

Dr. Petr Vanýsek

Curriculum vitae

12 January 2010

Address: Work:
 Northern Illinois University
 Department of Chemistry and Biochemistry
 418 Faraday West
 DeKalb, IL 60115 (USA)
 Private:
 226 Oak Drive, DeKalb, IL 60115-2556, USA
Telephone: (815) 753-6876 (day), fax: (815) 753-4802
e-mail: niu@vanysek.com
Born: in Ostrava, Czechoslovakia, presently Czech Republic
Status: US naturalized citizen

EDUCATION

1971-1976 MSc. (Summa Cum Laude), physical chemistry. Charles University, Prague, Czechoslovakia.
1977-1982 Ph.D. (Summa Cum Laude), physical chemistry. Czechoslovak Academy of Sciences, J. Heyrovský Institute of Physical Chemistry and Electrochemistry, Prague, Czechoslovakia.

EXPERIENCE

Present position:

Assistant (8/85-5/91), Associate and Full (2008) Professor, Northern Illinois University, Department of Chemistry and Biochemistry, DeKalb, IL 60115.
Director of Graduate Studies in the Department of Chemistry and Biochemistry

Past positions:

1981-1982 Research Associate, J. Heyrovský Institute of Physical Chemistry and Electrochemistry, Prague, Czechoslovakia.
1982 Assistant Professor, Charles University of Prague, part time, Faculty of Philosophy. Prague.
1982-1984 Postdoctoral Research Associate, University of North Carolina, Chapel Hill, North Carolina.
1984 Undergraduate Laboratories Coordinator, University of North Carolina, Chapel Hill.
1984-1985 Faculty-in-residence, University of New Hampshire, Durham, NH.
1993-1994 Visiting Professor, University of Calgary, Alberta, Canada.

1998 Research visitor: Sandia National Laboratories, Sensor Group. June/July.
 1999 Research visitor: Georgia Institute of Technology, Sensor research. July.
 2000-2002 Principal Scientist, ACLARA BioSciences 2000, (sabbatical/leave of absence).
 2004 Visiting Professor, University of Concepción, Chile, June 29-July 9.
 2007 Visiting Scientist, University of Calgary, Alberta, Canada September-October
 2007 Visiting Lecturer, University of Concepción, Chile, November

CONSULTING:

(Present engagements, covered by nondisclosure agreements)

Energizer, Westlake, OH

Revalerio, Tacoma, WA

RESEARCH OBJECTIVES

Electrochemistry on interfaces between two immiscible electrolytes (structure, energetics, analytical applications). Electrochemical techniques (all the standard and contemporary methods of experimental inquiry with emphasis on interpretation of impedance and noise signal). Studies of oxides on metal surfaces, corrosion inhibition. Chemical sensors - Gas and liquid - principles, measurements, response evaluation. Electrochemical and interpretational aspects of quartz crystal microbalance oscillators. Applied electrochemistry – fuel cells and corrosion protection.

SELECTED EXAMPLES OF DISTINGUISHED SERVICE

Society for Electroanalytical Chemistry, Treasurer 2010-

Electrochemical Society, nominated by the President to the Financial Advisory Committee (2008-2011)

Electrochemical Society, elected the Secretary of the Society, Member of the Executive Committee. 2004-2008

Electrochemical Society (ECS), Publications Committee 2004-2008

Electrochemical Society (ECS), Society Meetings Committee 2004-2008

Electrochemical Society (ECS), Financial Committee 2004-2008

International Society of Electrochemistry, National Representative (USA) 2006-2008, elected for second term 2009-

Electrochemical Society, Physical Electrochemistry Division, secretary/treasurer 2003-2005

Society for Electroanalytical Chemistry, Member at large, Board of Directors 2003-2008

Electrochemical Society Chicago Section, Counselor 2005-2006, 2007-

Electrochemical Society – nominated for the Treasurer 2002

Electrochemical Society Chicago Section, Chairman 2002-2005

Electrochemical Society, Council of Sections, Chair 2002-2003

Electrochemical Society, Council of Sections, Secretary 2001-2002

Electrochemical Society - Technical affairs committee May 1999-May 2003

Sensor Group, Chairman, 1996-1998

Electrochemical Society - Graduate awards committee - 1996
Counselor, Local Section (Chicago) ECS 1995-present
Sensor Group, Vice-chairman, October 1994-96
Chairman, Local Section of ECS June 1994-95
Vice chairman, Local Section of ECS June 1993
Interface, Advisory Board, 1992-1996
Sensor Group, Newsletter editor, 1992-1996
Sensor Group, Member-at-large, 1992-1994
Treasurer, Local Section of the Electrochemical Society (ECS) 1992-1993

TEACHING

25 years of teaching experience at the university level, both graduate and undergraduate, in following subjects:

- Introductory chemistry (for nonchemists)
- General chemistry (1st and 2nd semester sequence)
- Quantitative analytical chemistry
- Instrumental analytical chemistry
- Electronics in chemical instrumentation
- Graduate electroanalytical chemistry
- Graduate applied electrochemistry
- Graduate physical electrochemistry
- Graduate special topics in electrochemistry (Fuel cells, Impedance measurements)
- Introduction to research – a service course
- Introduction to preparation of successful visual presentations – a service course
- Short course on impedance spectroscopy
- Short course on instrumental analysis
- Interdisciplinary introductory course on nanoscience and nanotechnology

SCIENTIFIC PUBLICATIONS

78. P. Vanýsek and H. Tavassol: Impedance in Electrochemistry--From Analytical Applications to Mechanistic Speculation. ECS Transactions 19(20) (2009) 43-54. (Published, refereed.)
77. P. Vanýsek and V. Novák: Liquid/liquid Electrochemistry in Electroanalysis: Fundamentals Revisited. In J. Li, P. Vanýsek, R. Brown, C. Bruckner-Lea, D. Hatchet and M. Josowicz [Eds.] 35 Years of Chemical Sensors. ECS Transactions, 19(9) (2009) 55-63. (Published, refereed)

76. Petr Vanýsek and Luis Basaez Ramirez: Interface between two immiscible liquid electrolytes: A review. *Journal of the Chilean Chemical Society*, 53 (2) (2008) 1455-1463. (Published, refereed)
75. P. Vanýsek: Impedance Data Masquerading as Unusual Circuit Elements: Instrumentation Artifacts. *ECS Transactions*, 13(13) (2008) 101-113. (Published, refereed)
74. Luis A. Basaez, Ivan M. Peric, Paola A. Jara, Cesar A. Soto, David R. Contreras, Carolina Aguirre and Petr Vanýsek: Electrochemical and Electrophoretic Study of Sodium Metamizole. *Journal of the Chilean Chemical Society*, 53 (2) (2008) 1126-1121. (Published, refereed)
73. Petr Vanýsek and Philippe Gauthier: Disposable graphite electrodes for studies of catalytic layers of platinum. *Journal of New Materials for Electrochemical Systems* 11 (2008) 157-163. (Published, refereed)
72. Potucek, Rudolf K.; Sumar, Alykhan; Vanysek, Petr; Birss, Viola I.: Data correction technique for using common electrochemical apparatus for the measurement of crystal impedance. *Electrochimica Acta* (2007), 52(28), 8031-8038. Published, refereed.
71. G. Luo, S. Malkova, J. Yoon, D. G. Schultz, B. Lin, M. Meron, I. Benjamin, P. Vanýsek and M. L. Schlossman: Ion Distribution at the Nitrobenzene-Water Interface Electrified by a Common Ion. *J. Electroanal. Chem.*, 593 (2006) 142-158. [Invited paper.]
70. G. Luo, S. Malkova, S. V. Pingali, D. G. Schultz, B. Lin, M. Meron, I. Benjamin, P. Vanýsek and M. L. Schlossman: Structure of the Interface between Two Polar Liquid: Nitrobenzene and Water. *J. Phys. Chem. Lett. B.*, 110 (2006) 4527-4530.
69. P. Vanýsek and L. A. Delia, Impedance Characterization of a Quartz Crystal Microbalance. *Electroanalysis*, 18 (2006) 371-377.
68. G. Luo, S. Malkova, J. Yoon, D. G. Schultz, B. Lin, M. Meron, I. Benjamin, P. Vanýsek and M. L. Schlossman, Ion distributions near a liquid-liquid interface, *Science*, 311 (2006) 216-218.
67. F. R. Perez, L. Basáez, J. Belmar and P. Vanýsek, Cyclic voltammetry of 1-(n-hexyl)-3-methyl-5-pyrazolone-based enamines and their chloromanganese(III) and nitridomanganese(V) complexes. *J. Chil. Chem. Soc.*, 53 (2005) 575-580.
66. L. Basáez, P. Vanýsek, B. L. Rivas: Electrodeic polymer materials based on aniline. Influence of Ni²⁺, Co²⁺ and Cu²⁺ ions on its formation. *J. Chil. Chem. Soc.*, 50 (2005) 447-450.

65. G. Luo, S. Malkova, S. V. Pingali, D. G. Schultz, B. Lin, M. Meron, T. J. Graber, J. Gebhardt, P. Vanýsek, M. L. Schlossman: The width of the water/2-heptanone liquid-liquid interface. *Electrochem. Commun.*, 7 (2005) 627-630.
64. G. Luo, S. Malkova, S. V. Pingali, D. G. Schultz, B. Lin, M. Meron, T. J. Graber, J. Gebhardt, P. Vanýsek and M. L. Schlossman: X-Ray studies of the interface between two polar liquids: neat and with electrolytes. *Faraday Discuss.*, 129 (2005) 23–34.
63. P. Vanýsek The Chalkboard: The glass pH electrode. *Electrochemical Society Interface*, 13(2) (2004) 19-20.
62. P. Vanýsek: Meeting reports – Paris Attracts Analytical Chemists. Report on the 203rd Meeting of the Electrochemical Society, held in Paris, France, 26 April – 2 May 2003. *Trends in Analytical Chemistry*, Vol 22, Nos. 7 + 8, 2003, pp. x-xii.
61. Gelis A. V., Vanýsek P., Jensen M. P. and Nash K. L. Electrochemical and spectrophotometric investigations of neptunium in alkaline media. *Radiochimica Acta*, 89(9) (2001) 565-571.
60. Basáez L. Peric I. Aguirre C. Vanýsek P. Electrochemical study of amoxicillin antibiotic across liquid-liquid interface. [Spanish] [Article]. *Boletín de la Sociedad Chilena de Química*, 46(2) (2001) 203-208.
59. Basáez, L.; Vanýsek, P. “Transport Studies of β -Lactam Antibiotics and Their Degradation Products Across Electrified Water/Oil Interface,” *J. Pharm. Biomed. Anal.*, 19 (1999) 183-192.
58. H. N. Dinh, P. Vanýsek, V. I. Birss, The Effect of Film Thickness and Growth Method on Polyaniline Film Properties. *J. Electrochem. Soc.* 164(9) (1999) 3324-3334.
57. J. Janata, M. Josowicz, P. Vanýsek, D. M. DeVaney, “Chemical Sensors,” *Anal. Chem.* 70 (1998) 179R-208R.
56. P. Vanýsek, “Sensor Division: After a Decade and Into the Next Century,” *Interface*, 7(4) (1998) 17 et 32.
55. L. Basáez and P. Vanýsek: Electrochemical studies of β -lactam antibiotics and their degradation products. *J. Pharm. Biomed. Anal.*, 19 (1999) 183-192.
54. P. Vanýsek: Impact of electrode geometry, depth of immersion, and size on impedance measurement. *Canadian J. Chem.*, 75(11), (1997) 1635-1642.
53. V. I. Birss, M. Chan, T. Phan, P. Vanýsek and A. Zhang: An electrochemical study of the composition of thin, compact Pd oxide films. *J. Chem. Soc., Faraday Trans.*, 92(20) (1996) 4041-4047.

52. V. I. Birss, V. H. Beck, A. J. Zhang and P. Vanýsek: Properties of thin hydrous Pd oxide films, *J. Electroanal. Chem.*, 429 (1997) 175-184.
51. I. Serebrennikova, P. Vanýsek and V. I. Birss: Characterization of porous aluminum oxide films by metal electrodeposition. *Electrochim. Acta*, 42 (1997) 145-151.
50. V. I. Birss, S. Guha-Thakurta, C. E. McGarvey, S. Quach and P. Vanýsek: An electrochemical study of the photolysis of adsorbed flavins. *J. Electroanal. Chem.*, 423 (1997) 13-21.
49. P. Vanýsek: Charge transfer processes on liquid/liquid interfaces: The first century. *Electrochim. Acta*, 40 (1995) 2841-2847.
48. A. J. Zhang, V. I. Birss and P. Vanýsek: Impedance characterization of thin electrochemically formed palladium oxide films. *J. Electroanal. Chem.*, 378 (1994) 63-76.
47. P. Vanýsek: The Sensor Division: Past, Present and Future. *Interface* 3 (1994) 19-27.
46. Petr Vanýsek: Analytical applications of electrified interfaces between two immiscible solutions. *TRAC - Trends in Analytical chemistry*, 12 (1993) 357-363.
45. Ivan Krejčí and Petr Vanýsek: Effect of zinc and iron ions on the electrochemistry of nickel oxide electrode: Slow cyclic voltammetry. *J. Power Sources*, 47 (1994) 79-88.
44. Giselle Sandí and Petr Vanýsek: Impedance and voltammetric studies of electrogenerated polyaniline conducting film. *Synthetic Metals*, 64 (1994) 1-8.
43. Ivan Krejčí, Petr Vanýsek and Antonín Trojánek: Transport of $Zn(OH)^-$ ions across a polyolefin microporous membrane. *J. Electrochem. Soc.*, 14 (1993) 2279-2283.
42. Zdeněk Samec, Antonín Trojánek and Petr Vanýsek: Polarization phenomena at ionic membrane/electrolyte interfaces. A Nafion membrane between two electrolyte solutions. *J. Electroanal. Chem.*, 332 (1992) 349-355.
41. Richard P. Buck and Petr Vanýsek: Interfacial potential differences at non-classical interfaces: Nernst, Nernst-Donnan, Nernst distribution and generalizations. *J. Electroanal. Chem.*, 292 (1990) 73-91.
40. Petr Vanýsek and Richard P. Buck: Multi-ion Nernst distribution potential equations: Interfacial potentials at equilibrium liquid/liquid and membrane interfaces. *J. Electroanal. Chem.*, 297 (1991) 19-35.
39. Petr Vanýsek, Irma C. Hernandez and Jianjiang Xu: Determination of choline, picrate, dodecylsulfate and several quarternary ammonium salts on an electrified liquid/liquid microinterface. *Microchem. J.*, 4 (1990) 327-339.

38. Petr Vanýsek: Analytical applications of electrochemical processes on the interface between two immiscible electrolyte solutions, *Anal. Chem.*, 62 (1990) 827A-835A.
37. Petr Vanýsek and Irma C. Hernandez: Ion transport across a microscopic interface between two immiscible electrolytes, *J. Electrochem. Soc.*, 137 (1990) 2763-2768.
36. Petr Vanýsek, Irma C. Hernandez and Jianjiang Xu, Supporting electrolytes for electrochemistry on liquid/liquid interfaces: Crystal violet and tetrabutylammonium tetraphenylborate in nitrobenzene. *J. Colloid Interface Sci.*, 139 (1990) 527-534.
35. Petr Vanýsek and Irma Hernandez: Microscopic interface between two immiscible electrolytes: A parallelism to an ultramicroelectrode. *Anal. Lett.*, 23 (1990) 771-785.
34. Petr Vanýsek and Zhisheng Sun: Bovine serum albumin adsorption on a water/nitrobenzene interface. *Bioelectrochem. Bioenerget.*, 2 (1990) 177-194.
33. P. Vanýsek: Uncertainty in potential of the reference interface in liquid/liquid measurements. *Electroanalysis*, 2 (1990) 409-413.
32. Deborah H. Wiegand and Petr Vanýsek: Distribution of oxacyanine dyes between water and nitrobenzene: Determination of partition constants, association and potentials of transfer of dye cations on liquid/liquid interfaces. *J. Colloid Interface Sci.*, 135 (1990) 272-282.
31. Zhisheng Sun and Petr Vanýsek: Electrochemical determination of lead and lead ion transfer at liquid/liquid interfaces. *Anal. Chim. Acta*, 228 (1990) 241-249.
30. Petr Vanýsek: Impedance spectroscopy and impedance related problems in electrochemistry on the interface between two immiscible electrolytes. *Chimica Oggi*, 8 (January/February), (1990) 47-52.
29. Brenda D. Spangler, Petr Vanýsek, Irma C. Hernandez and Robin D. Rogers: Structure of crystal violet tetraphenylborate. *J. Cryst. Spec. Res.*, 19 (1989) 589-596.
28. Deborah H. Wiegand and Petr Vanýsek: Spectroscopic and fluorometric characterization of oxacyanine dyes in water and nitrobenzene. *Applied Spectroscopy*, 42 (1988) 958.
27. E. Makrlík, W. Ruth and P. Vanýsek: Proton transfer across the water/nitrobenzene interface facilitated by some electroneutral ligands. *Z. Phys. Chem.*, (Leipzig), 265 (1984) 1256-1259.
26. V. Vanýsek and P. Vanýsek: Prediction of deuterium abundance in comets. *Icarus*, 61 (1985) 57-59.

25. J. Koryta, Guo Du, W. Ruth and P. Vanýsek: Transfer of alkali metal and hydrogen ion across liquid/liquid interface mediated by monensin. *Faraday Discuss. Chem. Soc.*, 77 (1984) 209-216.
24. P. Vanýsek and R. P. Buck: Properties of the interface of two immiscible electrolytes mediated by molecules of biological importance. *J. Electrochem. Soc.*, 131, (1984) 1792-1796.
23. P. Vanýsek, J. D. Reid, M. A. Craven and R. P. Buck: Properties of the interface between two immiscible electrolytes in the presence of proteins, *J. Electrochem. Soc.*, 131 (1984) 1788-1791.
22. E. Makrlík, W. Ruth and P. Vanýsek: Proton transfer across the water/nitrobenzene interface facilitated by aniline. *J. Colloid Interface Sci.*, 96 (1983) 548-550.
21. J. D. Reid, P. Vanýsek and R. P. Buck: Potential dependence of capacitance at a liquid/liquid interface. II. Unblocked interface. *J. Electroanal. Chem.*, 170 (1984) 109-125.
20. P. Vanýsek and R. P. Buck: New developments in liquid/liquid interface transport: A literature review. *J. Electroanal. Chem.*, 163 (1984) 1-9.
19. J. Koryta, N. Yu. Kozlov, A. Hofmanová, W. Khalil, P. Vanýsek, W. Ruth, and D. Guo: Determination of some antibiotics by voltammetry at the nitrobenzene/water interface. *Antibiotiki (Moscow)*, (1983) 810-814.
18. D. Guo, J. Koryta, W. Ruth, and P. Vanýsek: Diversity of ion carrier functions of monensin: A study using voltammetry at the interface of two immiscible electrolyte solutions. *J. Electroanal. Chem.*, 159 (1983) 413-420.
17. E. Makrlík, W. Ruth and P. Vanýsek: Proton transfer across the water/nitrobenzene interface facilitated by α -hexylate anion. *Electrochim. Acta*, 28 (1983) 575-577.
16. J. D. Reid, P. Vanýsek and R. P. Buck: Potential dependence of capacitance at a polarizable (blocked) liquid/liquid interface. *J. Electroanal. Chem. Interfacial Electrochem.*, 161 (1984) 1-15.
15. E. Makrlík, P. Vanýsek and W. Ruth: Mobilities of some univalent ions in aqueous and nitrobenzene media. *Collection Czechoslovak Chem. Commun.*, 49 (1984) 1277-1281.
14. W. Ruth, and P. Vanýsek: Determination of aniline traces in nitrobenzene by the facilitated proton transfer across the water/nitrobenzene interface. *Microchem. J.*, 29 (1984) 162-167.

13. J. Koryta, W. Ruth, P. Vanýsek and A. Hofmanová : Determination of monensin by voltammetry at the interface between two immiscible electrolyte solutions. *Anal. Lett.*, 15(B21) (1982) 1685-1692.
12. P. Vanýsek, W. Ruth and J. Koryta: Valinomycin mediated transfer of potassium across the water/nitrobenzene interface. *J. Electroanal. Chem. Interfacial Electrochem.*, 148 (1983) 117-121.
11. I. G. Abidor, P. Vanýsek, S. A. Tatuljan and L. V. Chernomordik: Surface potential of lipid double-layer membranes in 1:1 electrolyte solutions [In Russian]. *Elektrokchimiya*, 17 (1981) 1844-1851.
10. I. G. Abidor, P. Vanýsek and S. A. Tatuljan: Inner membrane potential measurement by triangular pulse voltammetry. [In Czech]. *Chem. Listy*, 77 (1983) 209-213.
9. P. Vanýsek and M. Behrendt: Investigation of acetylcholine, choline and acetylcholinesterase at the interface of the two immiscible electrolyte solutions. *J. Electroanal. Chem. Interfacial Electrochem.*, 130 (1981) 287-292.
8. P. Vanýsek: Electrolysis with electrolyte dropping electrode III. Investigation of anions. *J. Electroanal. Chem. Interfacial Electrochem.*, 121 (1981) 149-152.
7. Le Quoc Hung and P. Vanýsek: Instrumentation for investigation of electrolytic phenomena on the phase boundary between two immiscible electrolyte solutions I. Ohmic drop compensation in a four-electrode system. [In Czech] *Chem. Listy*, 74 (1980) 869-873.
6. D. Homolka, Le Quoc Hung, A. Hofmanová , M. W. Khalil, J. Koryta, V. Mareček, Z. Samec, S. K. Sen, P. Vanýsek, J. Weber, M. Březina, M. Janda and I. Stibor: Electroanalytical aspects of Faradaic ion transfer across the interface of two immiscible electrolyte solutions. I. Chronopotentiometry and cyclic voltammetry. *Anal. Chem.*, 52 (1980) 1606-1610.
5. J. Koryta, M. Březina, A. Hofmanová , D. Homolka, Le Q. Hung, M. W. Khalil, V. Mareček, Z. Samec, S. K. Sen, P. Vanýsek and J. Weber: A new model of membrane transport: Electrolysis at the interface of two immiscible electrolyte solutions. *Bioelectrochem. Bioenerget.*, 7 (1980) 61-68, *J. Electroanal. Chem.*, 116 (1980) 61-68.
4. Z. Samec, V. Mareček, P. Vanýsek and J. Koryta: Electrolysis on the interface between two immiscible electrolyte solutions. [In Czech] *Chem. Listy*, 74 (1980) 715-736.
3. J. Koryta, P. Vanýsek, H. Jänchenová and M. Březina: Electrochemical properties of bis- π -(3)-1,2-dicarbollylcobaltate. [In Russian]. *Elektrokchimiya*, 13 (1977) 706-709.

2. J. Koryta, P. Vanýsek and M. Březina: Electrolysis with electrolyte dropping electrode II. Basic properties of the system. *J. Electroanal. Chem. Interfacial Electrochem.*, 75 (1977) 211-228.
1. J. Koryta, P. Vanýsek and M. Březina: Electrolysis with an electrolyte dropping electrode. *J. Electroanal. Chem. Interfacial Electrochem.*, 67 (1976) 263-266.

OTHER PUBLICATIONS:

PATENTS

2. Berrien, La Shaun; Binyamin, Gary; Lackritz, Hilary S.; Vanýsek, Petr; Zhao, Mingqi. Sensor device and method for indicating oxygen consumption. PCT Int. Appl. (2002), 37 pp. Awarded 2005.
1. Patent Application filed (2001): Mingqi Zhao, Antonio Ricco, Tor Bjornson, Hillary S. Lackritz, Zhu Qun, Uyen Nguyen and Petr Vanýsek: Microfluidic chip having integrated electrodes.

BOOKS

3. P. Vanýsek [Editor]: Modern Electroanalytical Techniques, John Wiley, Chemical Analysis Series. Volume 139. J. Winefordner, Editor., John Wiley, New York 1996.
2. P. Vanýsek: Electrochemistry on Liquid/Liquid Interfaces, Chinese edition, translation of item 1, Peoples Republic of China, 1987.
1. P. Vanýsek: Electrochemistry on liquid/liquid interfaces. Lecture notes in chemistry, Vol. 39, Springer-Verlag, Berlin 1985. 106 pp.

EDITED VOLUMES/PROCEEDINGS/TRANSACTIONS

13. P. Vanýsek, D. Hansen and M. Orazem (Editors). Impedance in electrochemistry – from analytical applications to mechanistic speculations 2. ECS Transactions 19(20) 137 pp. Pennington, NJ (2009).
12. J. Li, P. Vanýsek, R. Brown, C. Bruckner-Lea, D. Hatchet and M. Josowicz (Editors) 35 Years of Chemical Sensors. ECS Transactions, 19(6) (2009) 356 pp. The Electrochemical Society, Pennington (2009).

11. P. Vanýsek (Editor) *Tutorials in Nanotechnology: Focus on Sensors*. From: 214th ECS Meeting, October 12 - October 17, 2008, Honolulu, HI ECS Transactions, Vol. 16 No. 15. 79 pp. The Electrochemical Society, Pennington (2009).
10. P. Vanýsek (Editor) *Impedance in Electrochemistry: From Analytical Applications to Mechanistic Speculations*. (Symposium held at the 209th Meeting of ECS in Denver, CO 8-10 May 2006.) [In: ECS Trans., 2007; 2(17)]. Preface pp. iii-viii. Publisher. Electrochemical Society 2007. (not refereed) (I was one of the referees for the volume, though.)
9. *Impedance in Electrochemistry: From Analytical Applications to Mechanistic Speculations* ECS. P. Vanýsek, Editor; Trans. Electrochem. Soc. **2**, (17) 29 (2007).
8. *Chemical Sensors VI: Chemical and Biological Sensors and Analytical Methods*. PV 2004-08. C. Bruckner-Lea, P. Vanýsek, G. Hunter, M. Egashira, N. Miua and F. Mizutani, Editors. Electrochemical Society, Pennington, NJ 2004. pp. 460.
7. *Historical Perspectives of the Evolution of Electrochemical Tools*. J. Leddy, V. Birss and P. Vanýsek Editors. Electrochemical Society, Pennington, NJ 2004. SV 2002-29, pp. 302.
6. Butler, M.; Vanýsek, P.; Yamazoe, N.; Editors. *Proceedings of the Second International Symposium: Chemical and Biological Sensors and Analytical Methods II*. [In: *Proceedings of the Electrochemical Society (2001-18)*, 2001; 2001-18]. Electrochemical Soc, Pennington, N. J. 2001.
5. Wachsman, E. D.; Weppner, W.; Traversa, E.; Liu, M.; Vanýsek, P.; Yamazoe, N.; Editors. *Solid-State Ionic Devices II: Ceramic Sensors*. (Proceedings of the International Symposium held 23-23 2000 in Phoenix Arizona.) [In: *Proc. - Electrochem. Soc.*, 2001; 2000-32]. 530 pp. Electrochemical Society, Pennington, N. J. 2001.
4. P. Vanýsek, M. Alodan, J. Lipkowski, and O. Magnussen, *Electrochemical Science and Technology of Copper*, Proceedings Volume 2000-30, The Electrochemical Society, Pennington 2003.
3. M. Butler, N. Yamazoe, P. Vanýsek and M. Aizawa (Editors): *Chemical Sensors IV*. In: *Proc. - Electrochem. Soc.* 1999; 99-23. 456 pp.
2. J. Leddy, P. Vanýsek and M. D. Porter, Editors. *Proceedings of a symposium on New Directions in Electroanalytical Chemistry II*. In: *Proc. - Electrochem. Soc.*, 1999; 99-5]. 268 pp. (Edited book)
1. A. J. Ricco, M. A. Butler, P. Vanýsek, G. Horvai and A. F. Silva (Editors): *Chemical and biological sensors and analytical electrochemical methods*. Proceedings of the Electrochemical Society, Vol. PV97-19, Pennington 1997. 1100 pp.

CHAPTERS

8. P. Vanýsek: The History of the Chicago Local Section of the Electrochemical Society. A chapter in a book. The Electrochemical Society – 1902-2002: A Centennial History. Written and Edited by Forest A. Trumbore and Dennis R. Turner. Electrochemical Society, Pennington, NJ **2002**. pp. 133-135.
7. P. Vanýsek: Liquid-Liquid Electrochemistry in: Modern Electroanalytical Techniques [P. Vanýsek, Editor], John Wiley, Chemical Analysis Series. Volume 139. J. Winefordner, Editor., John Wiley, New York 1996. pp. 337-364.
6. M. Butler, N. Yamazoe, P. Vanýsek and M. Aizawa (Editors): Chemical Sensors IV. In: Proc. - Electrochem. Soc. 1999; 99-23. 456 pp. (Contents refereed) (Edited book)
5. D. R. Turner, R. P. Buck, M. A. Butler and P. Vanýsek: Sensors in Electrochemistry and Solid State Science in The Electrochemical Society. 4th Edition, pp. 41-43. The Electrochemical Society, Pennington (1997).
4. Petr Vanýsek: Electrified Immiscible Liquid Boundaries: Conventional and Microscopic Interfaces. In: R. A. Mackay and J. Texter, Eds., Electrochemistry in Colloids and Dispersions, VCH Publishers, New York (1992), pp. 71-84.
3. Petr Vanýsek: Interfacial ion transport between immiscible liquids in: M. Blank and I. Vodyanoy (Eds.), Membrane Electrochemistry, Advances in Chemistry Series Vol. 235. pp. 55-81. The American Chemical Society, Washington 1994.
2. Jonathan D. Reid, Owen R. Melroy, William E. Bronner, Harold C. Hughes, Petr Vanýsek and Richard P. Buck: Structure of the double layer and rates of ion crossings at "single" immiscible liquid/liquid (L/L) interfaces, In: A. Fernando Silva (Ed.): Trends in interfacial electrochemistry, NATO ASI Series. Series C: Mathematical and Physical Sciences, Vol. 179, pp. 103-185. D. Reidel, Dordrecht (Holland), 1986.
1. J. Koryta and P. Vanýsek: Electrolysis at the interface of two immiscible electrolyte solutions. Advances in Electrochemistry and Electrochemical Engineering (H. Gerischer and C. W. Tobias, Eds.), Vol. 12, Wiley-Interscience, New York, 1981. pp. 113-176.

MEETING ABSTRACTS/PROCEEDINGS/INDEXED REPORTS

16. M. L. Schlossman, G. Luo, S. Malkova, S. V. Pingali, D. Schultz, B. Lin, M. Meron, P. Vanýsek, X-ray studies of the electrolyte distribution at the interface between two polar liquids, Abstracts of Papers, 230th ACS National Meeting, Washington, DC, United States, Aug. 28-Sept. 1, 2005.
15. Gelis, Artem V.; Vanýsek, Petr; Jensen, Mark P.; Nash, Kenneth L.: Neptunium speciation in strongly alkaline solutions. Abstr. Pap. - Am. Chem. Soc. (2001), 221st.
14. Vanýsek, Petr; Boone, Travis; Dang, Tam; Geiger, Heather; Klapperich, Catherine M.; Lee, Howard; Nicewarner, Dawn; Kurnik, Ronald; Singh, Sharat; Xiao, Vivian; Zhao, Mitch: Multiwell microfluidic plates for evaporation-controlled sub-microliter assays: design and results. In: Proceedings - Electrochemical Society 2001-18 (Chemical and Biological Sensors and Analytical Methods II), 376-383, Pennington, NJ 2001.
13. P. Vanýsek: Quartz crystal microbalance in electroanalytical applications In: Proceedings for the 1997 IEEE International Frequency Control Symposium, IEEE, Piscataway, 1997, pp. 49-55.
12. P. Vanýsek and S. Dragan: Capacitance and interfacial tension studies of water-nitrobenzene interface: A probe into the interfacial structure. In: New Directions in Electroanalytical Chemistry, J. Leddy and R. M. Wightman, Eds., Proceedings of the Electrochemical Society, Vol. PV96-9, Los Angeles, May 1996. pp. 212-223.
11. P. Vanýsek: Charge transfer processes on liquid/liquid interfaces: The status in 1994. Gov. Rep. Announce. Index (U.S.) 1995 95(2), Abstract No. 503,779. (Published 1996)
10. V. I. Birss, V. H. Beck and P. Vanýsek: Oxygen evolution at hydrous oxide films at platinum and palladium electrodes. Proceedings of the Electrochemical Society (Proceedings of the Symposia on Fundamentals of Electrochemical Process Design: A Tutorial and anodic Processes: Fundamental and Practical Aspects) Vol. 95-11, 381-399 (1995).
9. Vanýsek, P.: Introduction to electrochemical impedance. Report (1994), (Order No. AD-A277081), 78 pp. CAN 123:352926.
8. P. Vanýsek, Charge transfer processes on liquid/liquid interfaces: The first hundred years. Gov. Rep. Announce. Index (U.S.) 93(11), Abstr. No. 331,409 (1993).
7. P. Vanýsek: Analytical applications of electrified interfaces between two immiscible solutions. Gov. Rep. Announce. Index (U.S.) 93(15), Abstr. No. 343,837 (1993).

6. P. Vanýsek: Electrified microscopic and conventional interfaces between two immiscible solutions. Report. Gov. Rep. Announce. Ind. (U.S.), 91(20), Abstr. 158,285 (1991).
5. Vanýsek, Petr. Interfacial tension studies of electrified liquid/liquid interfaces: classical techniques for new data. Proc. - Electrochem. Soc. (1993), 93-7(Proceedings of the Symposium on Chemical Sensors II, 1993), 107-14.
4. P. Vanýsek: Investigation of the interface between two immiscible electrolytes applied to membrane electrochemistry. Report. Gov. Rep. Announce. Ind. (U.S.), 91(20), Abstr. 154,618 (1991).
3. Petr Vanýsek: Interfacial tension studies of electrified liquid/liquid interfaces: Classical techniques for new data. Proceedings of the Symposium on Chemical Sensors. PV93-7. M. Butler, A. Ricco and N. Yamazoe, Eds., The Electrochemical Society, Pennington, May 1993. pp. 107-114.
2. J. D. Reid, O. R. Melroy, W. E. Bronner, P. Vanýsek and R. P. Buck: Structure of the double layer and rates of ion crossings at "simple" immiscible liquid/liquid (L/L) interfaces. Relation to the mechanism of Liquid Ion-Selective electrodes. In: M. Kessler, J. Hopler and D. K. Harrigan (Eds). In: Proceedings International Symposium on "The theory and application of ion-selective electrodes in physiology and medicine," Burg Rabenstein, Sept. 12th - Sept.14th, 1983. Springer, Berlin 1984. Abstract #40, p. 40.
1. J. Koryta, P. Vanýsek, M. W. Khalil, V. Mareček, Z. Samec and M. Březina in: E. Pungor and I. Buzás (Eds.), "A mechanistic tool for liquid-membrane ion-selective electrode investigation: Polarization of the liquid-liquid interface." In: Proceedings of the Conference on Ion Selective Electrodes, Budapest, September 5-9, 1977, Akademiai Kiado, Budapest and Elsevier, Amsterdam, 1978, pp. 441-444.

CONTRIBUTIONS NOT PEER-REVIEWED

20. Petr Vanýsek: Outreach. ECS Interface Summer 2009, 65.
19. Petr Vanýsek: Congressional Visit Days on Capitol Hill. ECS Interface Summer 2009, 17.
18. Petr Vanýsek: ECS Constitution and Bylaws. ECS Interface Summer 2008, 15.
17. Petr Vanýsek: Congressional Visit Days. ECS Interface Summer 2008, 15-16.
16. Petr Vanýsek: ECS and ISE Sign Cooperation Agreement, The Electrochemical Society Interface Winter 2007, pp. 14-15 (not refereed)

15. P. Vanýsek, Report from the European Section of the Electrochemical Society. Interface, Fall 2006, p. 51
14. P. Vanýsek: CRC Handbook of Chemistry and Physics: 82nd edition. Standard Transformed Gibbs Energy of Formation for Important Biological Species. pp. 7-9 - 7-11. Boca Raton 2001.
13. P. Vanýsek: CRC Handbook of Chemistry and Physics. 81st edition. Revision of tables of Diffusion Coefficients and Ionic Conductivities, in print. CRC Press, Boca Raton 2000.
12. P. Vanýsek: CRC Handbook of Chemistry and Physics. 79th edition. Revision of tables of Electrochemical Series, pp. (8-21)-(8-31). CRC Press, Boca Raton 1998.
11. P. Vanýsek: Tables of ion radicals. Updated tables for the 1996/97 edition of the CRC Handbook of Chemistry and Physics. pp. (8-31)-(8-33).
10. P. Vanýsek: Revision of tables of activity coefficients for CRC Handbook of Chemistry and Physics, 1995/96 edition. pp. (5-92)-(5-93)
9. Petr Vanýsek: Review of book by Kh. Brainina and E. Nyeman: Electroanalytical Stripping methods, Wiley 1993, (ISBN 471595063). Bioelectrochemistry and Bioenergetics, 36, 93 (1995).
8. Petr Vanýsek: Review of book by J. Koryta, J. Dvořák and L. Kavan: Principles of Electrochemistry, 2nd edition, Wiley, Chichester, 1993. 486 pp. for Bioelectrochemistry and Bioenergetics (M. Blank), 15 July 1993, Bioelectrochem. Bioenerget. 33, 107-108 (1994).
7. P. Vanýsek: Revision of the table of diffusion coefficients for CRC handbook (74th Ed.), 1993/94 edition. pp.(5-90)-(5-92). CRC Press, Boca Raton, 1993.
6. Petr Vanýsek: Ionic conductivity and diffusion at infinite dilution, Handbook of Chemistry and Physics, CRC Press, 1992/93 edition. Boca Raton, 1992. pp. (5-111)-(5-113).
5. Petr Vanýsek: Tables of standard reduction potentials. Revision for The Handbook of Chemistry and Physics, CRC Press, 1991/92 Edition, 72nd Edition. , Boca Raton 1991. pp. (8-17)-(8-27).
4. Petr Vanýsek: Redox potentials of ion radicals. A table. CRC Handbook of Chemistry and Physics, 70th edition, CRC Press, Boca Raton 1989. pp. (D-159)-(D-160).
3. P. Vanýsek: Electrochemical Series in Handbook of Chemistry and Physics, pp. (D-151)-(D-170), 67th edition 1986-1987, CRC Press, Boca Raton 1986.

2. P. Vanýsek: Table of Equivalent conductivities and other tables related to conductivity measurements. CRC handbook, Vol. 65, pp. D-171 - D-174, (1984).
1. P. Vanýsek: Standard Electrochemical Potentials. Handbook of Chemistry and Physics, Vol. 64, CRC, Boca Raton 1983. pp. (D-156)-(D-163).