## Curriculum vitae of Laura Sziráki



Laura Sziráki, <u>Sziraki@chem.elte.hu</u>

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**Birth**: 1949

**Qualification (diploma):** Eötvös Loránd University, Budapest, secondary school teacher of physics and chemistry, excellent diploma with university degree, 1973

**Affiliation**: Eötvös Loránd University, Budapest, Institute of Chemistry, Dept. of Physical Chemistry, Laboratory of Electrochemistry and Electroanalytical chemistry 1973 – present

**Employment:** assistant professor 1973-1980, senior lecturer 1980-1998, associate professor, 1998-present. Retired from 2012.

**Scientific degree**: dr. univ. 1977, PhD 1995 physical chemistry, electrochemistry Faculty of Natural Sciences, Eötvös L University.

**Teaching activity**: : for geology majors and from 2009 for Msc geology majors : physical chemistry lecture (1992-2012) and seminar

for chemistry teacher students of College of Teacher-Training of Eötvös L. University, physical chemistry lecture (1995-2005)

Laboratory courses of physical chemistry and electrochemistry for chemistry teacher-students, biology majors, pharmacy majors (1973-2012) and for students of engineer-physics (1994-2010), and for chemistry majors 1982-86 and 1992-to present.

Electrochemistry lecture and laboratory course modules for chemistry majors with specialization in environmental chemistry and chemical materials science and chemistry materials science MSc (1995-to present).

Special lecture and doctorate course: Corrosion and metal deposition studies with electrochemical methods (1999- to present)

Supervisor: for 2 graduated PhD students (defense: 2008 and 2010), consulent for 1 PhD student, 4 thesis, 2 TDK thesis.

**Research expertise:** Main field: electrochemistry, corrosion of metals and metal alloys: anodic dissolution, passivity, corrosion, electrodeposition.

Applied electrochemical topics (electrodeposition and electroforming of alloys from environmentally sound bath, corrosion of lead-acid battery cathode, metal oxide pH, glucose sensors, corrosion assessment of implanted dental materials etc).

Recently focused on preparation and investigation of thin layers of electrochromic metal oxides and electrodeposited alloys with non-equilibrium structure with electrochemical polarization and impedance spectroscopic techniques.

With cooperation of hungarian and foreign colleques the electrochemical investigations are completed with other surface analytical techniques, e.g. SEM/TEM, XRD, XPS, CEMS, radiotracer method and SPM.

**Research cooperation and research abroad**: collaborations fellowships: 1-1 month in University of J. Kepler, Inst. Of Inorganic Chemistry, Austria (2004), Mendelejev Institute of Moscow (1985), collaboration visits: Karpov Institute of Moscow (1982-86), Bulgarian Academy of Science, Sofia (1992-98).

**Publications**: <a href="https://vm.mtmt.hu//search/slist.php?lang=0&AuthorID="https://vm.mtmt.hu//search/slist.php?lang=0&AuthorID="https://vm.mtmt.hu//search/slist.php?lang=0&AuthorID="https://vm.mtmt.hu//search/slist.php?lang=0&AuthorID="https://vm.mtmt.hu//search/slist.php?lang=0&AuthorID="https://vm.mtmt.hu//search/slist.php?lang=0...">https://vm.mtmt.hu/search/slist.php?lang=0...">https://vm.mtmt.hu/searc

44 in per-reviewed international or hungarian journal, 40 in conference proceedings . cumulative impact factor 30,7, number of citations 236.

Two textbook chapters in: Practical courses on Environmental Analytics and Technology (1999),

1 **patent** no: 213 361 announcement no: P 95 01355

**Research project**: 12 scientific projects from 1994: leader (3) or participating researcher.

## **Professional memberships:**

Public body of Hungarian Academy of science (HAS)

Hungarian Federation of Corrosion (member of managing committee), International Society of Electrochemistry (ISE)

Budapest, 2014-02-02 Sziráki Laura