

PERSONAL INFORMATION
Dr. Nadja Sändig


📍 Via Castelletto, 5A, 40017 San Giovanni in Persiceto (BO), Italy

☎ +39 3927750413

✉ nadja.saendig@unimore.it

Sex F | Date of birth 23/06/1971 | Nationality German

WORK EXPERIENCE

- 01/09/1996 – 31/12/1999 Theoretical chemistry research, Grant from the DFG (German Research Society)
Technical University of Berlin, Germany
- 01/03/1998 – 31/05/1998 Theoretical chemistry research, Grant from the DAAD (German Academic Exchange Service)
University of Tasmania, Hobart, Australia
- 01/06/1999 – 30/11/1999 Theoretical chemistry research, Grant from the DFG (German Research Society)
Czech Academy of Sciences, Prague, Czech Republic
- 01/01/2000 – 31/07/2000 Theoretical chemistry research, Grant from the DFG (German Research Society)
Technical University of Berlin, Germany
- 01/11/2000 – 31/07/2003 Theoretical chemistry research, FP5 grant
University of Perugia, Italy
- 01/01/2002 – 31/01/2002 Theoretical chemistry research journey
University of Stuttgart, Germany
- 01/10/2003 - 30/10/2005 Theoretical chemistry research, FP6 grant
University of Bologna, Italy
- 01/12/2005 – 30/06/2014 Theoretical chemistry research, FP7 grants
University of Bologna, Italy
- 01/06/2014 - 31/08/2014 EU project management and proposal writing for European funding programmes
University of Modena and Reggio Emilia, Department of Engineering Science and Methods
- 01/06/2014 – 31/12/2014 Project management of a LIFE+ project
Experimental Station for the Food Preserving Industry (SSICA), Parma, Italy
- 01/09/2014 - 31/05/2015 EU/international project management and proposal writing for European and International programmes
University of Modena and Reggio Emilia, Department of Life Sciences
- 01/01/2015 - 31/05/2015 Proposal drafting for a European funding programme (LIFE+)
University of Modena and Reggio Emilia, Artificial Intelligent Research and Innovation Centre AIRI (former Softech-ICT) is an Interdepartmental ICT Research Centre
- 01/06/2015 - 31/05/2016 EU/international project management and proposal writing for European and International programmes
University of Modena and Reggio Emilia, Department of Life Sciences
- 01/01/2016 – 31/12/2016 Project Management of the Excellence Centre MAX
CNR Nano di Modena
- 01/06/2016 – 31/03/2018 EU/international project management and proposal writing for European and International programmes
University of Modena and Reggio Emilia, Department of Life Sciences

- 01/12/2016 - 31/03/2018 **Dissemination of the results obtained in the POR-FESR project LumePlaner and Proposal Writing**
University of Modena and Reggio Emilia, Interdepartmental centre for industrial research and technology transfer in the field of integrated technologies for sustainable energy, efficient energy conversion, building energy efficiency, lighting and home automation
- 01/06/2018 – 31/07/2028 **Dissemination Manager**
BEWARRANT S.P.R.L., Bruxelles, Belgium
- 02/09/2018 – 31/08/2023 **Research Facilitator (PTA, D3 position)**
University of Modena and Reggio Emilia, International Research Office
- 01/09/2023 - today **Research Facilitator (PTA, EP position)**
University of Modena and Reggio Emilia, Department of Biomedical, Metabolic and Neurosciences, Faculty of Medicine and Surgery

EDUCATION AND TRAINING

- 06/07/1990 **Classical high school graduation**
Rostock, Germany
- 1990-1996 **Study of Chemistry**
University of Halle zu Wittenberg, Technical University of Berlin, Germany
- 1996 **Master's degree in chemistry**
- 02/09/1996 **Thesis in the research group of Prof. Dr. W. Koch** entitled: "Tantal-vermittelten Aktivierung von organischen Substraten" (Activation of organic substrates with tantalum)
Technical University of Berlin (TU-Berlin), Germany
- 1997-2000 **Doctorate in Chemistry**
Technical University of Berlin (TU-Berlin), Germany
- 10/08/2000 **PhD Thesis** in the research group of Prof. Dr. W. Koch, TU-Berlin, entitled: "Quantenchemische Untersuchungen zu katalysierten Reaktionen organischer Substrate" (Quantum chemical studies on catalysed reactions of organic substrates)
Technical University of Berlin (TU-Berlin), Germany

LANGUAGES AND SKILLS

Mother tongue German

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Italian	C1	C1	C1	C1	C1

Communication skills Very good communication skills gained through my experience as Project Manager/Research Facilitator

Computer skills Very good command of Microsoft Office™ tools

PUBLICATIONS

- 1) On the Mechanism of the Ta⁺ Mediated Activation of the C-H Bond in Methane
Nadja Sändig, Wolfram Koch
Organometallics 16, 5244 (1997).
- 2) A Quantum Chemical View on the Mechanism of the Ta⁺ Mediated Coupling of Carbon Dioxid with Methane
Nadja Sändig, Wolfram Koch
Organometallics 17, 2344 (1998).
- 3) The Structure and Stability of the CF₃²⁺ Dication
Jan Hrušak, Nadja Sändig and Wolfram Koch
Int. J. Mass Spectrom. 187, 701 (1999); (Special Issue in honor of Mike Bowers).
- 4) Quantum Chemical Investigation of the Initial Steps of the Yttrium-Mediated Polymerization of Ethene and Propene
Nadja Sändig, Thomas K. Dargel and Wolfram Koch
Z. anorg. allgem. Chem. 626, 392 (2000).
- 5) The Heat of Formation of the CF₂⁺⁺ Dication
Jan Hrušak, Herman Zdenik, Nadja Sändig and Wolfram Koch
Int. J. Mass Spectrom. 201, 269 (2000).
- 6) Quantenchemische Untersuchungen zu katalysierten Reaktionen organischer Substrate
Nadja Sändig
PhD thesis in Chemical Sciences, group of Prof. Dr. W. Koch, Coordinators Prof. Dr. H. Schumann, Prof. Dr. M. Schoen. Thesis legally deposited at the National Central Libraries in Berlin, Germany, and used for the final doctoral discussion on 10/08/2000.
- 7) The Importance of Dihydrogen Complexes H_nGe(H₂)⁺ (n=0,1) to the Chemistry of Cationic Germanium Hydrides: Advanced Theoretical and Mass Spectrometric Analysis
Phillip Jackson, Nadja Sändig, Martin Diefenbach, Detlef Schröder, Helmut Schwarz and Ragampetra Srinivas
Chem. Eur. J. 7, 151 (2001).
- 8) Kinetic and Density Functional Studies on Alkyl-Carbene Elimination from Pd^{II} Heterocyclic Carbene Complexes. A new Type of Reductive Elimination with Clear Implications for Catalysis
David S. McGuinness, Nadja Sändig, Brian F. Yates and Kingsley J. Cavell
J. Am. Chem. Soc. 123, 4029 (2001).
- 9) Why Does Cp₂YH Catalyze the Polymerization of Ethene but not of Propene?
Nadja Sändig, Wolfram Koch
Organometallics 21, 1861 (2002).
- 10) Glory Scattering Measurements of Water-Noble-Gas Interactions: The Birth of the Hydrogen Bond
Vincenzo Aquilanti, Elena Cornicchi, Marc Moix Teixidor, Nadja Sändig, Fernando Pirani and David Cappelletti
Angew. Chemie 117, 2356 (2005).
- 11) Tuning the physisorption of molecular hydrogen: binding to aromatic, hetero-aromatic and metal-organic framework materials
Fabrizia Negri, Nadja Sändig
Theor. Chem. Acc. 118, 149 (2007), (Special Issue in honor of Fernando Bernardi).
- 12) Driving Force for the Adsorption of Sexithiophene on Gold
Nadja Sändig, Fabio Biscarini and Francesco Zerbetto
J. Phys. Chem. C 112 (49), 19516 (2008).
- 13) Intermolecular Repulsion through Interfacial Attraction: Toward Engineering of

Polymorphs

Tibor Kudernac, Nadja Sändig, Tatiana Fernández Landaluce, Bart J. van Wees, Petra Rudolf, Nathalie Katsonis, Francesco Zerbetto and Ben L. Feringa
J. Am. Chem. Soc. 131 (43), 15655 (2009).

- 14) Molecules on Gold
 Nadja Sändig, Francesco Zerbetto
Chem. Commun. 46, 667 (2010).
 8th of Top 10 of most downloaded Chem. Comm. Articles, January 2010
- 15) Controlled Hydrogen-Bond Breaking in a Rotaxane by Discrete Solvation
 Anouk M. Rijs, Nadja Sändig, Martine N. Blom, J. Oomens, Jeffrey S. Hannam, David A. Leigh, Francesco Zerbetto and Wybren J. Buma
Angew. Chem. Int. Ed. 49 (23), 3896, (2010).
- 16) Laws of Thermal Diffusion of Individual Molecules on the Gold Surface
 Nadja Sändig, Francesco Zerbetto
Phys. Chem. Chem. Phys. 13, 13690, (2011).
- 17) Polymorphism and Isomerisation of an Azobenzene Derivative on Gold
 Nadja Sändig, Gilberto Teobaldi and Francesco Zerbetto
Chem. Commun. 47, 8662, (2011).
- 18) Stability, Dynamics, and Lubrication of MoS₂ Platelets and Nanotubes
 Marco Dallavalle, Nadja Sändig, and Francesco Zerbetto
Langmuir 28, 7393–7400, (2012).
- 19) Role of Substrate in Directing the Self-Assembly of Multicomponent Supramolecular Networks at the Liquid–Solid Interface
 Tatyana Balandina, Kazukuni Tahara, Nadja Sändig, Matthew O. Blunt, Jinne Adisoejoso, Shengbin Lei, Francesco Zerbetto, Yoshito Tobe, and Steven De Feyter
ACS Nano 6, 8381 (2012).
- 20) Project Management Methodologies as Main Tool for Current Challenges in Global Economy Driving Historical Changes
 Amilcar Baptista, Fernando Charrua Santos, José Carlos Pascoa, Nadja Sändig
J. Adv. Management Science (JAMS - ISSN: 2168-0787), presented at the International Conference on Management Sciences and Innovations (ICSMI), Geneva, Switzerland, (2014).
- 21) Conformation diversity of fused-ring pyrazine derivative on Au(111) and HOPG
 Hui-Juan Yan, Nadja Sändig, Haifeng Wang, Dong Wang, Francesco Zerbetto, Xiaowei Zhan, and Li-Jun Wan
Chem. Asian Journ. 1 (2015)
- 22) Stochastic analysis of movements on surfaces: The case of C60 on Au(111)
 Nadja Sändig, Evangelos Bakalis, Francesco Zerbetto
Chem. Phys. Lett. 633 (1), 163-168 (2015)

BOOK CHAPTER

- 1) Molecules on Gold Surfaces: What They Do and How They Go Around to Do It
 Nadja Sändig, Francesco Zerbetto
 In „Functional Supramolecular Architectures: for Organic Electronics and nanotechnology”, Eds. P. Samori, F. Cacialli, Wiley-VCH, Weinheim (15 Dec 2010), chapt. 3, pag. 55-78.

Quanto dichiarato nel presente curriculum vitae corrisponde al vero ai sensi degli artt. 46 e 47 del D.P.R. 445/2000.

Modena, 13.11.2024

N. Sändig

