

# Sándor Tömösközi

## Curriculum Vitae

### Basic data

**Department:** Department of Applied Biotechnology and Food Science

**Position:** Head of Department, Associate Professor

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### Links

**MTMT:** <https://m2.mtmt.hu/gui2/?type=authors&mode=browse&sel=authors10002025>

**ODT:** [https://doktori.hu/index.php?menuid=192&lang=HU&sz\\_ID=3297](https://doktori.hu/index.php?menuid=192&lang=HU&sz_ID=3297)

**Google Scholar ID:**

[https://scholar.google.com/scholar?hl=hu&as\\_sdt=0%2C5&q=T%C3%B6m%C3%B6sk%C3%B6zi+S%C3%A1ndor&btnG=](https://scholar.google.com/scholar?hl=hu&as_sdt=0%2C5&q=T%C3%B6m%C3%B6sk%C3%B6zi+S%C3%A1ndor&btnG=)

**ResearchGate:** <https://www.researchgate.net/profile/S-Toemoeskoeki>

**MTA:** [https://mta.hu/koztestuleti\\_tagok?PersonId=12986](https://mta.hu/koztestuleti_tagok?PersonId=12986)

### Introduction

#### Short introduction:

I graduated in 1987 and started working at the Department of Biochemistry and Food Technology of BME as a fresh graduate. Currently, I am responsible for coordinating the specialization of food quality and I am the head of Research Group of Cereal Science and Food Quality. My teaching areas are: food analysis, food safety, food technology, and laboratory quality management. My scientific focus includes: characterization of cereals, pseudo-cereals and plant protein sources and their components (proteins, starchy and non-starchy carbohydrates, dietary fibers), examination of their variability, development of cereal qualification methods and instruments and development of reference materials that help validate analytical methods related to food safety. I try to support the continuous development of the relationship between economic actors and higher education and research, and to involve our students and colleagues in this, and to shape an innovative approach.

**Education:**

1997	PhD, Chemistry (TU Budapest, Faculty of Chemical Technology)
(1987-1992)	University doctor (TU Budapest, Biology and Food technology)
(1989 - 1991)	Food Engineer (postgradual education at TU Budapest, Biology and Food Technology / Bioengineering)
(1982 - 1987)	MSc in Chemical Engineering (organic and biological chemistry) TU Budapest, Faculty of Chemical Technology

**Professional experience:**

Department of Applied Biotechnology and Food Science, Budapest University of Technology and Economics

(1995 - present)	Associate Professor
(1990 - 1995)	Assistant Professor
(1987 - 1990)	Assistant Lecturer

Budapest University of Technology and Economics

(2010-2012)	Scientific Program Leader in Research University Program
(2008-2012)	Scientific Program Leader in University Technology Transfer Program
(2005 - 2007)	Director of Research and International Affairs
(2003 - 2006)	Deputy Director, Later Director
(1999 - 2003)	Head of R+D Office

**Research topics:**

- cereal science
- compositional and functional characterization of plant macromolecules
- development of food analytical methods and instruments
- food safety research – sensitivity, allergy, FODMAP

**Research projects:**

R&D collaborations with business partnersGazdasági partnerekkel közösen végzett K+F együttműködések

2020 - 2024: Exploring of the undefined genetic, compositional and processing potentials of spelt in different environments (Project ID: OTKA K 135343) – co-supervisor

2017 – 2021: GalgaGabona project: Developments to improve the conditions of human utilization of oats and rye in terms of food safety, agrotechniques, processing technology and nutritional value (Project ID: 2017-1.3.1-VKE-2017-00004) – project and subproject leader

2016 – 2021: Development of a quality-oriented complex industrial production system and model, development of a new modified starch, and research into the utilization of a new fiber-based processed product (Project ID: GINOP-2.1.1-15) – scientific program leader

2016 – 2018: Austrian - Hungarian bilateral project: Fundamental study on the structure, rheological and functional properties of model gluten-free dough and products based on modified carbohydrate systems (Project ID: TÉT\_15-1-2016-0066) – Hungarian project leader

2014 – 2016 Régi búza genotípusok minőségének jellemzése és felhasználása a piacorientált nemesítésben (Characterisation of the quality potential of old wheat genotypes and their utilisation in market-oriented breeding) – (Project ID: AGR\_PIA-13-1-2013-0074 project) – scientific project manager, subproject leader

2015 – 2019 Új szempontok a búzanemesítésben: a bioaktív komponens összetétel javítása és annak hatásai (New aspects in wheat breeding: improvement of the bioactive component composition and its effects) – (Project ID: OTKA-K112179), subproject leader

2015-2018 Improving gluten free dough by a novel hemicellulose network (Project ID: OTKA-ANN114554), Hungarian project leader

2012 – 2014 Austrian - Hungarian bilateral project, Improvement and optimisation of the nutritional value and technological properties of gluten-free products – study on the effect of newly developed food additives and alternative crops (Project ID: TÉT\_10-1-2011-0731) – Hungarian project leader

2009 – 2013 National Project - “Development of breeding, agricultural production and food industrial processing system of Pannon wheat varieties” (Tech\_09-A3-2009-0221) – project coordinator, subproject leader

2010 – 2012 National Project - “Development of quality-oriented and harmonized R+D+I strategy and functional model at BME” (Project ID: TÁMOP-4.2.1/B-09/1/KMR-2010-0002) – scientific program manager

2009-2012 National project - “Development of R+D environment and tools for improvement the technology- and knowledge transfer activity at Budapest University of Technology and Economics” (Project ID: TÁMOP-4.2.1-08/1/KMR-2008-000) – scientific program manager

2009 - 2012 Hungarian Scientific Research Fund - "The relationships of breadmaking quality properties of wheat with the composition of gluten and pentosan" (Project ID: OTKA CK 80334) - subproject leader

2009 – 2012 National Project - “Health Promotion and Tradition: Development of raw materials, functional foods and technologies in cereal-based food chain” (Project ID: TECH\_08\_A3/2-2008-0425) – project coordinator, subproject leader

2010 – 2011 Austrian – Hungarian Action Fund - Use of pentosans for the production of bread, bakery goods and gluten-free bread of enhanced nutritional value (Project ID: 77öu12) – Hungarian project leader

2009-2011 EU-supported national program “Development of curriculum for MSc education on the area of Food safety and quality” (Project ID: TÁMOP-4.1.2-08/2/A/KMR-2009-0011) – subproject leader

2009 – 2011 Hungarian – Turkish bilateral project – “Improvement of quality and safety of cereals and cereal based food products” (Project ID: TR-16/2008) – Hungarian program leader

2007 – 2011 EU FP6 - MoniQA Network of Excellence (Monitoring and Quality Assurance in the Food Supply Chain (Project ID: FOOD-CT-2006-036337) – national program leader

2008 – 2009 Austrian – Hungarian Bilateral project - “Functional foods from underutilized cereals and pseudocereal; optimisation of processing parameters and evaluation of its health promoting properties” (Project ID: AT-12/2007) – Hungarian project leader

2003 – 2008 Hungarian Scientific Research Fund - “The effect of low molecular weight polypeptides on the polymerization degree distribution of polymeric glutenin” (Project ID: OTKA K 42703) – researcher

2004-2007 National R+D Program - „Scientific program for development of Pannon wheat quality - (Project ID: GAK-ALAP-00126/2004) – subproject leader

2004 – 2005 Scientific-technical cooperation, Austria – Hungary - „Comparison of different amaranth species (regarding chemical composition, functional and sensory properties) for the production of amaranth beverages and amaranth bread” (TÉT Program, Project ID: A-20/03) – Hungarian program leader

2001-2005 National R+D Program - „Improvement the utilisation of basic materials in cereal industry” (Project ID: NKFP (4/035/2001) – project coordinator, subproject leader

2001 – 2005 Hungarian Scientific Research Fund – “Development of micro-scale methods for determination of cereal quality” (Project ID: OTKA K 34486) – project leader

2003 – 2004 Scientific-technical cooperation, Poland – Hungary “Study of functional, rheological and surface properties of mixed protein systems containing wheat and other plant protein fractions” (TÉT Program, Project ID: PI 05/99) – Hungarian project leader

2001 – 2004 Hungarian Economic Competitiveness Program – “Pannon Wheat Program” (Project ID: ALAP1-00126/2004) - project coordinator

2000 – 2003 Hungarian Scientific Research Fund - “Investigation of nutritional and functional properties of pseudo cereals” (Project ID: OTKA T-032650) – program coordinator

1996-2000 National Committee for Technical Development (OMFB) Program – “Development of micro-scale Z-arm mixer and laboratory mill” (Project ID: 96-97-68-1354) – program coordinator

1994 – 1998 PHARE-PMU Program – “An educational, retraining and continuing education project in the field of food and pharmaceutical industries and environmental protection” (Project ID: HU-94.05 0101-L015/20) –program coordinator

#### **Awards, honours:**

2009. BME VBK Fodor Lajos Award

2015. BME VBK Görög Jenő Award

2015. Pro Progressio Innovációs Award

2021. BME „TDK Munkáért” teacher's commemorative plaque

#### **Scholarships, scientific trips:**

- Bolyai János Research scholarship (2002-2005 és 2008-2011)
- scientific trips within the framework of Phare and EU projects and bilateral cooperations

**Professional and scientific public activities:**

## Academic functions, memberships:

- ICC (International Association for Cereal Science and Technology), Board Member, National Representative (1995-2015)
- Ministry of Agriculture, Codex Alimentarius Hungaricus, Expert Committee leader
- Hungarian Academy of Sciences, President of the Food Analytical Working Committee
- Hungarian Academy of Sciences, vice president of the Food Science Committee
- Hungarian Academy of Sciences, Elected Representative of Doctor Members (2006-2013)
- Member of the Hungarian Food Industry Scientific Association
- Variety Certification Committee, National Food Chain Safety Office, member
- Hungarian Society of Nutrition, Board member

Member of editorial boards: Cereal Chemistry, Acta Alimentaria, Journal of Food Investigation

## Organized scientific conferences:

- 10th EuroFoodChem Conference, 22-24 September 1999, Budapest, Hungary
- 18<sup>th</sup> ICC (International Association for Cereal Science and Technology) Conference, 26 – 29 May 2002, Budapest, Hungary
- 9th European Young Cereal Scientists and Technologists Workshop in Budapest 25-27 May 2010
- 4th MoniQA International Conference in Budapest, Hungary, 26 February - 01 March 2013
- 5<sup>th</sup> Cereals&Europe Spring Meeting, Budapest: C&E Spring Meeting Celebrating Cereals in the AACC International Centennial Year, April 27-29 2015