, 3-9 September 2000.
21. *Design and use of electrochemical sensors in enantioselective high throughput screening of drugs*  
R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein  
ISCD 12, The International Symposium on Chirality, Chamonix, Mont Blanc, France,

- 24-28 September 2000.
22. *Validation criteria for an analytical method*  
**R.I. Stefan, J.F. van Staden**  
 The Millenium International Conference of the Israel Society for Quality, Jerusalem, Israel, 28-30 November 2000.
  23. *Validation criteria for SIA and FIA systems in process control*  
**J.F. van Staden, R.I. Stefan**  
 The Millenium International Conference of the Israel Society for Quality, Jerusalem, Israel, 28-30 November 2000.
  24. *Maltodextrins as new chiral selectors in potentiometric enantioselective, membrane electrodes design*  
**R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein**  
 Pittcon 2001, New Orleans, LA, USA, 4-9 March 2000.
  25. *Multi-component sequential injection process analytical systems*  
**J.F. van Staden, R.I. Stefan**  
 Pittcon 2001, New Orleans, LA, USA, 4-9 March 2000.
  26. *Quinine, quinidine and their tert-butyl carbonylated derivatives as new chiral selectors in the potentiometric, enantioselective membrane electrodes design. Their application for the assay of S and R enantiomers of dinitrobenzene leucine*  
**R.I. Stefan, W. Lindner, N. M. Maier, J. F. van Staden**  
 ISCD 13, 13<sup>th</sup> International Symposium on Chirality, Orlando, Florida, USA, 15-17 July 2001.
  27. *On-line simultaneous determination of S and R perindopril using amperometric biosensors as detectors in flow systems*  
**R.I. Stefan, J F van Staden, L V Mulaudzi and H Y Aboul-Enein**  
 IMA2001. Instrumental Methods of Analysis. Modern trends and Applications. Ioannina. Greece. 5 - 8 September 2001.
  28. *High throughput screening of drugs using (bio)sensors/SIA systems*  
**R.I. Stefan, J.F. van Staden and H Y Aboul-Enein**  
 ICFAI2001, 11<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Chiang Mai. Thailand. 16 - 20 December 2001.
  29. *Speciation by sequential injection analysis*  
**J.F. van Staden, R.I. Stefan and L.V. Mulaudzi**  
 ICFAI2001, 11<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Chiang Mai. Thailand. 16 - 20 December 2001.
  30. *New chiral selectors used in the design of the potentiometric, enantioselective membrane electrodes*  
**R.I. Stefan**  
 ANALITICA '2002. International Symposium on Analytical Science. S A Chemical Institute. Stellenbosch. 4 - 10 December 2002.
  31. *The XXX system. A new strategy and concept in flow analysis.*  
**J.F. van Staden and R.I. Stefan.**  
 Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong. Australia. 17 - 21 February 2003.
  32. *Determination of azidothymidine using an immunosensor/SIA system.*  
**R.I. Stefan, J.F. van Staden, R.G. Bokretzion and H.Y. Aboul-Enein.**  
 Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong. Australia. 17 - 21 February 2003.
  33. *Diamond paste based electrochemical sensors*  
**R.I. Stefan, and J.F. van Staden**  
 37<sup>th</sup> SACI Convention. Chemistry for a better life. Pretoria. 4 - 9 July 2004.
  34. *Enantioselective, potentiometric membrane electrodes for the enantioanalysis of L- and D-2-hydroxyglutaric acids in urine samples*  
**R.M. Nejem, R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein**  
 37<sup>th</sup> SACI Convention. Chemistry for a better life. Pretoria. 4 - 9 July 2004.
  35. *Enantioselective, potentiometric membrane electrode based on vancomycin. Its application for the determination of L-pipecolic acid*  
**AA. Ratko and R.I. Stefan**  
 6<sup>th</sup> Symposium (Molecular and cell function of the biological systems). Minsk. 6 - 8 October 2004.
  36. *Process analytical technology (PAT) as seen from industry, does it fulfill the expectations*  
**JF van Staden, RI Stefan-van Staden**  
 Instrumental Methods of Analysis. Modern Trends and Applications. 2-6 October, 2005 Iraklion, Crete, Greece
  37. *Diamond paste based electrochemical (bio)sensors*  
**RI Stefan-van Staden, JF van Staden**

Instrumental Methods of Analysis. Modern Trends and Applications. 2-6 October, 2005 Iraklion, Crete, Greece

38. Environmental analysis using diamond paste based electrochemical sensors  
**RI Stefan-van Staden, JF van Staden**  
 3<sup>rd</sup> Black Basin Conference on Analytical Chemistry, 12<sup>th</sup>-14<sup>th</sup> of September 2005, Constantza, Romania
39. Applications of enantioselective sensors and biosensors in pharmaceutical and clinical analysis  
**RI Stefan-van Staden, JF van Staden, HY About-Enein**  
 The Fifth International Conference on Electrochemistry (ICE-V), 13<sup>th</sup> -16<sup>th</sup> of February 2006, Luxor, Egypt
40. Fullerenes // new chiral selectors for enantioanalysis  
**RI van Staden**  
 International Conference on Chemistry and Chemical Engineering, 28<sup>th</sup>-30<sup>th</sup> of May 2008, Timisoara, Romania
41. Studies of the interactions between the enantiomers of deprenyl and C<sub>60</sub> and C<sub>70</sub> fullerenes using molecular modeling and chiral sensors  
**RI van Staden**  
 20<sup>th</sup> International Symposium on Chirality, 6<sup>th</sup>-9<sup>th</sup> of July 2008, Geneva, Switzerland.
42. New nanostructured materials based on porphyrins for the design of stochastic sensors  
**RI Stefan-van Staden, E. Fagadar-Cosma, J.F. van Staden, O. Radacina, S. Balasoiu, I. Balcu, M. Iorga**  
 3<sup>rd</sup> International Conference on Biomaterials and Medical Devices - BIOMMEDD'2008, 13-16 November 2008, Bucharest, Romania.
43. The importance and essentiality of real-time intelligent interactive monitoring and control in medical, pharmaceutical and clinical fields with PAT  
**J.F. van Staden, RI Stefan-van Staden, I. Balcu**  
 3<sup>rd</sup> International Conference on Biomaterials and Medical Devices - BIOMMEDD'2008, 13-16 November 2008, Bucharest, Romania.
44. Nanostructured glasses and powders based on hybrid silica materials incorporating 5,10,15-tris(3-hydroxy-phenyl)-20-(3,4-dimethoxy-phenyl)-porphyrin  
**E. Fagadar-Cosma, C. Enache, D. Vlascici, Gh. Fagadar-Cosma, R.I. Stefan-van Staden, H. Stadler, J.F. van Staden.**  
 Nanotech Insight, 29<sup>th</sup> March // 2<sup>nd</sup> April 2009, Barcelona, Spain.
45. Determination of free-L-T<sub>3</sub> and free-L-T<sub>4</sub> from blood using the immunosensors/sequential injection analysis system  
**RI van Staden, J.F. van Staden, H.Y. About-Enein, G.L. Radu, N. Mirica, I. Balcu, M.C. Mirica**  
 Journées d'Electrochimie XIV-ème édition, 6 - 10 juillet 2009, Sinaia, ROUMANIE.
46. New stochastic microsensors based on nanostructured materials for molecular diagnosis  
**RI van Staden**  
 Euroanalysis XV, Innsbruck, Austria, 6-10 September 2009.
47. New stochastic microsensors based on nanostructured manganese porphyrins for molecular diagnosis  
**RI van Staden**  
 Instrumental Methods of Analysis. Modern Trends and Applications. 4-8 October, 2009, Athens, Greece.
48. Multimode Sensors - A New Concept in Sensors' Technology  
**RI Stefan-van Staden**  
 221st ECS Meeting, May 6-10, 2012, Seattle, WA, USA.
49. Enantioselective sensors for biomedical analysis  
**RI Stefan-van Staden**  
 Chirality 2012, June 9-13, 2012, Dallas, TX, USA.
50. New stochastic sensors for biomedical applications  
**RI Stefan-van Staden**  
 14 IMCS2012. 14<sup>th</sup> International Meeting on Chemical Sensors. May 20-23, 2012, Nuremberg, Germany.
51. Single molecule detection in molecular diagnosis of hepatitis B  
**RI Stefan-van Staden**  
 XIV Linz Winter Workshop 2012, 3-6 February 2012, Linz, Austria.
52. Simultaneous neurotransmitters analysis using microelectrodes based on porphyrins  
**RI Stefan-van Staden, I. Moldoveanu, JF van Staden**  
 4<sup>th</sup> EuChemS Congress, 26-30 August 2012, Prague, Cehia.
53. New multimode sensors based on nanostructured materials for simultaneous screening of biological fluids for specific breast cancer and hepatitis B biomarkers  
**RI Stefan-van Staden, M Enachescu**  
 222<sup>nd</sup> Meeting of ECS, PRIME 2012 PACIFIC RIM MEETING ON ELECTROCHEMICAL AND SOLID-STATE SCIENCE, 7 - 12 October 2012, Honolulu, Hawaii, USA.
54. Stochastic sensors for single molecule detection  
**RI Stefan-van Staden**  
 ROJAC 2012, 1<sup>st</sup> International Conference on Analytical Chemistry, 18-22 September 2012, Targoviste, Romania.
55. New trends in the technology of micro and nanosensors for biomedical analysis  
**RI Stefan-van Staden**

245<sup>th</sup> ACS Meeting, 7 - 11 April 2013, New Orleans, USA.

**b. Postere**

1. *Mexiletine Selective Membrane Electrode*  
R.I. Stefan, M.S. Ionescu  
The XIIIth National Conference on Analytical Chemistry, Constanta, Romania, 22-24 September 1994.
2. *Metomidate - Sensing Electrode*  
R.I. Stefan  
National Symposium of Electrochemical Sensors and Biosensors, Cluj-Napoca, Romania, 28-29 September 1995.
3. *Amiodarone - Selective Membrane Electrode*  
R.I. Stefan, H.Y. Aboul-Enein, G.E. Baiulescu  
The XIIIth National Conference on Analytical Chemistry, Craiova, Romania, 23-25 May 1996.
4. *Some considerations concerning the use of ion-selective membrane electrodes in pharmaceutical analysis*  
R.I. Stefan, G.E. Baiulescu  
The XIIIth National Conference on Analytical Chemistry, Craiova, Romania, 23-25 May 1996.
5. *Mockbamide Selective Membrane Electrode and Its Pharmaceutical Applications*  
R.I. Stefan, G.E. Baiulescu, H.Y. Aboul-Enein  
Pittcon'96, Chicago, Illinois, USA, 3-8 March 1996.
6. *Considerations Concerning the Use of Ion-Selective Membrane Electrodes in Pharmaceutical Analysis*  
R.I. Stefan, G.E. Baiulescu  
Euroanalysis IX, Bologna, Italy, 1-7 September 1996.
7. *Flecainide - Selective Membrane Electrodes*  
R.I. Stefan, G.E. Baiulescu, H.Y. Aboul-Enein  
Pittcon'97, Atlanta, Georgia, USA, 16-21 March 1997.
8. *Biosensor for the Enantioselective Analysis of S-Captopril*  
R.I. Stefan, H.Y. Aboul-Enein, C. Bala, G.L. Radu  
Biosensors'98, Berlin, Germany, June 1998.
9. *Biosensor for the Enantioselective Analysis of S-Enalapril and S-Ramipril*  
R.I. Stefan, H.Y. Aboul-Enein, G.L. Radu  
Biosensors'98, Berlin, Germany, June 1998.
10. *Biosensors for the Enantioselective Analysis of S-Cilazapril, S-Trandolapril, and S-Pentopril*  
R.I. Stefan, H.Y. Aboul-Enein, G.L. Radu, G.E. Baiulescu  
The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, September 1998.
11. *Biosensors for the Enantioselective Analysis of S-Perindopril*  
R.I. Stefan, H.Y. Aboul-Enein, G.L. Radu  
The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, September 1998.
12. *Comparison of flow and sequential system for fluoride assays in toothpaste and borehole water, using a F-selective electrode*  
R.I. Stefan, J.F. van Staden  
The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, September 1998.
13. *Validation criteria for developing ion-selective membrane electrodes for analysis of pharmaceuticals*  
R.I. Stefan, H.Y. Aboul-Enein  
Drug Analysis '98, Brussels, Belgium, May 1998.
14. *The opportunity to use ion-selective membrane electrodes for dissolution tests*  
R.I. Stefan, H.Y. Aboul-Enein  
Drug Analysis '98, Brussels, Belgium, May 1998.
15. *Determination of urinary oxalate using oxalate-selective membrane electrodes*  
R.I. Stefan, I. Draghici, G.E. Baiulescu  
The 7<sup>th</sup> International Meeting on Chemical Sensors, Beijing, China, 27-30 July 1998.
16. *New theoretical concepts concerning the ion-selective membrane electrodes based on ion-pair complexes*  
R.I. Stefan, J.F. van Staden  
7<sup>th</sup> International Chemistry Conference in Africa, Durban, South Africa, 6-10 July 1998.
17. *Simultaneous analysis of S- and R-perindopril using amperometric biosensors*  
J.F. van Staden, R.I. Stefan, H.Y. Aboul-Enein  
7<sup>th</sup> International Chemistry Conference in Africa, Durban, South Africa, 6-10 July 1998.

18. *New amperometric immunosensors for drugs assay*  
**R.I. Stefan**, H.Y. Aboul-Enein, G.L. Radu, G.E. Baiulescu  
 Euroanalysis 10, Basel, Switzerland, 6-11 September 1998.
19. *Quality, reliability and flexibility in analytical chemistry*  
**G.E. Baiulescu, R.I. Stefan**  
 Euroanalysis 10, Basel, Switzerland, 6-11 September 1998.
20. *Comparison of flow and sequential injection systems for fluoride assays in toothpaste and borehole water, using a F-selective electrode*  
**R.I. Stefan, J.F. van Staden**  
 Euroanalysis 10, Basel, Switzerland, 6-11 September 1998.
21. *Simultaneous flow injection determination of calcium and fluoride in natural and borehole water with conventional ion-selective electrodes in series.*  
**R.I. Stefan, J.F. van Staden**  
 International Conference on Flow Injection Analysis, Seattle, USA, August 1998.
22. *Comparison of flow and sequential system for fluoride assays in toothpaste and borehole water, using a F-selective electrode*  
**R.I. Stefan, J.F. van Staden**  
 Analitika '98, Midrand, South Africa, 12-14 October 1998.
23. *Evaluation of different SIA systems using an electrochemical sensor as detector*  
**J.F. van Staden, R.I. Stefan, S. Birghila**  
 International Conference on Flow Injection Analysis, Prague, Czech Republic, June 1999.
24. *Developments in electrochemical sensors construction for chiral drugs assay*  
**R.I. Stefan, H.Y. Aboul-Enein, J.F. van Staden**  
 International Symposium on Chiral Discrimination, Chicago, Illinois, USA, July 1999.
25. *Flow injection systems for enantioselective analysis of chiral drugs*  
**J.F. van Staden, R.I. Stefan, H.Y. Aboul-Enein,**  
 International Symposium on Chiral Discrimination, Chicago, Illinois, USA, July 1999.
26. *Electrochemical sensors in the analysis of chiral drugs*  
**R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein**  
 37<sup>th</sup> IUPAC Congress, Berlin, Germany, August 1999.
27. *Simultaneous assay of enantiomers using sequential injection analysis-(bio)sensors systems*  
**R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein.**  
 Pittconi2000. New Orleans, LA, USA. 12-17 March 2000.
28. *The assay of S-Enalapril using an amperometric biosensor/SIA system*  
**J.F. van Staden, R.I. Stefan, E.B. Naidoo and H.Y. Aboul-Enein**  
 8<sup>th</sup> International Conference on Flow Analysis, Warsaw, Poland, 25-29 June 2000.
29. *Determination of S-Pentopril using an amperometric biosensor/sequential injection analysis system*  
**R.I. Stefan, L.V. Mulaudzi, E.B. Naidoo, H.Y. Aboul-Enein and J.F. van Staden**  
 8<sup>th</sup> International Conference on Flow Analysis, Warsaw, Poland, 25-29 June 2000.
30. *On-line assay of S-Ramipril using an amperometric biosensor/sequential injection system*  
**R.I. Stefan, L.V. Mulaudzi, H.Y. Aboul-Enein and J.F. van Staden**  
 8<sup>th</sup> International Conference on Flow Analysis, Warsaw, Poland, 25-29 June 2000.
31. *Simultaneous assay of T3 and T4 using sensors/SIA systems*  
**R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein**  
 8<sup>th</sup> International Conference on Flow Analysis, Warsaw, Poland, 25-29 June 2000.
32. *A bienzymatic sensor for proteins assay in milk*  
**R.I. Stefan, M. Makhafofa, J.F. van Staden**  
 8<sup>th</sup> International Meeting on Chemical Sensors, Basel, Switzerland, 3-5 July, 2000.
33. *Bienzymatic sensor for proteins assay in milk*  
**R.I. Stefan, M. Makhafofa, J.F. van Staden**  
 Euroanalysis XI, Lisbon, Portugal, 3-9 September 2000.
34. *Design and use of electrochemical sensors in enantioselective high throughput screening of drugs*  
**R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein**  
 Euroanalysis XI, Lisbon, Portugal, 3-9 September 2000.
35. *The assay of S-enantiomers of enalapril, ramipril and trandolapril using an amperometric biosensor/sequential injection analysis system*  
**J.F. van Staden, R.I. Stefan, H.Y. Aboul-Enein**  
 ISCD 12, The International Symposium on Chirality, Chamonix, Mont Blanc, France, 24-28 September 2000.

36. *Design and use of electrochemical sensors in enantioselective high throughput screening of drugs*  
R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein  
38<sup>th</sup> IUPAC Congress, World Chemistry Congress, Brisbane, Australia, 1-6 July 2001.
37. *Selectivity and specificity in analytical chemistry*  
J. Vessman, R.I. Stefan, J.F. van Staden, K. Danzer, W. Lindner, D.T. Burns, A. Fajgel, H. Muller  
38<sup>th</sup> IUPAC Congress, World Chemistry Congress, Brisbane, Australia, 1-6 July 2001.
38. *Information essential for characterizing a flow-based analytical system*  
E.A.G. Zagatto, J.F. van Staden, N. Maniasso, R.I. Stefan, G.D. Marshall  
38<sup>th</sup> IUPAC Congress, World Chemistry Congress, Brisbane, Australia, 1-6 July 2001.
39. *Selectivity and specificity in analytical chemistry*  
J. Vessman, R.I. Stefan, J.F. van Staden, K. Danzer, W. Lindner, D.T. Burns, A. Fajgel, H. Muller  
41<sup>st</sup> IUPAC General Assembly, Brisbane, Australia, 29 June - 8 July 2001.
40. *Information essential for characterizing a flow-based analytical system*  
E.A.G. Zagatto, J.F. van Staden, N. Maniasso, R.I. Stefan, G.D. Marshall  
41<sup>st</sup> IUPAC General Assembly, Brisbane, Australia, 29 June - 8 July 2001.
41. *On-line simultaneous determination of S and R perindopril using amperometric biosensors as detectors in flow systems*  
J.F. van Staden, R.I. Stefan, L.V. Mulaudzi, H.Y. Aboul-Enein  
ISCD 13, 13<sup>th</sup> International Symposium on Chirality, Orlando, Florida, USA, 15-17 July 2001.
42. *On-line spectrophotometric speciation of Cr(VI) and Cr(III) by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
IMAI2001. Instrumental Methods of Analysis. Modern trends and Applications. Ioannina. Greece. 5 - 8 September 2001.
43. *On-line speciation of iron(II) and iron(III) using a spectrophotometric sequential injection system*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
IMAI2001. Instrumental Methods of Analysis. Modern trends and Applications. Ioannina. Greece. 5 - 8 September 2001.
44. *Spectrophotometric determination of chloride in mineral and drinking waters using sequential injection analysis*  
J.F. van Staden, R.I. Stefan and S.I. Tlowana  
IMAI2001. Instrumental Methods of Analysis. Modern trends and Applications. Ioannina. Greece. 5 - 8 September 2001.
45. *Determination of zinc in pharmaceutical products using a sequential injection system*  
J.F. van Staden, R.I. Stefan, M. Tsarwani  
IMAI2001. Instrumental Methods of Analysis. Modern trends and Applications. Ioannina. Greece. 5 - 8 September 2001.
46. *On-line determination of hydrochloric acid in process effluent streams by potentiometric sequential injection acid-base titration*  
J.F. van Staden, R.I. Stefan, M.G. Mashamba  
IMAI2001. Instrumental Methods of Analysis. Modern trends and Applications. Ioannina. Greece. 5 - 8 September 2001.
47. *On-line dilution and determination of concentrated hydrochloric acid using an SIA titration system*  
J.F. van Staden, R.I. Stefan, M.G. Mashamba  
ICFIA2001. 11<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Chiang Mai. Thailand. 16 - 20 December 2001.
48. *Determination of boron as boric acid in eye lotions using an SIA system*  
J.F. van Staden, R.I. Stefan, M. Tsarwani  
ICFIA2001. 11<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Chiang Mai. Thailand. 16 - 20 December 2001.
49. *Determination of paracetamol in pharmaceutical samples using an SIA system*  
J.F. van Staden, R.I. Stefan, M. Tsarwani  
ICFIA2001. 11<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Chiang Mai. Thailand. 16 - 20 December 2001.
50. *On-line simultaneous determination of S- and R-perindopril using amperometric biosensors as detectors in flow systems*  
R.I. Stefan, J.F. van Staden, L.V. Mulaudzi, H.Y. Aboul-Enein  
ICFIA2001. 11<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Chiang Mai. Thailand. 16 - 20 December 2001.
51. *Simultaneous assay of L-T<sub>3</sub>, L-T<sub>4</sub> and D-T<sub>4</sub> using a sensor/SIA system*  
J.F. van Staden, R.I. Stefan, H.Y. Aboul-Enein  
IMCS2002. 9<sup>th</sup> International Meeting on Chemical Sensors. Boston, USA. 7-10 July 2002.
52. *Determination of azidothymidine using an immunosensor/SIA system*  
H.Y. Aboul-Enein, R.I. Stefan, J.F. van Staden  
IMCS2002. 9<sup>th</sup> International Meeting on Chemical Sensors. Boston, USA. 7-10 July 2002.
53. *Simultaneous determination of bicarbonate and total carbonate by titration using automated sequential injection analysis with spectrophotometric detection*



- P.J. Fletcher, J.F. van Staden, R.I. Stefan  
Euroanalysis XII. Division of Analytical Chemistry of the Federation of European Chemical Societies and Gesellschaft Deutcher Chemiker. Dortmund. Germany. 8 - 13 September 2002.
54. *On-line sequential injection analysis of bromine and bromide in effluent streams by spectrophotometric detection*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
Euroanalysis XII. Division of Analytical Chemistry of the Federation of European Chemical Societies and Gesellschaft Deutcher Chemiker. Dortmund. Germany. 8 - 13 September 2002.
55. *On-line spectrophotometric speciation of Mn(II) and Mn(VII) by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
Euroanalysis XII. Division of Analytical Chemistry of the Federation of European Chemical Societies and Gesellschaft Deutcher Chemiker. Dortmund. Germany. 8 - 13 September 2002.
56. *Flow and sequential injection analysis as sampling processing systems for the simultaneous assay of enantiomers*  
J.F. van Staden, R.I. Stefan  
Euroanalysis XII. Division of Analytical Chemistry of the Federation of European Chemical Societies and Gesellschaft Deutcher Chemiker. Dortmund. Germany. 8 - 13 September 2002.
57. *Determination of L- and D-methotrexate using amperometric biosensors*  
R.I. Stefan, R.G. Bokretson, J.F. van Staden, H.Y. Aboul-Enein  
Euroanalysis XII. Division of Analytical Chemistry of the Federation of European Chemical Societies and Gesellschaft Deutcher Chemiker. Dortmund. Germany. 8 - 13 September 2002.
58. *Diamond paste based electrode for the determination of Fe (II)*  
R.I. Stefan, S.G. Bairu, J.F. van Staden  
Euroanalysis XII. Division of Analytical Chemistry of the Federation of European Chemical Societies and Gesellschaft Deutcher Chemiker. Dortmund. Germany. 8 - 13 September 2002.
59. *Speciation by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
ANALITICA '2002. International Symposium on Analytical Science. S A Chemical Institute. Stellenbosch. 4 -10 December 2002.
60. *On-line spectrophotometric speciation of Mn(II) and Mn(VII) by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
ANALITICA '2002. International Symposium on Analytical Science. S A Chemical Institute. Stellenbosch. 4 -10 December 2002.
61. *On-line sequential injection analysis of bromine and bromide in effluent streams by spectrophotometric detection*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
ANALITICA '2002. International Symposium on Analytical Science. S A Chemical Institute. Stellenbosch. 4 -10 December 2002.
62. *Diamond paste-based electrode for the determination of Fe(II)*  
S.G. Bairu, R.I. Stefan and J.F. van Staden  
ANALITICA '2002. International Symposium on Analytical Science. S A Chemical Institute. Stellenbosch. 4 -10 December 2002.
63. *Determination of L- and D-enantiomers of methotrexate using amperometric biosensors*  
R.G. Bokretson, R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein  
ANALITICA '2002. International Symposium on Analytical Science. S A Chemical Institute. Stellenbosch. 4 -10 December 2002 (selected for oral presentation).
64. *Simultaneous Detection of L- and D-methotrexate using a sequential injection analysis/amperometric biosensors system*  
R.G. Bokretson, R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein  
ANALITICA '2002. International Symposium on Analytical Science. S A Chemical Institute. Stellenbosch. 4 -10 December 2002.
65. *Determination of bicarbonate and total carbonate by titration using automated sequential injection analysis with spectrophotometric detection*  
P.J. Fletcher, J.F. van Staden, R.I. Stefan  
36<sup>th</sup> Convention. S A Chemical Institute. Port Elizabeth. 1 - 5 July 2002.
66. *On-line spectrophotometric speciation of Cr(VI) and Cr(III) by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
36<sup>th</sup> Convention. S A Chemical Institute. Port Elizabeth. 1 - 5 July 2002.
67. *On-line speciation of iron(II) and iron(III) using a spectrophotometric sequential injection system*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
36<sup>th</sup> Convention. S A Chemical Institute. Port Elizabeth. 1 - 5 July 2002.
68. *Flow injection analysis of bromine with spectrophotometric detection*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong, Australia. 17 - 21 February 2003.
69. *On-line spectrophotometric determination of bromine using sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong, Australia. 17 - 21 February 2003.
70. *Determination of ethanol in beverages using sequential injection analysis with spectrophotometric detection*  
P.J. Fletcher, J.F. van Staden, R.I. Stefan  
Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong, Australia. 17 - 21 February 2003.
71. *Determination of bicarbonate and total carbonate using automated sequential injection analysis with spectrophotometric detection*

- P.J. Fletcher, J.F. van Staden, R.I. Stefan  
Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong, Australia. 17 - 21 February 2003.
72. *On-line simultaneous determination of the activity of  $\alpha$ - and  $\beta$ -amylase by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong, Australia. 17 - 21 February 2003.
73. *On-line spectrophotometric speciation of Mn(II) and Mn(VII) by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong, Australia. 17 - 21 February 2003.
74. *On-line sequential injection analysis of bromine and bromide in effluent streams by spectrophotometric detection*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong, Australia. 17 - 21 February 2003.
75. *Simultaneous detection of L- and D-methotrexate using a sequential injection analysis/ampereometric biosensors system*  
R.G. Bokretson, R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein  
Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong, Australia. 17 - 21 February 2003.
76. *Diamond paste based electrodes for the determination of Ag(I)*  
R.I. Stefan, S.G. Bairu, J.F. van Staden  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23-27 September 2003.
77. *Diamond paste based electrodes for the determination of Cr(III) in pharmaceutical compounds*  
R.I. Stefan, S.G. Bairu, J.F. van Staden  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23-27 September 2003.
78. *Diamond paste based electrodes for the determination of iodide in vitamins and table salt*  
R.I. Stefan, S.G. Bairu, J.F. van Staden  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23-27 September 2003.
79. *Maltodextrins as new chiral selectors for the design of enantioselective potentiometric membrane electrodes for the assay of L-proline*  
R.I. Stefan, K. Ozoemena  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23-27 September 2003.
80. *Biosensors for the enantioselective analysis of pipecolic acid*  
R.I. Stefan, R.M. Nejem, J.F. van Staden, H.Y. Aboul-Enein  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23-27 September 2003.
81. *Enantioselective potentiometric membrane electrodes based on  $\alpha$ ,  $\beta$ , and  $\gamma$ -cyclodextrins as chiral selectors for the assay of L-proline*  
K. Ozoemena, R.I. Stefan  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23-27 September 2003.
82. *Simultaneous determination of creatine and creatinine using amperometric biosensors*  
R.I. Stefan, R.G. Bokretson, J.F. van Staden, H.Y. Aboul-Enein  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23-27 September 2003.
83. *Biosensors for the determination of ortho-acetyl-L-carnitine. Their utilization as detectors in a sequential injection analysis system*  
R.I. Stefan, R.G. Bokretson, J.F. van Staden, H.Y. Aboul-Enein  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23-27 September 2003.
84. *Spectrophotometric determination of bromate by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23 - 27 September 2003.
85. *On-line simultaneous determination of the activity of  $\alpha$ - and  $\beta$ -amylase by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23 - 27 September 2003.
86. *Simultaneous determination of L- and D-carnitine using a sequential injection analysis/ampereometric biosensor system*  
R.I. Stefan, R.G. Bokretson, J.F. van Staden, H.Y. Aboul-Enein  
IMA2003. The 3<sup>rd</sup> International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki, Greece. 23 - 27 September 2003.
87. *On-line simultaneous determination of the activity of  $\alpha$ - and  $\beta$ -amylase by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida, Venezuela. 7 - 13 December 2003.
88. *Spectrophotometric determination of bromate by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida, Venezuela. 7 - 13 December 2003.
89. *On-line spectrophotometric determination of iodate by sequential injection analysis*  
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida, Venezuela. 7 - 13 December 2003.

90. *Flow injection analysis of bromine with spectrophotometric detection*  
L.V. Mulaudzi, **J.F. van Staden**, R.I. Stefan  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003.
91. *On-line spectrophotometric determination of bromine using sequential injection analysis*  
L.V. Mulaudzi, **J.F. van Staden**, R.I. Stefan  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003.
92. *Biosensors for the determination of ortho-acetyl-L-carnitine. Their utilization as detectors in a sequential injection analysis system*  
R.I. Stefan, R.G. Bokretsiion, **J.F. van Staden**, H.Y. Aboul-Enein  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003.
93. *Biosensors for the enantioselective analysis of pipercolic acid*  
R.I. Stefan, R.M. Nejem, **J.F. van Staden**, H.Y. Aboul-Enein  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003.
94. *On-line assay of the S-enantiomer of elanapril, ramipril and pentopril using a sequential injection analysis/amperometric biosensor system*  
R.I. Stefan, **J.F. van Staden**, C. Bala, H.Y. Aboul-Enein  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003.
95. *Simultaneous determination of L- and D-carnitine using a sequential injection analysis/amperometric biosensor system*  
R.I. Stefan, R.G. Bokretsiion, **J.F. van Staden**, H.Y. Aboul-Enein  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003.
96. *Simultaneous determination of creatine and creatinine using amperometric biosensors*  
R.I. Stefan, R.G. Bokretsiion, **J.F. van Staden**, H.Y. Aboul-Enein.  
ICFIA2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003.
97. *Sequential injection spectrophotometric determination of trace amounts of iodide by its catalytic effect on the 4,4'-methylenebis(N,N-dimethylaniline)-chloramine-T*  
**Z.O. Tesfaldet**, J.F. van Staden and R.I. Stefan  
37<sup>th</sup> SACI Convention. Chemistry for a better life. Pretoria. 4 - 9 July 2004.
98. *Sequential injection analysis of formaldehyde*  
**S. Mathodi**, J.F. van Staden and R.I. Stefan  
37<sup>th</sup> SACI Convention. Chemistry for a better life. Pretoria. 4 - 9 July 2004.
99. *Sequential injection spectrophotometric determination of calcium in pharmaceutical preparations using o-cresolphthalein complexone as complexing agent*  
J.F. van Staden, **Z.O. Tesfaldet**, R.I. Stefan, **H.Y. Aboul-Enein**  
13<sup>th</sup> International Symposium on Flow Injection Analysis including related techniques (ICFIA 2005), 24-29 April 2005. Las Vegas, Nevada USA
100. *Sequential Injection Spectrophotometric Determination of Ritodrine Hydrochloride Using 4-Aminoantipyrine*  
J.F. van Staden, N.W. Beyene, R.I. Stefan, **H.Y. Aboul-Enein**  
13<sup>th</sup> International Symposium on Flow Injection Analysis including related techniques (ICFIA 2005), 24-29 April 2005. Las Vegas, Nevada USA
101. *Enantioanalysis of ketoprofen based on its molecular interaction with C<sub>60</sub> fullerenes*  
**R.G. Bokretsiion**, R.I. Stefan-van Staden  
PITTCON2007, February 2007, Chicago, IL, USA
102. *Enantioanalysis of ketoprofen based on its molecular interaction with C<sub>60</sub> fullerenes*  
**R.I. Stefan-van Staden**, R.G. Bokretsiion  
20<sup>th</sup> International Symposium on Chirality, 6<sup>th</sup>-9<sup>th</sup> of July 2008, Geneva, Switzerland.
103. *Enantioanalysis of butaclamol using enantioselective, potentiometric electrodes*  
**R.I. Stefan-van Staden**, J.F. van Staden, H.Y. Aboul-Enein, M.C. Mirica, I. Balcu  
20<sup>th</sup> International Symposium on Chirality, 6<sup>th</sup>-9<sup>th</sup> of July 2008, Geneva, Switzerland.
104. *Porphyryns as new nanostructured materials for the design of stochastic sensors*  
**R.I. Stefan-van Staden**, E. Fagadar-Cosma, O. Radacina, J.F. van Staden, S. Balasoiu, I. Balcu, M. Iorga  
Nanotech Insight, 29<sup>th</sup> March // 2<sup>nd</sup> April 2009, Barcelona, Spain.

### 3. Indrumator științific pentru BSc, Master, Doctorat, Postdoc

#### 3.1. Studenți care au terminat studiile.

Numele studentului	Titlu/Titlul tezei/data obținerii titlului/universitatea	Indrumator	Co-indrumator	Durata studiului (ani)
AAlecu	BSc/Utilization of ion-selective, membrane electrodes in pharmaceutical analysis/1995/Universitatea din Bucuresti	RI Stefan	GE Baiulescu	2
FD Munteanu	BSc/Lauryl sulfate as new ligand in the design of ion-selective, membrane electrodes/1996/Universitatea din Bucuresti	RI Stefan	GE Baiulescu	2
C Radoi	BSc/Determination of Vitamin C in fruits using HPLC/1996/ Universitatea din Bucuresti	RI Stefan	-	2
G Manguirea	BSc/Determination of antiarrhythmic drugs using ion-selective membrane electrodes/1997/ Universitatea din Bucuresti	RI Stefan	-	2
J Manguirea	BSc/In vitro dissolution tests of pharmaceutical products using ion-selective membrane electrodes/1997/ Universitatea din Bucuresti	RI Stefan	-	2
M Diaconu	BSc/Determination of antidepressive drugs using ion-selective, membrane electrodes/1997/ Universitatea din Bucuresti	RI Stefan	-	2
AAlecu	MSc/Ion-selective membrane electrodes: membrane potential development/1996/ Universitatea din Bucuresti	RI Stefan	GE Baiulescu	1
K Naidoo	MSc/Electrochemical behaviour of boron-doped diamond electrodes/2001/University of Pretoria, South Africa	RI Stefan	JF van Staden	2/Distinguit
MG Mashamba	MSc/Process potentiometric sequential injection titrations/2002/ University of Pretoria, South Africa	JF van Staden	RI Stefan	2
RG Bokretson	MSc/On-line process control in pharmaceutical industry/2003/ University of Pretoria, South Africa	RI Stefan	JF van Staden	1/Distinguit
SG Bairu	MSc/Diamond paste based electrodes for inorganic analysis/2003/ University of Pretoria, South Africa	RI Stefan	JF van Staden	1/Distinguit
ZO Tesfaldet	MSc/Sequential injection analysis of cations in pharmaceutical products/2005/ University of Pretoria, South Africa	JF van Staden	RI Stefan	2/Distinguit
TR Mashile	MSc/Enantioanalysis of pharmaceutical compounds/2006/ University of Pretoria, South Africa	RI Stefan	-	1/Distinguit
L Holo	MSc/Enantioselective, potentiometric membrane electrodes for enantioanalysis of amino acids of clinical and pharmaceutical importance/2006/ University of Pretoria, South Africa	RI Stefan	-	1/Distinguit
LA Gugoasa	MSc/Biosensors based on DNA for the assay of neurotransmitters/2012/ University of Pretoria, South Africa	A Ciucu	RI van Staden	2
RM Nejem	PhD/ Enantioselective sensors and biosensors for clinical analysis/2004/ University of Pretoria, South Africa	RI Stefan	-	3/Excelent
I Moldoveanu	PhD/Screening systems for early detection of cancer and hepatitis/2015/Universitatea Politehnica din Bucuresti	RI van Staden	-	3/Excelent
LA Gugoasa	PhD/Multimode screening systems for obesity/2015/ Universitatea Politehnica din Bucuresti	RI van Staden	-	3/Excelent
Ionela Raluca Comnea	PhD/Screening systems for early detection of lung cancer/2017/ Universitatea Politehnica din Bucuresti	RI van Staden	-	3/Excelent
Ahmed Jassim Muklivi Al-Ogaidi	PhD/Fast detection of colon cancer biomarkers/2017/ Universitatea Politehnica din Bucuresti	RI van Staden	-	3/Excelent
Amalia Gabriela Diaconeasa	PhD/Detection of specific biomarkers for ageing related illnesses/2018/ Universitatea Politehnica din Bucuresti	RI van Staden	-	3/Excelent
Grigorina Mitrofan	PhD/Investigation of thyroid function and its associated pathologies using stochastic sensing/2018/Universitatea Politehnica din Bucuresti	RI van Staden	-	3/Excelent
Ruxandra Maria 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	-	3/Summa Cum Laude
Alexandrina Lungu	PhD/Modern analytical methods for environmental analysis	RI van Staden	-	3/Summa Cum Laude
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 Ratko	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 Stefan-van Staden	-	2

### 3.2. Studenti doctoranzi la Universitatea Politehnica din Bucuresti

Numele studentului	Titlul tezei	Data inceperii studiilor
Mihaela Iuliana Bogea	PhD/Detection and personalized treatment of gastric cancer	October 2019
Oana Raluca Musat	PhD/Innovative methods for diagnostic and personalized treatment of breast cancer	October 2019
Irina Alina Anghel-Chera	PhD/Modern methods of determination of influence of pollutants on human body	October 2019
Sebastian Gheorghe	PhD/Fast screening method for early detection of brain cancer	October 2018
Alexandru Adrian Bratei	PhD/A modern approach of pathology and clinical analysis	October 2020
Bianca Maria Tuchiu	PhD/Fast screening tests for evaluation of the quality of semisolid pharmaceutical formulations	October 2020
Damaris Cristina Gheorghe	PhD/Innovative methods in clinical analysis	October 2021
Andreea Elena Sandu (m. Domeanu)	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 Niculae	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

- Sigma Xi, The Scientific Research Honor Society, Full member
- 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)
- 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 - FELLOW
- 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 XIII<sup>th</sup> National Conference on Analytical Chemistry, Craiova, Romania, 1996.
- Comitet stiintific al Chemometrics Workshop, Timisoara, Romania, 1997.
- Comitet stiintific al The XIV<sup>th</sup> National Conference on Analytical Chemistry, Piatra Neamt, Romania, 1998.
- Co-secretara, 7<sup>th</sup> International Conference on Kinetics in Analytical Chemistry, Bucharest, Romania, 2001.
- Co-secretara, ICFAI2003, Merida, Venezuela, 2003.
- Membra a comitetului de program al 10<sup>th</sup> 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, ROIACAC 2012, 1<sup>st</sup> International Conference on Analytical Chemistry, Targoviste, Romania, 2012.
- Chairman, ROIACAC 2014, 2<sup>nd</sup> International Conference on Analytical Chemistry, Targoviste, Romania, 2014.
- Chairman, ROIACAC 2016, 3<sup>rd</sup> International Conference on Analytical Chemistry, Iasi, Romania, 2016.
- Chairman, ROIACAC 2018, 4<sup>th</sup> International Conference on Analytical Chemistry, Bucuresti, Romania, 2018.

**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)**
- **Editor pentru chimie analitica si bioanaliza: Revista - Coagent Chemistry, Taylor & Francis**

**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

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 Asociației Bolnavilor de Cancer
- 2013 ▫ Membru de onoare al Ligii Studenților Români din Străinătate
- 2013 ▫ Premiul She Business pentru inovare
- 2017 - Premiul Radar de Media pentru Cercetare Științifică
- 2019- Medalia și Premiul Gheorghe Spacu din partea Societății de Chimie din România, pentru recunoașterea meritelor cercetării ei la cel mai înalt nivel pe plan național și internațional**
- 2020-ACS FELLOW**

## Medalii și premii speciale în competiții internaționale

- 2008 ▫ Medalie de aur și Diploma of Excelență pentru brevetul cu titlul: *Procedeu de realizare a senzorilor stocastici pe baza de porfirine și pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular* la AI 2-lea Congres Internațional al Cercetătorilor și Inventatorilor din România, **11-12 decembrie 2008, București, România.**
- 2009 ▫ Medalia Pro Invent și Diploma de Excelență; Diploma de Excelență a Societății Inventatorilor din România, pentru brevetul cu titlul: *Procedeu de realizare a senzorilor stocastici pe baza de porfirine și pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular* la **Pro Invent, 24-27 martie 2009, Cluj-Napoca, România.**
- 2009 ▫ Medalie de aur și Premiul Arca al Societății Inventatorilor din Croația, pentru brevetul cu titlul: *Procedeu de realizare a senzorilor stocastici pe baza de porfirine și pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular* la **37<sup>eme</sup> Salon Internațional des Inventions des Techniques et Produit Nouveaux, 1-5 Aprilie 2009, Geneva, Elveția.**
- 2009 ▫ Medalie de aur și Premiul Federației Asociațiilor Inginerilor din Polonia ▫ NOT, pentru brevetul cu titlul: *Procedeu de realizare a senzorilor stocastici pe baza de porfirine și pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular* la International Warsaw Invention Show, IWIS 2009, **1-3 iunie 2009, Varsovia, Polonia.**
- 2009 ▫ Medalie de aur și Premiul Technopol Moscova pentru brevetul cu titlul: *STOC-μSENS-CMD* diagnosticarea cancerului la nivel molecular înainte ca pacientul să fie bolnav clinic, la IX Moscow International Salon of Innovations and Investments, **26-29 august 2009, Moscova, Federația Rusă.**
- 2009 ▫ Placheta de argint pentru brevetul cu titlul: *STOC-μSENS-CMD* diagnosticarea cancerului la nivel molecular înainte ca pacientul să fie bolnav clinic, la ARCA 2009, **15-19 septembrie 2009, Zagreb, Croația**
- 2009 ▫ Medalie de aur și Premiul ARCA de Excelență pentru brevetul cu titlul: *STOC-μSENS-CMD* diagnosticarea cancerului la nivel molecular înainte ca pacientul să fie bolnav clinic, la Inventika, **28-31 septembrie 2009, București, România.**
- 2009 ▫ Medalie de aur cu felicitări din partea juriului și Cupa AGEPI a Agenției de Proprietate Intelectuală din Moldova pentru brevetul cu titlul: *STOC-μSENS-CMD* diagnosticarea cancerului la nivel molecular înainte ca pacientul să fie bolnav clinic, la EUREKA 2009, **19-21 noiembrie 2009, Bruxelles, Belgia.**
- 2010 ▫ Medalie de aur cu felicitări din partea juriului și Diploma de excelență, pentru brevetul cu titlul: *STOC-μSENS-CMD* diagnosticarea cancerului la nivel molecular înainte ca pacientul să fie bolnav clinic, la **PRO INVENT 2010, 16-19 martie 2010, Cluj-Napoca, România.**
- 2010 ▫ Premiul (medalia de aur) Organizației Mondiale pentru Proprietate Intelectuală (OMPI) pentru cea mai bună femeie inventatoare, Medalia AGEPI și Medalia de Aur cu Felicitări din partea juriului pentru brevetul cu titlul: *STOC-μSENS-CMD* diagnosticarea cancerului la nivel molecular înainte ca pacientul să fie bolnav clinic, la **38<sup>e</sup> Salon Internațional des Inventions des Techniques et Produit Nouveaux, 21-25 Aprilie 2010, Geneva, Elveția.**
- 2010 ▫ Premiul al-II-lea, Categorie (Invenții), pentru brevetul cu titlul: *STOC-μSENS-CMD* diagnosticarea cancerului la nivel molecular înainte ca pacientul să fie bolnav clinic, la Bright fair 2010, World Forum of Researchers and Inventors, **8-10 Octombrie 2010, Bucharest, România.**
- 2010 ▫ Premiul Societății Inventatorilor din România, pentru brevetul cu titlul: diagnosticarea cancerului la nivel molecular înainte ca pacientul să fie bolnav clinic, la Targul Internațional de Invenții Invent-Invest, **23-26 Noiembrie 2010, Iași, România.**
- 2011 ▫ Premiul Mare al Universității Tehnice din Cluj, pentru brevetul cu titlul: DOT sensor enantioselectiv, la **PRO INVENT, 22-25 Martie 2011, Cluj-Napoca, România.**
- 2011 ▫ Premiul Mare al Asociației Inventatorilor din Europa și Medalia de Aur pentru brevetul cu titlul: DOT sensor enantioselectiv, la **39 Salon Internațional des Inventions des Techniques et Produit Nouveaux, 6-10 Aprilie 2010, Geneva, Elveția.**
- 2012 ▫ Medalia omagială a salonului PRO INVENT, Ordinul Științific Gogu Constantinescu în grad de Comandor și medalie Gogu Constantinescu pentru rezultate remarcabile obținute în activitatea de cercetare științifică, de promovare a invenției, precum și pentru contribuția la recunoașterea internațională a creativității românești.
- 2010 ▫ Premiul pentru Știință și Viață, Revista VIP
- 2010 ▫ Premiul Națională Internațională, National TV
- 2010 ▫ Premiul Zece pentru România pentru cercetare, Realitatea TV
- 2010 ▫ Premiul Omul Anului al Revistei Argesul
- 2010 ▫ Premiul pentru Cercetare, Gala Femei de Succes
- 2011 ▫ Premiul Femeia Anului, Revista Avantaje
- 2011 ▫ Premiul Radio România Cultural, Secțiunea Cercetare
- 2011 ▫ Premiul Omul anului, Gala premiilor de excelență "DEMOS T.N.", Targu Neamt 2011



## 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 invitatia unor societati profesionale: Octombrie 2011 □ doua cursuri (domeniul senzori electrochimici pentru analiza clinica si farmaceutica) sustinute la invitatia ACS si ECS la San Francisco, USA; Mai 2012 □ curs (in domeniul enantioanalizei clinice) sustinut la invitatia ECS la Seattle (USA); Septembrie 2012 □ curs (in domeniul calitatii si fiabilitatii in analiza chimica) sustinut la invitatia DAC a EUCHEMs la Belgrad (Serbia) in cadrul conferintei EUROANALYSIS; Mai 2016 □ curs (in domeniul micro si nanosenzorilor) sustinut la invitatia 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 domeniul prioritar, □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, □Microsenzori 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 □ 3 lucrari publicate

#### 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 micelarai□, 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 0 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 0 Cursuri, seminarii, laboratoare in domeniile chimie generala si chimie analitica, anul I 0 chimie, biochimie, inginerie (clase cu 50 0 700studenti); 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 0 Facultatea de Chimie, Universitatea din Bucuresti 1992-1998.
- 12.4. Indrumator pentru MSc si conducator de doctorat 0 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, senzorialor, biosenzorialor, fiabilitatii in chimia analitica, tinute la invitatia Societatii Americane de Chimie, Societatii de Electrochimie din SUA, Diviziei de Chimie Analitica a EUCHEMs 0 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 0 chimie analitica 0 publicate de Editura Universitatii din Pretoria.

## 13. Activitati artistice

Raluca-Ioana Stefan-van Staden incepe la 5 ani cursurile de balet din cadrul Casei de Cultura din Campulung Muscel si este prezenta ca recitator in spectacolele realizate de mama sa, Valeria Mihai Stefan. In 1975, la varsta de 6 ani este admisa la Scoala de Muzica si Arte Plastice din Campulung Muscel, la clasa Profesoarei de pian Jeanina Ionescu. La varsta de 8 ani scrie prima compozitie. Intre 1981 si 1983 studiaza pianul cu Profesor Mirebella Parota. La 10 ani este selectionata sa reprezinte scoala la concursul de interpretare Lira de Aur de la Suceava, unde este prezenta si in anii 1981 si 1982. Raluca a fost invitata sa cante cu diferite ocazii la Campulung-Muscel si Pitesti incepand de la varsta de 8 ani. In 1985 obtine premiul I la faza judeteana a concursului Cantarea Romaniei si Premiul al-III-lea si medalie de bronz la faza nationala a concursului Cantarea Romaniei. In anul 1987 este admisa la Facultatea de Chimie a Universitatii din Bucuresti si participa la concursul artistic organizat la nivel de tara intre facultatile de chimie, Iasi, Octombrie 1987 unde obtine un premiu special pentru recitalul de pian. Din ianuarie 1988, Raluca studiaza in particular pianul cu prof univ Dr Georgeta Stefanescu Barnea. In anul 1989 obtine premiul I pe Municipiul Bucuresti in cadrul concursului Cantarea Romaniei si participa la Faza nationala, unde obtine Premiul al-III-lea si medalie de bronz. In anul 1991 este admisa la Universitatea Nationala de Muzica din Bucuresti, Facultatea de Compozitie, Muzicologie si Pedagogie Muzicala, sectia Pian si Pedagogie Muzicala, la clasa Prof univ Dr Georgeta Stefanescu Barnea, din anul 1993 fiind la clasa Prof Univ Dr Remus Manoleanu. Din anul 1992, Raluca face un curs de compozitie cu Prof Univ Dr Dan Dediu. In perioada 1991 0 1997, Raluca a sustinut numeroase recitaluri la Universitatea Nationala de Muzica din Bucuresti, Sala Dalles, Scoala de Muzica si Arte Plastice din Campulung-Muscel, la Timisoara, la CNA Dinu Lipatti Bucuresti, Sala Alfred Alesandrescu, Radio 0 recital cu transmisie in direct (septembrie 1993). In anul 1996 este admisa la master la sectiunea de Compozitie muzicala, clasa Prof Univ Dr Dan Dediu pe care o absolve in iunie 1997 cu oratoriul pentru solisti, cor si orchestra Dupa melci (versuri Ion Barbu). La Pretoria sustine doua recitaluri invitate in 1998 (august si noiembrie), unul fiind organizat de Universitatea din Pretoria si altul de Ambasada Romaniei din Africa de Sud, cand sustine o parte si cu muzica de camera alaturi de violonista romanca, Camelia Onea. Din 1999, Raluca sustine recitaluri in Pretoria si Johannesburg, solo si muzica de camera alaturi de Camelia Onea. In aprilie 1999, Raluca sustine alaturi de violonista romanca Cristina Anghelescu o serie de recitaluri cu muzica de camera in Africa de Sud 0 Pretoria si Johannesburg. In anul 2011, Raluca sustine un recital de pian la San Francisco, iar in 2012 la Linz. Raluca a cantat ca solist cu orchestra Nota Brevis din Bucuresti in numeroase concerte. Compozitiile sale pentru pian solo, flaut si vioara si voce si pian au fost transmise la Radio in diverse emisiuni in perioada 1993-1996 si cantate la Universitatea Nationala de Muzica din Bucuresti in cadrul Concertelor claselor de compozitie. Lista compozitiilor mai importante este :

1. Piesa pentru pian : Valurile Marii Negre, 15 iunie 1977
2. Poveste pentru voce si pian, versuri Valeria Mihai Stefan, 12 decembrie 1983
3. Suita pentru pian : I Contraste □Andante, II Roata □Allegro, III Meditatie □Lento, IV Toaca □Vivace, 20 mai 1993
4. Lied De ce ..., versuri Valeria Mihai Stefan, 10 martie 1994
5. Piesa pentru flaut si vioara, 5 februarie 1994
6. Azi la munte ... - piesa pentru cor (trei voci), versuri Valeria Mihai Stefan, 15 septembrie 1995
7. Un gandac aristocrat □piesa pentru cor (trei voci), versuri Valeria Mihai Stefan, 20 martie 1994
8. La tempete □piesa pentru cor de femei, 15 martie 1995
9. Studiu pentru pian, 5 mai 1996
10. Dupa melci ... oratoriu pentru solisti, cor si orchestra, versuri Ion Barbu, 5 mai 1997



