

# **Prof. Dr. György Inzelt**

Chemistry Institute, Department of Physical Chemistry, Laboratory of Electrochemistry and Electroanalytical Chemistry, Eötvös Loránd University, H-1117 Budapest, Pázmány Péter sétány 1/a, Hungary, [inzeltgy@chem.elte.hu](mailto:inzeltgy@chem.elte.hu)



## **Curriculum vitae**

**Born** November 2, 1946, Budapest

1970 **M. Sc.** with honours, Eötvös University, Budapest

1972 **Ph. D.**, summa cum laude, Eötvös University

1978 **C. Sc.**, Hungarian Acad. Sci.

1988 **D. Sc.**, Hungarian Acad. Sci.

1970-1977 assistant professor, Eötvös Univ., Dept. of Physical Chemistry, Budapest

1982-1983 postdoctoral research associate (University of Tennessee, Knoxville, USA)

1983-1990 associate professor

1990- full professor, Eötvös University, Dept. of Physical Chemistry

1994-1998 Vice Rector of Eötvös University

1999-2005 Director of the Chemistry Institute of Eötvös University

1998- **Head of the Doctoral School in Chemistry, Eötvös University**

2006- Head of the Laboratory of Electrochemistry and Electroanalytical Chemistry,  
Eötvös University

2007- **Member of the Hungarian Accreditation Committee**

1993- **Member of the Doctoral Committee of Faculty of Sciences, Eötvös University**

1995-1998 **Chairman of the Doctoral Committee, Eötvös University**

1994-1998 Chairman of the Habilitation Committee, Eötvös University

1994-1998 **Member of the National Doctoral and Habilitation Council**

1993-2006 Chairman of Subcommittee of Electrochemistry, Hungarian Acad. Sci.

1991- Member of the Committee of Physical and Inorganic Chemistry of Hung. Acad.  
Sci.

1987- Member of International Society of Electrochemistry, 1997-2003 co-chairperson of  
Division 2, chair-elect of Division 1, 2005-2006, chair 2007-2008, past cair 2009-  
2010

2000- IUPAC Fellow, Member of Advisory Subcommittee of Div. 1

1992-2004 FECS WPEC, National secretary

1992-2002 Magyar Kémiai Folyóirat, Member of Editorial Board

1996-2002, 2004-2007 Electrochimica Acta, Member of the Editorial Board

1998- J. Solid State Electrochemistry (Springer) Member of the Editorial Board, Regional  
Editor Europe 2003-2007, Topical editor 2007-

1999- Electrochemistry Communications (Elsevier) Member of the Editorial Board

#### **Research interest:**

Modified electrodes, polymer film electrodes, conducting polymers, electroanalysis, electrosorption, electrochemical oscillations, organic electrochemistry, solid state electrochemistry, history of chemistry

**Publications: 479, book: 7, book chapter: 14, citations: 3128, h-index: 36**

#### **Teaching activity:**

Physical chemistry, Electroanalytical chemistry, History of Chemistry, Advanced electrochemistry lectures, Ph. D. programme: Theoretical Electrochemistry, History of Electrochemistry lectures

#### **Honours:**

Scientific Prize (Eötvös Univ. Faculty of Science) 1991.

Pro Universitate (Eötvös Univ.) 1997.

Széchenyi Professorship 1997-2000.

Doctor Honoris Causa, Babes-Bolyai University, Cluj, Romania, 2000.

Polányi Mihály Award ( Hung.Acad.Sci.) 2004

Knight Cross of the Order of Merit of Republic of Hungary 2007

ISE Fellow 2009

Széchenyi-Prize 2011

Szilárd Leo Professorship 2011

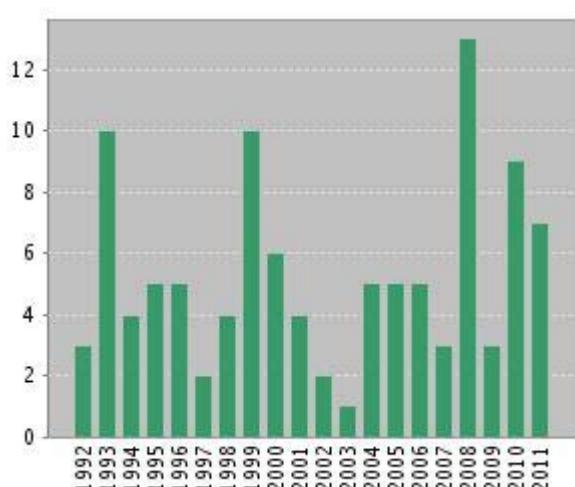
Festschrift: Journal of Solid State Electrochemistry 2011 15 (11-12)

**Publications: <https://vm.mtmt.hu/www/index.php#>**

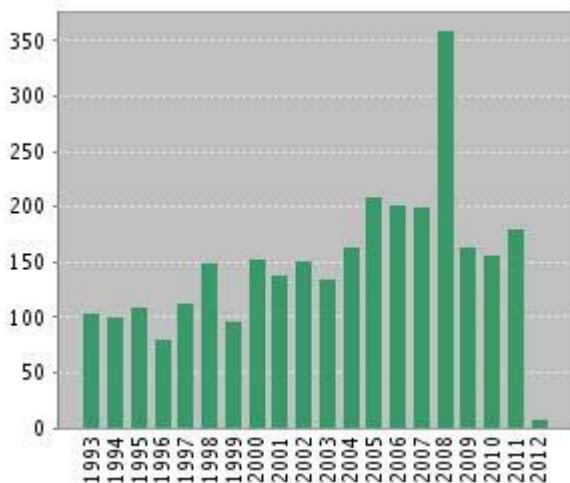
**Citations: <https://vm.mtmt.hu/www/index.php#>**

#### **Web of Science**

##### **Published Items in Each Year**



## Citations in Each Year



## Recent publications

### E. Bura-Nakic, A. Róka, I. Ciglenecki, G. Inzelt:

Electrochemical nanogravimetric studies of sulfur/sulfide redox processes on gold surface  
J. Solid State Electrochemistry, 13, 1935-1944 (2009).

### G. Inzelt, A. Róka:

The Advantages of Using an Electrochemical Quartz Nanobalance to Study the  
Electrochemical Conversion of Solid Microparticles  
Chemical and Biochemical Engineering Quaterly 23 (1): 31-41 (2009).

### E. Bura-Nakic, A. Róka, I. Ciglenecki, G. Inzelt:

Electrochemical quartz crystal microbalance study of FeS particles attached to Au surface  
Electroanalysis 21 (15): 1699-1708 (2009).

### Á. Kriston, G. Inzelt, I. Faragó, T. Szabó:

Simulation of the transient behavior of fuel cells by using operator splitting techniques for  
real-time applications  
Computers and Chemical Engineering 34: 339-348 (2010).

### G. Inzelt, B.B. Berkes and Á. Kriston:

Two Types Dissolution of Platinum in Acid Media. An Electrochemical Nanogravimetric  
Study  
Electrochemical Society Transactions 25 (23): 137-156 (2010).

### Suzana Sopsic, Marijana Kraljic-Rokovic, Zoran Mandic, György Inzelt:

Preparation and characterization of RuO<sub>2</sub>/polyaniline composite electrodes  
J. Solid State Electrochemistry, 14: 2021-2026 (2010).

### G. Inzelt, B.B. Berkes and Á. Kriston:

Temperature dependence of two types of dissolution of platinum in acid media. An  
electrochemical nanogravimetric study

*Electrochimica Acta* 55: 4742-4749; (2010).

**B.B. Berkes, A. Székely and G. Inzelt:**

Effect of Cs<sup>+</sup> ions on the electrochemical nanogravimetric response of platinum electrode in acid media

*Electrochemistry Communications*, 12: 1095-1098 (2010).

**Ákos Kriston, Tamás Szabó, György Inzelt:**

The marriage of car sharing and hydrogen economy: A possible solution to the main problems of urban living

*International J Hydrogen Energy* 35: 12697-12708 (2010).

**G. Inzelt, B.B. Berkes, Á. Kriston and A. Székely:**

Electrochemical nanogravimetric studies of platinum in acid media

*J. Solid State Electrochemistry*, 15, 901-915 (2011).

**G. Inzelt, B.B. Berkes, Á. Kriston:**

Electrochemical nanogravimetric studies of adsorption, deposition, and dissolution processes occurring at platinum electrodes in acid media

*Pure Appl. Chem.*, 83 (2): 269-279 (2011).

**Suzana Sopsic, Marijana Kraljic-Rokovic, Zoran Mandic, András Róka, György Inzelt:**

Mass changes accompanying the pseudocapacitance of hydrous RuO<sub>2</sub> under different experimental conditions

*Electrochimica Acta* 56: 3543-3548 (2011).

**S. Fletcher, G. Inzelt, F. Scholz:**

Electrochemistry – past, present and future

*J. Solid State Electrochemistry* 15(7-8): 1295-1296 (2011).

**G. Inzelt:**

Milestones of the development of kinetics of electrode reactions

*J. Solid State Electrochemistry* 15: 1373-1389 (2011).

**Suzana Sopsic, Zoran Mandic, György Inzelt, Marijana Kraljic-Rokovic, Ernest Mestrovic:**

Ion dynamics in the pseudocapacitive reaction of hydrous ruthenium oxide. Effect of the temperature pre-treatment

*J Power Sources*:196: 4849-4858 (2011).

**G. Inzelt:**

Rise and rise of conducting polymers

*J. Solid State Electrochemistry* 15: 1711-1718 (2011).

**A. Kriston, B.B. Berkes, P. Simon, G. Inzelt, K. Dobos and A. Nemes:**

Unusual surface mass changes in the course of the oxygen reduction reaction on platinum and their explanation by using a kinetic model

*J. Solid State Electrochemistry Accepted: 21 October 2011. DOI 10.1007/s10008-011-1582-6*

## **Recent Books**

G. Inzelt: Conducting Polymers – A New Era in Electrochemistry, Springer-Verlag, Berlin, Heidelberg, 2008, p. 294 ISBN 978 3 540 75929 4, 2<sup>nd</sup> edition, 2012

G. Inzelt: Electrochemical Dictionary, In: A.J. Bard, G. Inzelt, F. Scholz (eds.), Springer-Verlag, Berlin, Heidelberg, 2008 pp. 723 ISBN 978 3 540 74597 6

G. Inzelt: Electroanalytical Methods, Guide to Experiments and Applications 2nd, revised and extended edition In: F. Scholz (ed) Springer-Verlag, Berlin Heidelberg, 2010., ISBN978-3-642-02914-1, eISBN 978-3-642-02915-8, DOI 10.1007/978-3-642-02915-8

- I. 3. Kinetics of Electrochemical Reactions pp. 33-53.
- II. 4. Chronocoulometry pp. 147-158.
- II. 10 Electrochemical Quartz Crystal Nanobalance pp. 257-270.
- IV. 1. Seminal Publications in Electrochemistry and Electroanalysis (with F. Scholz and Z. Stojek) pp. 339-342.

G. Inzelt and G.G. Láng: Electrochemical Impedance Spectroscopy (EIS) for Polymer Characterization In: Electropolymerization (eds. S. Cosnier and A. Karyakin) Wiley-VCH, Weinheim, Germany, 2010, pp. 51-76.

Inzelt: Encyclopedia of Electrochemistry (eds. A.J. Bard, M. Stratmann) Inorganic Electrochemistry Vol. 7 (eds. F. Scholz, Ch. Pickett), Weinheim, Wiley-VCH, 2006. ISBN 978 3 527 30399 1

- Ch. 1 Standard potentials pp. 1-18.
- Ch. 2. Standard, formal and other characteristic potentials of selected electrode reactions pp. 19-77.
- Ch. 7.2. Nitrogen oxides and oxyanions pp. 241-253.
- Ch. 18. The nickel group (nickel, palladium, platinum) pp. 497-529.

G. Inzelt: Encyclopedia of Electrochemistry (eds. A.J. Bard, M. Stratmann) Functions and applications of modified electrodes Vol. 10 (eds. I. Rubinstein, J. Rusling, M. Fujihara), Weinheim, Wiley-VCH, 2007. ISBN 978 3 527 30402 8

Ch. 9. Charge transport in polymer modified electrodes, pp. 651-683