

# Curriculum Vitæ

## Personal information

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## Education

2018 **Habilitation**, "*Functionals, Integrals, Spheres and Cusps*", Université Paul Sabatier (Toulouse, France).  
2005-2008 **PhD in Theoretical and Computational Chemistry**, Université de Lorraine (Nancy, France). Supervisor: Prof. Xavier Assfeld.  
2005 **Magistère Molecular Engineering**, Université de Lorraine (Nancy, France).  
2005 **MSc in Theoretical Chemistry**, Université de Lorraine (Nancy, France).  
2005 **MSc in Physical Chemistry**, Université de Lorraine (Nancy, France).  
2004 **BSc in Physical Chemistry**, Université de Lorraine (Nancy, France).

## Current positions

2017- **CNRS Researcher** (independent & permanent), [Laboratoire de Chimie et Physique Quantiques \(LCPQ\)](#), UMR5626, Université Paul Sabatier (Toulouse, France).

## Previous positions

2016-2017 **Senior Lecturer**, group leader of the Mathematical and Theoretical Chemistry group, Research School of Chemistry, Australian National University (Canberra, Australia).  
2013-2015 **Australian Research Council Research Fellow**, Discovery Early Career Researcher Award from the Australian Research Council, group leader of the Mathematical and Theoretical Chemistry Group, Research School of Chemistry, Australian National University (Canberra, Australia).  
2008-2012 **Postdoctoral Fellow in Theoretical Quantum Chemistry**, Theoretical Quantum Chemistry Group, Research School of Chemistry, Australian National University (Canberra, Australia). Supervisor: Prof. Peter Gill.

## Fellowships & Grants

- 2020-2023 **Early-career research grant from the Agence Nationale de la Recherche** (PI), “*A complex adiabatic connection for electronic states*”, (€204,100).
- 2020-2022 **Research grant from NEXT/NanoX** (co-PI with Pina Romaniello), “*Multireference quasi-particles for strong correlation*”, (€88,000), ANR-17-EURE-0009.
- 2017 **Visiting Fellow**, Australian National University (Canberra, Australia).
- Jun. 2016 **Visiting Erskine Fellow**, University of Canterbury (Christchurch, New Zealand).
- Feb. 2016 **Visiting Fellow**, Université Paul Sabatier (Toulouse, France).
- 2014-2016 **Discovery Project grant from the Australian Research Council** (Co-PI with Peter Gill), “*Accurate chemistry via resolution and quadrature*” (\$330,000), DP140104071.
- 2013-2016 **Discovery Early Career Researcher Award from the Australian Research Council** (PI), “*Thinking outside the box: spherical geometry in chemistry and physics*” (\$365,219), DE130101441.
- 2008 **Prize of the best PhD thesis in Molecular Physics and Chemistry**, Université de Lorraine (Nancy, France).
- 2005-2008 **French government scholarship** (MRT scholarship) for PhD studies.

## Supervision role

- Postdocs (3) Davids Agboola (2014), Marat Sibaeve (2015-2016) and Stefano di Sabatino (2019-2020)
- PhDs (4) Caleb Ball (2014-2017) and Giuseppe Barca (2014-2017) co-supervised with Peter Gill, Mickael Vénil (due 2021) and Clotilde Marut (due 2022).
- MSc (5) Anneke Knol (2015), Sam Backwell (2015), Fergus Rogers (2016), Sebastian Sitkiewicz (2017), Mickael Vénil (2018) and Thomas Colle (2019).
- Visiting fellows Denis Jacquemin (2016), Université de Nantes (hosted as the Craig lecturer at the Research School of Chemistry of the Australian National University), Xavier Assfeld (2016) Université de Lorraine, Joshua Hollett (2018) University of Winnipeg and Peter Gill (2019) University of Sydney.

## Teaching activities

- 2018-2020 **Lecturer**, TCCM winter school LTTC in Theoretical Chemistry, (Luchon, France): theory and implementation of DFT-based methods (6 hours/year).
- 2014 & 2016 **Lecturer**, Quantum and Computational Chemistry Student Conference (Cass, New Zealand): quantum Monte Carlo and DFT methods (4 hours/year).
- 2017-2020 **Teaching assistant**, Engineering school ISAE-SUPAERO (Toulouse, France): numerical analysis and parallel computing labs (15 hours/year).
- 2016 **Senior Lecturer**, Research School of Chemistry (Australian National University): designed an entire third-year course in Computational Chemistry and Molecular Modelling (CHEM3208, course convenor) and Honours (fourth-year) course in Theoretical and Computational Chemistry.
- 2006-2008 **Teaching assistant** in Mathematics (64 hours/year during 2 years), Department of Pharmacy, Université de Lorraine (Nancy, France): first-year tutorials in Mathematics.
- 2005 **Teaching assistant** in Physical Chemistry (64 hours), Department of Chemistry, Université de Lorraine (Nancy, France): first-year physical chemistry labs.
- 2004 **Teaching assistant** in Quantum/Computational Chemistry (16 hours), Department of Chemistry, Université de Lorraine (Nancy, France): fourth-year computational chemistry labs.

## Organisation of scientific meetings

- 2020 Member of the organisation committee of the International summer School in electronic structure Theory: electron correlation in Physics and Chemistry (ISTPC) (Aussois, France).
- 2018- Foundation member of the “Groupement de Recherche” NBODY (previously COREL).
- 2018 Annual meeting of the IRSAMC institute (Toulouse, France).
- 2016 2nd Quantum and Computational Chemistry Student Conference (Cass, New Zealand).

## Institutional responsibilities

- 2013-2017 Undergraduate Student Advisor, Australian National University (Canberra, Australia).
- 2018- Alternate leader of the theoretical method development group (GMO) at the LCPQ (Toulouse, France).
- 2019- Seminar coordinator of the LCPQ.

## Reviewing activities

- 2018 Doctoral Thesis Examiner: Dr David Gregoire (Université de Marseille, France), Dr Killian Deur (Université de Strasbourg, France), Dr Mauricio Rodriguez Mayorga (Universitat de Girona, Spain).
- 2013- Reviewer, Australian Research Council (Australia).
- 2016-2017 Interview panel member for postdoctoral positions at the Australian National University.
- 2008- Reviewer (~ 20 papers/year) for various scientific journals (JCP, JCTC, JPC, PCCP, PRL, PRB, PRA, etc).

## Memberships of scientific societies

- 2017- Member, World Association of Theoretical Oriented Chemists (WATOC).

## Major collaborations

- International Alex Thom (Cambridge, UK), Peter Gill (University of Sydney, Australia), Anouar Benali (Argonne, US) & David Tew (Oxford, UK).
- National Denis Jacquemin (Université de Nantes), Emmanuel Fromager (Université de Strasbourg) & Julien Toulouse (Sorbonne Université, Paris).