

## Raluca-Ioana Stefan-van Staden

### PROFESSIONAL EXPERIENCE

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- 1.03.2007 - present Professor, Senior Researcher, Head of Laboratory of Electrochemistry and PATLAB.  
03.2014-07.2015 Scientific Director of the National Institute of Research for Electrochemistry and Condensed Matter  
National Institute of Research for Electrochemistry and Condensed Matter, Laboratory of Electrochemistry and PATLAB Bucharest , Bucharest (Romania)
- 15.12.2013 - present Professor at "Politehnica" University Bucharest.
- Research, Director of projects and project coordinator for national and international projects, management of laboratory, coordinate the activity of the young researchers in the laboratory.
- 1.01.2001- 31.08.2006 Associate Professor of Analytical Chemistry and Bioanalysis  
University of Pretoria , Pretoria (South Africa)
- Education – supervisor for MSc, PhD and postdoc students. Coordinator for chemistry lectures at 2<sup>nd</sup> year level, lectures and practical activities on all levels I, II, III, IV(Hons). Research – leader of research group on bioanalysis and enatioanalysis in the fields of clinical and pharmaceutical analysis. Management – member of the Committee of Research in the Department of Chemistry. Mentor for young researchers for research programs offered by University of Pretoria and Royal Society of Chemistry.
- 1.02.1998 – 31.12.2000 Postdoc  
University of Pretoria, Pretoria (South Africa)
- Education – lecture at the 2<sup>nd</sup> and 4<sup>th</sup> (Hons) year levels, promoter for MSc and PhD students, external evaluator for PhD thesis. Research – in the fields of pharmaceutical and biomedical analysis, and flow systems.
- 1.10.1992 – 31.01.1998 Teaching assistant and assistant  
University of Bucharest , Bucharest (Romania)
- Education – lectures at 4<sup>th</sup> year level, practicals at 2<sup>nd</sup> – 4<sup>th</sup> year levels, supervisor for BSc and MSc thesis.  
Research – in the fields of clinical and pharmaceutical analysis.

### EDUCATION AND TRAINING

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- 1.10.1987 – 1.07.1992 BSc in Chemistry  
University of Bucharest, Bucharest (Romania)  
Chemistry, Analytical Chemistry. Graduated with the best mark in the Faculty of Chemistry, Chemistry section.
- 1.03.1995 – 27.03.1997 PhD in Chemistry

University of Bucharest, Bucharest (Romania)  
Chemistry, Analytical Chemistry

1.10.1991 – 1.07.1996 [BSc in Piano and Musical Education](#)  
National University of Music Bucharest, Bucharest (Romania)  
Piano and musical education

1.10.1996 – 1.07.1997 [MSc in compositional stile and language](#)  
National University of Music Bucharest, Bucharest (Romania)  
Musical Composition

29 07 2013 [Dr Habilitas in Chemistry Affiliated at University "Politehnica" Bucharest](#)

## PERSONAL SKILLS

[Mother tongue\(s\)](#) Romanian

<a href="#">Other language(s)</a>	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Afrikaans	B1	B1	B1	B1	B1

[Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user](#)  
[Common European Framework of Reference for Languages](#)

[Communications skills](#) Good experience in the communication of science.

[Organisational / managerial skills](#) I am manager of research teams since 2001. At University of Pretoria I had a team formed from 15 students (from undergraduates to postdoc students – all levels); here I have a team formed from 7 students which are studying for MSc, PhD, postdoc. I am the Head of Laboratory where I am working. I was the secretary of the Commission V.1. General Aspects of Analytical Chemistry, from IUPAC, between 1999 and 2001. I am part of the Executive Committee of the Division of Sensors from ECS, USA. I am director of projects at national and international levels. Since March 2014, I am Scientific Director of the Institute.

[Job-related skills](#) I was part of the Research Committee of the Department of Chemistry of University of Pretoria. I am part of the Research Committee of the Institute.

[Computer skills](#) MSWord, Corel and Sigma Plot.

- ANNEXES
1. PUBLICATIONS
  2. PARTICIPATIONS AT CONFERENCES
  3. FORMAR SUPERVISION AND CO-SUPERVISION OF STUDENTS
  4. MEMBERSHIP IN NATIONAL AND INTERNATIONAL BODIES
  5. MEMBER OF EDITORIAL BOARDS
  6. VISITS TO UNIVERSITIES AS GUEST PROFESSOR OR/AND RESEARCHER
  7. MANAGEMENT AND ADMINISTRATIVE DUTIES
  8. REFEERING DUTIES
  9. AWARDS
  10. PROFESSIONAL SERVICE PERFORMED
  11. RESEARCH PROJECTS

**1. Publications**

1.1. Papers published in ISI journals (Hirsch factor 26, with more than 2700 citations)

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. Mutihac, 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 ( $T_3$ )  
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-cilazapril, 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 Analityczna*, 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. Abi enzymatic 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 ( $T_3$ ) and L-tetraiodothyronine ( $T_4$ )  
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. Bokretslon, 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. Bokretson, 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. Bokretson  
*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. Bokretson, 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. Bokretson  
*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. Bokretson, 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. Bokretson, 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. Bokretson, 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. Bokretson, 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  
J.F. van Staden, L.V. Mulaudzi and R.I. Stefan  
Anal.Chim.Acta, 499(1-2), 129-137, 2003.
92. Utilization of maltodextrin based enantioselective, potentiometric membrane electrodes for the enantioselective assay of S-perindopril  
K.I. Ozoemena, R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
Talanta, 62(4), 681-685, 2004.
93. Determination of L and D-pipecolic acids using a diamond paste based electrode  
R.I. Stefan and R.M. Nejem  
Instrum.Sci. & Technol., 32(3), 311-320, 2004.
94. Diamond paste based electrodes for the determination of Pb(II) at trace concentration levels  
R.I. Stefan and S.G. Bairu  
Talanta, 63(3), 605-608, 2004.
95. Enantioselective, potentiometric membrane electrodes based on maltodextrins. Their applications for determination of L-Proline.  
K.I. Ozoemena and R.I. Stefan  
Sens.Actuators B, 98(1), 97-100, 2004.
96. Determination of L-carnitine using enantioselective, potentiometric membrane electrodes based on macrocyclic antibiotics  
A.A. Rat'ko, R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
Talanta, 63(3), 515-519, 2004.
97. Determination of (+)-3,3',5-triiodo-L-thyronine (L-T<sub>3</sub>) from serum using a sequential injection analysis/immunosensor system  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
J. Immunoassay Immunochem., 25(2), 183-189, 2004.
98. Enantioselective, potentiometric membrane electrode based on vancomycin. Its application for the determination of D-pipecolic acid  
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*Sensing and Biosensing Research*, 1, 1-7, 2014
200. Screening tools for neuron specific enolase  
R.I. Stefan-van Staden, I.R. Comnea, J.F. van Staden, C. Stanciu Gavan  
*RSC Advances*, 4(50), 26383-26388, 2014
201. Screening of children saliva samples for bisphenol A using stochastic, amperometric and multimode microsensors  
R.I. Stefan-van Staden, L.A. Gugoasa, B. Calenic, J.F. van Staden, J. Legler  
*Analytical Chemistry Research*, 1, 1-7, 2014
202. Pattern recognition of estradiol, testosterone and dihydrotestosterone in children's saliva samples using stochastic microsensors  
R.I. Stefan-van Staden, L.A. Gugoasa, B. Calenic, J. Legler  
*Scientific Reports* 4, 5579; DOI:10.1038/srep05579, 2014
203. Monocrystalline Diamond Paste Based Sensors and Microsensors  
R.I. Stefan-van Staden  
*Buletinul Societatii de Chimie*, XIX(2), 22-28, 2014
204. Engineered Nanoporous Gold Microspheres for Stochastic Sensing  
R.I. Stefan-van Staden, I. Moldoveanu, C. Surdu-Bob, C. Stanciu-Gavan  
*RSC Advances*, 4(97), 54140 - 54143, 2014
205. Immunosensors in clinical and environmental analysis  
R.G. Bokretsiou, R.I. Stefan-van Staden, J.F. van Staden H.Y. Aboul-Enein  
*Crit.Rev.Anal.Chem.*, 45(1), 2-31, 2015
206. New Stochastic Microsensors Based on Oleamides  
C. Cioates Negut, R.I. Stefan-van Staden, I. Moldoveanu, E.M. Ungureanu, C. Stanciu-Gavan  
*Electrochem.Comm.*, 51, 98-102, 2015
207. Multimode sensors as new tools for molecular recognition of testosterone, dihydrotestosterone and estradiol in children's saliva  
L.A. Gugoasa, R.I. Stefan-van Staden, B. Calenic, J. Legler  
*J Molec Recogn*, 28(1), 10-19, 2015
210. Platform based on microsensors used for the screening of HER-1 in peritoneal fluid  
I. Moldoveanu, R.I. Stefan-van Staden, J.F. van Staden, C. Stanciu-Gavan, C. Savlovschi  
*Rev Roum Chim*, 60(5-6), 447-451, 2015
211. Design of potentiometric sensors based on Interaction of cyclodextrins (chiral selectors) with the enantiomer of interest. Applications for pharmaceutical analysis.  
R.I. Stefan-van Staden, R.G. Bokretsiou, J.F. van Staden, H.Y. Aboul-Enein  
*Current Drug Therapy*, 9, 250-255, 2014
212. New platforms for fast assessment of levels of testosterone, dihydrotestosterone and estradiol in children's saliva  
L.A. Gugoasa, R.I. Stefan-van Staden, J.F. van Staden, B. Calenic, J.F. van Staden, J. Legler  
*Anal.Lett.*, 49(3), 335-341, 2016
213. Detection of folic acid from orange juice using amperometric dot microsensors based on graphite and graphene  
R. Georgescu, J.F. van Staden, R.I. Stefan-van Staden, C. Boscomea  
*Rev Roum Chim*, 60(5-6), 461-466, 2015
214. Evaluation of Amperometric Dot Microsensors for the Analysis of Folic Acid in Pharmaceutical Tablets and Urine Samples  
R. Georgescu, J.F. van Staden, R.I. Stefan-van Staden, C. Boscomea  
*J Porph Phthal*, 19(5), 679-687, 2015
215. A new hypothesis of aging  
AG Diaconeasa, M Rachita, R.I. Stefan-van Staden  
*Medical Hypothesis*, 84(3), 252-257, 2015
216. New approach application of data transformation in mean centering of ratio spectra method  
M.M. Issa, R.M. Nejem, R.I. Stefan-van Staden, H.Y. Aboul-Enein  
*Spectrochim Acta Part A*, 142, 204-209, 2015
217. Chitosan based diamond paste stochastic sensors modified with gold nanoparticles detect hepatitis C core antigen  
I. Moldoveanu, R.I. Stefan-van Staden, J.F. van Staden  
*Electroanalysis*, 27(8), 1842-1846, 2015

218. Enantioselective, potentiometric membrane electrodes based on C<sub>70</sub> fullerenes for the enantioanalysis of S-Clenbuterol in serum  
R.I. Stefan-van Staden  
J Electrochem Soc, 162(7), H477-H480, 2015
219. Novel Textile Material Based Disposable Sensors for Biomedical Analysis  
R.I. Stefan-van Staden, L.A. Gugoasa, M. Badulescu, C. Surdu-Bob  
RSC Advances, 5(56), 45545-45550, 2015
220. Development and Validation of Kinetic and Atomic Absorption Spectrophotometric Methods for the Determination of Salbutamol Sulfate  
R.M. Nejem, M.M. Issa, A.A. Saleh, A.A. Shanab, R.I. Stefan van Staden, H.Y. Aboul-Enein  
RSC Advances, 5(70), 57164-57170, 2015
221. A new graphene stochastic sensor for the molecular screening of TNF- $\alpha$   
I.R. Comnea-Stancu, R.I. Stefan-van Staden, A.R. Biris  
J.Electrochem.Soc., 162(9), B245-B247, 2015
222. Pattern recognition of monocyte chemoattractant protein-1 (MCP-1) in whole blood samples using new platforms based on nanostructured materials.  
R.I. Stefan-van Staden, L.A. Gugoasa, C. Socaci, A.R. Biris  
Nanoscale, 7(36), 14848-14853, 2015
223. Multimode microsensors based on carbon matrices used for the assay of IL-6 in whole blood samples  
L.A. Gugoasa, R.I. Stefan-van Staden  
ECS J Solid State Sci Technol, 4(10), S3006-S3010, 2015
224. Pattern recognition of HER-2 in whole blood samples using stochastic microsensors  
I. Moldoveanu, R.I. Stefan-van Staden  
ESC J Solide State Science & Technol., 4(10), S3067-S3070, 2015
225. Pattern recognition of adipokines in whole blood samples using stochastic sensing  
L.A. Gugoasa, R.I. Stefan-van Staden, O.C. Rusu  
Microsystem Technologies, 22(1), 11-16, 2016
226. Stochastic sensors based on maltodextrins for screening of whole blood for neuron specific enolase, carcinoembryonic antigen and epidermal growth factor receptor  
I.R. Comnea-Stancu, R.I. Stefan-van Staden, J.F. van Staden, C. Stanciu-Gavan  
Microsystem Technologies, 22(1), 25-29, 2016
227. New nanocomposites-graphene pastes based stochastic microsensors  
R.I. Stefan-van Staden, L.A. Gugoasa, C.A. Socaci, A.R. Biris  
RSC Advances, 5(81), 66185-66191, 2015
228. Fast screening of biological fluids for cytokines and adipokines using stochastic sensing  
L.A. Gugoasa, R.I. Stefan-van Staden, A. Dima, C.A. Visan, A. Streinu-Cercel, C. Socaci, A.R. Biris, B. Calenic  
Microelectronic Engineering, 148, 64-69, 2015
229. Nanostructured materials detect epidermal growth factor receptor, neuron specific enolase and carcinoembryonic antigen  
R.I. Stefan-van Staden, I.R. Comnea-Stancu, C.C. Surdu-Bob, M. Badulescu  
Nanoscale, 7(38), 15689-15694, 2015
230. Fast screening test of whole blood samples and pharmaceutical compounds for enantiorecognition of free L-T<sub>3</sub>, L-T<sub>4</sub>, and D-T<sub>4</sub>  
G Mitrofan, R.I. Stefan-van Staden, I.R. Comnea-Stancu, J.F. van Staden, G Bazylak, C. Kapnissi-Christodoulou, H.Y. Aboul-Enein  
Chirality, 27(12), 973-978, 2015
231. Ionic Liquids for the Molecular Enantiorecognition of free L-T<sub>3</sub>, L-T<sub>4</sub> and D-T<sub>4</sub>  
R.I. Stefan-van Staden, G Mitrofan, I.R. Comnea-Stancu, J.F. van Staden, C. Kapnissi-Christodoulou, H.Y. Aboul-Enein  
RSC Adv, 5(92), 75451-75457, 2015
232. Carbon modified paper based disposable sensors  
R.I. Stefan-van Staden, I. Moldoveanu, C. Surdu-Bob, M. Badulescu, J.F. van Staden  
J Electrochem Soc, 162(14), B360-B362, 2015
233. Diamond Paste-Based Stochastic Sensor for Screening of Children's Cerebrospinal Fluid  
R.I. Stefan-van Staden, I.R. Comnea-Stancu, C.A. Visan, A. Streinu-Cercel  
J Electrochem Soc, 162(14), B351-B353, 2015
234. New platforms for fast assessment of levels of testosterone, dihydrotestosterone and estradiol in children's saliva  
L.A. Gugoasa, R.I. Stefan-van Staden, J.F. van Staden, B. Calenic, J.F. van Staden, J. Legler  
Anal.Lett., 49(3), 335-341, 2016
235. Pattern recognition of adipokines in whole blood samples using stochastic sensing  
L.A. Gugoasa, R.I. Stefan-van Staden, O.C. Rusu  
Microsystem Technologies, 22(1), 11-16, 2016



236. Stochastic sensors based on maltodextrins for screening of whole blood for neuron specific enolase, carcinoembryonic antigen and epidermal growth factor receptor  
I.R. Comnea-Stancu, R.I. Stefan-van Staden, J.F. van Staden, C. Stanciu-Gavan  
*Microsystem Technologies*, 22(1), 25-29, 2016
237. New stochastic sensors for the assay of biogenic amines in wines  
F. Harja, R.I. Stefan-van Staden, I.R. Comnea-Stancu, C. Cioates Negut, E.M. Ungureanu  
*J Electrochem Soc*, 163(6), B252-B255, 2016.
238. Stochastic sensors designed for assessment of biomarkers specific to obesity  
C Cioates Negut, RI Stefan-van Staden, EM Ungureanu, DI Udeanu  
*J Pharm Biomed Anal*, 128, 280-285, 2016.
239. New Azulene Based Stochastic Microsensor  
GL Arnold, RI Stefan-van Staden, I Moldoveanu-Ionita, EM Ungureanu, LR Popescu-Mandoc  
*J Electrochem Soc*, 163(10), B563-566, 2016
240. Fast Screening of Tissue Samples for Glycogen  
RI Stefan-van Staden, AG Diaconeasa, C Stanciu Gavan  
*J Pharm Biomed Anal*, 135, 16-19, 2017
241. Difference between Adjacent Data Point as a New Method for the Analysis of Ternary Mixtures of Tartrazine, Sunset Yellow and Azorubine Dyes  
R.M. Nejem, M.M. Issa, A.M. Abu Shanab, R.I. Stefan-van Staden, H.Y. Aboul-Enein  
*Current Pharmaceutical Analysis*, 13, 154-161, 2017.
242. Pattern recognition of Cu(II), Pb(II), Hg(II), and Cd(II) in waste waters  
LR Mandoc (Popescu), I Moldoveanu, RI Stefan-van Staden, EM Ungureanu  
*Microsystem Technology*, 23,1141-1145, 2017.
243. Molecular screening of blood samples for the simultaneous detection of CEA, HER-1, NSE, CYFRA 21-1 using stochastic sensors  
RI Stefan-van Staden, IR Comnea-Stancu, CC Surdu-Bob  
*J Electrochem Soc.*, 164(6), B267-B273, 2017
244. Multimode microsensors based on Ag-TiO<sub>2</sub>-graphene materials used for the molecular recognition of carcinoembryonic antigen in whole blood samples  
L.A. Gugoasa, A.J.M. Al'Ogaidi, R.I. Stefan-van Staden, A. El-Khatib, M.C. Rosu, S. Pruneanu  
*RSC Advances*, 7, 28419 - 28426, 2017
245. Advanced methods for analysis of testosterone  
L.A. Gugoasa, R.I. Stefan-van Staden  
*Current Medicinal Chemistry*, 000, 000, 2017
246. Molecular recognition of colon cancer biomarkers: P53, KRAS and CEA in whole blood samples  
LA Gugoasa, RI Stefan-van Staden, AJM Al'Ogaidi, C Stanciu-Gavan  
*J Electrochem Soc*, 164(9), B443-B447, 2017
247. Phthalocyanine-BODIPY dye: synthesis, characterization, and utilization for pattern recognition of CYFRA 21-1 in whole blood samples  
R.I. Stefan-van Staden, I.R. Comnea-Stancu, H. Yanik, M. Göksel, A. Alexandru, M. Durmuş  
*Anal Bioanal Chem*, 409(26), 6195-6203, 2017
248. Determination of p53 using Graphite Based Amperometric Sensors  
R.I. Stefan-van Staden, A.J.M. AL-Ogaidi, L.A. Gugoasa  
*J Electrochem Soc.*, 164(12), B502-B505, 2017
249. Fast Screening of Whole Blood Samples for Early Detection and Monitoring of Thyroid Diseases  
RI Stefan-van Staden, G Mitrofan  
*RSC Adv.*, 7, 43567-43573, 2017
250. New nanostructured materials detect dopamine in biological fluids  
RI Stefan-van Staden, LR Balahura, A Oprisanu-Vulpe, LA Gugoasa, JF van Staden, EM Ungureanu, C Socaci  
*J Electrochem Soc*, 164(12), B561-B566, 2017
251. Graphene-porphyrin composite synthesis through graphite exfoliation: the electrochemical sensing of catechol  
M Coroş, F Pogăcean, L Măgeruşan, MC Roşu, AS Porav, C Socaci, A Bende, RI Stefan-van Staden, S Pruneanu  
*Sens Actuators B*, 000, 000, 2017
252. Pattern recognition of 8-hydroxy-2'-deoxyguanosine in biological fluids  
RI Stefan-van Staden, LR Balahura, LA Gugoasa, JF van Staden, HY Aboul-Enein, MC Rosu, S Pruneanu  
*Anal. Bioanal. Chem.*, 00, 000, 2017

## 1.2. Books and Chapters in Books

1. *"Quality and Reliability in Analytical Chemistry"*  
H.Y. Aboul-Enein, R.I. Stefan and G.E. Baiulescu  
CRC Press, Boca Raton, Florida, USA, 28 September 2000.
2. *"Electrochemical Sensors in Bioanalysis"*  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
Marcel Dekker Inc., New York, USA, 2001.
3. *"Laboratory Auditing for Quality and Regulatory Compliance"*  
D.C. Springer, R.I. Stefan and J.F. van Staden  
Taylor and Francis, New York, USA, 2005.
4. *"Recent developments of chemiluminescence sensors"* (Chapter 20)  
X.R. Zhang, A.M. Garcia-Campana, W.R.G. Baeyens, R.I. Stefan,  
H.Y. Aboul-Enein and J.F. van Staden  
in CHEMILUMINESCENCE IN ANALYTICAL CHEMISTRY.  
A.M. Garcia-Campana and W.R.G. Baeyens (Editors)  
Marcel Dekker, Inc., New York. USA, 2001.
5. *"Sequential Injection Analysis in HPLC"* (Chapter) in  
ENCYCLOPEDIA OF CHROMATOGRAPHY  
R.I. Stefan, H.Y. Aboul-Enein and J.F. van Staden  
Jack Cazes (Editor)  
Marcel Dekker, Inc., New York. USA, 2001.
6. *"Enantioselective Electrochemical Sensors"* (Chapter) in  
SENSORS UPDATE, Volume 10  
R.I. Stefan, H.Y. Aboul-Enein and J.F. van Staden  
H. Baltes, G.K. Fedder, G. Korvink (Editors)  
Wiley-VCH, Weinheim, Germany, 2001.
7. *"Biosensors Technology"* (Chapter 21) in  
EWEING'S ANALYTICAL INSTRUMENTATION HANDBOOK  
R.I. Stefan, H.Y. Aboul-Enein and J.F. van Staden  
Jack Cazes (Editor)  
Marcel Dekker, Inc., New York. USA, 2004.
8. *"Enantioselective Biosensors"*  
(Chapter 13) in  
CHIRAL SEPARATION TECHNIQUES. A PRACTICAL APPROACH.  
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein  
G. Subramanian (Editor)  
Wiley-VCH, Weinheim, Germany, 2006.
9. *"Enantioselective, Potentiometric Membrane Electrodes. Design, mechanism of potential development and applications for pharmaceutical and biomedical analysis"* (Chapter 3) in  
ELECTROCHEMICAL SENSOR ANALYSIS  
R.I. Stefan-van Staden  
S. Alegret, A. Merkoci (Editors)  
Elsevier, 2007.
10. *"Enantioanalysis of S-Captopril using an enantioselective, potentiometric membrane electrode"* (Procedure 3) in  
ELECTROCHEMICAL SENSOR ANALYSIS  
R.I. Stefan-van Staden, J.F. van Staden and H.Y. Aboul-Enein  
S. Alegret, A. Merkoci (Eds)  
Elsevier, Amsterdam, The Netherlands, (ISBN: 978-0-444-53053) 2007.

11. *"Electrochemical biosensors based on screen-printed electrodes. Applications for environmental and food analysis"* (Chapter) in **RECENT ADVANCES IN ANALYTICAL ELECTROCHEMISTRY**  
M. Tudorache, C. Bala and R.I. Stefan  
K.I. Ozoemena (Editor)  
Research Signpost, (978-81-7895-274-1) 2007.
12. *"Mechanism of potential development for potentiometric sensors, based on modeling of interaction between electrochemically active compounds from the membrane and analyte"* (Chapter 4) in **CHEMICAL SENSORS: SIMULATION AND MODELING, Volume 5: Electrochemical sensors**  
R.I. Stefan-van Staden  
G. Korotcenkov (Editor)  
In Sensors Technology Series (Joe Watson, Ed.)  
Momentum Press, LLC, New York (ISBN-13: 987-1-60650-596-0) 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 Makhlof (Editors)  
Springer International Publishing Switzerland, 2015. (ISBN: 978-3-319-15207-3)

### 1.3 Patents

1. Stochastic sensors for the determination of ascorbic acid and procedure for their development  
Raluca-Ioana van Staden, Eugenia Lenuta Fagadar-Cosma  
Nr 123101/October 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. Participations at Conferences

Invited papers: over 20  
 Oral presentations: over 150  
 Poster presentations: over 300

Session Chair:

- KAC'2001, 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 IMCS'2010. 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.
- 226<sup>th</sup> Meeting of ECS, Cancun, Mexico, October 2014.
- 227<sup>th</sup> Meeting of ECS, Chicago, USA, May 2015.
- 228<sup>th</sup> Meeting of ECS, Phoenix, USA, October 2015.
- 229<sup>th</sup> Meeting of ECS, San Diego, USA, May-June 2016

FROM WHICH A SELECTION IS PRESENTED:

### 2.1. Invited Lectures

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  
 Pittcon 2000, New Orleans, LA, USA, 12-17 March 2000. (Keynote lecture)
3. *Enantioselective sensors in pharmaceutical analysis*  
 R.I. Stefan  
 First International Conference on Analytical Chemistry - SCAR 2000, Brasov, Romania (Opening plenary lecture) 21-23 September 2000.
4. *Electrochemical sensors and kinetics in analytical chemistry*  
 R.I. Stefan, J.F. van Staden  
 KAC'2001, 7<sup>th</sup> International Symposium on Kinetics in Analytical Chemistry, Bucharest, Romania. 21-23 September 2001. (Keynote lecture)
5. *New horizons in sequential injection kinetic analysis*  
 J.F. van Staden, R.I. Stefan  
 KAC'2001. 7<sup>th</sup> International Symposium on Kinetics in Analytical Chemistry. Bucharest. Romania. 26 - 29 September 2001. (Plenary lecture)
6. *Chiral recognition using potentiometric, enantioselective membrane electrodes*  
 R.I. Stefan  
 IMCS'2002. 9<sup>th</sup> International Meeting on Chemical Sensors. Boston, USA. 7-10 July 2002 (Plenary lecture)
7. *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)
8. *Multicomponent analysis using electrochemical sensors in flow systems.*  
 R.I. Stefan, J.F. van Staden  
 ICFIA'2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003. (Plenary lecture)
9. Chemical speciation by sequential injection analysis (SIA) with spectrophotometric detection  
 J.F. van Staden and R.I. Stefan  
 ICFIA'2003. 12<sup>th</sup> International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003. (Plenary lecture)
10. 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
11. 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)
12. Early detection of cancer - a chance for life  
**R.I. Stefan-van Staden**  
 Chronic Diseases. Bucharest, Romania. 22-23 September 2010 (Plenary lecture)
13. Multimode sensors for pharmaceutical analysis  
**R.I. Stefan-van Staden**  
 1st World Drug Discovery online Conference, Huston, TX, USA, October 20-22, 2011 (Keynote lecture)
14. New electrochemical sensors for biomedical investigations  
**R.I. Stefan-van Staden**  
 220th ECS Meeting & Electrochemical Energy Summit, Boston, MA, USA, October 9-14, 2011 (Keynote lecture)
15. Stochastic dot microsensors for the assay of dopamine in pharmaceutical samples and biological fluids  
**R.I. Stefan-van Staden**  
 2nd World Drug Discovery online Conference, Huston, TX, USA, October 16-18, 2012 (Keynote lecture)
16. 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)
17. Stochastic microsensors based on nanostructured materials used in the screening of whole blood for Hepatitis B  
**R.I. Stefan-van Staden, Iuliana Moldoveanu**  
 224th ECS Meeting & Electrochemical Energy Summit, San Francisco, CA, USA, October 26-November 1, 2013 (Keynote lecture)
18. 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)
19. 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, "IC-ANMBES 2014", Brasov, Romania, June 13-15, 2014 (Plenary lecture)
20. Novel stochastic sensor for simultaneous assay of neurotransmitters  
**R.I. Stefan-van Staden, I. Moldoveanu, J.F. van Staden**  
 French-Romanian Meeting-FRM, Brasov, Romania, June 15, 2014 (Invited lecture)
21. 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 PROGRESSE ÎN STIINIA COMPUSILOR ORGANICI SI MACROMOLECULARI, Iasi, Romania, September 24-26, 2015 (Keynote lecture)
22. 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)
23. A new approach in biomedical analysis  
**R.I. van Staden.**  
 International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences "IC-ANMBES 2016", Brasov, Romania, 29 June- 1 July 2016 (Key note presentation)
24. 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)
25. Stochastic sensors as screening tools for biomedical analysis  
**R.I. Stefan-van Staden**  
 ETCMOS 2017, Warsaw, Poland, May 28-30, 2017 (Keynote lecture)
26. Molecular Diagnosis – a Chance for Life  
**Raluca-Ioana Stefan-van Staden**  
 41<sup>st</sup> ARA Congres, August 1-5, 2017, Sinaia, Romania (Keynote lecture)
27. SCREENING-UL LA NIVEL MOLECULAR – O SANSA LA VIATA!  
**R.I. Stefan-van Staden**  
 Zilele Academice Iesene, Iasi, Romania, 5-6 Octombrie 2017, (Opening Plenary Lecture)

## 2.2. Oral Presentations

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 XXIIIrd 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. Makhafola, 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  
ICFIA2001. 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  
ICFIA2001. 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. vanStaden 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. Bokretsjon 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. Rat'ko 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 Aboul-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. Aboul-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 IMCS'2012. 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**  
 RO'ICAC 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.

### 2.3. Posters

1. *Mexiletine Selective Membrane Electrode*  
**R.I. Stefan**, M.S. Ionescu  
 The XIII<sup>th</sup> 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 XIII<sup>th</sup> 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 XIII<sup>th</sup> National Conference on Analytical Chemistry, Craiova, Romania, 23-25 May 1996.
5. *Moclobemide 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 XIV<sup>th</sup> 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 XIV<sup>th</sup> 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 XIV<sup>th</sup> 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<sup>-</sup>-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<sup>-</sup>-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.  
Pittcon'2000. 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. vanStaden 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. Makhafola, 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. Makhafola, 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  
IMA'2001. 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  
IMA'2001. 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  
IMA'2001. 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. Tsanwani  
IMA'2001. 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  
IMA'2001. 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  
ICFIA'2001. 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. Tsanwani  
ICFIA'2001. 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. Tsanwani  
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. SA 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. SA 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 pipercolic 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  $\nabla$ - and  $\exists$ -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/amperometric 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. Bokretson, **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. Bokretson, **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. Bokretson, **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. Bokretson**, R.I. Stefan-van Staden  
PITTCON'2007, 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. Bokretson  
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. *Porphyrins 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.

## 3.1. Former supervisor and co-supervisor of students

Name of the student	Degree/Title of the thesis/Date of graduation	Supervisor	Co-supervisor	Duration of studies (years)
AAlecu	BSc/Utilization of ion-selective, membrane electrodes in pharmaceutical analysis/1995	RI Stefan	GE Baiulescu	2
FD Munteanu	BSc/Lauryl sulfate as new ligand in the design of ion-selective, membrane electrodes/1996	RI Stefan	GE Baiulescu	2
C Radoi	BSc/Determination of Vitamin C in fruits using HPLC/1996	RI Stefan	-	2
G Mangiurea	BSc/Determination of antiarrhythmic drugs using ion-selective membrane electrodes/1997	RI Stefan	-	2
J Mangiurea	BSc/In vitro dissolution tests of pharmaceutical products using ion-selective membrane electrodes/1997	RI Stefan	-	2
M Diaconu	BSc/Determination of antidepressive drugs using ion-selective, membrane electrodes/1997	RI Stefan	-	2
AAlecu	MSc/Ion-selective membrane electrodes: membrane potential development/1996	RI Stefan	GE Baiulescu	1
K Naidoo	MSc/Electrochemical behaviour of boron-doped diamond electrodes/2001	RI Stefan	JF van Staden	2/Distinction
MG Mashamba	MSc/Process potentiometric sequential injection titrations/2002	JF van Staden	RI Stefan	2
RG Bokresion	MSc/On-line process control in pharmaceutical industry/2003	RI Stefan	JF van Staden	1/Distinction
SG Bairu	MSc/Diamond paste based electrodes for inorganic analysis/2003	RI Stefan	JF van Staden	1/Distinction
ZO Tesfaldet	MSc/Sequential injection analysis of cations in pharmaceutical products/2005	JF van Staden	RI Stefan	2/Distinction
TR Mashile	MSc/Enantioanalysis of pharmaceutical compounds/2006	RI Stefan	-	1/Distinction
L Holo	MSc/Enantioselective, potentiometric membrane electrodes for enantioanalysis of amino acids of clinical and pharmaceutical importance/2006	RI Stefan	-	1/Distinction
LA Gugoasa	MSc/Biosensors based on DNA for the assay of neurotransmitters/2012	A Ciucu	RI van Staden	2
RM Nejem	PhD/ Enantioselective sensors and biosensors for clinical analysis/2004	RI Stefan	-	3/Exceptional
I Moldoveanu	PhD/Screening systems for early detection of cancer and hepatitis/2015	RI van Staden	-	3/Exceptional
LA Gugoasa	PhD/Multimode screening systems for obesity/2015	RI van Staden	-	3/Exceptional
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 van Staden	-	2



## 3.2. Supervisor of students

Numele studentului	Titlul tezei	Data inceperii studiilor
Ionela Raluca Comnea	PhD/Screening systems for early detection of lung cancer	October 2013
Amalia Gabriela Diaconeasa	PhD/Detection of specific biomarkers for ageing related illnesses	October 2013
Grigorina Mitrofan	PhD/Investigation of thyroid function and its associated pathologies using stochastic sensing	October 2014
Ahmed Jassim Muklive Al-Ogaidi	PhD/Fast detection of colon cancer biomarkers	October 2014
Ruxandra Ilie	PhD/Detection of biomarkers specific to gastric cancer	October 2016
Ioana Popa	PhD/Detection of biomarkers associated to early onset of diabetes	October 2016
Mariana Mincu	PhD/Stochastic sensors for environmental monitoring	October 2017

## 4. Membership in national and international bodies

- Electrochemical Society/USA – full member, Sensor Division - member of the Executive Committee and Member-at-Large.
- DAC of EUCHEMs – full member, Representative of Romanian Society of Chemistry.
- Romanian Society of Analytical Chemistry - past full member
- The South African Chemical Institute – full member
- American Chemical Society – full member, Chair of the Romanian International Chapter of ACS
- International Society of Electrochemistry – full member
- International Society of Bioelectrochemistry – full member
- Romanian Society of Chemistry – full member
- The Israeli Metrological Society – full member
- IUPAC – fellow.
- Secretary, Commission V.1, General Aspects on Analytical Chemistry, IUPAC 1999-2001.
- Phoenix – Romanian Association of University Chemists – founder member.

## Role in Scientific Committees:

- Scientific Organizing Committee of The XIII<sup>th</sup> National Conference on Analytical Chemistry, Craiova, Romania, 1996.
- Scientific Organizing Committee of Chemometrics Workshop, Timisoara, Romania, 1997.
- Scientific Organizing Committee of The XIV<sup>th</sup> National Conference on Analytical Chemistry, Piatra Neamt, Romania, 1998.
- Co-secretary, 7<sup>th</sup> International Conference on Kinetics in Analytical Chemistry, Bucharest, Romania, 2001.
- Co-secretary, ICFIA'2003, Merida, Venezuela, 2003.
- Member of the Technical Program Committee of the 10<sup>th</sup> International Meeting on Chemical Sensors, July 11-14, 2004. Tsukuba, Japan.
- Chair and member of the Scientific Committee – SENSOR DEVICES 2010, Venetia, Italy, July 2010; SENSOR DEVICES 2011, Nice, France, August 2011; SENSOR DEVICES 2012, Roma, Italy, August 2012; SENSOR DEVICES 2013, Barcelona, Spain; SENSOR DEVICES 2014; SENSOR DEVICES 2015.
- Chairman, 1<sup>st</sup> International Conference on Analytical Chemistry, RO-ICAC'2012, 18-21 September, 2012, Targoviste, Romania.
- Chairman, 2<sup>nd</sup> International Conference on Analytical Chemistry, RO-ICAC'2014, 17-21 September, 2014, Targoviste, Romania.
- Chairman, 3<sup>rd</sup> International Conference on Analytical Chemistry, RO-ICAC'2016, June, 2016, Timisoara, Romania.
- Chairman, RO'ICAC 2016, 3<sup>rd</sup> International Conference on Analytical Chemistry, Iasi, Romania, 2016

## 5. Member of editorial boards

- Serves since 2000 on the Editorial Board of "Preparative Biochemistry & Biotechnology" (Taylor and Francis)
- Serves since 2003 on the Editorial Board of "Sensor Letters" (American Scientific Publishers)
- Serves since 2005 on the Editorial Board of "Sensors & Transducers Journal"
- Senior Member of the International Advisory Board of "Encyclopedia of Sensors" (American Scientific Publishers, 2004)

- Serves since 2010 on the Editorial Board of Global Journal of Analytical Chemistry, Simplex Academic Publisher
- Serves since 2012 on the Editorial Board of "International Journal on Advances in Systems and Measurements" (IARIA Journals)
- Serves since 2012 on the Editorial Board of "Journal of Membrane and Separation Technology" (Life Sciences, Global)

#### 6. Visits at the universities as guest professor or/and researcher

- University "Tor Vergata", Rome (Italy), 1996.
- Universitatea Yamagata (Japonia), 2015 – Press conference together with the President of the University.
- University of Antwerpen (Belgium), 1998.
- University of Vienna (Austria), 1999, 2000.
- University of Bucharest (Romania), 2000, 2001, 2002, 2004, 2005.

#### 7. Management and administrative duties

- Secretary of Comission V.1 General Aspects of Analytical Chemistry, IUPAC, 1998-2001.
- Course coordinator CMY 200 – 2002, 2005.
- Organizer in cooperation with SwissLab of two seminars: SPR & Biosensors seminar (26/03/2003, 11/2004) and Corrosion and Battery seminar (27/03/2003).
- Member of the Research Committee and of the Social Committee of the Department of Chemistry.
- Organizer of the Research Day of Department of Chemistry, 2005 and 2006
- **Head of Laboratory of Electrochemistry and PATLAB Bucharest, National Institute of Electrochemistry and Condensed Matter, Timisoara.**
- **Romanian representative in DAC of EUCHEMs**
- **Sensor Division of Electrochemical Society/USA, member in Executive Committee and Member-at-Large**
- **Scientific Director of National Institute of Research for Electrochemistry and Condensed Matter 03.2014-07.2015.**

#### 8. Refereing duties

**Regular reviewer for publications submitted to the following international journals, such as:** 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.

#### External examiner for Ph D thesis for:

- University "Politehnica", Bucharest, Romania
- University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania
- University of Pretoria, South Africa
- University of Rhodes, South Africa
- Technical University Ghorghe Asachi, Iasi, Romania

#### 9. Awards

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 – **Second Prize on the competition Gala of Prizes in Education, Section: Research, organized by Foundation "Dinu Patriciu", Bucharest, Romania, 2009.**

2010 – **Diploma of Excellence for the activity of invention from ANCS (National Authority of Scientific Research), Romania,**

- 8 June 2010, Bucharest, Romania.
- 2010 – **Diploma of Excellence for the representation with success of Romania to Salon International des Inventions de Geneve 2010**, from ANCS (National Authority of Scientific Research), Romania, 8 June 2010, Bucharest, Romania.
- 2010 – **Romanian Oscar for Excellence**, 11 October 2010, Bucharest, Romania.
- 2010 – **VIP Prize for Science and Life**, 1 September 2010, Bucharest, Romania.
- 2010 – **Honorary Citizen of Campulung-Muscel**
- 2010 – **Honorary Citizen of Arges county**
- 2010 – **Prize of National TV, Nationala Internationala for the invention activity**
- 2010 – **Prize: 10 for Romania for Research**
- 2010 – **Romanian Oscar for Excellence in Research**
- 2010 – **The prize of Argesul Newspaper “Omul Anului”**
- 2010 – **Gala Successful Women, Prize for Excellence in Research and Medical fields**
- 2010 – **Women of the Year, Section Science, awarded by Advantage Magazine**
- 2011 – **Prize “Omul Anului”,** from organization Pro Democratia, Demos TN, Targu Neamt, December, 2011.
- 2012 – **Gogu Constantinescu Order and Medal, Degree Comandor, Cluj-Napoca**
- 2012 – **Best Poster Award for a poster on stochastic sensor used for the screening of hepatitis B, 1<sup>st</sup> International Conference on Analytical Chemistry, Targoviste, September 2012**
- 2012 – **Henri Coanda Gold Medal, National Conference on Research and Inovation, Bucharest, Romania**
- 2013 – **Prize “She Bussiness” for excellence in research for developing a screening method for early detection of breast cancer**
- 2008 – **Gold Medal and Diploma of Excellence for a patent on stochastic sensors at the 2<sup>nd</sup> International Congress of the Researchers and Inventors from Romania, 11-12 December 2008, Bucharest, Romania.**
- 2009 – **Pro Invent Medal and Diploma of Excellence, and Diploma of Excellence of the Society of Inventors from Romania, for a patent on stochastic sensors at the Pro Invent, 24-27 March 2009, Cluj-Napoca, Romania.**
- 2009 – **Gold Medal, and Arca Prize of the Society of Inventors from Croatia, for a patent on stochastic sensors at the 37<sup>eme</sup> Salon International des Inventions des Techniques et Produit Nouveaux, 1-5 April 2009, Geneve, Switzerland.**
- 2009 – **Gold Medal, and the Prize of the Polish federation of Engineering Association - NOT, for a patent on stochastic sensors at the International Warsaw Invention Show, IWIS 2009, 1-3 June 2009, Warsaw, Poland.**
- 2009 – **Gold Medal, and Prize of Technopol Moscow, for a patent on a stochastic microsensor for early detection of cancer, at IX Moscow International Salon of Innovations and Investments, 26-29 August 2009, Moscow, Russian Federation.**
- 2009 – **Silver Plate, for a patent on a stochastic microsensor for early detection of cancer, at ARCA, 15-19 September 2009, Zagreb, Croatia.**
- 2009 - **Gold Medal, and the Prize EXCELLENCE RECOGNITION AWARD of the Society of Inventors from Croatia, for a patent on a stochastic microsensor for early detection of cancer, at INVENTIKA, 28-31 October 2009, Bucharest, Romania.**
- 2009 - **Gold Medal with merit, and the Prize of AGEPI, for a patent on a stochastic microsensor for early detection of cancer, at EUREKA 2009, 19-21 November 2009, Brussels, Belgium.**
- 2010 - **Gold Medal with special mention and Diploma of excellence, for a patent on a stochastic microsensor for early detection of cancer, at PRO INVENT 2010, 16-19 March 2010, Cluj-Napoca, Romania.**
- 2010 - **Gold Medal with the congratulations of the jury, WIPO award for the best woman inventor, and AGEPI medal, for a patent on a stochastic microsensor for early detection of cancer, at 38<sup>e</sup> Salon International des Inventions de Geneve, 21-25 April 2010, Geneve, Switzerland.**
- 2010 – **2<sup>nd</sup> Prize, Category “Inventions”, for a patent on a stochastic microsensor for early detection of cancer, at Bright fair 2010, World Forum of Researchers and Inventors, 8-10 October 2010, Bucharest, Romania.**
- 2010 – **Prize of the Society of Inventors from Romania, and the Medal of the Society of Inventors for a patent on a stochastic microsensor for early detection of cancer, at The First Fair of Inventions, 23-26 November 2010, Jassy, Romania.**
- 2011 – **Prize of the Technical University of Cluj-Napoca, and Order Leonardo da Vinci for a patent on enantioselective sensors, at PRO INVENT 2011, March 2011, Cluj-Napoca, Romania.**
- 2011 – **Gold medal and Prize of the International Society of Inventors, for a patent on enantioselective sensors, at 39<sup>e</sup> Salon International des Inventions de Geneve, April 2011, Geneve, Switzerland.**
- 2012 – **Gold medal of the Ukraina Society of Inventors for a patent on enantioselective sensors, at National Conference on Research and Inovation, May 2012, Bucharest, Romania.**
- 2012 – **Gold medal for a patent on enantioselective sensors, at IFIA, November 2012, Kuwait.**
- 2012 – **Gold medal for a patent on early detection of cancer, at IFIA, November 2012, Kuwait.**

## 10. Professional service performed

- **Expert referee and panel member** for National Council of Scientific Research in Higher Education and the National Authority for Research, Ministry of Science and Education, Romania, National Research Foundation South Africa, Bulgarian National Research Found, Czech Republic – research projects.
- de Beers Research Center, Johannesburg, February 2001 - **Invited lecture**.
- SACI, **Raikes Medal Lecture**, February 2003.
- **Invited lectures** to different universities, e.g., University of Vienna, Wits University, University of Bucharest, University of Antwerpen, University Babes Bolyai, Cluj, UC at Berkeley.
- **Invited lectures** for professional societies: American Chemical Society – San Francisco Section; Electrochemical Society – San Francisco Section.
- **Invited short courses** by ECS at San Francisco (2011, 2 short courses on sensors for clinical and pharmaceutical analysis), and ECS Meeting Seattle (2012, short course on enantioselective clinical analysis), by American Chemical Society at San Francisco (2011, 2 short courses on sensors for clinical and pharmaceutical analysis), by Division of Analytical Chemistry of EUCHEMs, at EUROANALYSIS (2011, one short course on quality and reliability in analytical chemistry) Belgrad, Serbia, and by ECS Sensor Division (2016, nanosensors for clinical analysis).
- **Judge** in the national photographic competition: SA Science Lens, South Africa.
- **Judge** in the national competition: Gala of the Prizes for Education, Foundation "Dinu Patriciu", 2011, Section Research, Romania
- **Judge** – PRO INVENT (International Invention Salon), Romania, March 2013.
- **Judge** – for poster competition for Sensors Division at ECS meetings in USA, and for the presentations at SmaSys 2015 conference, Japan.
- Invited lecture at TEDx Bucharest, 15 October 2010
- Invited lecture at TEDx Eroilor, Cluj-Napoca, December, 2011
- Invited for **live interviews** by SABC Africa, programme 180 degrees and by Radio fm 95.9mHz - Johannesburg, 26 July 2004, South Africa.
- Invited for interview by Radio Romania Actualitati, Radio Romania Cultural, RadioNet3 Radio Romania International, TVR, B1, PROTV, PROTV international, Realitatea TV, Antena, TVRM, Trinitas, Money Channel, RomaniaTV.
- Invited piano recitals: Bucharest, Timisoara, Campulung-Muscel, Piatra Neamt, San Francisco (USA), Linz (Austria).
- Her musical compositions' works were presented by Radio Romania Cultural – national radio station.

## 11. Research Projects

Awarded to Raluca as project director/manager:

- *"Electrochemical sensors for bioanalysis"*, grant awarded by National Research Foundation from South Africa, 2001-2006, 200000Euro.

- PNII, Partnership, "Sensors and microsensors based on porphyrins for the assay of pharmaceutical compounds, of the compounds of clinical relevance and of food", CNMP, October 2007 – September 2010, 2000000lei.
- PNII, Ideas, "Stochastic microsensors as new tools for the assay of substances of biological importance", UEFISCDI, October 2011 – September 2014, 1500000lei.
- ERC-like project, "Stochastic approach for early diagnosis of cancer", UEFISCDI, July 2012 – June 2014, 1500000lei.
- Preproject responsible, FP7, DENAMIC, "Developmental neurotoxicity assessment of mixtures in children", CE, 70000Euro. Responsible with development of tools based on stochastic sensing for the assay of 7 (and more) neurotransmitters and biomarkers.
- Bilateral Romania-Cyprus, "Enantioanalysis of compounds of clinical importance using microsensors and micellar electrokinetic chromatography", May 2010-April2012 40000lei
- Bilateral Romania-Republica Moldova, "Detection and inhibition of cancer at the molecular level", September 2010-November 2012, ANCS, 32600lei.
- Bilateral Romania-Cyprus, "Early detection of thyroid cancer using stochastic sensing and capillary zone electrophoresis", 2014-2015, ANCS, 60000lei.
- Partnership, PNII, "Multimode sensors for screening tests for colorectal cancer, and for personalized treatment", 2014-2016,UEFISCDI.

## 12. Education activities

### Lectures/practical activities:

1. Faculty of Chemistry, University of Bucharest 1992-1998 – Lectures on separation methods and trace analysis (4<sup>th</sup> year of study, Chemistry section), practical activities for students from 1<sup>st</sup> to 5<sup>th</sup> year of study.
2. Department of Chemistry, University of Pretoria 2000-2006 – Lectures and practical activities for general chemistry, analytical chemistry, 1<sup>st</sup> year sections: chemistry, biochemistry, engineering (classes comprising between 50 and 700 students); Lectures on analytical chemistry, 2<sup>nd</sup> year (Course coordinator for the 2<sup>nd</sup> year of study); Lectures on electrochemical sensors for the 4<sup>th</sup> year of study (Hons class).
3. Promoter for BSc and MSc students – Faculty of Chemistry, University of Bucharest, 1992-1998.
4. Promoter for MSc and PhD students – University of Pretoria 1999-2006.
5. From December 2013, Promoter for PhD students, University Politehnica, Bucharest.

**Publications:** Books for practical activities for students from the 1<sup>st</sup> and 2<sup>nd</sup> year: General chemistry and Analytical chemistry- University of Pretoria Press.

## 13. Artistic activities

Raluca-Ioana Stefan-van Staden started at 5 years old the balley in the House of Cultere in Campulung Muscel and she was on the stage as reciter taking part in the shows organized by her mother (Valeria Mihai Stefan). In 1975, when she was 6 years old, she was admited at the School of Music from Campulung Muscel, at the class of Professor Jeanina Ionescu. When she was 8 years old she wrote her first composition. When she was 10 years old, she represented the school at the Lira de Aur national competition, in Suceava, where she went again in 1981 and 1982. Between 1981 and 1983 she studied the piano with Professor Mirebella Parota. Raluca gave numerous piano recitals since she was 8 years old in Campulung-Muscel and Pitesti. In 1985 she obtained the first prize at the Arges County competition Cantarea Romaniei and the 3rd Prize and bronze medal in the national competition Cantarea Romaniei. Just after her admision in 1987 at the Faculty of Chemistry, University of Bucharest she was selected to participate in the artistic competition of all chemistry faculties from Romania, and she was awarded with a special prize for piano recital. From Jabuary 1988, Raluca was taking pivat lessons with Professor Dr Georgeta Stefanescu Barnea from the National Avademy of Music in Bucharest. In 1989 she obtained the first prize at the Bucuresti city piano competition Cantarea Romaniei and she was selected to participate at the national competition, in Iasi where she obtained the 3rd prize and bronz medal. In 1991 she became a student at the National University of Music in Bucharest, at the Faculty of Musical Education, Composition and Musicology, at the specialisation of Piano and Musical Education, when she studied piano at the class of Professor Dr Georgeta Stefanescu Barnea, and from 1993 at the class of Professor Dr Remus Manoleanu. From 1992, Raluca was enrolling at the composition course with Professor Dr Dan Dediu. Between 1991 and 1997, Raluca gave numerous piano recitals at the National University of Music in Bucharest, Dalles Hall, The School of Music in Campulung, in Timisoara, at CNA Dinu Lipatti Bucuresti, Alfred Alesandrescu Hall, Radio – (September 1993). In 1996 she became a master student at the section of Musical Composition, under the guidance of Professor Dr Dan Dediu, and she was receiving the MSc degree with an Oratorio for solo, choir and orchestra After snails (poetry Ion Barbu). In Pretoria she was giving two invited piano recitals in

1998 (August and November), one being organized by the University of Pretoria, and the other one by the Romanian Embassy in South Africa from which one part was Chamber music with the Romanian violonist Camelia Onea. From 1999, Raluca gave more than 5 recitals in Pretoria and Johannesburg, solo and Chamber music (with the violonist Camelia Onea). In April 1999, Raluca gave together with the Romanian violonist Cristina Anghelescu a series of Chamber Music recitals in South Africa – Pretoria and Johannesburg. In 2011, Raluca was invited with a piano recital in San Francisco, and in 2012 in Linz. Raluca played with Nota Brevis orchestra numerous concertos in Bucharest. Her compositions for piano solo, flute and violine, and voice and piano were recorded for the radio between 1993-1996 and played in concerts organized by the National University of Music in Bucharest. The most important compositions of Raluca are :

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