



**PERSONAL INFORMATION** Bende Attila


 National Institute for Research and Development of Isotopic and Molecular Technologies (NIRDIMT), Cluj-Napoca, Romania  
 +40 (0) 264 584037 ext. 194

 "attila.bende" at "itim-cj.ro"

Sex Male | Date of birth 15/07/1973 | Citizenship Romanian

**WORK EXPERIENCE**

1997 - present **Research Assistant, Scientific Researcher III, Scientific Researcher II, Scientific Researcher I**

National Institute for Research and Development of Isotopic and Molecular Technologies (NIRDIMT), Donat Street, 67 - 103, Cluj-Napoca, Romania

Molecular modelling: Biopolymers, Molecular excited states, Intermolecular interactions, Self-assembled supramolecular systems, Laser-molecule interaction.

Business or sector Public (research)

**EDUCATION AND TRAINING**

Sept. 1999 – March. 2003 **Ph.D in Theoretical Molecular Physics**

Faculty of Physics, "Debrecen" University, Debrecen, Hungary

- Modelare Modelling of the Basis Set Superposition Errors (BSSE)
- Theoretical IR Spectroscopy

Sept. 1996 – June 1997 **M.Sc., Quantum Field Theory and Statistical Physics**

"Babeş-Bolyai" University, Faculty of Physics, Cluj-Napoca, Romania

- *Project:* "Geometry of  $(SF_6)_n - (Ar)_m$  mixed cluster", Supervisor: Prof. Dr. Titus A. Beu

Sept. 1992 – June 1996 **B.Sc., Physics**

"Babeş-Bolyai" University, Faculty of Physics, Cluj-Napoca, Romania

- *Project:* "Harmonic vibrational spectrum and normal coordinate analysis of dimethylamine", Supervisor: Dr. Ioan Deac (ITIM)

**PERSONAL SKILLS**

Mother tongue(s) Hungarian, Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C1

Other skills Quantum Chemistry Softwares: Gaussian09, Molpro2012.1; NWChem6.5; DFTB+1.2;  
 Programming Languages: Fortran; Perl; C++

Driving licence B

**ADDITIONAL INFORMATION**

Professional Association Romanian Physical Society (President of the Atomic and Molecular Physics Section)

Affiliation: Romanian Society of Pure and Applied Biophysics

Royal Society of Chemistry (RSC)

American Chemical Society (ACS)

International Society for Theoretical Chemical Physics (national representant)

Journal Referee for: Physical Chemistry Chemical Physics; CrystEngComm; Organic & Biomolecular Chemistry; Theoretical Chemistry Accounts; Journal of Molecular Modeling; Journal of Molecular Structure;

Journal of Mathematical Chemistry; Structural Chemistry;  
 (For details see my [Publons](#) profile)

**Research Directions:** Research Domain: Theoretical Molecular and Biomolecular Physics

Research Topics:

- Laser – molecule interaction
- Intermolecular interactions including high-level electron correlation effects
- Dynamics of molecular excited state relaxation
- Advanced materials with properties controlled by laser radiation
- Design of auto-assembled molecular systems
- Macromolecular modelling
- Charge carrier migration in infinite long biopolymer chains

**Visiting Scientist:** Short visits up to 3 months

- Theoretical and Physical Chemistry Department of the “Friedrich-Alexander” University, Erlangen-Nürnberg, Germany;
- “Frederico II” University, Physics Faculty, Naples, Italy
- Laboratory of Computational Chemistry and Biochemistry, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland
- Faculty of Organic Chemistry, University of Vigo, Spain
- German Cancer Research Center (DKFZ), Biophysics Department, Heidelberg, Germany

**Honors and Awards:**

- „**Constantin Miculescu**“ prize of the Romanian Academy, in 2015 for the group of research works „*Theoretical studies of the laser radiation interaction on molecular systems*”.
- Outstanding reviewer with remarkable contributions for “*Journal of Molecular Structure*” in 2016, offered by Elsevier.
- Outstanding reviewer with remarkable contributions in the field of *Chemistry* in 2018, offered by Publons (Clarivate).
- Outstanding reviewer with remarkable contributions for “*Physical Chemistry Chemical Physics*” in 2018, offered by Publons (Clarivate).