

## Curriculum Vitae

### Personal particulars

Name: **Tombácz, Etelka**

Date of birth: 14 February 1952

Nationality: Hungarian

Marital status: married, 1 child (1981 László)

Place of work: Department of Physical Chemistry and Materials Science, University of Szeged

Address: H-6720 Szeged, Aradi Vt. 1.

Status: **full professor**

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### Academic Qualifications

2005: Habilitation (Chemistry) University of Szeged (Hungary)

2004: D.Sc. Hungarian Academy of Sciences, Budapest (Hungary)

1986: PhD (C.Sc.) Hungarian Academy of Sciences, Budapest (Hungary)

1977: Doctorate, Attila József University, Szeged (Hungary)

1975: Graduated Chemist (M.Sc.), Attila József University, Szeged (Hungary)

1970: Chemical Technician, Technical High School, Debrecen (Hungary)

### Positions held:

2009-: Leader of Aqueous Colloids Research Group

2006-: Full professor, 1988-2006: Associate Professor, 1983-1988: Assistant Professor, 1979-1983: Postdoctoral Fellow (Candidature), 1975-1979: Research Assistant at the Department of Colloid Chemistry, Attila József University (1975-2000), University of Szeged (from 2000), Szeged, Hungary.

### Foreign institution visited:

2012 and 2013: Invited researcher for 2 months at the Institute of Experimental Physics of the Slovak Academy of Sciences, Kosice (Slovak Republic)

2008 and 2009: Visiting researcher for 6 weeks at the Graduate School of Life and Environmental Science, University of Tsukuba (Japan)

2006 and 2007: Invited professor for 2 months at DIOM (Devices and Instrumentation in Optoelectronics & Microwaves) Laboratory, Université Jean Monnet, Saint Etienne (France)

1994/95: Invited Researcher at the Department of Chemistry and Biochemistry, South Dakota State University, SD, USA

1989/90: Postdoctoral Fellow at the Department of Chemistry, Baylor University, TX, USA

### Teaching activities:

Courses: Colloid Chemistry, Environmental Colloids, Aqueous Colloidal Systems, Soil Chemistry, Rheology, Soil Pollution and Purification; PhD courses: Interfacial Equilibria and Dispersion Stability in Aqueous Systems, Humic substances in Environmental Systems

Supervisor of 38 B.Sc./M.Sc. students and 6 PhD thesis

### Skills

Dynamic light scattering, laser Doppler electrophoresis, potentiometric titration, UV-VIS and fluorescence spectroscopy, rheology, magnetic separation and hyperthermia

Computational skills: MS Office – word processing, spread sheets; presentations (Power Point, Corel Draw), modelling (Minteq and Fiteql)

### **Languages:**

English: intermediate spoken/written

### **Projects/Research activity**

Research funding total: over 30 million HUF yearly

**OTKA NK 84014:** Magneto-responsive iron oxide nanoparticles for biomedical use (2011-15)

**TÁMOP-4.2.2.A-11/1/KONV-2012-0047:** New functional materials ... (2013-14)

IPA Project: **HUSRB/1002/214/193:** BANAMOCA (Bile Acid Nanosystems...) (2012-13)

Previous projects:

**FR-17/2009:** Magnetic nanoparticles for magneto-optical thin film (2009-12)

**JSPS/109:** Flocculation and interfacial dynamics of clay colloid as a reactive carrier in soil and groundwater system (2008-10)

**OTKA K-69109:** Biocompatible magnetic fluids: preparation and investigation (2007-11)

EU project: **FP6 STREP (GOCE-CT-2003-505450):** INDEX (Indicators and thresholds for desertification, soil quality, and remediation (2004-07)

Several R&D grants from industry on aqueous suspension formulation (ceramic, paint, phosphor) and cosmetics.

### **Publications**

Book chapters –13, reviewed papers –97 (cumulative IF ~174), proceedings and CD publications –33. WoS +Scopus citations – above 3000, h-index: 33 (January 2015). Presentations at International and National Meetings –120 (16 invited lectures and 40 lectures)

### **Referee experience**

Reviewer for 22 peer reviewed journals.

Independent expert for OTKA and other national fund proposal evaluation.

Committee member for 31 Ph.D. defences, 4 habilitations and 5 D.Sc. defense.

### **Role in scientific/public bodies**

2013-: Associate Editor of Applied Clay Sciences (Elsevier)

2010-: Member of the editorial board of Colloids and Surfaces A (Elsevier)

2010-2011: Associate Member of the IUPAC body Chemistry and Environment (VI)

2009-: Member of the editorial board of Applied Clay Sciences (Elsevier)

2006-2010: Board member of the International Humic Substances Society (IHSS)

2005-2012: President of Colloid Chemistry Working Committee of Hungarian Academy of Sciences

2005-: Hungarian representative of International Board of ELKIN (electrokinetics)

2004-: Member of the editorial board of Colloid and Polymer Science (Springer)

2004-: Member of the international advisory board of IAP (Interfaces Against Pollution)

2003-2009: Member of the IUPAC Division VI-Chemistry and Environment (DCE)

1992-: Member of IHSS and the Hungarian Coordinator for the IHSS

### **Awards and decorations**

2007: Master Teacher Medal (OTDK committee)

1998-2001: Széchenyi Professor Fellowship

2001/02-2003/04: István Széchenyi Fellowship

1982: Aladár Buzágh Prize, Hungarian Academy of Sciences

1970: Winner of the National Chemical Competition for High School Students