

## PERSONAL DATA

Name and surname: Samo Hočevar

Date of birth: 08.12.1968

Citizenship: Republic of Slovenia

Foreign language: English (active)



## EDUCATION

1987: Gymnasium Bežigrad, Ljubljana.

1996: BSc, pure chemistry, Faculty of Chemistry and Chemical Technology, University of Ljubljana.

2000: MSc, analytical chemistry, Faculty of Chemistry and Chemical Technology, University of Ljubljana.

2002: PhD, analytical chemistry, Faculty of Chemistry and Chemical Technology, University of Ljubljana.

## EMPLOYMENT

1997 - 1998: Patent examiner, Slovenian Intellectual Property Office, Ljubljana.

1998 - : MSc/PhD student, young investigator, Research Associate, Associate Scientist, from 2011 Senior Scientist, Department of Analytical Chemistry, National Institute of Chemistry, Ljubljana.

2010 - 2013: Acting Head of the Department of Analytical Chemistry, National Institute of Chemistry, Ljubljana.

2013 - : Head of the Department of Analytical Chemistry, National Institute of Chemistry, Ljubljana.

## RESEARCH FIELD AND EXPERTISE

Analytical chemistry, trace analysis, electroanalysis, voltammetric and potentiometric (stripping) analysis, amperometry, development, preparation and modification of electrodes and microelectrodes using carbon nanoparticles, carbon fibers, glassy carbon, carbon paste, gold, platinum, etc., development of (bio)sensors and micro(bio)sensors, measurement of trace heavy metal ions and organic compounds (pharmaceuticals, pesticides, glucose, 2,4,6-trinitrotoluene) with the newly introduced antimony and bismuth electrodes, electrochemical in-vivo measurements of neurotransmitters (dopamine, serotonin) and ascorbate in the striatum of rat brain, development of gas sensors, characterization of electrochemical sensors and study of analytical parameters, SECM, SEM/EDX.

## WORK IN EXPERT COMMISSIONS BOTH DOMESTICALLY AND ABROAD

- member of the Committee for Innovations at the National Institute of Chemistry,
- referee for international journals *Electroanalysis*, *Analytica Chimica Acta*, *Talanta*, *Electrochimica Acta*, *Journal of Solid State Electrochemistry*, *Sensors*, *Analyst*, *Sensors & Actuators: B. Chemical*, *Electrochemistry Communications*,
- Guest Editor for a Special Issue of the journal *Electroanalysis*, vol. 22, July 2010,
- Examination Commission member for two PhD defenses at the University Ca'Foscari Venezia (23.02.2016).

## PARTICIPATION IN NATIONAL AND INTERNATIONAL PROJECTS AND PROGRAM

- principal investigator of the program P1-0034 - Analytics and chemical characterization of materials and processes,
- involved in EU project (WP5, NANORESTART, HORIZON 2020),
- involved in several national projects:
  - J4-4115 Development of advanced electrochemical sensors for in-vitro and in-vivo studies of brain development and function (2011-2014), G. Majdič,
  - M1-0016 Development and preparation of photoelectrochemical cells of Graetzel type (2004-2006), B. Orel,

- Z1-6370 Development of Advanced Electrochemical Micro- and Nano-Sensors for Environmental and Biomedical Measurements (2004-2006), B. Ogorevc,
- involved in several international-bilateral projects:
  - Bilateral project "The development and innovations of modern detection systems and materials for electroanalytical measurements" (BI-CZ/09-10-004); partner: prof. dr. Ivan Švancara, Department of Analytical Chemistry, University of Pardubice, Pardubice, Czech Republic. Principal investigator in RS: dr. Samo Hočevar,
  - Bilateral project "Development of bismuth and antimony film electrodes for trace metal analysis: electrode mechanisms, kinetics and analytical applications" (BI-MK/10-11-005); partner: dr. Valentin Mirčeski, Institute of Chemistry, Faculty of Natural Sciences and Mathematics, "Ss Cyril and Methodius" University, Skopje, Republic of Macedonia. Principle investigator in RS: dr. Samo Hočevar,
  - Bilateral project "Study and further development of antimony- and bismuth-based electrodes for their application in advanced electroanalysis" (BI-CZ/11-12-008); partner: prof. dr. Ivan Švancara, Department of Analytical Chemistry, University of Pardubice, Pardubice, Czech Republic. Principal investigator in RS: dr. Samo Hočevar,
  - Bilateral project "Novel inorganic and organic nanostructured electrode coatings for advanced electrochemical detection of compounds of biomedical and environmental significance" (BI-CN/11-13-011); partner: prof. dr. Xueji Zhang, Institute of Biomedicine and Bioengineering, University of Science and Technology, Beijing, People's Republic of China. Principal investigator in RS: dr. Božidar Ogorevc,
  - Bilateral project "Novel approaches for Advanced Electrochemical Sensing" (BI-CZ/07-08-008); partner: prof. dr. Karel Vytras, Department of Analytical Chemistry, University of Pardubice, Pardubice, Czech Republic. Principal investigator in RS: dr. Božidar Ogorevc,
  - Bilateral project "Formation and applications of Nanocomposite SOLGEL thin films" (1000-07-380012); partner: prof. dr. D. Mandler, Department of Inorganic and Analytical Chemistry, Hebrew University of Jerusalem, Israel. Principal investigator in RS: dr. Božidar Ogorevc,
  - Bilateral project "Development of novel electrochemical (micro)sensors using advanced materials for biomedical and environmental measurements" (BI-US/06-07-022); partner: prof. dr. Joseph Wang, Arizona State University, Tempe, AZ. Principal investigator in RS: dr. Samo Hočevar,
  - Bilateral project "Advanced electrochemical sensors" (1999-2000, MZT code SLO-US 022, contract no. 3411-99-71-0022); partner: prof. dr. Joseph Wang, New Mexico State University, Las Cruces, New Mexico, USA. Principal investigator in RS: dr. Božidar Ogorevc,
  - Bilateral project "Development of Advanced Electrochemical Sensors and Their Miniaturization" (2002-2003, SLO-US-2002/17); partner: prof. dr. Joseph Wang, New Mexico State University, Las Cruces, New Mexico, USA. Principal investigator in RS: dr. Božidar Ogorevc,
  - Bilateral project "New Materials for Electrochemical Sensing in Stripping Analysis" (SI-CZ/04-05/07); partner: prof. dr. Karel Vytras, Department of Analytical Chemistry, University of Pardubice, Pardubice, Czech Republic. Principal investigator in RS: dr. Božidar Ogorevc.

## **OTHERS**

- mentorships of young investigators,
- invited lectures at Universities:
  - the 23 of April 2015: an invited lecture at the University of Maribor entitled "Bismuth- and Antimony-Based Electrodes; Development and Application",
  - the 23rd of February 2016: an invited lecture at the University Ca'Foscari Venice entitled "Metal film electrodes for trace analysis - recent development",
- co-organizer of international conferences SLONANO 2005 and SLONANO 2010,
- principal organizer of an important international scientific conference "14th International Conference on Electroanalysis - ESEAC 2012",
- over 70 scientific articles, 1 review article, 2 Editorial, invited lectures,
- over 3990 citations, ca. 54 citations/article, h-index 30 (Scopus),

- the most cited article: 695 citations (J. Wang, J. Lu, S.B. Hocevar, P.A. Farias, B. Ogorevc, Bismuth-coated carbon electrodes for anodic stripping voltammetry, *Anal. Chem.* 72 (2000) 3218).