

CURRICULUM VITAE

Sonia Coriani, Professor, PhD H-index (WoS): 29

Researcher IDs: www.researcherid.com/rid/B-6424-2011; orcid.org/0000-0002-4487-897X

Scientific focus area

Quantum chemistry, computational spectroscopy, molecular properties, electronic structure theory, response theory, nonlinear optical effects, photonics. Both method development and applications.

Education & Qualifications

- 2017 Interviewed for a Villum Investigators Grant, The VELUX Foundations, Denmark
- 2014 Italian National Qualification as Full Professor in Physical Chemistry
- **2013** Interviewed for a ERC-Consolidator grant
- **2010** Norwegian Qualification as Adjunct Professor in Chemistry
- 2000 PhD degree in Theoretical Chemistry, Faculty of Science, Aarhus University, Denmark
- **1993** Master Degree *cum laude* in Chemistry, University of Modena, Italy

Employment

Since 02/2017 Professor in Physical Chemistry, DTU Chemistry, Technical University of Denmark 2014-2017 Associate Prof., Dep.nt Chemical and Pharmaceutical Sciences, University of Trieste, Italy 2015-2016 AIAS-COFUND senior fellow, Aarhus Institute of Advanced Studies, Aarhus University, DK 1999-2014 Tenured Research Scientist, Department of Chemical Sciences, University of Trieste, Italy 2010-2012 IEF-Marie Curie Fellow (associate prof.), Department of Chemistry, Aarhus University 2007-2011 Adjunct Associate Professor (20%), Centre for Theoretical and Computational Chemistry, Dept. of Chemistry, University of Oslo, Norway (5 years)

Career breaks: 19/05/2006–18/10/2006 and 23/09/2003–27/02/2004, both due to maternity leave

Research management (since 2010)

2018-2021 DTU node coordinator & Principal Investigator (PI), Marie-Sklodowska-Curie Innovative Training Network *COSINE*, 3.75 million € (580164€ to DTU node);

2013-2020 PI, Grant CHIM02-RICERCA from the University of Trieste, 106 k€.

2015-2016 PI, AIAS-COFUND grant, Aarhus University, Denmark, 110 k€

2011-2013 Co-PI (with P. Decleva), Italian PRIN2009 research network, Funding to Trieste 35000 €.

2012-2013 Proposer. EuroMagNET II: Challenging light-matter interactions in strong magnetic fields: a combined experimental and theoretical investigation of magneto-electric effects. Receiving institution: Laboratoire National des Champs Magnetique Intenses - LNCMI, Toulouse, France.

2011 Co-proposer, EuroMagNET II: *Magnetochiral birefringence and dichroism effects: can theory and experiment be brought to agreement*. Receiving institution Laboratoire National des Champs Magnetique Intenses - LNCMI, Toulouse, France.

2010-2012 PI. FP7 Marie Curie Intra-European Fellowship for Career Development, *Coupled-cluster methods for theoretical x-ray spectroscopies*, Dep.nt of Chemistry, Aarhus University, 265000 €.

Scientific Production & Impact of own research

115 peer-reviewed articles, 5 book chapters. Co-author of the Dalton and LSDalton quantum chemistry programs. <u>From Web Of Science Core Collection</u>: H-index: 29; total citations: 2962 (2505 without self citations); citing articles: 1953 (1852 without self-citations). Average citations per item: 25.18. The most highly cited paper has received 442 citations. <u>From Google Scholar</u>: H-index: 35 (22 since 2012); i-10 index: 88 (53 since 2012), total citations 4377 (2398 since 2012)



Present and past Supervision of Bachelor, Master, PhD Students and Postdoctoral Fellows

From 2017: 1 PhD student (M. Lopez) + 1 postdoc (R. Faber) + 2 PhD students starting in 2018; 2002-2016: 1 postdoc (J. Cukras), 2 PhDs (D. Marchesan, A. Baranowska), 3 B.Sc. (J. Carbone, P. Posocco, M. Pianca), 1 M. Sc. (T. Fransson)

Current Membership of Scientific Networks

2016–2018 CMST COST Action CM1405 Molecules in Motion (MOLIM)

2014–2018 COST Action MP1306 Modern Tools for Spectroscopy on Advanced Materials (EUSpec) **2013–2017** COST Action XUV/X-ray light and fast ions for ultrafast chemistry (XLIC)

Current Main International Collaborations

- Prof. Henrik Koch, Norwegian University of Science and Technology, Trondheim, Norway
- Prof. Jacob Kongsted, University of Southern Denmark, Denmark
- Drs. Fabrizio Santoro and Roberto Improta, Italian National Research Council
- Prof. Juha Vaara and Dr. Petr Stepanek, University of Oulu, Finland
- Prof. Piero Decleva, University of Trieste, Italy
- Prof. Geert Rikken, Laboratoire National des Champs Magnétiques Intenses, Toulouse, France
- Prof. Michael Odelius, Stockholm University, Sweden
- Assistant Prof. Lan Cheng, Johns Hopkins University, Baltimore, Maryland, US
- Prof. Stefano Stranges, Drs. Marcello Coreno, M. de Simone, Elettra Sincrotrone SpA, Trieste, Italy

Other scientific activities and expert assignments

- Invited speaker at WATOC2017 (Aug 2017) and 16-ICQC 2018 (June 2018) conferences
- 2 plenary, 38 invited talks, 20 contributed talks/oral communications at International Conferences since 1995; 15 invited seminars at various European universities
- Member of Editorial Board of *Theoretical Chemical Accounts*, Springer; *Molecular Physics*, Taylor and Francis; *Cogent Chemistry*, cogent-oa
- More than 20 short-term scientific visits at International research institutions in Europe
- 3 International Conferences organized:
 - 1) Molecular Properties and Computational Spectroscopy: From Esoteric Effects to Novel Probing Tools, Pisa, Italy, 10-12/04/2017 (106 participants), with C. Cappelli and F. Santoro;
 - 2) Quantum Chemistry beyond the Artic Circle. Promoting Female Excellence in Theoretical and Computational Chemistry, Sommarøy, Norway, 23-26/6/2010 (75 participants), with M. Pecul;
 - 3) XIV European Seminar on Computational Methods Quantum Chemistry (ESCMQC), Isola d'Elba, Italy, 2-6/10/2008 (85 participants), with A. Rizzo (chair), C. Cappelli, B. Mennucci, S. Monti
- Regular peer reviewer for J. Chem. Phys.; J. Chem. Theory Comput.; Mol. Phys.; Phys. Chem. Chem. Phys.; J. Phys. Chem.; ACS Photonics; Int. J. Quantum Chem.; Chem. Phys. Lett.; J. Comp. Chem.; Theor. Chem. Accounts; J. Phys. Chem. Lett.
- Opponent/Evaluator at 4 international PhD defences (2008, 2012, 2016, 2017);
- Expert evaluator for temporary and permanent positions in Denmark, Italy, Norway and Sweden;
- Regular project reviewer for FNRS, ERA-Chemistry, the Italian Ministry of Research

Institutional and Administrative Responsibilities

Since Sept. 2017 IT Security Representative for DTU Chemistry

2015 Departmental committee for the internationalization of the M.Sc. in Chemistry, Univ. of Trieste

2014–2016 Advisory Committee, Interdepartmental Centre for Computational Sciences, Univ. Trieste

2004–2008 Member of Steering Board, Dep. of Chemical Sciences, University of Trieste

2001–2007 Erasmus/Socrates Exchange Coordinator (Trieste-Santiago de Compostela, Spain)

2005–2006 Implementation committee member, educational outreach project "Scientific Degrees"

2004–2010 Responsible for the activity "ChemShow-Chemistry wonders", University of Trieste