Curriculum Vitae

INFORMAŢII PERSONALE

Raluca-Ioana van Staden

Str. Pascani Nr.8, Bl 728A, Sc.B, Et.4, Ap.52, Bucuresti (România)

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Data nasterii: 16.07.1969 | Naţionalitatea: Romana

Nume inaintea casatoriei: Stefan

EXPERIENŢA PROFESIONALĂ

Din 1.03.2007 - Profesor, CSI, Sef al Laboratorului de Electrochimie si PATLAB, Institutul National de Cercetare pentru Electrochimie si Materie Condensata.

Cercetare, Director si coordonator de proiecte nationale si internationale, managementul laboratorului, indrumator pentru tineri cercetatori – masteranzi, doctoranzi

03.2015-07.2016 Director Stiintific al Institutului National de Cercetare pentru Electrochimie si Materie Condensata

Din 15.12.2013 - Profesor – conducator de doctorat la Universitatea Politehnica din Bucuresti

Conducator stiintific pentru doctoranzi.

1 Ian 06 - 31 Aug 06 Profesor de Chimie Analitica si Bioanaliza

Universitatea din Pretoria, Pretoria (Africa de Sud)

Educatie - conducator stiintific pentru master, doctorat, postdoc. Coordonator de curs, predare cursuri si laboratoare anii I-IV de studiu. Cercetare - coordonatoarea grupului de cercetare in bioanaliza si enantioanaliza in domeniile clinic si farmaceutic. Management - membra a Comitetului de Cercetare al Catedrei de Chimie. Mentor pentru tinerii cercetatori din catedra, in programe oferite de universitate si Royal Society of Chemistry.

1 Feb 98 - 31 Dec 00 Postdoc

Universitatea din Pretoria , Pretoria (Africa de Sud)

Educatie - predare de cursuri la anii II si IV, conducator stiintific de master si doctorat, membru in comisii de doctorat. Cercetare - in domeniul analizei farmaceutice, biomedicale si sisteme in flux.

1 Oct 92 - 31 Ian 98 Preparator si asistent universitar

Universitatea din Bucuresti , Bucuresti (România)

Educatie - curs anul IV, laboratoare anii I-IV, coordonare lucrari de licenta si master. Cercetare - in domeniile analizei clinice si farmaceutice.

EDUCAŢIE ŞI FORMARE

1 Oct 87 - 1 Iul 92 — Diploma de Chimist - sef de promotie

Universitatea din Bucuresti, Bucuresti (România)

Chimie, specializarea chimie analitica. Sefa de promotie, Facultatea de Chimie, Specializarea – Chimie.

1 Mar 95 - 27 Mar 97 — Doctor in Chimie

Universitatea din Bucuresti, Bucuresti (România)

Chimie, specializarea Chimie analitica

1 Oct 91 - 1 Iul 96 — Licentiat in pian si educatie muzicala

Universitatea Nationala de Muzica din Bucuresti, Bucuresti (România)

Pian si educatie muzicala

1 Oct 96 - 1 Iul 97 — Master in limbaj si stil compozitional

Universitatea Nationala de Muzica din Bucuresti, Bucuresti (România)

Compozitie muzicala

29 Iul 2013 — Dr Habilitas in Chimie /al doilea doctorat. Drept de conducere a tezelor de doctorat (Universitatea Politehnica din Bucuresti).

Universitatea Politehnica din Bucuresti

COMPETENTE PERSONALE

Limba(i) maternă(e) — Română

Alte limbi străine cunoscute

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

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

Competenţe de comunicare — Buna experienta in comunicarea stiintei.

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

Conduc proiecte de cercetare nationale si internationale.

Competenţe dobândite la locul de muncă	Am facut parte din Comitetul de cercetare al Catedrei de Chimie din cadrul Universitatii din Pretoria. Fac parte din Comitetul stiintific al Institutului de Cercetare pentru Electrochimie si Materie Condensata.
Competenţe informatice	MSWord, Corel si Sigma Plot.

ANEXE

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

1. Publicatii

1.1. Lucrari publicate in reviste ISI (h=27, 3723 citari, conform SCOPUS ; h=25, 3232 citari, conform Web of Science, h=34, 5195 citari conform 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 lantanides 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
Analusis, 25(2), 39-42, 1997.

13. Ion-selective membrane electrodes: membrane configuration
R.I. Stefan and H.Y. Aboul-Enein
Instrum. Sci. & Technol., 25(2), 169-173, 1997.

14. Tamoxifen-selective membrane electrodes
R.I. Stefan, G.E. Baiulescu and H.Y. Aboul-Enein
Pharmazie, 52(10), 780-783, 1997.

15. Lauryl sulphate as counter ion for construction of ion-selective membrane electrodes for moclobemide and disopyramide
R.I. Stefan
Anal. Chim. Acta, 350(1-2), 105-108, 1997.

16. Ion-selective membrane electrodes in pharmaceutical analysis
R.I. Stefan, G.E. Baiulescu and H.Y. Aboul-Enein
Crit. Rev. Anal. Chem., 27(4), 307-321, 1997.

17. Taxol-selective membrane electrodes
R.I. Stefan and H.Y. Aboul-Enein
J. Anal.Chem., 53(6), 551-553, 1998.

18. Validation criteria for developing ion-selective membrane electrodes for analysis of pharmaceuticals
R.I. Stefan and H.Y. Aboul-Enein
Accred. Qual. Assur., 3, 194-196, 1998.

19. A new construction for a potentiometric, enantioselective membrane electrode and use for L-proline assay
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Anal. Lett., 31(11), 1787-1794, 1998.

20. Enantioselective sensors and biosensors in the analysis of chiral drugs
H.Y. Aboul-Enein and R.I. Stefan
Crit. Rev. Anal. Chem., 28(3), 259-266, 1998.

21. The opportunity to use amperometric biosensors for enantioselective analysis of angiotensin converting enzyme inhibitors
R.I. Stefan, G.L. Radu, H.Y. Aboul-Enein and G.E. Baiulescu
Current Trends Anal. Chem., 1(1), 135-138, 1998.

22. Biosensors for the enantioselective analysis of S-enalapril and S-ramipril
R.I. Stefan, H.Y. Aboul-Enein and G.L. Radu
Prep. Biochem. & Biotechnol., 28(4), 305-312, 1998.

23. Ion-selective membrane electrodes based on ion-pair complexes: correlation between slopes and stability of ion-pair complexes
R.I. Stefan and H.Y. Aboul-Enein
Instrum. Sci. & Technol., 27(2), 105-110, 1999.

24. A new construction for a potentiometric, enantioselective membrane electrode. Its utilization to the S-captopril assay.
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Talanta, 48(5), 1139-1143, 1999.

25. Potentiometric, enantioselective membrane electrodes for S-enalapril assay
H.Y. Aboul-Enein, R.I. Stefan and J.F. van Staden
Analusis, 27(1), 53-56, 1999.

26. Analysis of L- and D-ascorbic acid in fruits and fruit drinks by HPLC
H.Y. Aboul-Enein, I.A. Al-Duraibi, R.I. Stefan, C. Radoi and A. Avramescu
Seminars in Food Analysis, 4(1), 31-37, 1999.

27. Biosensors for the enantioselective analysis of S-perindopril
H.Y. Aboul-Enein, R.I. Stefan and G.L. Radu
Prep. Biochem. & Biotechnol., 29(1), 55-61, 1999.

28. The construction of an amperometric immunosensor for the thyroid hormone (+)-3,3',5-triiodo-L-thyronine (T_3)
H.Y. Aboul-Enein, R.I. Stefan, G.L. Radu and G.E. Baiulescu
Anal. Lett., 32(3), 447-455, 1999.

29. Analysis of several angiotensin-converting enzyme inhibitors using potentiometric, enantioselective membrane electrodes
H.Y. Aboul-Enein, R.I. Stefan and J.F. van Staden
Anal. Lett., 32(4), 623-632, 1999.

30. Biosensor for the enantioselective analysis of S-cilazapril, S-trandolapril and S-pentopril
H.Y. Aboul-Enein, R.I. Stefan and G.L. Radu
Pharm. Developm. Technol., 4(2), 251-255, 1999.

31. Determination of S-perindopril using a flow injection system with an amperometric biosensor
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Sens. Actuators B, 54(3), 261-265, 1999.

32. On-line monitoring of calcium in natural and borehole water with a flow injection system using a calcium-selective membrane electrode
J.F. van Staden and R.I. Stefan
S. Afr. J. Chem., 52(1), 24-26, 1999.

33. The opportunity to use ion-selective membrane electrodes for dissolution tests
H.Y. Aboul-Enein and R.I. Stefan
Instrum. Sci. & Technol., 27(2), 89-93, 1999.

34. Electrochemical sensor arrays
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Crit. Rev. Anal. Chem., 29(2), 133-153, 1999.

35. Estimation of uncertainties in clinical analysis
R.I. Stefan, G.E. Baiulescu, H.Y. Aboul-Enein and J.F. van Staden
Accred. Qual. Assur., 4(6), 225-229, 1999.

36. Detection of S-enantiomer of cilazapril, pentopril and trandolapril using potentiometric, enantioselective membrane electrode
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Electroanalysis, 11(3), 192-194, 1999.

37. Enantioselective membrane electrode for S-ramipril assay
R.I. Stefan, J.F. van Staden, G.E. Baiulescu and H.Y. Aboul-Enein
Chemia Analityczna, 44(3), 417-422, 1999.

38. S-perindopril assay using a potentiometric, enantioselective membrane electrode
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Chirality, 11(8), 631-634, 1999.

39. The reliability of the sampling process for the trace atmospheric constituents
R.I. Stefan, H.Y. Aboul-Enein and G.E. Baiulescu
Saudi Pharm. J., 7(2), 103-110, 1999.

40. Determination of fluoride in toothpaste, effluents streams and natural and borehole water using a flow injection system with a fluoride-selective membrane electrode
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Pharm. Acta Helv., 73(6), 307-310, 1999.

41. Analysis of chiral drugs with enantioselective biosensors. An overview.
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Electroanalysis, 11(16), 1233-1235, 1999.

42. Simultaneous flow injection analysis of calcium and fluoride in natural and borehole water with conventional ion-selective electrodes in series
J.F. van Staden and R.I. Stefan
Talanta, 49(5), 1017-1022, 1999.

43. Chemiluminescence-based (bio)sensors
H.Y. Aboul-Enein, R.I. Stefan and J.F. van Staden
Crit. Rev. Anal. Chem., 29(4), 323-331, 1999.

44. Nicolae Teclu one of the founders of the spectrometric techniques
G.E. Baiulescu and R.I. Stefan
NOESIS, 24, 159-163, 1999.

45. Immunosensors in clinical analysis
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Fresenius J. Anal. Chem., 366(6/7), 659-668, 2000.

46. Amperometric biosensors based on D-amino acid oxidase for R-perindopril assay
J.F. van Staden, R.I. Stefan and H.Y. Aboul-Enein
Fresenius J. Anal. Chem., 367(2), 178-180, 2000.

47. Simultaneous determination of S- and R-captopril using sequential injection analysis
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Talanta, 51(5), 969-975, 2000.

48. An amperometric biosensors/SIA system for the simultaneous determination of S- and R-captopril
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Biosens. Bioelectron., 15(1-2), 1-5, 2000.

49. Evaluation of different SIA systems using an electrochemical sensor as detector
J.F. van Staden, R.I. Stefan and S. Birghila
Talanta, 52(1), 3-11, 2000.

50. Determination of urinary oxalate using oxalate-selective membrane electrodes
R.I. Stefan, I. Draghici and G.E. Baiulescu
Sens. Actuators B, 65(1-3), 250-252, 2000.

51. On-line assay of S-captopril using an amperometric biosensor/SIA system
J.F. van Staden, R.I. Stefan and H.Y. Aboul-Enein
Anal. Chim. Acta, 411(1-2), 51-56, 2000.

52. Design and use of electrochemical sensors in enantioselective high throughput screening of drugs
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Combinatorial Chemistry & High Throughput Screening, 6(3), 445-454, 2000.

53. Recent developments and applications of chemiluminescence sensors
R.I. Stefan, H.Y. Aboul-Enein, J.F. van Staden, X.R. Zhang, A.M. Garcia-Campana and W.R.G. Bayens
Crit. Rev. Anal. Chem., 30(4), 271-289, 2000.

54. Molecular recognition in chiral discrimination
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Crystal Engineering, 4, 113-118, 2001.

55. Maltodextrins as new chiral selectors in potentiometric enantioselective, membrane electrodes design
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Fresenius J. Anal. Chem., 370(1), 33-37, 2001.

56. Selectivity in analytical chemistry. Recommendations for its use.
J. Vessman, R.I. Stefan, J.F. van Staden, A. Fajgel, K. Danzer, W. Lindner, H. Muller and D.T. Burns
Pure and Appl. Chem., 73(8), 1381-1386, 2001.

57. A bienzymatic amperometric sensor for proteins assay in milk
R.I. Stefan, M.A. Makhafola and J.F. van Staden
Prep. Biochem. Biotechnol., 32(2), 135-142, 2002.

58. On-line determination of hydrochloric acid in process effluent streams by potentiometric sequential injection acid-base titration
J.F. van Staden, M.G. Mashamba and R.I. Stefan
S. Afr. J. Chem., 55, 39-51, 2002.

59. Biosensors for the enantioselective analysis of the thyroid hormones L-triiodothyronine (T_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. Bokretsion, 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. Bokretsion, 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. Bokretsion
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. Bokretsion, 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. Bokretsion
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. Bokretsion, 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. Bokretsion, 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. Bokretsion, 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. Bokretsion, J.F. van Staden and H.Y. Aboul-Enein
Biosens. Bioelectron., 19(3), 261-267, 2003.

87. Determination of Fe(III) in water samples using diamond paste based electrodes
R.I. Stefan, S.G. Bairu and J.F. van Staden
Instrum. Sci. & Technol., 31(4), 411-416, 2003.

88. Determination of L- and D-pipecolic acid using diamond paste based amperometric biosensors
R.I. Stefan and R.M. Nejem
Anal. Lett., 36(12), 2635-2644, 2003.

89. Monocrystalline diamond paste based electrodes and their applications for the determination of Fe(II) in vitamins
R.I. Stefan and S.G. Bairu
Analytical Chemistry, 75(20), 5394-5398, 2003.

90. New enantioselective, potentiometric membrane electrodes based on C_{70} 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
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313. Determination of dopamine in whole blood samples using a new electrochemical sensor based on graphene
SS Gheorghe, RM Ilie-Mihai, RI Stefan-van Staden
U.P.B. Sci. Bull., 83(4), 145-150, 2021

314. Application of a tetraamino cobalt(II) phthalocyanine modified screen printed carbon electrode for the sensitive electrochemical determination of L-dopa in pharmaceutical and biological samples
R State, JF van Staden, C Stefanov, RI Stefan-van Staden
Electroanalysis, 33(7), 1778-1788, 2021

315. Recent trends in supramolecular recognition using electrochemical sensors.
C Cioates Negut, RI Stefan-van Staden
J Electrochem Soc., 168 (6), 067517, 2021

316. Nitrogen, sulfur co-doped graphene as efficient electrode material for L-cysteine detection
C. Varodi, F. Pogăcean, A. Ciorită, O. Pană, B. Cozar, T. Radu, M. Coroș, R.I. Ștefan-van Staden, S. Pruneanu
Chemosensors, 9(6), 146, 2021.

317. Stochastic biosensors based on N and S-doped graphene for the enantioanalysis of aspartic acid in biological samples
RI Stefan-van Staden, DC Gheorghe, RM Ilie-Mihai, L Barbu-Tudoran, SM Pruneanu
RSC Adv., 11, 23301-23309, 2021

318. Subclinical hypothyroidism has no association with insulin resistance indices in adult females: A case-control study
RA Stoica, R Ancuceanu, SD Stefan, A Pantea Stoian, C Guja, RI Stefan-van Staden, I Popa-Tudor, C Serafinceanu, C Ionescu-Tirgoviste
Experimental Therapeutics Medicine, 22, 1033, 2021

319. Simultaneous determination of levodopa and dopamine from biological samples using 3D printed stochastic microsensors
C Cioates Negut, Sorin Sebastian Gheorghe, RI Stefan-van Staden, JF van Staden
J Pharm Biomed Anal, 205, 114292, 2021

320. Fast screening method based on disposable stochastic sensor for sensitive detection of heregulin-α in biological samples
RI Stefan-van Staden, SS Gheorghe, C Cioates Negut, M Badulescu
Life, 11, 894, 2021

321. Fast screening method of biological samples based on needle stochastic sensors for early detection of gastric cancer
RM Ilie-Mihai, DC Gheorghe, RI Stefan-van Staden, A Lungu-Moscalu, SM Pruneanu, JF van Staden
Rev de Chimie, 72(4), 22-34, 2021

322. Hydrothermal synthesis of nitrogen, boron co-doped graphene with enhanced electro-catalytic activity for cymoxanil detection
C Varodi, F Pogăcean, M Coros, L Magerusan, RI Stefan van Staden, S Pruneanu
Sensors, 21, 6630, 2021 https://doi.org/10.3390/s21196630

323. Mussel Shells - a Valuable Calcium Resource for Pharmaceutical Industry
M Mititelu, G Stanciu, D Drăgănescu, AC Ioniță, SM Neacșu, M Dinu, RI Stefan-van Staden, E Moroșan
Marine Drugs, 20(1), 25, 2022

324. Disposable stochastic sensors obtained using nanolayer deposition of copper, graphene, and copper-graphene composite on silk, for biomedical analysis
C Cioates Negut, RI Stefan-van Staden, M Badulescu, B Bita
Anal Bioanal Chem, 414(5), 1797–1807, 2022

325. Review. Recent trends on the electrochemical sensors used for the determination of tartrazine and Sunset Yellow FCF from food and beverage products
R Georgescu State, JF van Staden, RI Stefan-van Staden
J Electrochem Soc., 169, 017509, 2022

326. Enantioanalysis of aspartic acid using 3D stochastic sensors
IM Bogea, RI Stefan-van Staden, DC Gheorghe, RM Ilie-Mihai
Anal.Lett, 55(1), 85-92, 2022

327. Stochastic microsensors based on carbon nanotubes decorated with Cu and Au nanoparticles, for molecular recognition of isocitrate dehydrogenases 1 and 2 in biological samples
RI Stefan-van Staden, C Cioates Negut, SS Gheorghe, P Sfirloaga
Nanomaterials, 12(3), 460, 2022

328. 2D Disposable Stochastic Sensors for Molecular Recognition and Quantification of Maspin in Biological Samples
RI Stefan-van Staden, RM Ilie-Mihai, DC Gheorghe, IM Bogea, M Badulescu
Microchimica Acta, 189, 101, 2022

329. Stochastic Sensors for the Enantioselective Determination of Serine in Blood for the Early Diagnosis of Breast Cancer
OR Musat, RI Stefan-van Staden
Anal. Lett., 55(13), 2124-2131, 2022

330. Stochastic microsensors based on modified graphene for pattern recognition of maspin in biological samples
RI Stefan-van Staden, IM Bogea, RM Ilie-Mihai, DC Gheorghe, M Coros, SM Pruneanu
Anal Bioanal Chem, 414(12), 3667-3673, 2022

331. Facile detection of naphthalene with a 5,10,15,20-tetrakis(4-methoxyphenyl)-21H,23H-porphine nickel (II)/N-(1-Naphthyl) ethylenediamine dihydrochloride renewable graphene oxide paste electrode
IR Comnea-Stancu, JF van Staden, RI Stefan-van Staden
J Electrochem Soc, 169, 037527, 2022

332. Recent Electrochemical Methods Proposed for the Detection of Hepatitis C Virus. A Minireview
RM Ilie-Mihai, R.I. Stefan-van Staden, J.F. van Staden, H.Y. Aboul-Enein
Revista de Chimie, 73(2), 1-16, 2022

333. Progress in electroanalysis of p53, CEA and CA19-9. A minireview.
RM Ilie-Mihai, RI Stefan-van Staden, JF van Staden
J Electrochem Soc., 169 (3), 037518, 2022

334. Fast screening method for early diagnostic of gastric cancer based on utilization of a chitosan – S-doped graphene - based needle stochastic sensors
RM Ilie-Mihai, DC Gheorghe, RI Stefan-van Staden, A Lungu-Moscalu, JF van Staden
J Pharm Biomed Anal, 214, 114725, 2022

335. Challenges in Biomedical Analysis - From Classical Sensors to Stochastic Sensors
RI Stefan-van Staden
ECS Sensors Plus, 1, 011603, 2022

336. In-House Validated Map of Lymph Node Stations in a Prospective Cohort of Colorectal Cancer: A Tool for a Better Preoperative Staging
P. Simu, I. Jung, L. Banias, Z.Z. Fulop, T. Bara, I. Simu, S. Andone, RI Stefan-van Staden, C.B. Satala, I. Halmaciu, S. Gurzu
J Oncology, Article ID 1788004, 10 pages, 2022

337. Disposable stochastic sensors for fast analysis of ibuprofen, ketoprofen, and flurbiprofen in their topical pharmaceutical formulations
BM Țuchiu, RI Stefan-van Staden, M Bădulescu, JF van Staden
J.Pharm.Biomed.Anal., 215, 114758, 2022.

338. Interleukin-8, CXCL10, CXCL11 and their role in insulin resistance in adult females with subclinical hypothyroidism and prediabetes
RA Stoica, N Drăgana, R Ancuceanu, OI Geicu, C Guja, A Pantea-Stoian, DC Gheorghe, RI Stefan-van Staden, C Serafinceanu, A Costache, C Ionescu-Tîrgoviște
Journal of Clinical and Translational Endocrinology, 28, 100299, 2022.

339. NS Decorated Graphenes Modified with 2,3,7,8,12,13,17,18-Octaethyl-21H,23H-Porphine Manganese (III) Chloride Based 3D Needle Stochastic Sensors for Enantioanalysis of Arginine - a Key Factor in the Metabolomics and Early Detection of Gastric Cancer
RI Stefan-van Staden, MI Bogea, RM Ilie-Mihai, DC Gheorghe, HY Aboul-Enein, M Coros, SM Pruneanu
Anal. Bioanal.Chem., 414(22), 6521–6530, 2022

340. Determination of D-serine from whole blood samples using an electrochemical sensor based on zinc (II)-5(4-carboxylphenyl)-10,15,20-tris(4phenoxyphenyl)porphyrine
OR Musat, RM Ilie-Mihai, RI Stefan-van Staden
Sci Bull UPB, 84(4), 139-148, 2022

341. Determination of p53 from whole blood samples using an electrochemical sensor based on graphene decorated with N and S
IM Bogea, RM Ilie-Mihai, RI Stefan-van Staden
Sci Bull UPB, 84(3), 121-130, 2022

342. Nanographene based electrochemical sensors for ultrasensitive determination of sorbic acid from bread and mayonnaise
RI Stefan-van Staden, AR Niculae, JF van Staden, P Sfirloaga, R State
Anal Bioanal Chem, 414(23), 6813–6824, 2022

343. Mini-Review−Electrochemical sensors used for the determination of some antifungal azoles
BM Tuchiu, RI Stefan-van Staden, J (Koos) F van Staden
ECS Sensors Plus, 1(3), 030601, 2022

344. Sulfur-doped graphene based electrochemical sensors for fast and sensitive determination of (R)-(+)-Limonene from beverages
AR Niculae, RI Stefan-van Staden, JF van Staden, R Georgescu State
Sensors, 22(15), 5851 https://doi.org/10.3390/s22155851, 2022

345. Ultrafast screening of whole blood for early prediction of diabetes by fractalkine detection
RI Stefan-van Staden, DC Gheorghe, RA Stoica
Sensors & Diagnostics, 1(5), 977-982, 2022

346. Highly sensitive electrochemical detection of azithromycin with graphene-modified electrode
F Pogăcean, C Varodi, L Măgeruşan, RI Stefan-van Staden, S Pruneanu
Sensors, 22(16), 6181, 2022 https://doi.org/10.3390/s22166181

347. Carbon Nanopowder Based Stochastic Sensor for Ultrasensitive assay of CA 15-3, CEA and HER2 in whole blood
RI Stefan-van Staden, OR Musat, DC Gheorghe, RM Ilie-Mihai, JKF van Staden
Nanomaterials, 12, 3111, 2022. https://doi.org/10.3390/

348. V-set and immunoglobulin domain containing 1 (VSIG1) as an emerging target for epithelial–mesenchymal transition of gastric cancer
CB Satală, I Jung, Z. Kovacs, RI Stefan-van Staden, T Bara, C Molnar, AI Patrichi, S. Gurzu
Scientific Reports, 12, 16241, 2022

349. Simultaneous analysis of MLH1, MSH2, MSH6, PMS2 and KRAS in patients with gastric and colon cancer using stochastic sensors
RI Stefan-van Staden, DC Gheorghe, F Pogacean, S Pruneanu
Chemosensors, 10(10), 380, 2022 https://doi.org/10.3390/chemosensors10100380

350. Ultrasensitive assay of HER-1, HER-2, and heregulin-α in whole blood
RI Stefan-van Staden, OR Musat, DC Gheorghe, RM Ilie-Mihai
Talanta Open, 6, 100151, 2022

351. N-methylfulleropyrrolidine based multimode sensor for determination of butoconazole nitrate
BM Ţuchiu, RI Stefan-van Staden, JF van Staden, HY Aboul-Enein
ACS Omega, 7(46), 42537−42544, 2022

352. Molecular Recognition and Quantification of MLH1, MSH2, MSH6, PMS2 and KRAS in biological samples
RI Stefan-van Staden Staden, RM Ilie-Mihai, M Coros, SM Pruneanu
ECS Sensors Plus, 1, 031606, 2022

353. Molecular recognition and quantification of HER-3, HER-4 and HRG-α in whole blood and tissue samples using stochastic sensors
DC Gheorghe, Raluca-Ioana Stefan-van Staden
Micromachine, 13(10), 1749, 2022. https://doi.org/10.3390/mi13101749

354. An Approach to the Simultaneous Determination of a Panel of Five Biomarkers for the Early Detection of Brain Cancer Using the Stochastic Method
C Cioates Negut, RI Stefan-van Staden, P Sfirloaga
Chemistry, 4(4), 1382–1394, 2022. https://doi.org/10.3390/chemistry4040090

355. Mini-review: Electrochemical sensors used for the determination of water- and fat-soluble vitamins: B, D, K
DC Gheorghe, RI Stefan-van Staden, JF van Staden
Crit. Rev. Anal. Chem., 00, 000, 2023

356. Recent trends in ibuprofen and ketoprofen electrochemical quantification – a review
BM Ţuchiu, RI Stefan-van Staden, JF van Staden
Crit Rev Anal Chem, 00, 000, 2023

357. Minireview: current trends, and future challenges for the determination of patulin in food products
C Cioates Negut, RI Stefan-van Staden, JF van Staden
Anal Lett, 56(1), 25-41, 2023

358. Review- recent developments in electrochemical detection of atrazine
IR Comnea-Stancu, JF van Staden, RI Stefan-van Staden
Anal Lett, 00, 000, 2023

359. Simultaneous molecular recognition of IL-2, IL-4, and TNF-α in biological samples
C Cioates Negut, RI Stefan-van Staden, P Sfirloaga
Electroanalysis, 00, 000, 2023

360. Simultaneous detection of anthracene and phenanthrene using a poly-Alizarin Red S/carbon paste electrode
IR Comnea-Stancu, JF van Staden, RI Stefan-van Staden, RN State
Chemosphere, 310, 136909, 2023

361. Effect of cooking and preserving on the heavy metals content of seafood, tuna and poultry
IA Chera-Anghel, RI Stefan-van Staden
Food Chem, 407, 135158, 2023

362. Gold nanoparticles/nanographene-based 3D sensors integrated in mini-platforms for thiamine detection
DC Gheorghe, JF van Staden, RI Stefan-van Staden, P. Sfirloaga
Sensors, 23(1), 344, 2023. https://doi.org/10.3390/s23010344

363. Portable device based on the utilization of a 2D disposable paper stochastic sensor for fast ultrasensitive screening of food samples for bisphenols
RI Stefan-van Staden, IA Chera-Anghel, JF van Staden, DC Gheorghe, M Badulescu
Sensors, 23(1), 314, 2023. https://doi.org/10.3390/s23010314, 2023

1.1. Books and Chapters in Books

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

1. *"Quality and Reliability in Analytical Chemistry"*
H.Y. Aboul-Enein, **R.I. Stefan** and G.E. Baiulescu
CRC Press, Boca Raton, Florida, USA, 28 September 2000.

2. *"Electrochemical Sensors in Bioanalysis"*
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
Marcel Dekker Inc., New York, USA, 2001.

3. *"Laboratory Auditing for Quality and Regulatory Compliance"*
D.C. Springer, **R.I. Stefan** and J.F. van Staden
Taylor and Francis, New York, USA, 2005.

4. *"Recent developments of chemiluminescence sensors"* (Chapter 20)
X.R. Zhang, A.M. Garcia-Campana, W.R.G. Bayens, **R.I. Stefan**,
H.Y. Aboul-Enein and J.F. van Staden
in CHEMILUMINESCENCE IN ANALYTICAL CHEMISTRY.
A.M. Garcia-Campana and W.R.G. Baeyens (Editors)
Marcel Dekker, Inc., New York. USA, 2001.

5. *"Sequential Injection Analysis in HPLC"* (Chapter) in
ENCYCLOPEDIA OF CHROMATOGRAPHY
R.I. Stefan, H.Y. Aboul-Enein and J.F. van Staden
Jack Cazes (Editor)
Marcel Dekker, Inc.**, New York. USA, 2001.**

6. "*Enantioselective Electrochemical Sensors"* (Chapter) in
SENSORS UPDATE, Volume 10
R.I. Stefan, H.Y. Aboul-Enein and J.F. van Staden
H. Baltes, G.K. Fedder, G. Korvink (Editors)
Wiley-VCH **,Weinheim , Germany, 2001.**

7. *"Biosensors Technology"* (Chapter 21) in
EWEING'S ANALYTICAL INSTRUMENTATION HANDBOOK
R.I. Stefan, H.Y. Aboul-Enein and J.F. van Staden
Jack Cazes (Editor)
Marcel Dekker, Inc.**, New York. USA, 2004.**

8. "*Enantioselective Biosensors*"
(Chapter 13) in

CHIRAL SEPARATION TECHNIQUES. A PRACTICAL APPROACH.
R.I. Stefan, J.F. van Staden and H.Y. Aboul-Enein
G. Subramanian (Editor)
Wiley-VCH ,Weinheim , Germany, 2006.

9. "*Enantioselective, Potentiometric Membrane Electrodes. Design, mechanism of potential development and applications for pharmaceutical and biomedical analysis"* (Chapter 3) in
ELECTROCHEMICAL SENSOR ANALYSIS
R.I. Stefan-van Staden
S. Alegret, A Merkoci (Editors)
Elsevier, 2007.

10. "*Enantioanalysis of S-Captopril using an enantioselective, potentiometric membrane electrode*" (Procedure 3) in
ELECTROCHEMICAL SENSOR ANALYSIS
R.I. Stefan-van Staden, J.F. van Staden and H.Y. Aboul-Enein
S Alegret, A Merkoci (Eds)
Elsevier, Amsterdam, The Netherlands, (ISBN: 978-0-444-53053) 2007.

11. "*Electrochemical biosensors based on screen-printed electrodes. Applications for environmental and food analysis"* (Chapter) in
RECENT ADVANCES IN ANALYTICAL ELECTROCHEMISTRY
M. Tudorache, C. Bala and **R.I. Stefan**
K.I. Ozoemena (Editor)
Research Signpost, (978-81-7895-274-1) 2007.

12. "*Mechanism of potential development for potentiometric sensors, based on modeling of interaction between electrochemically active compounds from the membrane and analyte"* (Chapter) in
CHEMICAL SENSORS: SIMULATION AND MODELING
R.I. Stefan-van Staden
G. Korotcenkov (Editor)
Momentum Press, LLC, 2013.

13. "*Electrochemical Sensors Based on Nanostructured Materials"* (Chapter) in
HANDBOOK OF 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 H_2O_2 sensing (Chapter 10) in
Graphene-based nanocomposite sensors
R Georgescu State, IR Comnea-Stancu, RI Stefan-van Staden, JF van Staden
Royal Society of Chemistry, 2023.

18. Graphene-based Nanocomposites for Hormone Detection (Chapter 19) in
Graphene-based nanocomposite sensors
RM Ilie-Mihai, DC Gheorghe, RI Stefan-van Staden
Royal Society of Chemistry, 2023.

1.3 Brevete

1. Procedeu de realizare a senzorilor stocastici pe baza de porfirine si pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular
Raluca-Ioana van Staden, Eugenia Lenuta Fagadar-Cosma
Nr 123101/Octombrie 2010.

2. STOC-µSENS-CMD
Raluca-Ioana van Staden, Jacobus Frederick van Staden
Nr 125050/Decembrie 2010.

3. DOT senzor enantioselectiv si procedeu de realizare a acestuia
Raluca-Ioana van Staden, Jacobus Frederick van Staden
Nr 126158/Iulie 2016.

4. Disposable multimode minicell
Raluca-Ioana van Staden, Jacobus Frederick van Staden
Nr. RO131898B1/2021.

2. Participari la conferinte

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

Presedinte de sectiune pentru maim ult de 20 de sesiuni:

Presedinte de sesiune:

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

O SELECTIE A PREZENTARILOR:

2.1. Lucrari invitate

1. *Estimation of uncertainties in clinical analysis*
R.I. Stefan, G.E. Baiulescu, H.Y. Aboul-Enein, J.F. van Staden
The Twelfth International Conference of the Israel Society for Quality, Jerusalem, Israel, 1-3 December 1998. (Keynote lecture)

2. *The influence of matrix additives on ion-selective membrane electrodes response*
R.I. Stefan, J.F. van Staden, H.Y. Aboul-Enein, G.E. Baiulescu

Pittcon 2000, New Orleans, LA, USA, 12-17 March 2000. (Keynote lecture)

3. *Electrochemical sensors and kinetics in analytical chemistry*
R.I. Stefan, J.F. van Staden
KAC'2001, 7th International Symposium on Kinetics in Analytical Chemistry, Bucharest, Romania. 21-23 September 2001. (Keynote lecture)

4. *New horizons in sequential injection kinetic analysis*
J.F. van Staden, R.I. Stefan
KAC'2001. 7th International Symposium on Kinetics in Analytical Chemistry. Bucharest. Romania. 26 - 29 September 2001. (Plenary lecture)

5. *Chiral recognition using potentiometric, enantioselective membrane electrodes*
R.I. Stefan
IMCS'2002. 9th International Meeting on Chemical Sensors. Boston, USA. 7-10 July 2002 (Plenary lecture)

6. *Fullerenes and their derivatives as new chiral selectors for the design of electrochemical sensors.*
R.I. Stefan
Euroanalysis XII. Division of Analytical Chemistry of the Federation of European Chemical Societies and Gesellschaft Deutcher Chemiker. Dortmund. Germany. 8 - 13 September 2002. (Keynote lecture)

7. *Multicomponent analysis using electrochemical sensors in flow systems.*
R.I. Stefan, J.F. van Staden
ICFIA'2003. 12th International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003. (Plenary lecture)

8. Chemical speciation by sequential injection analysis (SIA) with spectrophotometric detection
J.F. van Staden and R.I. Stefan
ICFIA'2003. 12th International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003. (Plenary lecture)

9. Process analytical technology (PAT) as an environmental tool. Does it fulfill the expectations?
J.F. van Staden, **R.I. Stefan-van Staden**
3rd Black Basin Conference on Analytical Chemistry, 12th-14th of September 2005, Constantza, Romania

10. 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)

11. Early detection of cancer - a chance for life
R.I. Stefan-van Staden
Chronic Diseases. Bucharest, Romania. 22-23 September 2010 (Plenary lecture)

12. Multimode sensors for pharmaceutical analysis
R.I. Stefan-van Staden
1st World Drug Discovery online Conference, Huston, TX, USA, October 20-22, 2011 (Keynote lecture)

13. New electrochemical sensors for biomedical investigations
R.I. Stefan-van Staden
220th ECS Meeting & Electrochemical Energy Summit, Boston, MA, USA, October 9-14, 2011 (Keynote lecture)

14. Stochastic dot microsensors for the assay of dopamine in pharmaceutical samples and biological fluids
R.I. Stefan-van Staden
2nd World Drug Discovery online Conference, Huston, TX, USA, October 16-18, 2012 (Keynote lecture)

15. New trends in food analysis
R.I. Stefan-van Staden
Challenges in Food Analysis, International Workshop, Constantza, Romania, May 31 – June 1, 2013 (plenary lecture)

16. Stochastic microsensors based on nanostructured materials used in the screening of whole blood for Hepatitis B
R.I. Stefan-van Staden, Iuliana Moldoveanu
224th ECS Meeting & Electrochemical Energy Summit, San Francisco, CA, USA, October 26-November 1, 2013 (Keynote lecture)

17. Stochastic and multimode sensors based on porphyrins. New trends and applications in biomedical analysis.
R.I. Stefan-van Staden
8th International Conference on Porphyrins and Phthalocyanines (ICPP-8), Istanbul, Turkey, June 22-27, 2014 (Keynote lecture)

18. Stochastic sensors - new tools for screening in biomedical analysis
R.I. Stefan-van Staden
The 3rd International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, "IC-ANMBES 2014", Brasov, Romania, June 13-15, 2014 (Plenary lecture)

19. 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)

20. Utilization of macromolecular compounds for the molecular recognition of substances of clinical interest
R.I. Stefan-van Staden
A XXV-a sesiune de comunicări ştiinţifice PROGRESE ÎN STIINŢA COMPUSILOR ORGANICI SI MACROMOLECULARI, Iasi, Romania, September 24-26, 2015 (Keynote lecture)

21. New Stochastic Sensors Based on Nanostructured Materials for Fast Screening of Biological Fluids for Cancer Biomarkers
R.I. Stefan-van Staden
3rd International Conference on Smart Systems Engineering 2015 (SmaSys 2015), Yonezawa, Japan, October 8-9, 2015 (Keynote lecture)

22. A new approach in biomedical analysis
R.I. van Staden.
International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences "IC-ANMBES 2016", Brasov, Romania, 29June- 1 July 2016 (Key note presentation)

23. Point-of-care screening tools for cancer
RI van Staden
229th ECS MEETING, May 29-June 2, 2016, San Diego, CA, USA (invited lecture)

24. Stochastic sensors as screening tools for biomedical analysis
RI Stefan-van Staden
ETCMOS 2017, Warsaw, Poland, May 28-30, 2017 (Keynote lecture)

25. Molecular Diagnosis – a Chance for Life
Raluca-Ioana Stefan-van Staden
41st ARA Congres, August 1-5, 2017, Sinaia, Romania (Keynote lecture)

26. SCREENING-UL LA NIVEL MOLECULAR – O SANSA LA VIATA!
RI Stefan-van Staden
Zilele Academice Iesene, Iasi, Romania, 5-6 Octombrie 2017, (Opening Plenary Lecture)

27. STOCμSENS-MD – A TEST FOR LIFE
RI Stefan-van Staden
10th Synevo Clinica Research Symposium, Bucharest, Romania November 9, 2018 (Plenary lecture)

28 Supramolecular Assemblies Recognized Gastric Cancer Biomarkers in Biological Fluids
RI Stefan-van Staden
235th Meeting of ECS, Dallas, USA, May-June 2019 (Invited lecture)

29. Stochastic sensors as screening tools for fast and early detection of illnesses
RI Stefan-van Staden
235th Meeting of ECS, Dallas, USA, May-June 2019 (Invited lecture)

30. New Trends in Molecular Recognition of Substances of Biological Importance
RI Stefan-van Staden
EUROANALYSIS, Istanbul, Turkey, September, 2019 (Invited lecture)

31. New Trends in Molecular Recognition of Substances of Biological Importance
RI Stefan-van Staden
43rd ARA Congress, Los Angeles, USA, November 15-17, 2019 (plenary lecture)

32. Noi metode si biomarkeri pentru diagnosticarea precoce a cancerului gastric
RI Stefan-van Staden
Institutul Petru Poni, Iasi, 11 noiembrie 2019, Conferinta invitata.

33. 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 (invited lecture)

34. Quality and Reliability in Analytical Chemistry
Raluca-Ioana Stefan-van Staden
Virtual EURACHEM Workshop, Bucharest, July 14-15, 2020 (plenary lecture)

35. 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)

36. 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)

37. Innovative methods for food analysis
RI Stefan-van Staden
5th International Conference Food Science & Nutrition, Dubai, 4-5 September 2023

a. Prezentari orale

1. *Mianserin Ion Selective Membrane Electrode and Its Pharmaceutical Applications*
M.S. Ionescu, **R.I. Stefan**, A.A. Bunaciu, V.V. Cosofret
The Xth National Conference on Analytical Chemistry, Jassy, Romania, 19-20 September, 1991.

2. *Penbutolol Selective Membrane Sensor*
M.S. Ionescu, **R.I. Stefan**, G.E. Baiulescu, A.A. Bunaciu, V.V. Cosofret, H.Y. Aboul-Enein
The XIth National Conference on Analytical Chemistry, Cluj-Napoca, Romania, 24-25 September 1992.

3. *Moclobemide Selective Membrane Electrode and Its Pharmaceutical Applications*
R.I. Stefan, G.E. Baiulescu
National Symposium of Electrochemical Sensors and Biosensors, Cluj-Napoca, Romania, 28-29 September 1995.

4. *The Utilization of Ion-Selective Membrane Electrodes for the in vitro Dissolution Test of Pharmaceutical Compounds*
R.I. Stefan
The Drugs Research Between Information and Life Sciences. First International Conference, Bucharest, Romania, 3-4 October 1996.

5. *Utilization of Lauryl Sulphate for the Construction of Membrane of Ion-Selective Electrodes*
R.I. Stefan
The XXIInd 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. Makhafola, 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 carbomylated 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
IMA'2001. 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
ICFIA'2001. 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
ICFIA'2001. 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. vanStaden and R.I. Stefan.
Flow Analysis IX. Royal Australian Chemical Institute and IUPAC. Geelong. Australia. 17 - 21 February 2003.

32. *Determination of azidothymidine using an immunosensor/SIA system.*
R.I. Stefan, J.F. van Staden, R.G. Bokretsion 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. Rat'ko 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 Ingineering, 28th-30th of May 2008, Timisoara, Romania

41. Studies of the interactions between the enantiomers of deprenyl and C_{60} and C_{70} 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-T_3 and free-L-T_4 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 Congres , 26-30 August 2012, Prague, Cehia.

53. New multimode sensors based on nanostrucured 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, Hawai, 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.

b. Postere

1. *Mexiletine Selective Membrane Electrode*
R.I. Stefan, M.S. Ionescu
The XIIth 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**
Pittcon'97, Atlanta, Georgia, USA, 16-21 March 1997.

8. *Biosensor for the Enantioselective Analysis of S-Captopril*
R.I. Stefan, H.Y. Aboul-Enein, C. Bala, **G.L. Radu**
Biosensors'98, Berlin, Germany, June 1998.

9. *Biosensor for the Enantioselective Analysis of S-Enalapril and S-Ramipril*
R.I. Stefan, H.Y. Aboul-Enein, **G.L. Radu**
Biosensors'98, Berlin, Germany, June 1998.

10. *Biosensors for the Enantioselective Analysis of S-Cilazapril, S-Trandolapril, and S-Pentopril*
R.I. Stefan, H.Y. Aboul-Enein, G.L. Radu, G.E. Baiulescu
The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, September 1998.

11. *Biosensors for the Enantioselective Analysis of S-Perindopril*
R.I. Stefan, H.Y. Aboul-Enein, G.L. Radu
The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, September 1998.

12. *Comparison of flow and sequential system for fluoride assays in toothpaste and borehole water, using a F-selective electrode*

R.I. Stefan, J.F. van Staden
The XIVth National Conference on Analytical Chemistry, Piatra Neamt, Romania, September 1998.

13. *Validation criteria for developing ion-selective membrane electrodes for analysis of pharmaceuticals*
R.I. Stefan, H.Y. Aboul-Enein
Drug Analysis '98, Brussels, Belgium, May 1998.

14. *The opportunity to use ion-selective membrane electrodes for dissolution tests*
R.I. Stefan, H.Y. Aboul-Enein
Drug Analysis '98. Brussels, Belgium, May 1998.

15. *Determination of urinary oxalate using oxalate-selective membrane electrodes*
R.I. Stefan, I. Draghici, **G.E. Baiulescu**
The 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, Ilinois, 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, Ilinois, 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*
JF. 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. vanStaden
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. vanStaden 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-T_3, L-T_4 and D-T_4 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 analysi.*
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. Bokretsion, 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 spectropohotometric 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 sequenial 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. Bokretsion, 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. Bokretsion, 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 ∀- and ∃-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. Bokretsion, 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 ∀-, ∃-, and (-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. Bokretsion, 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. Bokretsion, 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 ∀- and ∃-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. Bokretsion, **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
ICFIA'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
ICFIA'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
ICFIA'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
ICFIA'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
ICFIA'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. Bokretsion, **J.F. van Staden**, H.Y. Aboul-Enein
ICFIA'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
ICFIA'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
ICFIA'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. Bokretsion, **J.F. van Staden**, H.Y. Aboul-Enein
ICFIA'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. Bokretsion, **J.F. van Staden**, H.Y. Aboul-Enein.
ICFIA'2003. 12th International Conference on Flow Injection Analysis, including related techniques. Merida. Venezuela. 7 - 13 December 2003.

97. *Sequental 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. *Sequental 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 C_{60} fullerenes*
R.G. Bokretsion, R.I. Stefan-van Staden
PITTCON'2007, February 2007, Chicago, IL, USA

102. *Enantioanalysis of ketoprofen based on its molecular interaction with C_{60} fullerenes*
R.I. Stefan-van Staden, R.G. Bokretsion
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. Indrumator stiintific pentru BSc, Master, Doctorat, Postdoc

3.1. Studenti care au terminat studiile.

Numele studentului	Titlul/Titlul tezei/data obtinerii titlului/universitatea	Indrumator	Co-indrumator	Durata studiului (ani)
A Alecu	BSc/Utilization of ion-selective, membrane electrodes in pharmaceutical anaysis/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
A Alecu	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 Bokretsion	MSc/On-line process control in pharmaceutical industry/2003	RI Stefan	JF van Staden	1/Distinction
SG Bairu	MSc/Diamond paste based electrodes for inorganic analysis/2003	RI Stefan	JF van Staden	1/Distinction
ZO Tesfaldet	MSc/Sequential injection analysis of cations in pharmaceutical products/2005	JF van Staden	RI Stefan	2/Distinction
TR Mashile	MSc/Enantioanalysis of pharmaceutical compounds/2006	RI Stefan	-	1/Distinction
L Holo	MSc/Enantioselective, potentiometric membrane electrodes for enantioanalysis of amino acids of clinical and pharmaceutical importance/2006	RI Stefan	-	1/Distinction
LA Gugoasa	MSc/Biosensors based on DNA for the assay of neurotransmitters/2012	A Ciucu	RI van Staden	2
RM Nejem	PhD/ Enantioselective sensors and biosensors for clinical analysis/2004	RI Stefan	-	3/Excellent
I Moldoveanu	PhD/Screenng systems for early detection of cancer and hepatitis/2015	RI van Staden	-	3/Excellent
LA Gugoasa	PhD/Multimode screening systems for obesity/2015	RI van Staden	-	3/Excellent
Ionela Raluca Comnea	PhD/Screening systems for early detection of lung cancer	RI van Staden	-	3/Excellent
Ahmed Jassim Muklive Al-Ogaidi	PhD/Fast detection of colon cancer biomarkers	RI van Staden	-	3/Excellent
Amalia Gabriela Diaconeasa	PhD/Detection of specific biomarkers for ageing related illnesses	RI van Staden	-	3/Excellent
Grigorina Mitrofan	PhD/Investigation of thyroid function and its associated pathologies using stochastic sensing	RI van Staden	-	3/Excellent
KI Ozoemena	Postdoc (Claude Harris Leon Foundation fellowship)/Design and construction of novel ion and enantioselective membranes for the development of high performance electrochemical sensors	RI Stefan	-	1

AA Rat'ko	Postdoc/Studies on the behaviour of enantioselective, potentiometric membrane electrodes	RI Stefan	-	2
B Lal	Postdoc/Enantioselective, potentiometric membrane electrodes based on fullerens	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

3.2. Studenti doctoranzi la Universitatea Politehnica din Bucuresti

Numele studentului	Titlul/Titlul tezei	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	Ctober 2021
Andreea Elena Sandu (m. Dorneanu)	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 productts	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 oof food for increasing the security of food	October 2021
Catalina Cioates-Negut	Postdoc/Screening methods for diagnosis of brain cancer	August 2020

4. Membru in Societati nationale si internationale

- **Reprezentant al Romaniei in Divizia de Chimie Analitica, EUCHEMs**
- **Membra a Academiei Romano-Americane de Stiinte si Arte**
- **Leader al Bioanalytical Study Group din cadrul Diviziei de Chimie Analitica, EUCHEMs**
- **Electrochemistry Society, USA – membru, membru al Comitetului Executiv si Member-at-Large in Divizia de Senzori, din Octombrie 2012**

- Presedinta a Filialei Internationale din Romania a Societatii Americane de Chimie (Romania Chapter of American Chemical Society)
- 2020 Fellow al Societatii Americane de Chimie
- Societatea SIGMA XI, The scientific research honor society - membru
- Societatea de Chimie din Romania - membru
- International Society of Electrochemistry - membru
- International Society of Bioelectrochemistry - membru
- The South African Chemical Institute - membru
- American Chemical Society - membru
- The Israeli Metrological Society - membru
- IUPAC – Fellow.
- **Secretara, Comisia V.1, Aspecte generale ale chimiei analitice, IUPAC 1999-2001**.
- Phoenix – Romanian Association of University Chemists – - membru fondator.
- Romanian Society of Analytical Chemistry - fost membru.

Rol in Comitete Stiintifice:

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

5. Membra a birourilor editoriale

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

6. Vizite la universitati ca profesor/cercetator si colaborari

6.1. Vizite la universitati:

- University "Tor Vergata", Rome (Italy), 1996
- Universitatea Yamagata (Japonia), 2015 – Conferinta de presa impreuna cu rectorul universitatii.
- University of Antwerpen (Belgium), 1998
- University of Vienna (Austria), 1999, 2000.
- Universitatea din Bucuresti (Romania), 2000, 2001, 2002, 2004, 2005.
- UC at Berkeley, USA, 2011

6.2. Colaborari:

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

7. Management si administratie

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

8. Referent

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

Membru in comisii de doctorat:

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

- Universitatea "Gheorghe Asachi", Iasi, Romania

9. Premii si titluri

1997 - ***Wilhelm Simon award*** - a six month Scholarship, by the ICSC - World Laboratory Lausanne, Switzerland
1999 - ***IUPAC award*** for ***Young Scientist***
2001 **- *Exceptional Young Researcher, University of Pretoria***
2002 - ***President Award, National Research Foundation, South Africa***
2002 - ***Raikes Medal, South African Chemical Institute***
2003 - together with Dr KI Ozoemena, ***Claude Harris Leon Foundation award***
2004 – one of the 5 finalist for the Women in Science award – South Africa
2009 – Premiul II, Sectiunea Cercetare, Gala Premiilor in Educatie, Fundatia Dinu Patriciu
2010 – **Cetatean de onoare al Orasului Campulung-Muscel**
2010 – **Cetatean de onoare al judetului Arges**
2011, 2012 – Placheta Orasului Campulung-Muscel
2010 – Diploma de Excelenta pentru activitatea de inventica, ANCS
2010 – Diploma de Excelenta pentru reprezentarea cu success a Romaniei la Salonul International de Inventii de la Geneva, 2010, ANCS
2012 – Medalia omagiala a salonului PRO INVENT, **Ordinul Stiintific Gogu Constantinescu in grad de Comandor si medalia Gogu Constantinescu pentru rezultate remarcabile obtinute in activitatea de cercetare stiintifica, de promovare a inventicii, precum si pentru contributia la recunoasterea internationala a creativitatii romanesti**.
2012 – Membru de onoare al Asociatiei Bolnavilor de Cancer
2013 – Membru de onoare al Ligii Studentilor Romani din Strainatate
2013 – Premiu She Business pentru inovare
2017 - Premiul Radar de Media pentru Cercetare Stiintifica
2019 - Medalia Gheorghe Spacu si Premiul Societatii Romane de Chimie pentru inalta recunoastere nationala si internationala
2020-ACS FELLOW

Medalii si premii speciale in competitii internationale

2008 **–** Medalie de aur **si** Diploma of Excelenta pentru brevetul cu titlul: **"***Procedeu de realizare a senzorilor stocastici pe baza de porfirine si pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular"* **la AI** 2-lea Congres International al Cercetatorilor si Inventatorilor din Romania**, 11-12 decembrie 2008, Bucuresti, Romania.**

2009 – Medalia Pro Invent si Diploma de Excelenta; Diploma de Excelenta a Societatii Inventatorilor din Romania, pentru brevetul cu titlul: *Procedeu de realizare a senzorilor stocastici pe baza de porfirine si pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular"* la **Pro Invent,** 24-27 martie 2009, **Cluj-Napoca, Romania.**

2009 – Medalie de aur si Premiul Arca al Societatii Inventatorilor din Croatia, pentru brevetul cu titlul: "*Procedeu de realizare a senzorilor stocastici pe baza de porfirine si pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular"* la **37eme Salon International des Inventions des Techniques et Produit Nouveaux**, 1-5 Aprilie 2009, **Geneva**, **Elvetia**.

2009 – Medalie de aur **si** Premiul Federatiei Asociatiilor Inginerilor din Polonia – NOT, pentru **brevetul** cu titlul: **"*Procedeu de realizare a senzorilor stocastici pe baza de porfirine si pasta de diamant sau grafit pentru determinarea acidului ascorbic la nivel molecular"* la** International Warsaw Invention Show, IWIS 2009, **1-3 iunie 2009,** Varsovia, Polonia.

2009 – Medalie de aur **si** Premiul Technopol Moscova pentru **brevetul** cu titlul: **"*STOC-µSENS-CMD"* –** diagnosticarea cancerului la nivel molecular inainte ca pacientul sa fie bolnav clinic**,** la **IX** Moscow International Salon of Innovations and Investments, 2**6-29 august 2009**, Moscova, Federatia Rusa.

2009 – Placheta de argint pentru **brevetul** cu titlul: **"*STOC-µSENS-CMD"* –** diagnosticarea cancerului la nivel molecular inainte ca pacientul sa fie bolnav clinic**,** la ARCA 2009**, 15-19 septembrie 2009,** Zagreb, Croatia

2009 – Medalie de aur **si** Premiul ARCA de Excelenta pentru **brevetul** cu titlul: **"*STOC-µSENS-CMD"* –** diagnosticarea cancerului la nivel molecular inainte ca pacientul sa fie bolnav clinic**,** la Inventika, **28-31 septembrie 2009**, Bucuresti, Romania.

2009 – Medalie de aur cu felicitari din partea juriului **si** Cupa AGEPI a Agentiei de Proprietate Intelectuala din Moldova pentru **brevetul** cu titlul: **"*STOC-µSENS-CMD"* –** diagnosticarea cancerului la nivel molecular inainte ca pacientul sa fie bolnav clinic**,** la EUREKA 2009, **19-21 noiembrie 2009**, Bruxelles, Belgia.

2010 – Medalie de aur cu felicitari din partea juriului **si** Diploma de excelenta**,** pentru **brevetul** cu titlul: **"*STOC-µSENS-CMD"* –** diagnosticarea cancerului la nivel molecular inainte ca pacientul sa fie bolnav clinic**,** la **PRO INVENT 2010**, **16-19 martie 2010**, Cluj-Napoca, Romania.

2010 – Premiul (medalia de aur) Organizatiei Mondiale pentru Proprietate Intelectuala (OMPI) pentru cea mai buna femeie inventatoare, Medalia AGEPI si Medalia de Aur cu Felicitari din partea juriului pentru **brevetul** cu titlul: **"*STOC-µSENS-CMD"* –** diagnosticarea

cancerului la nivel molecular inainte ca pacientul sa fie bolnav clinic**,** la **38e Salon International des Inventions des Techniques et Produit Nouveaux**, 21-25 Aprilie 2010, Geneva, **Elvetia**.

2010 **–** Premiul al-II-lea, Categoria "Inventii"**,** pentru **brevetul** cu titlul: **"*STOC-µSENS-CMD*" –** diagnosticarea cancerului la nivel molecular inainte ca pacientul sa fie bolnav clinic**,** la Bright fair 2010, World Forum of Researchers and Inventors, 8-10 Octombrie 2010, Bucharest, Romania.

2010 **–** Premiul Societatii Inventatorilor din Romania, pentru **brevetul** cu titlul: diagnosticarea cancerului la nivel molecular inainte ca pacientul sa fie bolnav clinic**,** la Targul International de Inventii Invent-Invest, 23-26 Noiembrie 2010, Iasi, Romania.

2011 **–** Premiul Mare al Universitatii Tehnice din Cluj, pentru **brevetul** cu titlul: DOT sensor enantioselectiv**,** la PRO INVENT, 22-25 Martie 2011, Cluj-Napoca, Romania.

2011 – Premiul Mare al Asociatiei Inventatorilor din Europa si Medalia de Aur **pentru brevetul** cu titlul: DOT sensor enantioselectiv**,** la **39 Salon International des Inventions des Techniques et Produit Nouveaux**, 6-10 Aprilie 2010, Geneva, **Elvetia**.

2012– Medalia omagiala a salonului PRO INVENT, Ordinul Stiintific Gogu Constantinescu in grad de Comandor si medalia Gogu Constantinescu pentru rezultate remarcabile obtinute in activitatea de cercetare stiintifica, de promovare a inventicii, precum si pentru contributia la recunoasterea internationala a creativitatii romanesti.

2010 **–** Premiul pentru Stiinta si Viata, Revista VIP

2010 **–** Premiul Nationala Internationala, National TV

2010 **–** Premiul Zece pentru Romania pentru cercetare, Realitatea TV

2010 **–** Premiul Omul Anului al Revistei Argesul

2010 – Premiul pentru Cercetare, Gala Femei de Succes

2011 – Premiul Femeia Anului, Revista Avantaje

2011 – Premiul Radio Romania Cultural, Sectiunea Cercetare

2011 – Premiul Omul anului, Gala premiilor de excelenta "DEMOS T.N.", Targu Neamt 2011

10. Alte activitati profesionale

- Expert evaluator si membra in panel pentru **ANCS, UEFISCDI - Romania, National Research Foundation- Africa de Sud, Bulgarian National Research Found, Portugalia, Czech Republic – research projects.**

- **de Beers Research Center, Johannesburg, February 2001 -** Invited lecture**.**

- **SACI,** Raikes Medal Lecture**, February 2003.**

- **TEDx Bucuresti 2010; TEDx Eroilor Cluj-Napoca 2011.**

- Conferinte invitate la diferite universitati**, University of Vienna; Wits University; Universitatea din Bucuresti; University of Antwerpen; Universitatea Babes Bolyai, Cluj; Centrul de Senzori si Actuatori,** UC at Berkeley, USA**.**

- Membra in juriu pentru concursul national de fotografie**: SA Science Lens, South Africa; Gala Premiilor in Educatie, Sectiunea Cercetatorul Anului, Fundatia Dinu Patriciu, 2011; Studentul anului - organizat de Liga Studentilor Romani din Strainatate; Bursele L-Oreal Unesco Romania, 2012; membra in juriul pebtru acordarea premiului pentru cel mai bun poster – sectiunea senzori la conferintele Societatii de Electrochimie (SUA); membra in juriul pentru acordarea premiilor pentru cele mai bune lucrari prezentate in cadrul conferintei SmaSys, 2015, Japonia.**

- **Cursuri tinute la invitatia unor societati profesionale: Octombrie 2011 – doua cursuri (domeniul senzori electrochimici pentru analiza clinica si farmaceutica) sustinute la invitatia ACS si ECS la San Francisco, USA; Mai 2012 – curs (in domeniul enantionalizei clinice) sustinut la invitatia ECS la Seattle (USA); Septembrie 2012 – curs (in domeniul calitatii si fiabilitatii in analiza chimica) sustinut la invitatia DAC a EUCHEMs la Belgrad (Serbia) in cadrul conferintei EUROANALYSIS; Mai 2016 – curs (in domeniul micro si nanosenzorilor) sustinut la invitatia ECS (Denver, USA).**

- **Invitata pentru interviuri in direct la SABC Africa, programul 180 degrees si Radio fm 95.9mHz - Johannesburg, 26 July 2004, Africa de Sud.**

- **Invitata pentru interviu la Radio Romania Actualitati, Cultural, TVR, ProTV, Realitatea, Trinitas, B1, Antena, Kanal D, TVRM, Money Channel .**

- **Recitaluri de pian:** Bucuresti, Timisoara, Campulung-Muscel, Piatra Neamt, San Francisco (USA), Linz (Austria).

- Compozitiile muzicale au fost difuzate la Radio Romania Cultural.

11. Proiecte de cercetare

Proiecte nationale:

Director de proiect:

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

Responsabil de proiect:

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

Proiecte internationale:

Director de proiect:

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

Responsabil de proiect:

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

12. Activitate didactica

Cursuri/seminarii/laboratoare:

12.1. Facultatea de Chimie, Universitatea Bucuresti 1992-1998 – Curs de metode de separare si analiza de urme (anul IV, sectia Chimie), laboratoare anii I-V.

12.2. Departamentul de Chimie, Universitatea din Pretoria 2000-2006 – Cursuri, seminarii, laboratoare in domeniile chimie generala si chimie analitica, anul I – chimie, biochimie, inginerie (clase cu 50 – 700studenti); Curs de chimie analitica, anul II (coordonatorul cursurilor de chimie la anul II de studii); Curs de senzori electrochimici si bioanaliza la anul IV (Hons).

12.3. Indrumator pentru lucrarile de diploma si MSc – Facultatea de Chimie, Universitatea din Bucuresti 1992-1998.

12.4. Indrumator pentru MSc si conducator de doctorat – Universitatea din Pretoria 1999-2006.

12.5. Din decembrie 2013, conducator de doctorat - Universitatea Politehnica din Bucuresti.

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

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

13. Activitati artistice

Raluca-Ioana Stefan-van Staden incepe la 5 ani cursurile de balet din cadrul Casei de Cultura din Campulung Muscel si este prezenta ca recitator in spectacolele realizate de mama sa, Valeria Mihai Stefan. In 1975, la varsta de 6 ani este admisa la Scoala de Muzica si Arte Plastice din Campulung Muscel, la clasa Profesoarei de pian Jeanina Ionescu. La varsta de 8 ani scrie prima compozitie. Intre 1981 si 1983 studiaza pianul cu Profesor Mirebella Parota. La 10 ani este selectionata sa reprezinte scoala la concursul de interpretare Lira de Aur de la Suceava, unde este prezenta si in anii 1981 si 1982. Raluca a fost invitata sa cante cu diferite ocazii la Campulung-Muscel si Pitesti incepand de la varsta de 8 ani. In 1985 obtine premiul I la faza judeteana a concursului Cantarea Romaniei si Premiul al-III-lea si medalie de bronz la faza nationala a concursului Cantarea Romaniei. In anul 1987 este admisa la

Facultatea de Chimie a Universitatii din Bucuresti si participa la concursul artistic organizat la nivel de tara intre facultatile de chimie, Iasi, Octombrie 1987 unde obtine un premiu special pentru recitalul de pian. Din ianuarie 1988, Raluca studiaza in particular pianul cu prof univ Dr Georgeta Stefanescu Barnea. In anul 1989 obtine premiul I pe Municipiul Bucuresti in cadrul concursului Cantarea Romaniei si participa la Faza nationala, unde obtine Premiul al-III-lea si medalie de bronz. In anul 1991 este admisa la Universitatea Nationala de Muzica din Bucuresti, Facultatea de Compozitie, Muzicologie si Pedagogie Muzicala, sectia Pian si Pedagogie Muzicala, la clasa Prof univ Dr Georgeta Stefanescu Barnea, din anul 1993 fiind la clasa Prof Univ Dr Remus Manoleanu. Din anul 1992, Raluca face un curs de compozitie cu Prof Univ Dr Dan Dediu. In perioada 1991 – 1997, Raluca a sustinut numeroase recitaluri la Universitatea Nationala de Muzica din Bucuresti, Sala Dalles, Scoala de Muzica si Arte Plastice din Campulung-Muscel, la Timisoara, la CNA Dinu Lipatti Bucuresti, Sala Alfred Alesandrescu, Radio – recital cu transmisie in direct (septembrie 1993). In anul 1996 este admisa la master la sectiunea de Compozitie muzicala, clasa Prof Univ Dr Dan Dediu pe care o absolva in iunie 1997 cu oratoriul pentru solisti, cor si orchestra Dupa melci (versuri Ion Barbu). La Pretoria sustine doua recitaluri invitate in 1998 (august si noiembrie), unul fiind organizat de Universitatea din Pretoria si altul de Ambasada Romaniei din Africa de Sud, cand sustine o parte si cu muzica de camera alaturi de violonista romanca, Camelia Onea. Din 1999, Raluca sustine recitaluri in Pretoria si Johannesburg, solo si muzica de camera alaturi de Camelia Onea. In aprilie 1999, Raluca sustine alaturi de violonista romanca Cristina Anghelescu o serie de recitaluri cu muzica de camera in Africa de Sud – Pretoria si Johannesburg. In anul 2011, Raluca sustine un recital de pian la San Francisco, iar in 2012 la Linz. Raluca a cantat ca solist cu orchestra Nota Brevis din Bucuresti in numeroase concerte. Compozitiile sale pentru pian solo, flaut si vioara si voce si pian au fost transmise la Radio in diverse emisiuni in perioada 1993-1996 si cantate la Universitatea Nationala de Muzica din Bucuresti in cadrul Concertelor claselor de compozitie. Lista compozitiilor mai importante este :

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