

Sándor Góbi

Curriculum Vitae

Budapest

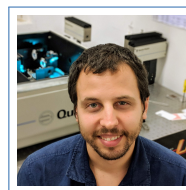
Hungary

* 1985

+36 (1) 372 2500 / 1150

sandor.gobi@ttk.ele.hu

www.sandorgobi.com



Languages

English **fluent**, written and spoken

Work Experience

- 2023– **Research Fellow**, *Laboratory of Molecular Spectroscopy*, Institute of Chemistry, ELTE Eötvös Loránd University, Budapest, Hungary
Group leader: Prof. György Tarczay
- 2020–2023 **Research Fellow**, *MTA–ELTE Lendület Laboratory Astrochemistry Research Group*, Institute of Chemistry, ELTE Eötvös Loránd University, Budapest, Hungary
Group leader: Prof. György Tarczay
- 2018–2020 **Postdoctoral Fellow**, *Laboratory for Molecular Cryospectroscopy and Biospectroscopy*, Chemistry Department, University of Coimbra, Coimbra, Portugal
Principal Investigator: Prof. Rui Fausto
- 2015–2017 **Postdoctoral Fellow**, *Reaction Dynamics Group*, Chemistry Department, University of Hawai'i at Mānoa, Honolulu, USA
Principal Investigator: Prof. Ralf I. Kaiser
- 2012–2015 **Research Assistant**, *Astrophysical and Geochemical Laboratory*, Konkoly Observatory, Research Centre for Astronomy and Earth Science, Hungarian Academy of Sciences, Budapest, Hungary
Group leader: Ákos Kereszturi

Education

- 2014 **PhD in Chemistry**, *Theoretical and Physical Chemistry, Structural Chemistry Doctoral Program, Chemistry Doctoral School*, Laboratory of Molecular Spectroscopy, Institute of Chemistry, ELTE Eötvös Loránd University, Budapest, Hungary
Supervisor: György Tarczay
- 2008 **MA in Chemistry**, *specialization: Material Structure Researcher Chemist*, Laboratory of Molecular Spectroscopy, Institute of Chemistry, ELTE Eötvös Loránd University, Budapest, Hungary
Supervisor: György Tarczay

Visits, mobility programs

- April 2017 **Visiting postdoctoral fellow**, Physical Organic Chemistry Group,
Ruhr Universität Bochum, Germany
Group leader: Prof. Dr. Wolfram Sander
- March–June 2014 **Visiting researcher**, Laboratory Astrophysics Group,
Friedrich-Schiller Universität Jena, Germany
Supervisor and group leader: Dr. Cornelia Jäger, Prof. Dr. Thomas Henning
- September–December 2013 **Visiting researcher**, *French–Hungarian Balaton–TéT program*,
PLANETO group, Institut de Planétologie et d'Astrophysique de Grenoble, France
Group leader: Dr. Bernard Schmitt
- March–April 2010 **Visiting PhD student**, *MTA–DFG mobility program*,
Max Planck Institut für Anorganische Chemie, Mülheim an der Ruhr, Germany
Group leader: Dr. Werner Klotzbücher
- March 2009 **Visiting scholar**, *MTA–DFG mobility program*,
Max Planck Institut für Anorganische Chemie, Mülheim an der Ruhr, Germany
Group leader: Dr. Werner Klotzbücher
- November 2008 **Visiting scholar**, *MTA–DFG mobility program*,
Max Planck Institut für Anorganische Chemie, Mülheim an der Ruhr, Germany
Group leader: Dr. Werner Klotzbücher

Experience with instruments and methods

Cryogenic (ultra-)high vacuum (UHV) systems, studies of astrophysical interest
Matrix-isolation (MI): traditional Ar, exotic *para*-H₂ matrices, hydrogenation studies
Ice-phase and MI transmission and reflection-absorption IR spectroscopy; supplemented by solution-phase spectroscopy
Other detection methods: UV-Vis, VCD, Raman, and ROA spectroscopy;
IR and Raman microscopy; mass spectrometry: PI-ReTOF-MS, EI-QMS
Lasers: Nd:YAG, CO₂, dye lasers, optical parametric oscillators (OPOs)
Irradiation: energetic electrons, laser UV or near-IR, Lyman- α , hydrogen atoms
Monitoring kinetics on-line by following the irradiation products or tunneling processes
Spectral and conformational analysis supported by quantum chemical (DFT, MP2) methods, tunneling half-life calculations