# Scientific CV

Name :	Dr. Attila Jancsó
Date of Birth :	25/10/1973 Place of Birth : Szeged, Hungary Nationality: Hungarian
Working Place :	Department of Inorganic and Analytical Chemistry, University of Szeged, 6720
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Job Title :	associated professor

#### Diplomas, degrees, knowledge of language

MSc in Chemistry : University of Szeged, Szeged, 20/06/1997. Reg. number: 316/1997.

<u>*PhD in Chemistry*</u> (Summa Cum Laude): University of Szeged, 28/06/2002. Reg. number: TTK-18/2002. Title: "Structural and functional mimicking of metal-binding sites of proteins by metal complexes of nitrogen donor ligands"

Habilitation in the field of Chemical sciences, University of Szeged, 12/04/2018. No.: 8/2018.

<u>Postgraduate courses</u>: (1) TEMPUS course, Gent, Belgium, "Atomic and mass spectrometric methods as analytical tools for inorganic components in the environment", 7/1994.

(2) FEBS/EU course, Louvain-la-Neuve, Belgium, "Role of Metals in Biology, Medicine and the Environment", 5/2002.

<u>Knowledge of language</u>: English: speaks and reads fluently in English, teaches courses of analytical chemistry in English (Exam: "C" type at intermediate level in 1990).

## Working places

- 1997-2000: University of Szeged, PhD student
- 2000-2001: PhD Fellow, supported by the SOROS Foundation
- 2001-2003: Department of Inorganic and Analytical Chemistry, University of Szeged, research assistant and assistant lecturer
- 2003-2004: Department of Chemistry, University of Turku, FIN, Marie Curie Postdoc Fellow
- 2005-2006: Dept. Inorganic and Analytical Chemistry, University of Szeged, assistant lecturer
- 2006-2020: Dept. Inorganic and Analytical Chemistry, University of Szeged, assistant professor
- 2020- : Dept. Inorganic and Analytical Chemistry, University of Szeged, associated professor

## International scholarships / Foreign institutions visited

- 10/1996-1/1997: Department of Chemistry, University of Bergen, Norway
- 6/1998-7/1998 and 6/1999-7/1999 : Laboratoire de Chimie Physique Organique et Colloidale, Université Henri Poincaré, Nancy, France
- 8/1999-10/1999: Department of Chemistry, University of Turku, Finland
- 2003-2004: EU FP5 Marie Curie Individual Fellowship Department of Chemistry, University of Turku, Finland
- 4/2007-7/2007 and 2/2009-4/2009: Laboratoire SRSMC, Nancy Université, France
- 22-28/10/2009, 28/09/2010-02/10/2010, 17-25/10/2011, 2-8/11/2012 : <sup>199m</sup>Hg and <sup>111</sup>Ag PAC (Perturbed Angular Correlation) spectroscopy experiments in cooperation with Lars Hemmingsen's research group (University of Copenhagen, Denmark) performed at ISOLDE, CERN (Geneva, Switzerland)
- 3-9/2/2014: CEA, Grenoble, France (Campus Hungary research visit)
- 13-18/5/2014: CERN/ISOLDE, Geneva, Switzerland (Campus Hungary research visit)
- 13-18/10/2014.: CERN/ISOLDE, Geneva, Switzerland (Campus Hungary research visit)
- 17-22/06/2015.: CERN/ISOLDE, Geneva, Switzerland (Campus Hungary research visit)
- 27/06-04/07/2016 .: CERN/ISOLDE, Geneva, Switzerland (research visit)
- 22-26/08/2016.: CERN/ISOLDE, Geneva, Switzerland (research visit)
- 29/10-07/11/2017.: CERN/ISOLDE, Geneva, Switzerland (research visit)
- 22/09-01/10/2018.: CERN/ISOLDE, Geneva, Switzerland (research visit)

- 01-31/07/2019: CEA, Grenoble, France (CNRS grant, research visit)

#### National scholarships / grants

- 2000-2001: PhD Grant from the SOROS Foundation
- 2003-2004: EU FP5 Marie Curie Individual Fellowship (Turku, Finland)
- 2005-2006: EU FP6, Marie Curie European Reintegration Grant
- 2005-2008: János Bolyai Research Fellowship from the Hungarian Academy of Sciences
- 2006-2009: Postdoctoral and Research Grant from the Hungarian Scientific Research Fund
- 2010: Postdoctoral fellowship of the EEA and Norway Grants and the Zoltán Magyary Foundation for Higher Education
- 2011-2014: János Bolyai Research Fellowship from the Hungarian Academy of Sciences
- 03/2012-08/2013: HURO/1001 Hungary-Romania Cross-Border Co-operation Programme
- 2013-2015: Campus Hungary research trips (4 trips)
- 2019: CNRS grant for a 1 months research trip (Grenoble, France)

## Awards

- 1997: Award of the Hungarian Chemical Society for excellent diploma work
- 2002: Award of the Hungarian Academy of Sciences for young researchers
- 2003: Award from the Hungarian Chemical Society
- 2005: SIGMA award, I. place (award of the Sigma-Aldrich Co.)
- 2009: Award for excellent work during the János Bolyai Research Fellowship from the Hungarian Academy of Sciences
- 2017: Scientific Award of the Faculty of Science and Informatics, University of Szeged

## **Research subjects**

- Modelling the metal binding sites of metalloproteins
- Design, synthesis and metal ion interaction of oligopeptides able for the efficient binding of toxic metal ions (eg. Cd<sup>2+</sup>, Hg<sup>2+</sup>, Pb<sup>2+</sup> etc.) or semimetals (e.g. H<sub>3</sub>AsO<sub>3</sub>). These studies are aimed at:

- the better understanding of the metal ion selectivity and metal recognition of metalloregulatory proteins from the MerR and ArsR families;

- the immobilization of the oligopeptide ligands to various matrices and investigation of the metal binding ability of the solid supported molecules, targeting potential future applications based on an efficient toxic metal ion capture.

- exploring the preferred coordination sites and coordination environment, as well as the solution speciation, of the typical aqueous form of arsenic(III) (H<sub>3</sub>AsO<sub>3</sub>) in aqueous solution.

Applied analytical techniques: pH-potentiometry, HPLC, MS, NMR-, UV-Vis, CD- and PAC-spectroscopies.

Number of scientific publications in international journals: **49** (including 1 book chapter and 5 conference proceedings); in national journals: **6**;  $\Sigma$  impact factor: **161.265**, Number of independent citations: **727**, First/corresponding author: **19/16**; Hirsch index: **18**; Participation at conferences: **77/41** (international/national); Lectures delivered at seminars held in foreign institutes: **6** 

#### International collaborations

- Dr. Lars Hemmingsen, University of Copenhagen, Department of Chemistry, Copenhagen, Denmark

- Dr. Monica Stachura, TRIUMF, Vancouver, Canada

- Dr. Pascale Delangle, INAC/SyMMES UMR 5819 CEA, CNRS, Université Grenoble Alpes, Grenoble, France

## **Teaching activities**

Lectures: Inorganic chemistry; Analytical chemistry (in English)

Seminars: Fundamentals of chemistry – inorganic chemistry; Inorganic chemistry; Calculations in analytical chemistry

Laboratory practicals: Inorganic chemistry; Analytical chemistry; Instrumental analytical chemistry; Analytical chemistry (in English); Fundamentals of analytical chemistry; Biological analytical chemistry

(Co)-supervising MSc, BSc and project works: 12 MSc thesis, 13 BSc thesis, 16 project works
(Co)-supervising 8 students' scientific projects prepared for a national scientific competition
(Co)-supervision of PhD studies: 2 successfully defended thesis (Dániel Szunyogh – 2016; Edit Éva Mesterházy – 2018) + 2 ongoing PhD projects

## Membership of scientific societies

Member of The Society of Biological Inorganic Chemistry, 2013-

Member of the public body of the Hungarian Academy of Sciences (MTA)

Member of the Hungarian Chemical Society, 1997-

Member of the Coordination Chemistry Group of the Hungarian Academy of Sciences, 2005-

Representative of the Institute of Chemistry in the PR committee of The Faculty of Science and Informatics, University of Szeged, 2005-

Representative of the Institute of Chemistry at the The Faculty of Science and Informatics, University of Szeged in the Labour Organization FDSZ, 2011-2013

## **Organising activities**

- 1998-2002: Organisation of a national conference on chemistry for young Hungarian researchers and Ph.D. students (as a member of the Hungarian Chemical Society)
- 1998-2002: Organisation of a competition for secondary school students in "Solving chemical problems"