

## CURRICULUM VITAE

### Personal data

Name: SISÁK, István (born: 29. 01. 1963 at Kistelek, Hungary)

Main affiliation: senior researcher

University of Szeged, Faculty of Agriculture, Institute of Plant Sciences and Environmental Protection

H6800 Hódmezővásárhely, Andrásy rd. 15.

Second affiliation: deputy general director

Agricultural Vocational and Technical Training Centre of the Great Plain, Hungary

H-6640 Csongrád, Kis-Tisza u. 4/a-6/a., Hungary

Marital status: married

Children: 3 (László Sándor 25 y.old, Mária Anna 31 y.old, János Mihály 32 y.old)

Spouse: BÓDIS, Judit associate professor, Hungarian University of Agriculture and Life Sciences,

Georgikon Campus, H-8360 Keszthely, Deák F. st. 16., Hungary

Knowledge of languages:

1991.01.21. German – state exam at advanced level type C (spoken and written)  
(No.: Á 0099128/1991) International standard: B2 (self assessment)

1998.01.14. English – state exam at advanced level type A (spoken (No.: 003894) International  
standard: C1 (self assessment)

1998.10.17. English – state exam at advanced level type B (written) (No.: 002841) International  
standard: C1 (self assessment)

1984 Russian – university exam (basic level) International standard:A1 (self assessment)

Military service: 1981 August-1982 July

### Studies, degrees

1977.09.-1981.06. High School “Árpád fejedelem” Kistelek, Hungary (matura with excellent result)

1987.06.10. agricultural engineer – Agricultural University of Keszthely, Major in Agricultural  
chemistry, (Dipl. No.: 20/1987) permission on use of highly toxic pesticides

1992: Justus Liebig Universität, Giessen, Fachrichtung Umweltsicherung und Entwicklung  
Ländlicher Räume, Germany, 2 semesters

1993: "Statistical procedures for agricultural research" certificate of the course conducted by  
Dr. M. G. Truman guest professor from Purdue University, West-Lafayette USA

1996.11.12. Candidate of the Agricultural Sciences – Hungarian Academy of Sciences (once a  
scientific degree, now changed to PhD; Dipl. No.: 16.230)

1999.10.26. PhD based on the Candidate of Agricultural Sciences degree – Agricultural University  
of Pannonia, Keszthely (No.: 35/1999)

### Teaching activities

1985-1986: student demonstrator, Agricultural University of Keszthely, Dept. Chemistry

1991 - 1992: department-engineer, Pannon Univ. Agric. Sci. Georgikon Fac., Dept. Agrochemistry  
conducting lab practices in the subject of Agrochemistry

1992 - 1996: teaching assistant, Pannon Univ. Agric. Sci. Georgikon Fac., Dept. Agrochemistry  
conducting lab practices in the subject of Agrochemistry (plant nutrients, pesticides)

1994: participation in the PhD teaching in the subject of Methods of data collection and  
analysis (demonstration of statistical program packages)

1996 - 1997: assistant professor, Pannon Univ. Agric. Sci. Georgikon Fac., Dept. Agrochemistry  
conducting lab practices in the subject of Agrochemistry (plant nutrients, pesticides) and  
occasional reading of lectures in Agrochemistry and in Fertilizer recommendation

1997- 1998: assistant professor, Pannon Univ. Agric. Sci. Georgikon Fac., Dept. Soil Sci.

conducting lab practices and field work in the subject of Soil science

reading lectures for PhD students in Soil classification

curriculum development and reading lectures in International soil classification systems

1999-2000: associate professor, Pannon Univ. Agric. Sci. Georgikon Fac., Dept. Soil Sci.  
Curriculum development and reading lectures in Environmental Soil Science (in English)

2001-2002: associate professor, Pannon Univ. Agric. Sci. Georgikon Fac., Dept. Soil Science and Water Management

2003 - associate professor, Pannon Univ. Agric. Sci. Georgikon Fac., Keszthely, Dept. Soil Science and Agrochemistry

2004 - 2005 associate professor, Pannon Univ. Agric. Sci. Georgikon Fac., Dept. Soil Science and Agrochemistry

2006 - 2018 associate professor, Pannon Univ. Agric. Sci. Georgikon Fac., Dept. Crop Production and Soil Science – reader of the major courses (Soil science, Soil protection, Soil chemistry etc.) at all levels of education) in Hungarian and in English for FAO-sponsored MSc students

2010 - 2018 organizer and reader in the postgraduate Special course in Soil science

2018. leader and reader in the postgraduate Special course in Precision Agriculture

2019 - senior researcher, leader and reader of the postgraduate Special course in Precision Agriculture, University of Szeged, Faculty of Agriculture (courses taught mainly in English but also in Hungarian: Soil Science, Water Management, Precision Agriculture, Digital Soil Mapping, Precision Nutrient Management, Extension in Precision Agriculture, Agro-Information Systems)

2024 – Hungarian mentor of 4 students during their internship in the Institute for Land and Water Management Research in Petzenkirchen, Austria

### **Supervising**

BSc, MSc and postgraduate theses: more than 30 in Hungarian, 8 in English  
supervision of completed PhD: 1 (SZÜCS, Péter: Scale dependency of soil erosion)

### **Research (principal investigator):**

**OTKA (Hungarian Research Fund) 1992 - 1995:** Factors affecting nutrient load of surface waters

**OTKA: 1995 - 1998:** Studies on soil deposition diagrams produced with soil samples at different phosphorus levels from the Hungarian Long-term Field Trials

**OTKA 1999-2002:** Equilibrium states of plant-available phosphorus in soils under cultivation or natural vegetation in the watershed of Lake Balaton

**EU FP5. 2000-2003:** An Environmental Soil Test to Determine the Potential for Sediment and Phosphorus Transfer in Run-off from Agricultural Land - DeSPRAL - Hungarian part

**Austrian-Hungarian bilateral RTD 2000-2001:** Diffuse P risk: a comparative study with soils of Western-Hungary and Eastern-Austria

**Austrian-Hungarian bilateral RTD 2002-2003:** Investigation of soil physical properties of environmental relevance and the incorporation of data into soil information systems

**KAC Ministry of Environmental Protection 1999-2000:** Methodology for complex assessment of soil erosion considering EU regulation and its relevance for land use

**GVOP AKF Applied Research and Development Fund 2005-2006.** Development of an automatic erosion calculator for the watershed of Lake Balaton accessible via the Internet and its adaptation for other environments

**Host of Dr. Ma Wenqi Chinese guest researcher 2007:** College of Resource and Environmental Science, Agricultural University of Hebei, Baoding, Hebei Province, 071001, P. R. China – pressure and state indicators of watersheds

**Chinese-Hungarian bilateral RTD 2009-2010:** Agricultural and environmental phosphorus indicators

**Chinese-Hungarian bilateral RTD 2011-2012:** Fine scale variability of yield gap and its implications for site specific management of soils in large scale farming and in smallholder environments

**GINOP-2.2.1-15-2017-00105** „Development of services that support the innovation process in the arable farming (SMART-FARMER)” Budget: appr. 3,2 million Euros, Support: appr. 1.7 million Euros

**1337/2016. Governmental decision 2/e** point: „Creative city – Sustainable country (KRAFT) National Program” Establishment of an Integrated Multifunctional Environmental Monitoring Laboratory at Kőszeg (appr. 0.75 million Euros)

**Research (participant):**

**COST Action 832** 1997-2003: Quantifying the Agricultural Contribution to Eutrophication. (deputy member of the Management Committee)

**OM-NKFP large projects of the Ministry of Education** 2001-2004: Management alternatives for reducing diffuse phosphorus load from the watershed of Lake Balaton (operative project coordinator)

**OTKA** 2003-2006: Comparison of environmental soil tests with soils from long-term phosphorus fertilization experiments

**OTKA** 2006-2008: Climate sensitivity of soils

**COST Action 863** 2006-2011: Mitigation Options for Nutrient Reduction in Surface Water and Groundwaters. (member of the Management Committee)

**TÁMOP large projects with partial EU funding** 2010-2012: Mobility and environment: research on vehicle industry energetics and environment in the Central and West Transdanubian region (digital soil mapping)

**TÁMOP** 2011-2013: Support for the scientific education in the University of Pannonia (digital soil mapping)

**EU FP7** 2011-2013: Merging Hydrologic models and Earth Observation data for reliable information on Water – MYWATER (digital soil mapping)

**TÁMOP** 2012-2014: Effects and amelioration of weather extremities due to the climate change in the next few decades (leader of the subproject: Response of soils to the meteorological variability (soil hydrology, erosion)

**TÁMOP** 2013-2015: Development of education in English in the University of Pannonia (curriculum development and lecture notes of the course Applied Soil Science)

**TÁMOP** 2013-2014: „Pannon model” - regional cooperation between universities in the food security and gastronomy

**OTKA** 2012-2015: Data model fusion for studying the combined effects of different land use and climate change scenarios on water regime and soil erosion. (modeling and runoff and erosion monitoring at small catchment scale)

**EFOP-3.6.1-16-2016-00015** Sub-topic: research of land evaluation aspects of precision crop production

**EFOP-3.6.3-VEKOP-16-2017-00008** Sub-topic: extension of PhD research themes in the area of environmental sciences

**Leadership**

1993 - 1996: group leader, Agric. Univ. Pannonia, Georgikon Faculty, Dept. Agrochemistry  
Research Group of the Hungarian Long-term Field Trials

1996 - 1997 project scientist, International Rice Research Institute, Philippines  
supervising long-term field trial network

1999 - 2000 department head Agric. Univ. Pannonia, Georgikon Faculty, Dept. Soil Sci.

2004 - 2005 department head Univ. Pannonia, Georgikon Faculty, Dept. Soil Sci. and Agrochem.

2006 – group leader Univ. Pannonia, Georgikon Faculty, Dept. Crop Prod. and Soil Sci. Group of Soil Sci. and Plant Nutr.

2013 - laboratory leader, Univ. Pannonia, Georgikon Faculty, Measurement and Diagnostic Service Centre, Laboratory of Soil Quality

2018 - leader of the postgraduate Special course in Precision Agriculture, University of Pannonia, Georgikon Faculty, Keszthely

2019 - leader of the postgraduate Special course in Precision Agriculture, University of Szeged, Faculty of Agriculture

2020 - deputy general director, Agricultural Vocational and Technical Training Centre of the Great Plain, Hungary, **main areas of responsibility: management of the education processes, establishment and management of quality assurance system of the education**

## **Reviewer**

### Scientific journals

Landscape and Urban Planning (1) IF: 3.184  
Science of the Total Environment (1) IF: 3.79  
Journal of Soil and Water Conservation (3) IF: 1.448  
Process Safety and Environmental Protection (1) IF: 2.551  
Georgikon for Agriculture (3)

### Project reviews for funding agencies

OTKA (2005-)  
EU Research Executive Agency (2006-2009)  
Ministry of Science and Education Croatia (2003)

PhD thesis reviewer 4 in Hungarian 2 in English

PhD thesis – member of the evaluation committee: 5 in Hungarian 2 in English

## **Long-term stays abroad**

Austria: 6 months 2010: sabbatical guest researcher Institut für Kulturtechnik und Bodenwasserhaushalt, Petzenkirchen (physical degradation of soil)

Philippines: 1 yr. 1996-97: project scientist, International Rice Research Institute (phosphorus cycles in long-term field experiments)

USA: 4 months 1996 May-August USDA ARS Pasture Systems and Watershed Management Research Laboratory, University Park, Pennsylvania (P movement in small catchments – Andrew Sharpley)

Germany: 10 months 1991-92: Justus Liebig Universität, Giessen, Institut für Bodenkunde und Bodenerhaltung (nutrient cycles in agricultural ecosystems – Tamas Harrach)

Laos: 1 month in 1990 Ministry of Agriculture (study on tropical soils)

Austria: 3 months in 1990 Universität für Bodenkultur (limnological studies in universities and research institutes)

## **Membership**

Associated Body of the Hungarian Academy of Sciences – Committee of Soil Science and Agrochemistry (Plant Nutrition)

Regional Committee of the Hungarian Academy of Sciences of Szeged – Working Committee of Plant Sciences

Hungarian Society of Soil Science

## **Conference organization**

4th International Congress of the European Society of Soil Conservation, 25-28 May 2004, Budapest, Hungary (member of the scientific committee);

International Conference on Land and Water Degradation, 6-9 September 2009, Magdeburg, Germany (member of the scientific committee);

COST Action 869 Final Conf. 12-14 October 2011, Keszthely, Hungary (main organizer, member of the scientific committee, editor of the proceedings)

Biannual Assembly of the Hungarian Soil Science Society, Keszthely, Hungary, 4-6 September 2014 (main organizer, member of the scientific committee)

LuWQ2015: 2nd International Interdisciplinary Conference on Land Use and Water Quality:

Agricultural Production and the Environment. Vienna, Austria, 21-24 September 2015 (member of the scientific committee)

Biannual Assembly of the Hungarian Soil Science Society, Hódmezővásárhely, Hungary, 1-3 September 2022 (main organizer, member of the scientific committee)

### **Awards**

1993 Kvassay Fellowship for young researchers

1996. Award for outstanding achievements from the Rector of the Agric. Univ. Pannonia

2014. Fasching Antal Award given by the Minister of Rural Development for digital soil mapping

### **List of publications in descending order of citations**

[https://m2.mtmt.hu/api/publication?page=1&cond=authors%3B10008502&ty\\_on=0&st\\_on=1&st\\_on\\_check=1&url\\_on=1&url\\_on\\_check=1&cite\\_type=3&sort=citingPubCount%2Cdesc&size=10](https://m2.mtmt.hu/api/publication?page=1&cond=authors%3B10008502&ty_on=0&st_on=1&st_on_check=1&url_on=1&url_on_check=1&cite_type=3&sort=citingPubCount%2Cdesc&size=10)

Hódmezővásárhely, 18<sup>th</sup> March 2025

István Sisák