

Date of birth: 20/6/1967, Trogir

married: wife Anita Tomaš (Graduated economist - Professor); my sons: Petar Tomaš and Lovre Tomaš

Education and Qualifications:

- Department of Physical Chemistry, Faculty of Chemistry, University of Lodz, Poland, short-term visit (2015, two weeks, Erasmus+ Staff Training Mobility).
- Chair of Physical Chemistry, Department of Chemistry and Biochemistry, Faculty of Chemistry and Chemical Technology, University of Ljubljana, Slovenia, short-term visit (2012, seven days, Erasmus Staff Training Mobility).
- Division of Physical Chemistry, Department of Chemistry, Faculty of Science, University of Zagreb, Croatia, short-term visit (2008, four months, research focus: thermodynamics of calixarene chemistry).
- PhD degree, University of Split, FCT, 2002.
- Master's degree, University of Split, FCT, 1998.
- B. Sc., University of Split, FCT, 1994.

Work Experience:

- Associate Professor of Physical Chemistry, University of Split, from 2014.
 - Assistant Professor of Physical Chemistry, University of Split, from 2006 to 2014.
 - Senior Research Assistant of Physical Chemistry, University of Split, from 2002 to 2006.
 - Research Assistant of Physical Chemistry, University of Split, from 1999 to 2002.
 - Junior Research Assistant of Physical Chemistry, University of Split, from 1994 to 1999.
- **Member of the organizing committee** of XXI. Croatian meeting of chemists and chemical engineers, Trogir, Croatia, 2009.

Informal collaborations: - Faculty of Chemistry and Chemical Technology, University of Ljubljana, Slovenia (dr. M. Bešter-Rogač).

- Faculty of Chemistry, University of Lodz, Poland (dr. A. Bald+, dr. Z. Kinart).

- Faculty of Sciences, University of Novi Sad, Serbia (dr. M. Vraneš, dr. A. Tot).

Head of Department of Physical Chemistry, FCT, University of Split: (2007-2009, and 2011-2013). **Field of work and research experience: solution chemistry** (thermodynamics of electrochemical reactions, thermodynamics of metal-ligand complexes formation, thermodynamics of the association reaction of electrolytes, determination of limiting molar conductivities of ions, viscosity and density studies of electrolytes: study of ion-ion and ion-solvent interactions); **supramolecular chemistry** (thermodynamics of calixarene chemistry); **ionic liquids**. **Teaching experience:** lecturer in Selected Topics in Physical Chemistry of Environmental to Ph. D. students of chemistry; lecturer in Physical Chemistry to undergraduate and graduate students of chemistry, chemical technology, pharmacy, and

biology and chemistry; seminar teacher to undergraduate and graduate students taking courses in Physical Chemistry; lecturer and seminar in Elements of Physical Chemistry on the professional study of chemical technology; laboratory teacher in Physical chemistry.

Research projects:

- 1994–1996, 1997-2002, 2003-2006, and 2008-2013
Ministry of Science and Education, Republic of Croatia
projects "Properties of electrolytes in mixed solvents", and
project "Electrolytes in mixed solvents", University of Split
- MC Member: EXchange on Ionic Liquids (EXIL) - COST
Action CM1206: 2016-2017, EU.
- STSM PROJECT TITLE (PI: R. Tomaš), 2016.: Studies
of molecular interactions of some imidazolium chloride
ionic liquids in water by viscometric and volumetric
measurements at different temperatures, COST CM1206,
EU.
- Project "SUPRACAR" - HRZZ : Development of
supramolecular receptors of anions and cations, University
of Zagreb, 2015-2019.

- Institutional project (FCT, University of Split): Molecular
interactions in the system ionic liquid - organic solvent,
2020-2022.
- Project "MakroSol" - HRZZ: Coordination reactions of
macrocyclic ligands in solution, University of Zagreb,
2019-2024.

Memberships

- Croatian Society of Chemists and Engineers; Croatian
Chemical Society; Almae Matris Alumni Chemico-Technologicae
Facultatis Spalatensis

Selected publications:

- 1) R. Tomaš, I. Tominić, M. Višić, V. Sokol, Complexation of Cd²⁺ and Cl⁻ Ions in Aqueous Mixtures of 2-Butanol, *Croatica Chemica Acta*, **78** (2005) 289-294.
- 2) R. Tomaš, I. Tominić, M. Višić, V. Sokol, Thermodynamic Study of Cadmium Chloride in Aqueous Mixtures of 2-Butanol from Potential Difference Measurements, *Journal of Solution Chemistry*, **34** (2005) 981-992.
- 3) N. Galić, N. Burić, R. Tomaš, L. Frkanec, V. Tomišić, Synthesis and cation binding properties of fluorescent calix[4]arene derivatives bearing tryptophan units at the lower rim, *Supramolecular Chemistry*, **23** (2011) 389-397.
- 4) A. Bald, Z. Kinart, R. Tomaš, Volumetric studies of aqueous solutions of monosodium salts of some aliphatic dicarboxylic acids at 298.15 K. A new method of data analysis, *Journal of Molecular Liquids*, **178** (2013) 94-98.
- 5) R. Tomaš, V. Sokol, P. Bošković, A. Turudić, Transference Numbers of Sodium Chloride in Formamide + Water Mixtures at 298.15 K from Potential Difference Measurements, *International Journal of Electrochemical Science*, **8** (2013) 7669-7679.
- 6) M. Tranfić Bakić, D. Jadreško, T. Hrenar, G. Horvat, J. Požar, N. Galić, V. Sokol, R. Tomaš, S. Alihodžić, M. Žinić, L. Frkanec, V. Tomišić, Fluorescent phenanthridine-based calix(4)arene derivatives: synthesis and thermodynamic and computational studies of their complexation with alkali-metal cations, *Royal Society of Chemistry Advances*, **5** (2015) 23900-23914.
- 7) R. Tomaš, T. Jovanović, M. Bešter-Rogač, Viscosity B-coefficient for sodium chloride in aqueous mixtures of 1,4-dioxane at different temperatures, *Acta Chimica Slovenica*, **62** (2015) 531-537.
- 8) R. Tomaš, A. Tot, J. Kuhar, M. Bešter-Rogač, Interactions in aqueous solutions of imidazolium chloride ionic liquids (Cnmim)(Cl) (n = 0, 1, 2, 4, 6, 8) from volumetric properties, viscosity B-coefficients and molecular dynamic simulations, *Journal of Molecular Liquids*, **254** (2018) 267-271.
- 9) N. Cindro, J. Požar, D. Barišić, N. Bregović, K. Pičuljan, R. Tomaš, L. Frkanec, V. Tomišić, Neutral glycoconjugated amide-based calix(4)arenes: complexation of alkali metal cations in water, *Organic and Biomolecular Chemistry*, **16** (2018) 904-912.
- 10) Z. Kinart, R. Tomaš, Conductivity properties of selected aliphatic monocarboxylic acid anions in water at 298.15 K, *International Journal of Electrochemical Science*, **15** (2020) 10007-10027.