Benjamin Rotenberg
né le 14 février 1982 à Paris, marié
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Laboratoire PHENIX, Sorbonne Université
4 pl. Jussieu, 75005 Paris
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Situation actuelle

Directeur de Recherche CNRS en section 13 (Chimie Physique, théorique, analytique)

Co-responsable de l'équipe Modélisation et Expériences Multiéchelles depuis 2019.

Laboratoire Physicochimie des électrolytes, et nanosystèmes interfaciaux - UMR 8234 CNRS Sorbonne Université.

Mots clés : simulations moléculaires et mésoscopiques, coarse-graining, phénomènes électrocinétiques, interfaces et milieux poreux chargés, nanofluidique, argiles, supercondensateurs, énergie bleue, bruit électrique dans les électrolytes...

Formation

2012 Habilitation à Diriger des Recherches

Physicochimie des interfaces chargées : modélisation multi-échelles et applications pour l'énergie

2004 – 2007 Thèse *Modélisation multi-échelle du comportement de l'eau et des ions dans les argiles*

sous la direction de Pierre Turq à l'Université Pierre et Marie Curie financement de l'Andra.

2003 – 2004 DEA en Matière Condensée : Chimie et Organisation, UPMC (Très Bien, rang 1er)

2001 – 2005 Cursus de chimie à l'**Ecole Normale Supérieure** (Paris)

Expérience professionnelle

(Co-)direction de 9 thèses, co-encadrement de 4 autres thèses et 12 post-docs, encadrement de L3, M1 et M2.

2023 Visiting Researcher à l'Université de Tel Aviv (Israël), dans le groupe de David Andelman.

2019 & 2020 Visiting Researcher à UC Berkeley, Californie (USA), dans le groupe de David Limmer.

Depuis 2018 Directeur de Recherche CNRS

2018 Visiting Researcher au Helmholtz-Zentrum Berlin (Allemagne), dans le groupe de Joachim Dzubiella.

2010 & 2011 Professeur invité à l'Université de Barcelone (Espagne), dans le groupe d'Ignacio Pagonabarraga.

2010, 2011 & 2013 Visiting Scholar à UC Berkeley, Californie (USA), dans le groupe de David Chandler.

2008 – 2018 Chargé de Recherche CNRS (CR2, puis CR1 en 2013) Laboratoire PECSA, PHENIX depuis 2014.

2007 – 2008 Post-doc à l'institut AMOLF, Amsterdam (Pays-Bas), avec Daan Frenkel.

2004 – 2007 Thèse au Laboratoire Liquides Ioniques et Interfaces Chargées sous la direction de Pierre Turq.

2004 Max-Planck-Institut fur Kolloïd- und Grenzflächenforschung, Golm (Allemagne), avec Markus Antonietti.

2003 Laboratoire Colloïdes et Matériaux Divisés, ESPCI, avec Jérôme Bibette.

2003 Department of theoretical chemistry, Cambridge (Royaume-Uni), avec Jean-Pierre Hansen.

Distinctions

2021 Co-lauréat du **Prix spécial Joseph Fourier (GENCI-Atos)** pour le code MetalWalls

2020 Membre de la promotion **"Cadres à haut potentiel 2020" du CNRS**

2018 HPCwire Readers' & Editors' Choice (best use of High Performance Computing in Energy)

2017 Friedrich-Wilhelm Bessel Research Award de la **Alexander von Humboldt Foundation** (Allemagne).

2015 Médaille de Bronze du CNRS.

2014 Selectionné par la New York Academy of Sciences pour participer au **Science and Technology in Society (STS) Forum**, Kyoto, dans le cadre du « Future Leaders program ».

2013-2018 Membre Distingué Junior de la Société Chimique de France.

2013 Grand Prix Michel Gouilloud Schlumberger de l'Académie des Sciences.

2013 Co-lauréat du **Prix La Recherche 2013**, mention « Physique ».

2013 Prix Jeune Chercheur de la Division de Chimie Physique (commune à la SCF et la SFP).

2012-2017 Prime d'Excellence Scientifique du CNRS.

2011 Young Faculty poster prize, **Mini Statistical Mechanics Meeting** (Berkeley, Californie, USA).

2007 Co-lauréat du **Prix La Recherche 2007**, mention « Énergie ».

2001 Admis à l'**École Normale Supérieure** (Paris, rang 1er) et à l'**École Polytechnique** (1er).

2000 Médaille de bronze aux **Olympiades Internationales de Chimie** (Copenhague, Danemark).

Enseignement

2018 Ecole internationale SJSACMS (Bangalore, Inde) : mesoscopic hydrodynamics, Lattice-Boltzmann (doct.).

Depuis 2015 Ecole internationale PISACMS (Paris) : mesoscopic hydrodynamics, Lattice-Boltzmann (M2/doct.).

2015 Ecole MeMoSim (Lyon) : méthodes probabilistes pour systèmes complexes (DCP, ANF CNRS).

2015 – 2018 Master Chimie Physique Analytique et Théorique (UPMC) : modélisation de la solvatation (M1).

2010 & 2011 Master in Computational Physics (Barcelone) : modélisation multi-échelle (M2).

Depuis 2009 Master Chimie Physique Analytique et Théorique (UPMC) : modélisation multi-échelle (M2).

2009 – 2017 International Master in Advanced Clay Science (Poitiers) : modélisation moléculaire (M1).

2005 – 2007 Moniteur en Chimie (UPMC).

Examinateur Oral de chimie au concours d'entrée à l'ENS (2012-2014)

Partenariats et financement de projets

H2020 *Porteur* du projet **ERC Consolidator** SENSES (1.8M€, 2020-25)
Hôte de la **Marie Curie Fellowship** Molecular Control de Sophie Marbach, avec NYU (2020-2023)
Principal Investigator du réseau européen **FET-OPEN** NANOPHLOW (total 3.3M€, 2018-21)
Coordinateur adjoint du réseau européen **ETN** NANOTRANS (total 3.9M€, 2016-20)
Participant à l'action **COST** NMR Relaxometry (2016-20)

FP7 *Membre associé* des réseaux européens **ITN** COMPLOIDS (2009-13) et **Euratom** CATCLAY (2010-14)

RS2E *Membre* du Réseau sur le Stockage Electrochimique de l'Energie

ANR *Principal Investigator* du projetANR DIADEM (2022-25) – 650k€
Principal Investigator du projet ANR-DFG NEPTUNE (2017-21) – 390k€
Porteur du projet JCJC LENNS (2015-19) – 180k€
Co-direction avec Pierre Turq du projet SIMISOL (2009-12) – 300k€
Partenaire des projets MAICANANO (2010-13), CELADYCT (2012-16) et BALWISE (2019-23)

Ville de Paris *Porteur* du projet Emergence(s) "Energie bleue et désalinisation" (2016-19) – 250k€

IFP-En Thèses d'Alexandru Botan (2008-11) et Pauline Simonnin (2014-17) – 200k€

Andra Post-doc de Magali Duvail (2010-11) et thèse d'Amaël Obliger (2011-14) – 175k€

DIM Oxymore de la Région Ile-de-France, avec Anne Boutin : thèse de Wilfried Louisfrema (2013-16) – 100k€

France-Berkeley Fund *Principal Investigator* avec D. Chandler (2012-13, 10k$) et D. Limmer (2018-19, 11k$)

GNR PARIS *Porteur* d'un projet (2010-11) – 3.5k€

GENCI *Porteur* de projets – 6 millions (2016) et 1,8 millions (2017) d'heures de calcul sur Curie ; 600.000 heures sur Curie et 700.000 heures sur Irene (2017) ; 2 millions (2018) et 3.5 millions (2019) d'heures sur Occigen ; 33.500 (2021) et 30.000 (2022) heures GPU sur Jean Zay.

ISCD *Partenaire* de l'équipe-projet MAESTRO de l'ISCD, Alliance Sorbonne Université (depuis 2020).

Responsabilités collectives et administration de la recherche

UMR PHENIX Co-responsable de l'équipe Modélisation et Expériences Multi-échelles depuis 2019, responsable du site web (www.phenix.cnrs.fr) depuis 2009. Ancien CSSI (Correspondant de Sécurité des Systèmes d'Information) [2013-2020] et ancien membre du conseil de l'UMR [2009-2010].

Programme NEEDS (Nucléaire : Energie, Environnement, Déchets, Société) du CNRS : co-direction du Projet Fédérateur "Milieux Poreux" [2012-2018].

CNRS Dans le cadre de la promotion 2020 des "cadres à haut potentiel", préparation d'un rapport sur la mission d'expertise du CNRS, ayant contribué à la mise en place en 2022 de la Mission Pour l'Expertise Scientifique.

UPMC Chargé de mission (vice-présidence recherche et innovation) sur la participation de l'UPMC au programme européen JOPRAD "Toward a joint programming on radioactive waste disposal" [2016-2018].

UFR 926 (UFR 926) Membre élu du conseil et du conseil scientifique, membre nommé de la commission des personnels IATOS [2009-2013]. Comités de sélection Maître de Conférences et ATER.

iMAT Membre du CoDir de l'Institut de science des matériaux de l'Alliance Sorbonne Université [Depuis 2022]

Labex MATISSE Membre [2011-2017] puis co-animateur [2015-2017] du comité de pilotage de l'axe transversal "Modélisation Multi-échelle".

Andra Comité de pilotage du groupement de laboratoires "Transferts" [2009-2014].

Subatech Membre invité du Conseil scientifique du laboratoire [2019].

DIM RESPORE Correspondant pour le laboratoire PHENIX [depuis 2017].

GDR NAME Correspondant pour le laboratoire PHENIX et membre du GT Stockage de l'énergie [depuis 2020].

Evaluateur ERC, ANR, PRACE (HPC Europe), Swiss National Science Foundation (Suisse), Netherlands Organisation for Scientific Research NWO et Technology Foundation STW (Pays-Bas), Foundation for Polish Science FNP (Pologne), Croatian Science Foundation (Croatie), Slovenian Research Agency (Slovénie), Programme Emergences (Ville de Paris), Labex Charmmat, I-SITE E2S, Comité ECOS Nord, Université Franco-Allemande.

Membre de jury ou rapporteur **26 thèses** (Paris, Orsay, Pau, Clermont-Ferrand, Marne-la-Vallée, Grenoble, Toulouse, Montpellier, Barcelone, Cambridge, Lund) et **6 HDR** (Paris, Lyon, Nantes, Clermont-Ferrand, Prague)

Animation scientifique

Membre de l'Editorial Board de *Molecular Physics* et guest editor de 3 volumes de cette revue.

Reviewer ($\sim$20/an) pour *Nature Commun., Nature Phys., PNAS, Phys. Rev. Lett., Phys. Rev. X, J. Phys. Chem. Lett., J. Chem. Phys., J. Phys. Chem., J. Chem. Theory Comput., Soft Matter, ACS Nano, Sci. Rep., Langmuir, Europhys. Lett., Nanolett., J. Power Sources, Mol. Phys., J. Coll. Interf. Sci., Phys. Rev. E, J. Phys. Condens. Matter, Geochim. Cosmochim. Acta, Oil & Gas Sci. Technol., Int. J. Greenh. Gas Control, Adv. Water Resour., ...*

Membre du bureau de la sub-division *Modélisation et Simulation* et **membre du Conseil** de la *Division de Chimie Physique* commune à la Société Chimique de France et à la Société Française de Physique [2015-2018].

Organisation de conférences

Juillet 2022 CECAM Conference *New frontiers in liquid matter* à Paris

Juin 2022 CECAM Workshop *Atomistic simulations of interfacial processes in energy materials* à Paris

Avril 2022 CECAM Workshop *Numerical Techniques for Nonequilibrium Steady States* à Mainz, Allemagne

Mai 2021 CECAM Workshop *Digital Prequel - Numerical Techniques for Nonequilibrium Steady States* (online)

Janvier 2020 Meeting en l'honneur de Loup Verlet à Paris.

Mai 2018 Journée Théorie, Modélisation et Simulation de la DCP, à Paris

Avril 2018 CECAM Workshop *Phoretic effects at the nanoscale* à Lausanne, Suisse

Mars 2018 CECAM Workshop *Electrostatics in Concentrated Electrolytes* à Lausanne, Suisse

Juin 2017 CECAM School *Transport of soft matter at the nanoscale* à Mainz, Allemagne

Avril 2017 CECAM Workshop *Exploiting finite-size effects in simulations*, Paris

Décembre 2016 Workshop annuel du *GDRI Multiscale Materials Under the Nanoscrope (M2UN)*

Décembre 2016 Journées annuelles de *NEEDS - Milieux Poreux*

Juillet 2016 CECAM-FR-MOSER Meeting *Algorithms and codes for the simulation of explicit electrodes*

Décembre 2015 Journées annuelles de *NEEDS - Milieux Poreux*

Juin 2015 Comité Scientifique de *LowPerm2015* à Rueil-Malmaison.

Mai 2015 CECAM Workshop *Simulation of systems under thermodynamic-like gradients* à Saragosse, Espagne.

Décembre 2014 Journées annuelles de *NEEDS - Milieux Poreux*

Octobre 2014 Premier Colloque NEEDS, Nantes.

Août 2014 CECAM Workshop *Modelling ionic liquids at electrochemical interfaces* à Paris.

Juillet 2014 Meeting en l'honneur de Pierre Turq à Paris.

Mars 2014 CFCAM Discussion Meeting *Simulation of systems under thermodynamic gradients* à Paris.

Décembre 2013 Meeting en l'honneur de Jean-Pierre Hansen à Paris.

Novembre 2013 Journées annuelles de *NEEDS - Milieux Poreux* à Paris.

Septembre 2013 CFCAM Discussion Meeting, *Modelling ionic liquids at electrochemical interfaces* à Paris

Décembre 2012 Colloque de lancement du programme *NEEDS - Milieux Poreux* à Paris.

Octobre 2012 Session Molecular Modelling au *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"* à Montpellier.

Juin 2011 CECAM Workshop *Microscopic-Scale View of CO_2 Sequestration* à Lausanne, Suisse.

Mai 2011 CECAM Workshop *New Challenges for the Simulation of Electrokinetic Phenomena* à Paris.

Publications et communications

138 articles dont 1 *Chem. Rev.*, 1 *Nature Materials*, 3 *Nature Communications*, 1 *Nature Energy*, 1 *Ann. Rev. Phys. Chem.*, 2 *PNAS*, 1 *ACS Nano*, 2 *JACS*, 1 *Phys. Rev. X*, 6 *Phys. Rev. Lett.*, 1 *Angew. Chem. Int. Ed.*, 1 *ACS Cent. Sci.*, 2 *J. Phys. Chem. Lett.* (dont 1 perspective), 2 *J. Chem. Theory Comput.*, 1 *Soft Matter*, 3 *Faraday Discussions* (dont 1 cover), 20 *J. Phys. Chem. B&C* (dont 1 cover), 26 *J. Chem. Phys.* (dont 1 perspective), 5 *PCCP* (dont 2 perspectives), 3 *Geochim. Cosmochim. Acta*, 2 *Energy Storage Materials*

7 actes de congrès avec comité de lecture

6 chapitres d'ouvrages

44 conférences invitées (dont 5 keynotes)

15 autres communications orales et **18 posters** à des conférences

39 séminaires invités et **24 autres communications**

Liste des publications

REVUES INTERNATIONALES AVEC COMITÉ DE LECTURE

[1] B. Rotenberg, R. Taïeb, V. Véniard et A. Maquet, H_2^+ in intense laser field pulses : ionization versus dissociation within moving nuclei simulations, *J. Phys. B* **35**, L397-L402 (2002).

[2] A. Moncho-Jorda, B. Rotenberg et A.A. Louis, Effect of polymer-polymer interactions on the surface tension of colloid-polymer mixtures, *J. Chem. Phys.* **119**, 12667-12672 (2003).

[3] B. Rotenberg, J. Dzubiella, J.-P. Hansen et A.A. Louis, Thermodynamic perturbation theory of the phase behavior of colloid / interacting polymer mixtures, *Mol. Phys.* **102**, 1-11 (2004).

[4] V. Krakoviack, B. Rotenberg et J.-P. Hansen, An integral equation approach to effective interactions between polymers in solution, *J. Phys. Chem. B* **108**, 6697-6706 (2004).

[5] S. Mandal, N. Lequeux, B. Rotenberg, M. Tramier, J. Fattaccioli, J. Bibette et B. Dubertret, Encapsulation of magnetic and fluorescent nanoparticles in emulsion droplets, *Langmuir* **21**, 4175-4179 (2005).

[6] B. Rotenberg, A. Cadène, J.-F. Dufrêche, S. Durand-Vidal, J.-C. Badot et P. Turq, An analytical model for probing ion dynamics in clays with Broadband Dielectric Spectroscopy, *J. Phys. Chem. B* **109**, 15548-15557 (2005).

[7] B. Rotenberg, J.-F. Dufrêche, et P. Turq, Frequency-dependent dielectric permittivity of salt-free charged lamellar systems, *J. Chem. Phys.* **123**, 154902-154913 (2005).

[8] D. Zerrouki, B. Rotenberg, S. Abramson, J. Baudry, C. Goubault, F.L. Calderon, D. Pine et J. Bibette, Preparation of doublet, triangular, and tetrahedral colloidal clusters by controlled emulsification, *Langmuir* **22**, 57-62 (2006).

[9] B. Rotenberg, J.-F. Dufrêche, B. Bagchi, E. Giffaut, J.-P. Hansen et P. Turq, Ion dynamics in compacted clays : Derivation of a two-state diffusion-reaction scheme from the lattice Fokker-Planck equation, *J. Chem. Phys.* **124**, 154701-154712 (2006).

[10] D. Moroni, B. Rotenberg, J.-P. Hansen, S. Succi, et S. Melchionna, Solving the Fokker-Planck kinetic equation on a lattice, *Phys. Rev. E* **73**, 066607 (2006).

[11] B. Rotenberg et D. Moroni, Second-order lattice Fokker-Planck algorithm from the trapezoidal rule, *Phys. Rev. E* **74**, 037701 (2006).

[12] B. Rotenberg, V. Marry, J.-F. Dufrêche, E. Giffaut et P. Turq, A multiscale approach to ion diffusion in clays : Building a two-state diffusion-reaction scheme from microscopic dynamics, *J. Coll. and Interf. Sci.* **309**, 289-295 (2007).

[13] B. Rotenberg, V. Marry, R. Vuilleumier, N. Malikova, C. Simon et P. Turq, Water and ions in clays : Unraveling the interlayer/micropore exchange using molecular dynamics, *Geochimica et Cosmochimica Acta* **71**, 5089-5101 (2007).

[14] B. Rotenberg, V. Marry, J.-F. Dufrêche, N. Malikova, E. Giffaut et P. Turq, Modeling water and ion diffusion in clays : A multiscale approach, *Comptes Rendus Chimie* **10**, 1108-1116 (2007).

[15] V. Marry, B. Rotenberg et P. Turq, Structure and dynamics of water at a clay surface from molecular dynamics simulation, *Phys. Chem. Chem. Phys.* **10**, 4802-4813 (2008).

[16] B. Rotenberg, I. Pagonabarraga et D. Frenkel, Dispersion of charged tracers in charged porous media, *Europhys. Lett.* **83**, 34004 (2008).

[17] M. Jardat, J.-F. Dufrêche, V. Marry, B. Rotenberg et P. Turq Salt exclusion in charged porous media : A coarse-graining strategy in the case of montmorillonite clays, *Phys. Chem. Chem. Phys.*, **11**, 2023-2033 (2009).

[18] B. Rotenberg, J.-P. Morel, V. Marry, P. Turq et N. Morel-Desrosiers, On the driving force of cation exchange in clays : Insights from combined microcalorimetry experiments and molecular simulations, *Geochimica et Cosmochimica Acta*, **73**, 4034-4044 (2009).

[19] B. Rotenberg, I. Pagonabarraga et D. Frenkel, Coarse-grained simulations of charge, current and flow in heterogeneous media, *Faraday Discussions*, **144**, 223-243 (2010). Cet article fait la **couverture du volume "Multiscale Modelling of Soft Matter"**.

[20] N. Malikova, E. Dubois, V. Marry, B. Rotenberg et P. Turq, Dynamics in clays - combining neutron scattering and microscopic simulation, *Z. Phys. Chem*, **244**, 153-181 (2010).

[21] B. Rotenberg, M. Salanne, C. Simon et R. Vuilleumier, From localized orbitals to material properties : Building classical force fields for nonmetallic condensed matter systems, *Phys. Rev. Lett.*, **104**, 138301 (2010).

[22] B. Rotenberg, V. Marry, N. Malikova et P. Turq, Molecular simulation of aqueous solutions at clays surfaces, *J. Phys. Cond. Matt.*, **22** 284114 (2010).

[23] I. Pagonabarraga, B. Rotenberg et D. Frenkel, Recent advances in the modelling and simulation of electrokinetic effects : bridging the gap between atomistic and macroscopic descriptions (Perspective Article), *Phys. Chem. Chem. Phys.*, **12**, 9566 (2010).

[24] A. Botan, B. Rotenberg, V. Marry, P. Turq et B. Noetinger, Carbon Dioxide in Montmorillonite Clay Hydrates : Thermodynamics, Structure, and Transport from Molecular Simulation, *J. Phys. Chem. C*, **114**, 14962 (2010).

[25] A. Botan, B. Rotenberg, V. Marry, P. Turq et B. Noetinger, Hydrodynamics in clay nanopores, *J. Phys. Chem. C*, **115**, 16109 (2011).

[26] C. Merlet, M. Salanne, B. Rotenberg et P.A. Madden, Imidazolium Ionic Liquid Interfaces with Vapor and Graphite : Interfacial Tension and Capacitance from Coarse-Grained Molecular Simulations, *J. Phys. Chem. C*, **115**, 16613 (2011).

[27] B. Rotenberg, A.J. Patel et D. Chandler, Molecular explanation for why talc surfaces can be both hydrophilic and hydrophobic, *J. Am. Chem. Soc.*, **133**, 20521 (2011).

[28] M. Salanne, B. Rotenberg, S. Jahn, R. Vuilleumier, C. Simon et P.A. Madden, Including many-body effects in models for ionic liquids, *Theo. Chem. Acc.*, **131**, 1143 (2012).

[29] S. Tazi, J. Molina, B. Rotenberg, P. Turq, R. Vuilleumier et M. Salanne, A transferable ab-initio based force field for aqueous ions, *J. Chem. Phys.*, **136**, 114507 (2012).

[30] C. Merlet, B. Rotenberg, P.A. Madden, P.-L. Taberna, P. Simon, Y. Gogotsi et M. Salanne, On the molecular origin of supercapacitance in nanoporous carbon electrodes, *Nature Mater.*, **11**, 306 (2012).

[31] C. Merlet, M. Salanne et B. Rotenberg, New Coarse-Grained Models of Imidazolium Ionic Liquids for Bulk and Interfacial Molecular Simulations *J. Phys. Chem. B*, **116**, 7687 (2012).

[32] S. Tazi, A. Botan, M. Salanne, V. Marry, P. Turq et B. Rotenberg, Diffusion coefficient and shear viscosity of rigid water models, *J. Phys. Cond. Matt.*, **24**, 284117 (2012).

[33] S. Tazi, B. Rotenberg, M. Salanne, M. Sprik and M. Sulpizi, Absolute acidity of clay edge sites from ab-initio simulations, *Geochimica et Cosmochimica Acta*, **94**, 1 (2012).

[34] M. Levesque, O. Bénichou, R. Voituriez and B. Rotenberg, Taylor Dispersion with Adsorption and Desorption, *Phys. Rev. E*, **86**, 036316 (2012).

[35] M. Levesque, V. Marry, B. Rotenberg, G. Jeanmairet, R. Vuilleumier and D. Borgis, Solvation of Complex Surfaces via Molecular Density Functional Theory, *J. Chem. Phys.*, **137**, 224107 (2012).

[36] C. Merlet, C. Péan, B. Rotenberg, P.A. Madden, P. Simon et M. Salanne, Simulating Supercapacitors : Can We Model Electrodes as Constant Charge Surfaces ? *J. Phys. Chem. Lett.*, **4**, 264 (2013).

[37] A. Botan, V. Marry, B. Rotenberg, P. Turq et B. Noetinger, How Electrostatics Influences Hydrodynamic Boundary Conditions : Poiseuille and Electro-Osmostic Flows in Clay Nanopores, *J. Phys. Chem. C*, **117**, 978 (2013).

[38] M. Levesque, O. Benichou et B. Rotenberg, Molecular diffusion between walls with adsorption and desorption, *J. Chem. Phys.*, **138**, 034107 (2013).

[39] C. Merlet, M. Salanne, B. Rotenberg et P.A. Madden, Influence of solvation on the structural and capacitive properties of electrical double layer capacitors, *Electrochimica Acta*, **101**, 262 (2013).

[40] B. Rotenberg et I. Pagonabarraga, Electrokinetics : insights from simulation on the microscopic scale (Topical Review), *Mol. Phys.*, **111**, 827 (2013).

[41] M. Levesque, M. Duvail, I. Pagonabarraga, D. Frenkel et B. Rotenberg, Accounting for adsorption and desorption in Lattice-Boltzmann simulations, *Phys. Rev. E*, **88**, 013308 (2013).

[42] A. Obliger, M. Duvail, M. Jardat, D. Coelho, S. Bekri et B. Rotenberg, Numerical homogenization of electrokinetic equations in porous media using Lattice-Boltzmann simulations, *Phys. Rev. E*, **88**, 013019 (2013).

[43] D.T. Limmer, C. Merlet, M. Salanne, D. Chandler, P.A. Madden, R. van Roij et B. Rotenberg, Charge fluctuations in nano-scale capacitors *Phys. Rev. Lett.*, **111**, 106102 (2013).

[44] C. Merlet, B. Rotenberg, P.A. Madden et M. Salanne, Computer simulations of ionic liquids at electrochemical interfaces (Perspective Article), *Phys. Chem. Chem. Phys.*, **15**, 15781 (2013).

[45] A. Botan, V. Marry, B. Rotenberg, P. Turq et B. Noetinger, Correction to "How Electrostatics Influences Hydrodynamic Boundary Conditions : Poiseuille and Electro-Osmostic Flows in Clay Nanopores", *J. Phys. Chem. C*, **117**, 20376 (2013).

[46] C. Merlet, C. Péan, B. Rotenberg, P.A. Madden, B. Daffos, P.-L. Taberna, P. Simon et M. Salanne, Highly confined ions store charge more efficiently in supercapacitors, *Nature Comm.*, **4**, 2701 (2013).

[47] L.M. Hamm, I.C. Bourg, A.F. Wallace et B. Rotenberg, Molecular Simulation of CO_2- and CO_3-Brine-Mineral Systems, *Rev. Mineral. Geochem.*, **77**, 189 (2013).

[48] A. Carof, V. Marry, M. Salanne, J.-P. Hansen, P. Turq et B. Rotenberg, Coarse-graining the dynamics of nano-confined solutes : The case of ions in clays, *Mol. Simul.*, **40**, 237 (2013).

[49] D. Borgis, R. Assaraf, B. Rotenberg et R. Vuilleumier, Computation of pair distribution functions and three-dimensional densities with a reduced variance principle, *Mol. Phys.*, **111**, 3486 (2013).

[50] C. Péan, C. Merlet, B. Rotenberg, P.A. Madden, P.-L. Taberna, B. Daffos, M. Salanne et P. Simon, On the dynamics of charging in nanoporous carbon-based supercapacitors, *ACS Nano*, **8**, 1576 (2014).

[51] A. Carof, R. Vuilleumier et B. Rotenberg, Two algorithms to compute projected correlation functions in molecular dynamics simulations, *J. Chem. Phys.*, **140**, 124103 (2014).

[52] A. Obliger, M. Jardat, D. Coelho, S. Bekri et B. Rotenberg, Pore network model of electrokinetic transport through charged porous media, *Phys. Rev. E*, **89**, 043013 (2014).

[53] B. Ancian *et al.*, Pierre Turq, an inspirational scientist in charge and at interfaces, *Mol. Phys.*, **112**, 1213 (2014).

[54] B. Rotenberg, O. Bernard et J.-P. Hansen, Salt-induced effective interactions and phase separation of an ultrasoft model of polyelectrolytes *Mol. Phys.*, **112**, 1313 (2014).

[55] G. Jeanmairet, V. Marry, M. Levesque, B. Rotenberg et D. Borgis, Hydration of Clays at the Molecular Scale : The Promising Perspective of Classical Density Functional Theory, *Mol. Phys.*, **112**, 1320 (2014).

[56] R. Joubaud, O. Bernard, B. Rotenberg, P. Turq, A. Delville et A. Ern, Numerical study of DFT with Mean Spherical Approximation for ionic condensation in highly charged confined electrolytes, *Phys. Rev. E*, **89**, 062302 (2014).

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Conférences et autres communications

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[21] *Statistical Mechanics in Physics, Chemistry, and Biology : A symposium celebrating David Chandler's 70th Birthday*, MIT, Cambridge, MA, Etat-Unis [10/2014]. Charge fluctuations in nanoscale capacitors, B Rotenberg, C. Merlet, D. Limmer, M. Salanne, D. Chandler, P.A. Madden et R. van Roij.

[22] *CECAM Workshop "Molecular hydrodynamics meets fluctuating hydrodynamics"*, Madrid [05/2015]. Computing Memory Functions Using Molecular Dynamics Simulation, B. Rotenberg, A. Carof, D. Lesnicki et R. Vuilleumier.

[23] *NEA Clay Club workshop "Filling the gaps - from microscopic pore structures to transport properties in shales"*, Edimbourg, Royaume-Uni [07/2015], Upscaling electrokinetic transport in clays with Lattice Boltzmann and Pore Network Models, B. Rotenberg, A. Obliger, M. Jardat, D. Coelho et S. Bekri.

[24] *Gordon Research Conference "Physics and Chemistry of Liquids"*, Holderness, NH, Etats-Unis [08/2015], Voltage-driven phase transitions in room temperature ionic liquids at electrochemical interfaces, B Rotenberg, C. Merlet, D. Limmer, M. Salanne, D. Chandler, P.A. Madden et R. van Roij.

[25] *Workshop on Water at the Interface between Biology, Chemistry, Physics and Materials Sciences*, Trieste, Italie [10/2015], Water and ions in clays, B Rotenberg.

[26] *"Liquids at interfaces"*, Les Houches [10/2015], Room temperature ionic liquids at electrochemical interfaces, B Rotenberg, C. Merlet, D. Limmer, M. Salanne, D. Chandler, P.A. Madden et R. van Roij.

[27] *CECAM Workshop "Interactions and Transport of Charged Species in Bulk and at Interfaces"*, Vienne, Autriche [07/2016], Structural transitions at ionic liquid interfaces, B Rotenberg, C. Merlet, D. Limmer, M. Salanne, D. Chandler, P.A. Madden et R. van Roij.

[28] **Keynote speaker**, *10^{th} Liquid Matter Conference*, Ljubljana, Slovénie [07/2017], Structural transitions at ionic liquid interfaces, B Rotenberg.

[29] **Keynote speaker**, *Goldschmidt 2017*, Paris [08/2017], Multiscale modeling of electrokinetic transport in porous materials, B Rotenberg.

[30] **Keynote speaker**, *MIGRATION 17 : 16$^{\mathrm{th}}$ International Conference on Chemistry and Migration Behaviour of Actinides and Fission Products in the Geosphere*, Barcelone, Espagne [09/2017]. Micro- and mesoscopic simulations of clay and cement-based materials, B. Rotenberg.

[31] *Journées scientifiques de l'Association Française d'Adsorption*, Marseille [01/2018]. Transport and adsorption in charged porous media : from molecular to mesoscopic simulations, B. Rotenberg.

[32] *David Chandler Linnett Memorial Symposium*, Cambridge, Royaume-Uni [04/2018]. Fluctuations in bulk and interfacial fluids, B. Rotenberg.

[33] *Journées de Physique Statistique*, Paris [02/2019]. Underscreening and Casimir force in confined ionic liquids, B. Rotenberg.

[34] *Molecular and materials simulation at the turn of the decade : Celebrating 50 years of CECAM*, Lausanne, Suisse [09/2019]. "Use the Force !" Reduced Variance Estimators for Radial Distribution Functions, Generic 3D Densities and (Local) Transport Coefficients, B. Rotenberg.

[35] *Berkeley Statistical Mechanics Meeting*, Berkeley, Etats-Unis [01/2020]. "Use the Force !" Reduced Variance Estimators for Radial Distribution Functions, Generic 3D Densities and (Local) Transport Coefficients, B. Rotenberg.

[36] *2^{nd} International workshop on the Multi-Scale Modeling of Functional Interfaces and Soft Material*, Berlin, Allemagne [03/2020]. Influence of electrode metallicity in molecular simulations : a semi-classical Thomas-Fermi model, B. Rotenberg.

[37] *CECAM Workshop "Memory Effects in Dynamical Processes : Theory and Computational Implementation"*, online [06/2021]. Computing memory kernels from noise reconstruction by a deterministic approach, R. Vuilleumier and B. Rotenberg.

[38] **Keynote speaker**, *Lorentz Center workshop "Clay Micromechanics 2022"*, online [01/2022]. Multiscale modelling of electrokinetic transport in clays, B. Rotenberg.

[39] *CECAM Workshop "Ion adsorption and electrokinetic transport at interfaces"*, Marcoule [05/2022]. Chemisorbed vs physisorbed surface charge and its impact on electrokinetic transport : carbon versus boron nitride surface, B. Rotenberg.

[40] *Psi-k conference*, Lausanne, Suisse [08/2022]. Electrode/electrolyte interfaces : From electronic response to interfacial structure, dynamics and thermodynamics using classical MD simulations, B. Rotenberg.

[41] *CECAM Workshop "Charged Species in Bulk and Interfaces : Transport and Regulation"*, Vienne, Autriche [09/2022]. Making Sense of Electrical Noise by Simulating Electrolyte Solutions, B. Rotenberg.

[42] *CECAM Mixed-Gen Series*, online [02/2023]. Electrode/electrolyte interfaces : From electronic response to interfacial structure, dynamics and thermodynamics using classical MD simulations, B. Rotenberg.

[43] *Nanofluidics at the crossroads*, Collège de France, Paris [05/2023]. Electrode/electrolyte interfaces : From electronic response to interfacial structure, dynamics and thermodynamics using classical MD simulations, B. Rotenberg.

[44] *CECAM Workshop "Fluids in porous materials : from fundamental physics to engineering applications"*, Lausanne, Suisse [06/2023]. From ion adsorption in nanoporous carbon electrodes and electrokinetic transport through nanotubes to blue energy harvesting and desalination, B. Rotenberg.

COMMUNICATIONS À DES CONGRÈS

[1] *Thermodynamics 2003*, Cambridge, Royaume-Uni [04/2003] **poster**, Phase diagrams of colloids / non-ideal polymer mixtures, B. Rotenberg, J. Dzubiella, A.A. Louis et J.-P. Hansen.

[2] *MIGRATION 05 : 10$^{\text{th}}$ International Conference on Chemistry and Migration Behaviour of Actinides and Fission Products in the Geosphere*, Avignon [09/2005] **communication orale**, Dielectric Spectroscopy as a probe for thermodynamic and dynamic properties of compacted smectites , B. Rotenberg, A. Cadène, N. Malikova, J.-F. Dufrêche, S. Durand-Vidal, P. Turq et J.-C. Badot.

[3] *Journées du Groupement de Recherche PARIS (Physico-chimie des Actinides et Radionucléides aux Interfaces et en Solution)*, Avignon [03/2006] **poster**, Modélisation multi-échelles de la dynamique ionique dans les argiles, B. Rotenberg, J.-F. Dufrêche, E. Giffaut, J.-P. Hansen et P. Turq.

[4] *International Electrokinetics Conference ELKIN 2006*, Nancy [06/2006] **communication orale**, Ionic mobility in charged confined media : building a two-state diffusion-reaction scheme from microscopic dynamics, B. Rotenberg, J.-F. Dufrêche, V. Marry, E. Giffaut, B. Bagchi, J.-P. Hansen et P. Turq.

[5] *Mobile Fission and Activation Products in Nuclear Waste Disposal (International OECD / NEA Workshop)*, La Baule [01/2007] **communication orale**, Ions at clay particle surfaces and ionic exchange : A molecular dynamics study, B. Rotenberg, V. Marry, N. Malikova, R. Vuilleumier, J.-F. Dufrêche, E. Giffaut et P. Turq.

[6] *Journées du Groupement de Recherche PARIS (Physico-chimie des Actinides et Radionucléides aux Interfaces et en Solution)*, Avignon [03/2007] **poster**, Interlayer / micropore exchange of water and ions in clays : A molecular dynamics study, B. Rotenberg, V. Marry, N. Malikova, R. Vuilleumier, E. Giffaut et P. Turq.

[7] *Enchanted Clays - the 44th annual meeting of the Clay Minerals Society*, Santa Fe, Nouveau-Mexique, Etats-Unis [06/2007] **communication orale**, Water and ionic exchange between interlayer and microporosity from molecular dynamics simulation, B. Rotenberg, V. Marry, N. Malikova, R. Vuilleumier, E. Giffaut et P. Turq.

[8] *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"*, Lille [09/2007] **poster**, Interlayer / micropore exchange of water and ions in clays : A molecular dynamics study, B. Rotenberg, V. Marry, N. Malikova, R. Vuilleumier, E. Giffaut et P. Turq.

[9] *Thermodynamics 2007*, Rueil-Malmaison [09/2007] **communication orale**, A microcalorimetric investigation of the effect of temperature on the retention of Cs^+ by Na-montmorillonite, J.-P. Morel, V. Marry, B. Rotenberg, P. Turq et Nicole Morel-Desrosiers.

[10] *SimBioMa Conference on Molecular Simulations in Biosystems and Material Science*, Konstanz, Allemagne [04/2008] **poster**, Coarse-graining the dynamics of nanoconfined solutes, B. Rotenberg, J.-F. Dufrêche, V. Marry et P. Turq.

[11] *7th Liquid Matter Conference*, Lund, Suède [06/2008] **poster**, Dispersion of charged tracers in charged porous media, B. Rotenberg, I. Pagonabarraga et D. Frenkel.

[12] *14th International Clay Conference*, Castellaneta Marina, Italie [06/2009] **communication orale**, Mesosopic modelling of ionic dispersion and diffusion in clays, B. Rotenberg, I. Pagonabarraga et D. Frenkel.

[13] *CECAM Workshop "Modeling and Simulation of Water at Interfaces from Ambient to Supercooled Conditions"*, Lausanne, Suisse [08/2009] **communication orale**, Structure and dynamics of water at clay surfaces from molecular dynamics simulation , B. Rotenberg, V. Marry, N. Malikova et P. Turq.

[14] *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"*, Nantes [03/2010] **poster**, Ionic dispersion and diffusion in clays : Mesoscopic modelling using the Lattice-Electrokinetics method, B. Rotenberg, I. Pagonabarraga et D. Frenkel.

[15] *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"*, Nantes [03/2010] **poster**, Structure and dynamics of mobiles species in clays from molecular simulations V. Marry, B. Rotenberg, J.-F. Dufrêche, N. Malikova et P. Turq.

[16] *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"*, Nantes [03/2010] **poster**, Hydrated clays in contact with gas reservoirs : A molecular simulation study, A. Botan, V. Marry, B. Rotenberg, P. Turq et B. Noetinger.

[17] *Mini Statistical Mechanics Meeting*, Berkeley, CA, Etats-Unis [01/2011] **poster**, Microscopic hydrophilicity vs. macroscopic hydrophobicity of clay surfaces, B. Rotenberg, A. Patel et D. Chandler.

[18] *Interpore, 3rd International Conference on Porous Media*, Bordeaux [03/2011] **poster**, Mesoscopic simulation of charge, current and flow in porous media, B. Rotenberg, I. Pagonabarraga et D. Frenkel.

[19] *International Conference on Flows and Mechanics in Natural Porous Media from Pore to Field Scale - Pore2Field*, Rueil-Malmaison [11/2011] **communication orale**, CO_2 storage in aquifers : classical molecular simulations of clay caprocks, B. Rotenberg, A. Botan, V. Marry, P. Turq et B. Noetinger.

[20] *Mini Statistical Mechanics Meeting*, Berkeley, CA, Etats-Unis [01/2012] **communication orale**, Why can talc surfaces can be both hydrophilic and hydrophobic ?, B. Rotenberg, A. Patel et D. Chandler.

[21] *Journées scientifiques de l'Association Française d'Adsorption*, Paris [05/2012] **communication orale**, Pourquoi les surfaces de talc peuvent être à la fois hydrophiles et hydrophobes, B. Rotenberg, A.J. Patel et D. Chandler.

[22] *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"*, Montpellier [10/2012] **poster**, Molecular explanation for why talc surfaces can be both hydrophilic and hydrophobic, B. Rotenberg, A.J. Patel et D. Chandler.

[23] *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"*, Montpellier [10/2012] **poster**, Acidity of clay edges from ab-initio simulations, S. Tazi, M. Salanne, B. Rotenberg, P. Turq, M. Sprik et M. Sulpizi.

[24] *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"*, Montpellier [10/2012] **poster**, Accurate force fields from ab-initio simulations : The case of clays, S. Tazi, M. Salanne, B. Rotenberg et P. Turq.

[25] *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"*, Montpellier [10/2012] **poster**, Hydrodynamics and electro-osmosis in clay by molecular simulation : Comparison of two force-fields, A. Botan, V. Marry, B. Rotenberg, P. Turq et B. Noetinger.

[26] *International Symposium "Using Natural and Engineered Clay-based Barriers for the Containment of Radioactive Waste"*, Montpellier [10/2012] **poster**, Electrokinetic flows in cylindrical and slit capillaries in clays : From pore scale to sample scale, A. Obliger, M. Jardat, B. Rotenberg, M. Duvail, S. Bekri et D. Coelho.

[27] *Journées Modélisation multi-échelle et applications aux procédés physico-chimiques*, Paris [02/2013], **communication orale**, Simulation mésoscopique sur réseau des systèmes interfaciaux complexes, B. Rotenberg

[28] *International Conference "Clays in Natural and Engineered Barriers for Radioactive Waste Confinement"*, Bruxelles [03/2015] **poster**, Pore Network Model of electrokinetic transport through charged porous media, B. Rotenberg, A. Obliger, M. Jardat, D. Coelho et S. Bekri

[29] *LowPerm2015*, Rueil-Malmaison [06/2015] **communication orale**, Pore Network Model of electrokinetic transport through charged porous media, B. Rotenberg, A. Obliger, M. Jardat, D. Coelho et S. Bekri

[30] *SCF'15*, Lille [07/2015], **communication orale**, Charge storage in nanoporous carbons : The molecular origin of supercapacitance, B. Rotenberg, C. Merlet, C. Péan et M. Salanne

[31] *Euroclay*, Paris [07/2019], **communication orale**, Mineral- and Ion-Specific Effects at Clay-Water Interfaces : Structure, Diffusion, and Hydrodynamics, B. Rotenberg, P. Simonnin, V. Marry, B. Noetinger et C. Nieto-Draghi

[32] *11^{th} Liquid Matter Conference*, on-line [07/2021], **poster**, Blue energy and desalination with nanoporous carbon electrodes : capacitance from molecular simulations to continuous models, N. Ganfoud, M. Simoncelli, M. Salanne et B. Rotenberg

[33] *Faraday Discussions "Iontronics : from fundamentals to ion-controlled devices"*, Edimbourg, Royaume-Uni [06/2023], **communication orale**, Electrical noise in electrolytes : a theoretical perspective, B. Rotenberg, T. Hoang Ngoc Minh, J. Kim, G. Pireddu, I. Chubak, S. Nair.

SÉMINAIRES

[1] Département de chimie de l'université de Cambridge (Royaume-Uni) [02/2006]
[2] Laboratoire Liquides Ioniques et Interfaces Chargées (UPMC) [04/2007]
[3] FOM Institute for Atomic and Molecular Physics (Amsterdam, Pays-Bas) [11/2007]
[4] CEA Saclay [02/2008]
[5] Schlumberger Cambridge Research Center (Cambridge, Royaume-Uni) [10/2008]
[6] FOM Institute for Atomic and Molecular Physics (Amsterdam, Pays-Bas) [10/2008]
[7] Département de Physique de la Technische Universität de Münich (Allemagne) [07/2009]
[8] Département de Chimie de l'Université de Californie, Berkeley [01/2010]
[9] Département de Génie Chimique de l'Université de Californie, Berkeley [03/2010]
[10] Département de Physique de l'Université de Barcelone, Espagne [06/2010]
[11] Institut Français du Pétrole, Rueil-Malmaison [10/2010]
[12] Département de Chimie de l'Université de Californie, Berkeley [01/2011]
[13] Département de Physique de l'Université de Barcelone, Espagne [05/2011]
[14] Ecole Normale Supérieure, Département de Chimie (Pôle de Physico-chimie Théorique) [06/2011]
[15] IFP Energies Nouvelles, Rueil-Malmaison [09/2011]
[16] Institut Paul Scherrer, Villigen, Suisse [10/2011]
[17] BP Institute (Cambridge, Royaume-Uni) [11/2012]
[18] Laboratoire Modélisation et Simulation Multi Echelle (Université Paris Est) [11/2013]
[19] Académie des Sciences, Section Géosciences [11/2013]
[20] MIT, Department of Civil and Environmental Engineering, (Cambridge, MA, Etats-Unis) [01/2014]
[21] Institut des Sciences Moléculaires (Nouvelle Université de Bordeaux) [06/2014]
[22] Département de Physique de l'Université de Rome "La Sapienza", Italie [09/2014]
[23] Institute for Theoretical Physics, Université d'Utrecht, Pays-Bas [10/2014]
[24] Institut Charles Gerhardt, Montpellier [11/2014]
[25] Ecole Normale Supérieure, Département de Chimie (Pôle de Physico-chimie Théorique) [12/2014]
[26] Ecole Normale Supérieure, Département de Physique [01/2016]
[27] Université de Mainz, Département de Physique [01/2016]
[28] Helmholtz-Zentrum Berlin für Materialen und Energie, Allemagne [10/2016]
[29] Université Paris Diderot (séminaire SCAN) [12/2016]
[30] IFP Energies Nouvelles, Rueil-Malmaison [06/2017]
[31] Institut de Physique de Rennes [10/2017]
[32] Université de Mainz, Département de Physique [11/2018]
[33] Freie Universität Berlin, Département de Physique [12/2018]
[34] Université de Bochum, Département de Chimie [11/2019]
[35] Laboratoire Jacques-Louis Lions, Sorbonne Université [02/2020]
[36] Duke University, Département de Chimie (en visio) [10/2020]
[37] Freie Universität Berlin, Département de Physique [03/2022]
[38] Korea Institute of Energy Technology (KENTECH, en visio) [04/2023]
[39] Université de Stuttgart, Institute for Computational Physics [06/2023]

AUTRES

[1] Journées de modélisation de Paris centre (ENS-ENSCP) [05/2006]
[2] Journée des doctorants du Groupe Français des Argiles (Ecole des Mines, Paris) [11/2006]
[3] Journée commune des Groupements de Recherche PARIS et MOMAS (IHP, Paris) [03/2007]
[4] Journée des doctorants de l'ANDRA (ENSCP) [06/2007]
[5] Journée des doctorants de l'ANDRA (ENSCP) [06/2008]
[6] Journée commune des GNR PARIS et MOMAS (Ecole Polytechnique) [03/2010]
[7] Journées de modélisation de Paris centre (ENS-ENSCP) [06/2010]
[8] Journée commune des GNR PARIS et MOMAS (Université Claude Bernard, Lyon) [11/2010]
[9] Journée Modélisation en physicochimie pour le nucléaire (UPMC) [01/2011]
[10] Journée de l'UMR PECSA, Paris [02/2011]
[11] Comité de suivi des recherches sur l'aval du cycle (COSRAC, MESR, PARIS) [02/2013]
[12] Journée des CR1 de l'Institut de Chimie (INC) du CNRS [06/2013]
[13] Journée annuelle du LABEX MATISSE [06/2015]
[14] Table ronde à la journée "Modélisation : succès et limites" (CNRS et Académie des Technologies) [12/2016]
[15] Meeting annuel du réseau européen ETN NANOTRANS (Berlin) [02/2017]
[16] Journée d'étude des liquides (Paris) [06/2018]
[17] Réunion semestrielle du RS2E (Montpellier) [10/2018]
[18] Rencontres prospectives du Réseau Français de Chimie Théorique (Nantes) [06/2019]
[19] Meeting annuel du réseau européen ETN NANOTRANS (Barcelone) [02/2020]
[20] Réunion semestrielle du RS2E (visio) [10/2020]
[21] Journée de lancement du livre "Étonnante Chimie" organisée par l'INC (Paris) [09/2021]
[22] CurieOsity, association des étudiants de physique de Sorbonne Université (Paris) [11/2021]
[23] Échanges avec des lycéens autour du livre "Étonnante Chimie" et du grand oral du bac (Paris) [04/2022]
[24] Conférence "Beaucoup de bruit pour rien ?" lors de la Nuit de l'ENS (Paris) [09/2022]