

Personal Information



Raluca-Ioana Stefan-van Staden

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Date of birth: 16.07.1969 | Nationality: Romanian

Maiden name: Stefan

PROFESSIONAL EXPERIENCE

- 1.03.2007 - present **Professor, Senior Researcher I, Head of Laboratory of Electrochemistry and PATLAB.**
Research, Director and coordinator of national and international projects, manager of the laboratory, mentor for young researchers.
- 01.03.2015 – 01.07.2016 **Scientific director, National Institute of Research for Electrochemistry and Condensed Matter**
Management of research activities.
- 15.12.2013 - present **Professor at University Politehnica of Bucharest, for coordination of PhD students**
Coordination of PhD students
- 1.01.2006- 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 2nd 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, environmental 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.
- 1.01.2001 – 31.12.2005 **Senior Lecturer of Analytical Chemistry and Bioanalysis**
University of Pretoria, Pretoria (South Africa)
Education – lecture at the 1st, 2nd and 4th (Hons) year levels, promoter for MSc and PhD students, external evaluator for PhD thesis. Research – in the fields of pharmaceutical, biomedical analysis, environment, and flow systems.
- 1.02.1998 – 31.12.2000 **Postdoc**
University of Pretoria, Pretoria (South Africa)
Education – lecture at the 2nd and 4th (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 4th year level, practicals at 2nd – 4th year levels, supervisor for BSc and MSc thesis.
 Research – in the fields of clinical and pharmaceutical analysis.

EDUCATION AND TRAINING

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 - University Politehnica of Bucharest**

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	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 more than 10 students which are studying for BSc, 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. I was Scientific Director of the Institute 2014-2015.
- 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 (h=27, 3723 citations, from SCOPUS ; h=25, 3232 citations, from Web of Science, h=34, 5195 citations from Google Scholar)
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
Farmazie, 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 (T₃)
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. Bokretsjon, J.F. van Staden and H.Y. Aboul-Enein
Talanta, 59(5), 883-887, 2003.

72. Determination of L- and D-enantiomers of carnitine using amperometric biosensors
R.I. Stefan, R.G. Bokretsiou, 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. Bokretsiou
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. Bokretsiou, 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. Bokretsiou
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. Bokretsiou, 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. Bokretsiou, 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. Bokretsiou, 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. Bokretsiou, 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 C₇₀ 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-T₃) 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
A.A. Rat'ko, R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Sens.Actuators B, 99(2-3), 539-543, 2004.
99. Simultaneous determination of L-thyroxine (L-T₄), D-thyroxine (D-T₄) and L-triiodothyronine (L-T₃) using a sensors/sequential injection analysis system
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
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U.P.B. Sci. Bull., 83(4), 145-150, 2021
317. Application of a tetraamino cobalt(II) phthalocyanine modified screen printed carbon electrode for the sensitive electrochemical determination of L-dopa in pharmaceutical and biological samples
R State, JF van Staden, C Stefanov, RI Stefan-van Staden
Electroanalysis, 33(7), 1778-1788, 2021
318. Recent trends in supramolecular recognition using electrochemical sensors.
C Cioates Negut, RI Stefan-van Staden
J Electrochem Soc., 168 (6), 067517, 2021
319. Nitrogen, sulfur co-doped graphene as efficient electrode material for L-cysteine detection
C. Varodi, F. Pogăcean, A. Ciorită, O. Pană, B. Cozar, T. Radu, M. Coroș, R.I. Ștefan-van Staden, S. Pruneanu
Chemosensors, 9(6), 146, 2021.
320. Stochastic biosensors based on N and S-doped graphene for the enantioanalysis of aspartic acid in biological samples
RI Stefan-van Staden, DC Gheorghe, RM Ilie-Mihai, L Barbu-Tudoran, SM Pruneanu
RSC Adv., 11, 23301-23309, 2021
321. Subclinical hypothyroidism has no association with insulin resistance indices in adult females: A case-control study
RA Stoica, R Anuceanu, SD Stefan, A Pantea Stoian, C Guja, RI Stefan-van Staden, I Popa-Tudor, C Serafinceanu, C Ionescu-Tirgoviste
Experimental Therapeutics Medicine, 22, 1033, 2021
322. Simultaneous determination of levodopa and dopamine from biological samples using 3D printed stochastic microsensors
C Cioates Negut, Sorin Sebastian Gheorghe, RI Stefan-van Staden, JF van Staden
J Pharm Biomed Anal, 205, 114292, 2021
323. Fast screening method based on disposable stochastic sensor for sensitive detection of heregulin- α in biological samples
RI Stefan-van Staden, SS Gheorghe, C Cioates Negut, M Badulescu
Life, 11, 894, 2021

324. Fast screening method of biological samples based on needle stochastic sensors for early detection of gastric cancer
RM Ilie-Mihai, DC Gheorghe, RI Stefan-van Staden, A Lungu-Moscalu, SM Pruneanu, JF van Staden
Rev de Chimie, 72(4), 22-34, 2021
325. Hydrothermal synthesis of nitrogen, boron co-doped graphene with enhanced electro-catalytic activity for cymoxanil detection
C Varodi, F Pogăcean, M Coros, L Magerusan, RI Stefan van Staden, S Pruneanu
Sensors, 21, 6630, 2021 <https://doi.org/10.3390/s21196630>
326. Mussel Shells - a Valuable Calcium Resource for Pharmaceutical Industry
M Mititelu, G Stanciu, D Drăgănescu, AC Ioniță, SM Neacșu, M Dinu, RI Stefan-van Staden, E Moroșan
Marine Drugs, 20(1), 25, 2022
327. Disposable stochastic sensors obtained using nanolayer deposition of copper, graphene, and copper-graphene composite on silk, for biomedical analysis
C Cioates Negut, RI Stefan-van Staden, M Badulescu, B Bită
Anal Bioanal Chem, 414(5), 1797–1807, 2022
328. Review. Recent trends on the electrochemical sensors used for the determination of tartrazine and Sunset Yellow FCF from food and beverage products
R Georgescu State, JF van Staden, RI Stefan-van Staden
J Electrochem Soc., 169, 017509, 2022
329. Enantioanalysis of aspartic acid using 3D stochastic sensors
IM Bogeia, RI Stefan-van Staden, DC Gheorghe, RM Ilie-Mihai
Anal.Lett., 55(1), 85-92, 2022
330. Stochastic microsensors based on carbon nanotubes decorated with Cu and Au nanoparticles, for molecular recognition of isocitrate dehydrogenases 1 and 2 in biological samples
RI Stefan-van Staden, C Cioates Negut, SS Gheorghe, P Sfirloaga
Nanomaterials, 12(3), 460, 2022
331. 2D Disposable Stochastic Sensors for Molecular Recognition and Quantification of Maspin in Biological Samples
RI Stefan-van Staden, RM Ilie-Mihai, DC Gheorghe, IM Bogeia, M Badulescu
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332. Stochastic Sensors for the Enantioselective Determination of Serine in Blood for the Early Diagnosis of Breast Cancer
OR Musat, RI Stefan-van Staden
Anal. Lett., 55(13), 2124-2131, 2022
333. Stochastic microsensors based on modified graphene for pattern recognition of maspin in biological samples
RI Stefan-van Staden, IM Bogeia, RM Ilie-Mihai, DC Gheorghe, M Coros, SM Pruneanu
Anal Bioanal Chem, 414(12), 3667-3673, 2022
334. Facile detection of naphthalene with a 5,10,15,20-tetrakis(4-methoxyphenyl)-21H,23H-porphine nickel (II)/N-(1-Naphthyl) ethylenediamine dihydrochloride renewable graphene oxide paste electrode
IR Comnea-Stancu, JF van Staden, RI Stefan-van Staden
J Electrochem Soc, 169, 037527, 2022
335. Recent Electrochemical Methods Proposed for the Detection of Hepatitis C Virus. A Minireview
RM Ilie-Mihai, R.I. Stefan-van Staden, J.F. van Staden, H.Y. Aboul-Enein
Revista de Chimie, 73(2), 1-16, 2022
336. Progress in electroanalysis of p53, CEA and CA19-9. A minireview.
RM Ilie-Mihai, RI Stefan-van Staden, JF van Staden
J Electrochem Soc., 169 (3), 037518, 2022
337. Fast screening method for early diagnostic of gastric cancer based on utilization of a chitosan – S-doped graphene - based needle stochastic sensors
RM Ilie-Mihai, DC Gheorghe, RI Stefan-van Staden, A Lungu-Moscalu, JF van Staden
J Pharm Biomed Anal, 214, 114725, 2022
338. Challenges in Biomedical Analysis - From Classical Sensors to Stochastic Sensors
RI Stefan-van Staden
ECS Sensors Plus, 1, 011603, 2022
339. In-House Validated Map of Lymph Node Stations in a Prospective Cohort of Colorectal Cancer: A Tool for a Better Preoperative Staging
P. Simu, I. Jung, L. Baniias, Z.Z. Fulop, T. Bara, I. Simu, S. Andone, RI Stefan-van Staden, C.B. Satala, I. Halmaci, S. Gurzu
J Oncology, Article ID 1788004, 10 pages, 2022
340. Disposable stochastic sensors for fast analysis of ibuprofen, ketoprofen, and flurbiprofen in their topical pharmaceutical formulations
BM Țuchiu, RI Stefan-van Staden, M Bădulescu, JF van Staden
J.Pharm.Biomed.Anal., 215, 114758, 2022.
341. Interleukin-8, CXCL10, CXCL11 and their role in insulin resistance in adult females with subclinical hypothyroidism and prediabetes
RA Stoica, N Drăgana, R Ancuceanu, OI Geicu, C Guja, A Pantea-Stoian, DC Gheorghe, RI Stefan-van Staden, C Serafinceanu, A Costache, C Ionescu-Tîrgoviște
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RI Stefan-van Staden, MI Bogea, RM Ilie-Mihai, DC Gheorghe, HY Aboul-Enein, M Coros, SM Pruneanu
Anal. Bioanal.Chem., 414(22), 6521–6530, 2022
343. Determination of D-serine from whole blood samples using an electrochemical sensor based on zinc (II)-5(4-carboxyphenyl)-10,15,20-tris(4-phenoxyphenyl)porphyrine
OR Musat, RM Ilie-Mihai, RI Stefan-van Staden
Sci Bull UPB, 84(4), 139-148, 2022
344. Determination of p53 from whole blood samples using an electrochemical sensor based on graphene decorated with N and S
IM Bogea, RM Ilie-Mihai, RI Stefan-van Staden
Sci Bull UPB, 84(3), 121-130, 2022
345. Nanographene based electrochemical sensors for ultrasensitive determination of sorbic acid from bread and mayonnaise
RI Stefan-van Staden, AR Niculae, JF van Staden, P Sfirloaga, R State
Anal Bioanal Chem, 414(23), 6813–6824, 2022
346. Mini-Review–Electrochemical sensors used for the determination of some antifungal azoles
BM Tuchi, RI Stefan-van Staden, J (Koos) F van Staden
ECS Sensors Plus, 1(3), 030601
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AR Niculae, RI Stefan-van Staden, JF van Staden, R Georgescu State
Sensors, 22(15), 5851 <https://doi.org/10.3390/s22155851>, 2022
348. Ultrafast screening of whole blood for early prediction of diabetes by fractalkine detection
RI Stefan-van Staden, DC Gheorghe, RA Stoica
Sensors & Diagnostics, 1(5), 977-982, 2022
349. Highly sensitive electrochemical detection of azithromycin with graphene-modified electrode
F Pogăcean, C Varodi, L Măgerușan, RI Stefan-van Staden, S Pruneanu
Sensors, 22(16), 6181, 2022 <https://doi.org/10.3390/s22166181>
350. Carbon Nanopowder Based Stochastic Sensor for Ultrasensitive assay of CA 15-3, CEA and HER2 in whole blood
RI Stefan-van Staden, OR Musat, DC Gheorghe, RM Ilie-Mihai, JKF van Staden
Nanomaterials, 12, 3111, 2022. <https://doi.org/10.3390/>
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CB Satală, I Jung, Z. Kovacs, RI Stefan-van Staden, T Bara, C Molnar, AI Patrichi, S. Gurzu
Scientific Reports, 12, 16241, 2022
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RI Stefan-van Staden, DC Gheorghe, F Pogăcean, S Pruneanu
Chemosensors, 10(10), 380, 2022 <https://doi.org/10.3390/chemosensors10100380>
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RI Stefan-van Staden, OR Musat, DC Gheorghe, RM Ilie-Mihai
Talanta Open, 6, 100151, 2022
354. N-methylfulleropyrrolidine based multimode sensor for determination of butoconazole nitrate
BM Tuchi, RI Stefan-van Staden, JF van Staden, HY Aboul-Enein
ACS Omega, 7(46), 42537–42544, 2022
355. Molecular Recognition and Quantification of MLH1, MSH2, MSH6, PMS2 and KRAS in biological samples
RI Stefan-van Staden, RM Ilie-Mihai, M Coros, SM Pruneanu
ECS Sensors Plus, 1, 031606, 2022
356. Molecular recognition and quantification of HER-3, HER-4 and HRG- α in whole blood and tissue samples using stochastic sensors
DC Gheorghe, Raluca-Ioana Stefan-van Staden
Micromachine, 13(10), 1749, 2022. <https://doi.org/10.3390/mi13101749>
357. An Approach to the Simultaneous Determination of a Panel of Five Biomarkers for the Early Detection of Brain Cancer Using the Stochastic Method
C Cioates Negut, RI Stefan-van Staden, P Sfirloaga
Chemistry, 4(4), 1382–1394, 2022. <https://doi.org/10.3390/chemistry4040090>
358. Mini-review: Electrochemical sensors used for the determination of water- and fat-soluble vitamins: B, D, K
DC Gheorghe, RI Stefan-van Staden, JF van Staden
Crit. Rev. Anal. Chem., 00, 000, 2023
359. Recent trends in ibuprofen and ketoprofen electrochemical quantification – a review
BM Tuchi, RI Stefan-van Staden, JF van Staden
Crit Rev Anal Chem, 00, 000, 2023

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

1.2. 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; CRC Press, 2019.**
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 Aliofkhazraei, Abdel Salam Hamdy Makhlouf (Editors)
Springer International Publishing Switzerland, 2015. (ISBN: 978-3-319-15207-3)
 14. New Trends in Enantioanalysis of Pharmaceutical Compounds using Electrochemical Sensors (Chapter) in
Recent Advances in Analytical Techniques Vol. 2. Novel Developments in Pharmaceutical and Biomedical Analysis
RI Stefan-van Staden
Atta-ur-Rahman, Sibel A. Ozkan, Rida Ahmed(Eds.)
Bentham, 2018 (ISSN: 2542-5617) (Print)
 15. Single-walled carbon nanotubes based sensors for biomedical analysis (Chapter 7) in
Advances in Chemistry Research, Volume 74
C. Cioates Negut and R.-I. Stefan-van Staden
James C. Taylor (Ed.)
Nova, Science and Technology, 2022 (ISBN: 979-8-88697-212-2)

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

1.3 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, OSIM, Romania
2. STOC- μ SENS-CMD
Raluca-Ioana van Staden, Jacobus Frederick van Staden
Nr 125050/Decembrie 2010, OSIM, Romania
3. DOT senzor enantioselectiv si procedeu de realizare a acestuia
Raluca-Ioana van Staden, Jacobus Frederick van Staden
Nr 126158/Iulie 2016, OSIM, Romania
4. Disposable multimode minicell and procedure for its design
Raluca-Ioana van Staden, Jacobus Frederick van Staden
131898/August 2021, OSIM/Romania

2. Participations at Conferences

Invited papers:	over 40
Oral presentations:	over 150
Poster presentations:	over 300

Session Chair for more than 20 sessions from which:

- KAC'2001, 7th International Symposium on Kinetics in Analytical Chemistry, Bucharest, Romania. 21-23 September 2001.
- 37th SACI Convention. Chemistry for a better life. Pretoria, South Africa. 4 - 9 July 2004.
- 13 IMCS'2010. 13th International Meeting on Chemical Sensors. Perth, Australia. 11-14 July 2010.
- 222nd Meeting of ECS, PRIME 2012 PACIFIC RIM MEETING ON ELECTROCHEMICAL AND SOLID-STATE SCIENCE, Honolulu, Hawaii, USA. 7 - 12 October 2012.
- 223rd Meeting of ECS, Toronto, Canada, May 2013.
- 225th Meeting of ECS, Orlando, USA, May 2014.
- 226th Meeting of ECS, Cancun, Mexic, October 2014.
- 227th Meeting of ECS, Chicago, USA, May 2015.
- 228th Meeting of ECS, Phoenix, USA, October 2015.
- 229th Meeting of ECS, San Diego, USA, May-June 2016
- 234th Meeting of ECS, Cancun, Mexic, October 2018

Lately I received numerous invitations as keynote and plenary speaker at Oncology, Analytical Chemistry, and Food Materials conferences.

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, 7th 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, 7th 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, 9th 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 Deutscher 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, 12th 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, 12th 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**
 3rd Black Basin Conference on Analytical Chemistry, 12th-14th of September 2005, Constantza, Romania
11. *Stochastic Microsensors for Molecular Diagnosis*
R.I. Stefan-van Staden
 13 IMCS 2010, 13th 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
8th 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 3rd 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
AXXV-a sesiune de comunicări științifice PROGRESSE ÎN STIINȚA 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
41st ARA Congress, 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)
28. STOCμSENS-MD – A TEST FOR LIFE
R.I. Stefan-van Staden
10th Synevo Clinica Research Symposium, Bucharest, Romania November 9, 2018 (Plenary lecture)
29. Supramolecular Assemblies Recognized Gastric Cancer Biomarkers in Biological Fluids
R.I. Stefan-van Staden
235th Meeting of ECS, Dallas, USA, May-June 2019 (Invited lecture)
30. Stochastic sensors as screening tools for fast and early detection of illnesses
R.I. Stefan-van Staden
235th Meeting of ECS, Dallas, USA, May-June 2019 (keynote lecture)
31. New Trends in Molecular Recognition of Substances of Biological Importance
R.I. Stefan-van Staden
EUROANALYSIS, Istanbul, Turkey, September, 2019 (Invited lecture)
32. New Trends in Molecular Recognition of Substances of Biological Importance
R.I. Stefan-van Staden
43rd ARA Congress, Los Angeles, USA, November 15-17, 2019 (plenary lecture)
33. Noi metode si biomarkeri pentru diagnosticarea precoce a cancerului gastric
R.I. Stefan-van Staden
Institutul Petru Poni, Iasi, 11 noiembrie 2019, Conferinta invitata.
34. Fast screening tests for early detection of gastric cancer
R.I. Stefan-van Staden, RM Ilie-Mihai, DC Gheorghe
ECS Meeting Prime 2020, Honolulu, 4-9 October 2020 (invited lecture)

35. Quality and Reliability in Analytical Chemistry
Raluca-Ioana Stefan-van Staden
 Virtual EURACHEM Workshop, Bucharest, July 14-15, 2020 (plenary lecture)
36. Fast Screening Tests for Early Diagnosis of Gastric Cancer, Based on Molecular Recognition and Assay of Maspin in Biological Samples
Raluca-Ioana Stefan-van Staden, Ruxandra Maria Ilie-Mihai, Damaris Cristina Gheorghe, Iuliana Mihaela Bogea
 240th ECS Meeting, Volume MA2021-02, M02: Biosensors and Nanoscale Measurements: A Symposium in Honor of Professors Nongjian Tao and Stuart Lindsay, 10-14 October, 2021, Orlando, FL, USA (digital event) (invited lecture)
37. New challenges in early diagnosis of gastric cancer
RI Stefan-van Staden, DC Gheorghe, AA Bratei, RM Ilie-Mihai
 241st ECS Meeting, May 29 – June 2, 2022, Vancouver, BC, Canada (keynote lecture)
38. Innovative methods for food analysis
RI Stefan-van Staden
 5th International Conference Food Science & Nutrition, Dubai, 4-5 September 2023

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 Xlth 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 XXIIInd 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
 10th 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
 7th 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
 8th International Conference on Flow Analysis, Warsaw, Poland, 25-29 June 2000.
18. *Bienzymatic sensor for proteins assay in milk*
R.I. Stefan, M. Makhafofa, J.F. van Staden
 8th 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, 13th 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
 ICFAIA2001. 11th 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
 ICFAIA2001. 11th International Conference on Flow Injection Analysis, including related techniques. Chiang Mai, Thailand. 16 - 20 December 2001.
30. *New chiral selectors used in the design of the potentiometric, enantioselective membrane electrodes*
R.I. Stefan
 ANALITICA '2002. International Symposium on Analytical Science. S A Chemical Institute. Stellenbosch. 4 - 10 December 2002.
31. *The XXX system. A new strategy and concept in flow analysis.*
J.F. van Staden and R.I. Stefan.
 Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong, Australia. 17 - 21 February 2003.
32. *Determination of azidothymidine using an immunosensor/SIA system.*
R.I. Stefan, J.F. van Staden, R.G. Bokretson 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
 37th 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
 37th 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. Rațko and R.I. Stefan
 6th 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
 3rd Black Basin Conference on Analytical Chemistry, 12th-14th 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), 13th -16th of February 2006, Luxor, Egypt
40. *Fullerenes – new chiral selectors for enantioanalysis*
RI van Staden
 International Conference on Chemistry and Chemical Engineering, 28th-30th of May 2008, Timisoara, Romania
41. *Studies of the interactions between the enantiomers of deprenyl and C₆₀ and C₇₀ fullerenes using molecular modeling and chiral sensors*
RI van Staden
 20th International Symposium on Chirality, 6th-9th 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
 3rd 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
 3rd 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, 29th March – 2nd April 2009, Barcelona, Spain.
45. *Determination of free-L-T₃ and free-L-T₄ 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. 14th 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
 4th 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
 222nd 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, 1st 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
 245th ACS Meeting, 7 - 11 April 2013, New Orleans, USA.
56. Fast screening tests for early detection of gastric cancer
RI Stefan-van Staden, RM Ilie-Mihai, DC Gheorghe
 ECS Meeting Prime 2020, Honolulu, 4-9 October, 2020

2.3. Posters

1. *Mexiletine Selective Membrane Electrode*
R.I. Stefan, M.S. Ionescu
 The XIIIth National Conference on Analytical Chemistry, Constanta, Romania, 22-24 September 1994.
2. *Metomidate - Sensing Electrode*
R.I. Stefan
 National Symposium of Electrochemical Sensors and Biosensors, Cluj-Napoca, Romania, 28-29 September 1995.
3. *Amiodarone - Selective Membrane Electrode*
R.I. Stefan, H.Y. Aboul-Enein, G.E. Baiulescu
 The XIIIth National Conference on Analytical Chemistry, Craiova, Romania, 23-25 May 1996.
4. *Some considerations concerning the use of ion-selective membrane electrodes in pharmaceutical analysis*
R.I. Stefan, G.E. Baiulescu
 The XIIIth National Conference on Analytical Chemistry, Craiova, Romania, 23-25 May 1996.
5. *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**
Pitcon'97, Atlanta, Georgia, USA, 16-21 March 1997.
8. *Biosensor for the Enantioselective Analysis of S-Captopril*
R.I. Stefan, H.Y. Aboul-Enein, C. Bala, **G.L. Radu**
Biosensors'98, Berlin, Germany, June 1998.
9. *Biosensor for the Enantioselective Analysis of S-Enalapril and S-Ramipril*
R.I. Stefan, H.Y. Aboul-Enein, **G.L. Radu**
Biosensors'98, Berlin, Germany, June 1998.
10. *Biosensors for the Enantioselective Analysis of S-Cilazapril, S-Trandolapril, and S-Pentopril*
R.I. Stefan, H.Y. Aboul-Enein, G.L. Radu, G.E. Baiulescu
The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, September 1998.
11. *Biosensors for the Enantioselective Analysis of S-Perindopril*
R.I. Stefan, H.Y. Aboul-Enein, G.L. Radu
The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, September 1998.
12. *Comparison of flow and sequential system for fluoride assays in toothpaste and borehole water, using a F-selective electrode*
R.I. Stefan, J.F. van Staden
The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, September 1998.
13. *Validation criteria for developing ion-selective membrane electrodes for analysis of pharmaceuticals*
R.I. Stefan, H.Y. Aboul-Enein
Drug Analysis '98, Brussels, Belgium, May 1998.
14. *The opportunity to use ion-selective membrane electrodes for dissolution tests*
R.I. Stefan, H.Y. Aboul-Enein
Drug Analysis '98, Brussels, Belgium, May 1998.
15. *Determination of urinary oxalate using oxalate-selective membrane electrodes*
R.I. Stefan, I. Draghici, **G.E. Baiulescu**
The 7th 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
7th 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
7th International Chemistry Conference in Africa, Durban, South Africa, 6-10 July 1998.
18. *New amperometric immunosensors for drugs assay*
R.I. Stefan, H.Y. Aboul-Enein, G.L. Radu, G.E. Baiulescu
Euroanalysis 10, Basel, Switzerland, 6-11 September 1998.
19. *Quality, reliability and flexibility in analytical chemistry*
G.E. Baiulescu, R.I. Stefan
Euroanalysis 10, Basel, Switzerland, 6-11 September 1998.
20. *Comparison of flow and sequential injection systems for fluoride assays in toothpaste and borehole water, using a F-selective electrode*
R.I. Stefan, J.F. van Staden
Euroanalysis 10, Basel, Switzerland, 6-11 September 1998.
21. *Simultaneous flow injection determination of calcium and fluoride in natural and borehole water with conventional ion-selective electrodes in series.*
R.I. Stefan, **J.F. van Staden**
International Conference on Flow Injection Analysis, Seattle, USA, August 1998.
22. *Comparison of flow and sequential system for fluoride assays in toothpaste and borehole water, using a F-selective electrode*
R.I. Stefan, J.F. van Staden
Analitika '98, Midrand, South Africa, 12-14 October 1998.
23. *Evaluation of different SIA systems using an electrochemical sensor as detector*
J.F. van Staden, R.I. Stefan, S. Birghila
International Conference on Flow Injection Analysis, Prague, Czech Republic, June 1999.
24. *Developments in electrochemical sensors construction for chiral drugs assay*
R.I. Stefan, H.Y. Aboul-Enein, J.F. van Staden
International Symposium on Chiral Discrimination, Chicago, Illinois, USA, July 1999.

25. *Flow injection systems for enantioselective analysis of chiral drugs*
J.F. van Staden, R.I. Stefan, H.Y. Aboul-Enein,
 International Symposium on Chiral Discrimination, Chicago, Illinois, USA, July 1999.
26. *Electrochemical sensors in the analysis of chiral drugs*
R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein
 37th 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
 8th 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
 8th 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
 8th International Conference on Flow Analysis, Warsaw, Poland, 25-29 June 2000.
31. *Simultaneous assay of T3 and T4 using sensors/SIA systems*
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
 8th 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
 8th 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
 38th 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**
 38th 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
 38th 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**
 41st 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
 41st 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, 13th 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. 11th 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. 11th 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
 ICFIA'2001. 11th 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
 ICFIA'2001. 11th International Conference on Flow Injection Analysis, including related techniques. Chiang Mai. Thailand. 16 - 20 December 2001.
51. *Simultaneous assay of L-T₃, L-T₄ and D-T₄ using a sensor/SIA system*
J.F. van Staden, R I Stefan, H Y Aboul-Enein
 IMCS'2002. 9th 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
 IMCS'2002. 9th 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
 36th 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
 36th Convention. S A Chemical Institute. Port Elizabeth. 1 - 5 July 2002.
67. *On-line speciation of iron(II) and iron(III) using a spectrophotometric sequential injection system*
L.V. Mulaudzi, J.F. van Staden, R.I. Stefan
 36th Convention. S A Chemical Institute. Port Elizabeth. 1 - 5 July 2002.
68. *Flow injection analysis of bromine with spectrophotometric detection*
L.V. Mulaudzi, **J.F. van Staden**, R.I. Stefan
 Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong. Australia. 17 - 21 February 2003.
69. *On-line spectrophotometric determination of bromine using sequential injection analysis*
L.V. Mulaudzi, **J.F. van Staden**, R.I. Stefan
 Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong. Australia. 17 - 21 February 2003.
70. *Determination of ethanol in beverages using sequential injection analysis with spectrophotometric detection*
P.J. Fletcher, J.F. van Staden, R.I. Stefan
 Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong. Australia. 17 - 21 February 2003.
71. *Determination of bicarbonate and total carbonate using automated sequential injection analysis with spectrophotometric detection*
P.J. Fletcher, J.F. van Staden, R.I. Stefan
 Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong. Australia. 17 - 21 February 2003.
72. *On-line simultaneous determination of the activity of α - and β -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/amperometric 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**
 IMA'2003. The 3rd 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**
 IMA'2003. The 3rd 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**
 IMA'2003. The 3rd 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**
 IMA'2003. The 3rd International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki. Greece. 23-27 September 2003.

80. *Biosensors for the enantioselective analysis of pipecolic acid*
 R.I. Stefan, R.M. Nejem, **J.F. van Staden**, H.Y. Aboul-Enein
 IMA'2003. The 3rd International Conference of Instrumental Methods of Analysis. (Modern trends and Applications). Thessaloniki. Greece. 23-27 September 2003.
81. *Enantioselective potentiometric membrane electrodes based on β -, γ -, and ϵ -cyclodextrins as chiral selectors for the assay of L-proline*
K. Ozoemena, R.I. Stefan
 IMA'2003. The 3rd 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
 IMA'2003. The 3rd 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
 IMA'2003. The 3rd 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
 IMA'2003. The 3rd 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 α - and β -amylase by sequential injection analysis*
 L.V. Mulaudzi, **J.F. van Staden**, R.I. Stefan
 IMA'2003. The 3rd 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
 IMA'2003. The 3rd 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 α - and β -amylase by sequential injection analysis*
 L.V. Mulaudzi, **J.F. van Staden**, R.I. Stefan
 ICFA'2003. 12th 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
 ICFA'2003. 12th 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
 ICFA'2003. 12th 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
 ICFA'2003. 12th 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
 ICFA'2003. 12th 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
 ICFA'2003. 12th International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003.
93. *Biosensors for the enantioselective analysis of pipecolic acid*
 R.I. Stefan, R.M. Nejem, **J.F. van Staden**, H.Y. Aboul-Enein
 ICFA'2003. 12th 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
 ICFA'2003. 12th 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
 ICFA'2003. 12th 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
 ICFA'2003. 12th 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
 37th SACI Convention. Chemistry for a better life. Pretoria. 4 - 9 July 2004.

98. *Sequential injection analysis of formaldehyde*
S. Matlhodi, J.F. van Staden and R.I. Stefan
37th 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**
13th 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**
13th 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 C₆₀ fullerenes*
R.G. Bokretson, R.I. Stefan-van Staden
PITTCO'2007, February 2007, Chicago, IL, USA
102. *Enantioanalysis of ketoprofen based on its molecular interaction with C₆₀ fullerenes*
R.I. Stefan-van Staden, R.G. Bokretson
20th International Symposium on Chirality, 6th-9th 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
20th International Symposium on Chirality, 6th-9th 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, 29th March – 2nd 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)
A Alecu	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 Bokretsi	MSc/On-line process control in pharmaceutical industry/2003	RI Stefan	JF van Staden	1/Distinction
SG Bairu	MSc/Diamond paste based electrodes for inorganic analysis/2003	RI Stefan	JF van Staden	1/Distinction
ZO Tesfaldet	MSc/Sequential injection analysis of cations in pharmaceutical products/2005	JF van Staden	RI Stefan	2/Distinction
TR Mashile	MSc/Enantioanalysis of pharmaceutical compounds/2006	RI Stefan	-	1/Distinction
L Holo	MSc/Enantioselective, potentiometric membrane electrodes for enantioanalysis of amino acids of clinical and pharmaceutical importance/2006	RI Stefan	-	1/Distinction
LA Gugoasa	MSc/Biosensors based on DNA for the assay of neurotransmitters/2012	A Ciucu	RI van Staden	2
RM Nejem	PhD/ Enantioselective sensors and biosensors for clinical analysis/2004	RI Stefan	-	3/Excellent
I Moldoveanu	PhD/Screening systems for early detection of cancer and hepatitis/2015	RI van Staden	-	3/Excellent
LA Gugoasa	PhD/Multimode screening systems for obesity/2015	RI van Staden	-	3/Excellent
Ionela Raluca Comnea	PhD/Screening systems for early detection of lung cancer	RI van Staden	-	3/Excellent
Ahmed Jassim Muklive Al-Ogaidi	PhD/Fast detection of colon cancer biomarkers	RI van Staden	-	3/Excellent
Amalia Gabriela Diaconeasa	PhD/Detection of specific biomarkers for ageing related illnesses	RI van Staden	-	3/Excellent
Grigorina Mitrofan	PhD/Investigation of thyroid function and its associated pathologies using stochastic sensing	RI van Staden	-	3/Excellent
KI Ozoemena	Postdoc (Claude Harris Leon Foundation fellowship)/Design and construction of novel ion and enantioselective membranes for the development of high performance electrochemical sensors	RI Stefan	-	1
AA Rat'ko	Postdoc/Studies on the behaviour of enantioselective, potentiometric membrane electrodes	RI Stefan	-	2
B Lal	Postdoc/Enantioselective, potentiometric membrane electrodes based on fullerenes	RI Stefan	-	2
K Sharma	Postdoc/Computational studies of molecular interactions	RI Stefan	-	1
B Calenic	Postdoc/Tissue engineered oral mucosa developed from keratinocyte stem cells using specific substrate topographies	RI van Staden	-	2

Ruxandra Ilie	PhD/Detection of biomarkers specific to gastric cancer	Ri van Staden	-	3/Summa Cum Laude
Ioana Popa	PhD/Detection of biomarkers associated to early onset of diabetes	Ri van Staden	-	3/Summa Cum Laude
Mariana Mincu	PhD/Stochastic sensors for environmental monitoring	Ri van Staden	-	2/Summa Cum Laude
Alexandrina Lungu	PhD/Modern analytical methods for environmental analysis	Ri van Staden	-	3/Summa Cum Laude
Sebastian Gheorghe	PhD/Detection of biomarkers specific to brain cancer	Ri van Staden	-	3/Summa Cum Laude
Catalina Cioates-Negut	Postdoc/Screening methods for diagnosis of brain cancer	Ri van Staden	-	2

3.2. Supervisor of students

Name of the student	Degree/Title of the thesis/Date of graduation	Date of start
Mihaela Iuliana Bogea	PhD/Detection and personalized treatment of gastric cancer	October 2019
Oana Raluca Musat	PhD/Innovative methods for diagnostic and personalized treatment of breast cancer	October 2019
Irina Alina Anghel-Chera	PhD/Modern methods of determination of influence of pollutants on human body	October 2019
Alexandru Adrian Bratei	PhD/A modern approach of pathology and clinical analysis	October 2020
Bianca Maria Tuchiu	PhD/A modern approach of pharmaceutical analysis	October 2020
Damaris Cristina Gheorghe	PhD/Inovative methods in clinical analysis	October 2021
Andreea Elena Sandu (m. Domeanu)	PhD/Inovative methods for determination of substances from marine sources used in therapeutics	October 2021
Andreea Dragoi (m. Branza)	PhD/Modern methods of analysis of marine extracts used in cosmetic and pharmaceutical products	October 2021
Rasit Ergun Yukmel	PhD/Development of new instrumentation for the screening of biological, food, and environmental samples	October 2021
Popa Maria-Lavinia	PhD/Quality control and testing of the protection equipments	October 2021
Andreea-Roxana Niculae	PhD/Fast screening tests of food for increasing the security of food	October 2021

4. Membership in national and international bodies

- **Sigma Xi, The Scientific Research Honor Society, Full member**
- **Electrochemical Society/USA** – full member, **Sensor Division** - member of the **Executive Committee** and **Member-at-Large**.
- **Member of the American-Romanian Academy for Science and Arts**
- **DAC of EUCHEMs** – full member, **Representative of Romanian Society of Chemistry; Head of Study group on Bioanalysis**.
- Romanian Society of Analytical Chemistry - past full member
- The South African Chemical Institute – full member
- **American Chemical Society – 2020 FELLOW, 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 XIIIth National Conference on Analytical Chemistry, Craiova, Romania, 1996.
- Scientific Organizing Committee of Chemometrics Workshop, Timisoara, Romania, 1997.
- Scientific Organizing Committee of The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, 1998.
- **Co-secretary, 7th 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 10th 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 DEVICE 2011, Nice, France, August 2011; SENSOR DEVICES 2012, Roma, Italy, August 2012; SENSOR DEVICES 2013, Barcelona, Spain; SENSOR DEVICES 2014; SENSOR DEVICES 2015.**
- **Chairman, 1st International Conference on Analytical Chemistry, RO-ICAC'2012, 18-21 September, 2012, Targoviste, Romania.**
- **Chairman, 2nd International Conference on Analytical Chemistry, RO-ICAC'2014, 17-21 September, 2014, Targoviste, Romania.**
- **Chairman, 3rd International Conference on Analytical Chemistry, RO-ICAC'2016, June, 2016, Timisoara, Romania.**
- **Chairman, RO'ICAC 2016, 3rd International Conference on Analytical Chemistry, Iasi, Romania, 2016**

5. Member of editorial boards/Guest Editor

- 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)
- Serves since 2019 on the Editorial Board of "Egyptian Pharmaceutical Journal" (Wolter Kluwer Health/MedKnow)
- Serves since 2020 on the Editorial Board of "Sensors"
- Serves since 2020 on the Editorial Board of "Analytical Letters" (Taylor and Francis)
- Serves since 2021 on the Editorial Board of "ECS Sensors Plus"
- Guest Editor – for "Sensors" for the special issue: "Graphene-Based Sensors for Pharmaceutical and Biomedical Analysis".
- Editor for analytical chemistry and bioanalysis: Coagent Chemistry, Taylor & Francis until 2021
- Academic Editor, Journal of Oncology
- **Guest Editor – Journal of Oncology 2020/2021**
- **Guest Editor – Frontiers in Oncology 2020/2021**
- **Guest Editor – Life 2021/2022**
- **Guest Editor – Journal of the Electrochemical Society for the issue: Women in Electrochemistry, 2021**

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 Commission 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 PhD 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 Gheorghe 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, 1st International Conference on Analytical Chemistry, Targoviste, September 2012
 2012 – **Henri Coanda Gold Medal**, National Conference on Research and Innovation, Bucharest, Romania
 2013 – **Prize “She Bussiness” for excellence in research** for developing a screening method for early detection of breast cancer
 2017- Prize Radar de Media for the Research Activities
2019- Gheorghe Spacu Medal and Award from the Romanian Society of Chemistry, for the high national and international recognition of her research by the peers.
2020-ACS FELLOW

2008 – **Gold Medal and Diploma of Excellence** for a patent on stochastic sensors at the **2nd 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^{eme} 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^e Salon International des Inventions de Geneve, 21-25 April 2010, Geneve, Switzerland.**
 2010 – **2nd 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 Novemberr 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^e 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 Innovation, 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), Pretoria, Johannesburg (South Africa).
- 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. – more than 130 papers published
- 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 – more than 14 papers published and two awarded patents; the patents were awarded with gold medals and special prizes in international fairs of invention and innovation, from which the highest prize was the one obtained at the international fair in Geneva, 2010: **Gold Medal with the congratulations of the jury, WIPO award for the best woman inventor, and AGEPI medal**
- PNII, Ideas, “*Stochastic microsensors as new tools for the assay of substances of biological importance*”, UEFISCDI, October 2011 – September 2014, 1500000lei.- more than 27 papers published
- PNIII, PED, January 2017-July 2018 “*Fast diagnosis of leukemia using stochastic sensors*”, 300000lei – more than 5 papers published
- PNIII, PCE, 2017-2019 Early detection of diabetes using stochastic sensors, 850000lei – more than 10 papers to date
- ERC-like project, “*Stochastic approach for early diagnosis of cancer*”, UEFISCDI, July 2012 – June 2014, 1500000lei – more than 25 papers.
- Project 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 – more than 8 papers published.

- Bilateral Romania-Cyprus, „Enantioanalysis of compounds of clinical importance using microsensors and micellar electrokinetic chromatography”, May 2010-April 2012 40000lei – 4 papers published
- Bilateral Romania-Republica Moldova, „Detection and inhibition of cancer at the molecular level”, September 2010-November 2012, ANCS, 32600lei. – 2 papers published
- Bilateral Romania-Cyprus, „Early detection of thyroid cancer using stochastic sensing and capillary zone electrophoresis”, 2014-2015, ANCS, 60000lei. – 4 papers published
- Partnership, PNII, Multimode sensors for screening tests for colorectal cancer, and for personalized treatment”, 2014-2016, UEFISCDI.1000000lei – more than 20 papers published
- PNIII – PCCF 2018-2022, Early diagnosis of gastric cancer, 8.500.000lei – 71 papers published to date and 1 patent

12. Education activities

Lectures/practical activities:

1. Faculty of Chemistry, University of Bucharest 1992-1998 – Lectures on separation methods and trace analysis (**including spectrometric methods of analysis, and environmental analysis**) (4th year of study, Chemistry section), practical activities for students from 1st to 5th year of study.
2. Department of Chemistry, University of Pretoria 2000-2006 – Lectures and practical activities for general chemistry, and analytical chemistry (**volumetry, gravimetry, spectrometry, environment**), 1st year sections: chemistry, biochemistry, engineering (classes comprising between 50 and 700 students); Lectures on analytical chemistry, 2nd year (Course coordinator for the 2nd year of study); **Lectures on electrochemical sensors for bioanalysis** for the 4th 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 1st and 2nd year: General chemistry and Analytical chemistry- University of Pretoria Press. Contribution to Ewing's Analytical Handbook.

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 admitted 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 admission 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 January 1988, Raluca was taking privat lessons with Professor Dr Georgeta Stefanescu Barnea from the National Academy 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 bronze 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