



N. MALIKOVA

Publications

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My scientific production includes **43 scientific articles** (36 peer-reviewed articles, current H-index of 17) in journals including *Langmuir* and *Physical Review Letters*. I have presented my work in 13 seminars and more than 50 conferences/workshops, including **14 invitations** (3 further invitations declined due to maternity leaves in 2011, 2013 and 2016).

Publications in peer-reviewed journals

- a) *Ions govern interfacial water dynamics in crowded protein environment*, T. Janc, J.-P. Korb, M. Lukšič, V. Vlachy, R. G. Bryant, G. Mériguet, N. Malikova* and A.-L. Rollet, *in preparation*
- b) *Critical aggregation threshold of magnetic nanoparticles tuned by salt effects*, M. Demirelli, N. Malikova, J.-Sirieix-Plenet, V. Peyre and J. Fresnais, *in preparation*
- c) *Polymer-induced aggregation of plate-like colloids – multiscale characterisation combining X-ray scattering and imaging*, Y. Sakhawoth, L. Michot, P. Levitz and N. Malikova, *in preparation*
- 1) *Aggregation of plate-like colloids induced by charged polymer chains: organisation at the nanometer scale tuned by polymer charge density*, Y. Sakhawoth, L. Michot, P. Levitz, A.-L. Rollet, J. Sirieix-Plenet, D. Hermida Merino and N. Malikova, *Langmuir* **35**, 10937-10946, **2019**.
- 2) *Ion-specificity and surface water dynamics in protein solutions*, T. Janc, M. Luksic, V. Vlachy, B. Rigaud, A.-L. Rollet, J.-P. Korb, G. Meriguet and N. Malikova, *Phys. Chem. Chem. Phys.*, **20**, 30340, **2018**.
- 3) *Flocculation of clay colloids induced by model polyelectrolytes – effects of relative charge density and size*, Y. Sakhawoth, L. J. Michot, P. Levitz and N. Malikova, *Chem Phys Chem* **18** (19), pp. 2756-2765, **2017**.
- 4) *Neutron imaging investigation of fossil woods: non-destructive characterization of microstructure and detection of in-situ changes as occurring in museum cabinets*, G. P. Odin, V. Rouchon, F. Ott, N. Malikova, P. Levitz and L. J. Michot, *Foss. Rec.* **20**, pp. 95-103, **2017**.
- 5) *Effect of chemical and geometrical parameters influencing the wettability of smectite clay films*, J. Ballah, M. Chamerois, S. Durand-Vidal, N. Malikova, P. Levitz, et al. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* **511**, pp. 255 – 263, **2016**.
- 6) *Counter-ion binding and mobility in the presence of hydrophobic polyions – combining molecular dynamics simulations and NMR*, M. Druchok, N. Malikova, A.-L. Rollet, V. Vlachy. *AIP Advances*, **6** (6), pp.065214, **2016**.
- 7) *Crystal structure and proton conductivity in highly oxygen-deficient $Ba_{(1-x)}La_x(In,Zr,Sn)O_{(3-x)}$ perovskites*, K. Świerczek, W. Zając, A. Klimkowicz, K. Zheng, N. Malikova and B. Dabrowski,

- Solid State Ionics 275, pp. 58-61, **2015**.
- 8) *On the crossroads between current polyelectrolyte theory and counterion-specific effects*, N. Malikova, A.-L. Rollet, S. Cebasek, M. Tomsic and V. Vlachy, Phys. Chem. Chem. Phys. **17**, pp. 5650-5658, **2015**.
 - 9) *Aqueous solutions of tetralkylammonium halides: ion hydration, dynamics and ion-ion interactions in light of steric effects*; D. Bhowmik, N. Malikova, G. Meriguet, O. Bernard, J. Teixeira and P. Turq, Phys. Chem. Chem. Phys. **16**, pp. 13447-13457, **2014**.
 - 10) *Pierre Turq, an inspirational scientist in charge and at interfaces*, B. Ancian et al, Mol. Phys. **112** (9-10), pp. 1213-1221, **2014**.
 - 11) *Anisotropy of water dynamics in clays: insights from molecular simulations for experimental QENS analysis*; V. Marry, E. Dubois, N. Malikova, J. Breu and W. Häussler, J Phys Chem C **117**, pp. 15106-15115, **2013**.
 - 12) *Bulk protons in anhydrous perovskites – neutron scattering studies*; A. Slodczyk, Ph. Colomban, N. Malikova, O. Zaafrani, S. Longeville, J.-M. Zanotti, O. Lacroix, B. Sala, Solid State Ionics **252**, pp. 7-11, **2013**.
 - 13) *Aqueous solutions of ionenes: interactions and counterion specific effects as seen by neutron scattering*; N. Malikova, S. Cebasek, V. Glenisson, D. Bhowmik, G. Carrot and V. Vlachy, Phys. Chem. Chem. Phys. **14**, pp. 12898-12904, **2012**.
 - 14) *Study of tetrabutylammonium bromide in aqueous solution by neutron scattering*; D. Bhowmik, N. Malikova, J. Teixeira, G. Mériguet, O. Bernard, P. Turq and W. Häussler, Eur. Phys. J. – Special Topics, **213**, 303-313, **2012**.
 - 15) *Nanometric confinement: toward new physical properties and technological developments Relevance and potential contributions of neutron scattering*; J.-M. Zanotti, K. Lagrene, N. Malikova, P. Judeinstein, K. Panesar, J. Ollivier, S. Rols, M. Mayne-L’Hermite, M. Pinault, and P. Boulanger, Eur. Phys. J. – Special Topics **213**, 129-148, **2012**.
 - 16) *Water dynamics in hectorite clays: influence of temperature studied by coupling Neutron Spin Echo and Molecular Dynamics*; V. Marry, E. Dubois, N. Malikova, S. Durand-Vidal, S. Longeville and J. Breu, Environmental Science and Technology **45**, pp. 2850-2855, **2011**.
 - 17) *Experiments-simulations-theories, Multiscale Approaches for Solutions*; J.-F. Dufrêche, N. Malikova, M. Jardat, G. Mériguet, E. Dubois, B. Rotenberg, V. Marry, J. Molina and P. Turq, in connection with the 2010 school "Neutrons and Simulations" organised by the French Neutron Scattering Society (SFN), EDP Sciences, *Collection SFN*, Volume **12**, pp. 263–283, **2011**.
 - 18) *Origins of rapid aging of Ba-based proton conducting perovskites*, A. Slodczyk, B. Dabrowski, N. Malikova and P. Colomban, MRS Online Proceedings Library, Volume **1311**, pp 1-6, January **2011**.
 - 19) *Dynamics in Clays - Combining Neutron Scattering and Microscopic Simulation*; Malikova N, Dubois E, Marry V, Rotenberg B, Turq P; Zeitschrift für physikalische Chemie **224** (1-2), pp. 153-181, **2010**.
 - 20) *Dynamic Study of N’N-dimethylparanitroaniline encapsulated in Silicalite-1 matrix using neutron spin-echo spectroscopy*; D. S. Bhangé, C. Dejoie, F. Porcher, N. Malikova, P.

- Martinetto, E. Dooryhe and M. Anne, 'The European Physical Journal - Special Topics' 189, pp. 279-284, **2010**.
- 21) *Molecular simulation of aqueous solutions at clay surfaces*; Rotenberg B, Marry V, Malikova N and P. Turq; J. Phys : Condensed Matter 22 (28) p. 284114, **2010**.
 - 22) N. Malikova, S. Longeville, J.-M. Zanotti, E. Dubois, V. Marry, P. Turq, J. Ollivier, *Signature of low dimensional motion in complex systems*, Phys. Rev. Lett. 101, 265901, **2008**.
 - 23) V. Marry, N. Malikova, A. Cadène, E. Dubois, S. Durand-Vidal, P. Turq, J. Breu, J.-M. Zanotti and S. Longeville, *Water diffusion in a synthetic hectorite by neutron scattering – beyond the isotropic translational model*, J. Phys : Condensed Matter 20, 104205, **2008**.
 - 24) N. Malikova, A. Cadène, E. Dubois, S. Durand-Vidal, V. Marry, P. Turq, J. Breu, S. Longeville and J.-M. Zanotti, *Water diffusion in a synthetic hectorite clay studied by quasi-elastic neutron scattering*, J. Phys. Chem C 111, pp. 17603-17611, **2007**.
 - 25) B. Rotenberg, V. Marry, R. Vuilleumier, N. Malikova, C. Simon and P. Turq, *Water and ions in clays: Unravelling the interlayer/micropore exchange using molecular dynamics*, Geoch. et Cosmoch. Acta 71, pp. 5089-5101, **2007**.
 - 26) N. Malikova, C.-K. Loong, J.-M. Zanotti et F. Fernandez-Alonso, *Proton-containing yttrium-doped barium cerate: a concurrent structural and dynamic study*, J. Phys. Chem. C 111, pp. 6574-6580, **2007**.
 - 27) B. Rotenberg, V. Marry, J.-F. Dufrêche, N. Malikova, E. Giffaut, P. Turq, *Modelling water and ion diffusion in clays: A multiscale approach*, Comptes Rendus Chimie 10, pp. 1108-1116, **2007**.
 - 28) N. Malikova, A. Cadène, V. Marry, E. Dubois, P. Turq, *Diffusion of water in clays on the microscopic scale – modelling and experiment*, J. Phys. Chem. B 110, pp. 3206-3214, **2006**.
 - 29) N. Malikova, A. Cadène, V. Marry, E. Dubois, P. Turq, J.-M. Zanotti and S. Longeville, *Diffusion of water in clays – microscopic simulation and neutron scattering*, Chemical Physics 317 (2-3), pp. 226-235, **2005**.
 - 30) E. Ferrage, B. Lanson, N. Malikova, A. Plançon, B. A. Sakharov and V. A. Drits, *New insights on the distribution of interlayer water in bi-hydrated smectite from X-ray profile modelling of 00l reflections*, Chem. Mater. 17, pp. 3499-3512, **2005**.
 - 31) V. Marry, N. Malikova, P. Turq and E. Giffaut, *Transport dans les argiles: une étude microscopique*, L'actualité chimique, 285-286, pp. 82-87, **2005**.
 - 32) J.-F. Dufrêche, V. Marry, N. Malikova and P. Turq, *Molecular hydrodynamics for electro-osmosis in clays: from Kubo to Smoluchowski*, Journal of Molecular Liquids 118, pp. 145-153, **2005**.
 - 33) N. Malikova, V. Marry, J.-F. Dufrêche, C. Simon, P. Turq and E. Giffaut, *Temperature effect in a montmorillonite clay at low hydration – Microscopic simulation*, Molecular Physics 102 (18), pp. 1965-1977, **2004**.
 - 34) N. Malikova, V. Marry, J.-F. Dufrêche and P. Turq, *Na/Cs montmorillonite : temperature activation of diffusion by simulation*, Current Opinion in Colloid and Interface Science 9 (1-2), pp. 124-127, **2004**.

- 35) F. J. Williams, N. Malikova, R. M. Lambert, *An AFM study of the genesis and sintering in hydrogen of a realistic Cu/amorphous silica planar model catalyst*, *Catalysis Letters* 90 (3-4), pp. 177-180, **2003**.
- 36) N. Malikova, I. Pastoriza-Santos, M. Schierhorn, N. Kotov et L.M. Liz-Marzán, *Layer-by-layer assembled mixed spherical and planar gold nanoparticles: Control of interparticle interactions*, *Langmuir* 18, pp. 3694-3697, **2002**.

Other publications

- 37) *The Scientific Life of Vojko Vlachy*, K. A. Dill, M. F. Holovko, B. Hribar-Lee and N. Malikova, *J. Mol. Liq.* 228, pp. 1-3, **2017**.
- 38) N. Malikova, *ECNS – A Personal Account*, *Neutron News* 27 (1), **2016**.
- 39) *Dynamique des protons libres dans les pérovskites MZrO₃:Ln par diffusion neutronique*; A. Slodczyk, Ph. Colomban, D. Lamago, O. Zaafrani, G. André, N. Malikova, O. Lacroix, S. Willemin, B. Sala; *Matériaux* 2010, Nantes 18-22 October **2010**.
- 40) *Signature of low dimensional diffusion in complex systems*, N. Malikova, S. Longeville, J.-M. Zanotti, E. Dubois, V. Marry, P. Turq, J. Ollivier, **Scientific Highlight of ILL**, ILL Annual Report, **2009**.
- 41) B. Rotenberg, V. Marry, N. Malikova, R. Vuilleumier, J.-F. Dufrêche, E. Giffaut and P. Turq, *Ions at clay particle surfaces and ionic exchange: a molecular dynamics study*, *Mobile Fission and Activation Products in Nuclear Waste Disposal*, 16-19 January **2007**, La Baule, France.
- 42) *Dynamique, à l'échelle atomique, de l'eau et des ions dans des argiles*, N. Malikova, A. Cadène, V. Marry, E. Dubois, P. Turq, J.-M. Zanotti, S. Longeville, **Fait Marquant of LLB**, **2006**.
- 43) J.-F. Dufrêche, N. Malikova, V. Marry, F. Grün, M. Jardat, E. Dubois and P. Turq, *Molecular hydrodynamics: from Kubo to Smoluchowski, Example of a Montmorillonite Clay*, *Slow Dynamics in Complex Systems: 3rd International Symposium*, 3-8 November 2003, Sendai, Japan; *AIP CONFERENCE PROCEEDINGS* 708, pp. 468-469, **2004**.

Invited oral presentations at conferences

- 2019** **Euroclay 2019:** International Conference on Clay Science and Technology, Paris, 1st-5th July 2019, *Flocculation of anisotropic colloids: combining scattering and imaging techniques* (invited keynote speech)
- 2018** **Annual meeting of the Division Chimie-Physique, (SFP-SCF)**, Paris, 20th November 2018, *Flocculation of anisotropic colloids: combining scattering and imaging techniques*.

- 2017** Meeting of the Swedish Neutron Scattering Society, Uppsala, Sweden, 15-16 May 2017, *Interactions in polyelectrolyte solutions probed by neutron scattering*
- 2016** 14th International Conference on Applications of Quasi-elastic neutron scattering (QENS 2016), Potsdam, Germany, 5-8 September 2016, *Interactions in polyelectrolyte solutions probed by neutron scattering: charge, hydrophobicity and ion-specific effects*
- 2014** Indian conference on Neutron Scattering, Indian Institute of Science, Education and Research, Pune, India, 10-12 February 2014, *Contributions of neutron scattering to the study of polyelectrolyte solutions: charge, hydrophobicity and counterion-specific effects*
- 2014** Lecture for graduate students at the University of Ljubljana, Slovenia, 26th March 2014, *Molecular Structure and Dynamics in Liquids and Solutions: Contributions of Neutron Scattering*
- 2010** First International Workshop on Nanoscale Modelling and Simulation, Lille, France, October 1st 2010, *Confinement of ions and water in clays – a microscopic view*
- 2009** XVIII International Conference on Horizons in Hydrogen Bond Research, Paris, France, 14-18 September 2009, *Dynamics in clays*
- 2009** 6th International Discussion Meeting on Relaxations in Complex Systems, Rome, Italy, 30th August – 5th September 2009, *Dynamics of water and ions in clays: experiment and simulation*
- 2009** International conference on neutron scattering, Knoxville, USA, 3-7 May 2009, *Dynamics of water and ions in clays - experiment and simulation*
- 2009** Quasi-elastic neutron scattering conference 2009, Paul Scherrer Institute, Villigen, Switzerland, 10-13 February 2009, *Dynamics and confinement in clays – combining experiment and simulation*
- 2007** Czech and Slovak School on Neutron Scattering (Jesenna skola o rozptylu neutronu), Tatranska Strba, Slovakia, 15-18 September 2007, *Quasi-elastic neutron scattering and molecular/atomic motion*
- 2006** Neutron scattering in Earth Sciences: Short Course of the Mineralogical Society of America, University of California, Berkeley, USA, 7-9 Decembre 2006, *Quasi-elastic neutron scattering and molecular dynamics simulations applied to clays*
- 2006** Modelling and simulation of clays over various scales of time and space, CECAM Workshop, Lyon, France, 29-31 May 2006, *Dynamics of water in clays by microscopic simulation and quasi-elastic neutron scattering*

Oral presentations at conferences

- 1) *Hydrogels based on modified ionenes and clay nanoparticles*, C. Hotton, J. Sirieix-Plénet, G. Ducouret and N. Malikova, **Journées Plénières du GDR SLAMM**, Roscoff, 18-21 November 2019.
- 2) *Flocculation of anisotropic colloids: combining scattering and imaging techniques*, Y. Sakhawoth, L. Michot, P. Levitz, A.-L. Rollet, J. Sirieix-Plénet, D. Hermida Merino and N. Malikova, **Journées de la Diffusion Neutronique 2019**, Saint-Martin de Londres, 16-19th September 2019.
- 3) *Colloidal aggregation of magnetic nanoparticles with opposite-charge species in salty environment*, M. Demirelli, N. Malikova, J. Sirieix-Plénet, V. Peyre and J. Fresnais, **33rd Conference of the European Colloid and Interface Society**, Leuven, Belgium, 8-13th September 2019.
- 4) *Salt specific effects on NMRD profiles of protein solutions*, T. Janc, M. Lukšič, V. Vlachy, A.-L. Rollet, J.-P. Korb, G. Mériquet, R. G. Bryant, N. Malikova, **11th Conference on Fast Field-Cycling NMR Relaxometry**, PISA, Italy, 5-7th June 2019.
- 5) *Ion-specificity and surface water dynamics in protein solutions*, T. Janc, M. Luksic, V. Vlachy, A.-L. Rollet, J.-P. Korb, G. Mériquet and N. Malikova, **2nd Workshop of Nuclear Magnetic Resonance Relaxometry**, Prague, Czech Republic, 4-6th February 2019.
- 6) *Flocculation of anisotropic colloids: combining scattering and imaging techniques*, Y. Sakhawoth, L. Michot, P. Levitz and N. Malikova, **IAP2018 – Interfaces Against pollution – International Conference** – Grande Motte, France, 10-13th June 2018.
- 7) *Model polyelectrolytes in the bulk and at charged mineral surfaces*, Y. Sakhawoth, Anne-Laure Rollet, L. Michot, P. Levitz and N. Malikova, **12th International Symposium of Electrokinetic Phenomena** – Dresden, Germany, 10-12 September 2017.
- 8) *Flocculation of anisotropic colloids induced by model polyelectrolytes*, Y. Sakhawoth, L. J. Michot, P. Levitz and N. Malikova, **16th International Clay Conference** – Granada, Spain, 17-21 July 2017.
- 9) *Polyelectrolytes and clay colloids in aqueous environment: beyond the electrostatic picture of clay flocculation*, Y. Sakhawoth, L. Michot, P. Levitz and N. Malikova, **Journées de la Diffusion Neutronique 24** – Multidisciplinary Science with Neutrons, Carqueiranne, France, May 2016.
- 10) *Aqueous solutions of ionenes: charge, hydrophobicity and counterion specific effects*, N. Malikova, A.-L. Rollet, S. Cebasek and V. Vlachy, **9th Liquid Matter Conference**, Lisbon, Portugal, July 2014.
- 11) *Ion Specific Effects in Polyelectrolyte solutions: an example of ionene salts in water*, B. Hribar-Lee, M. Boncina, S. Cebasek, M. Lukhic, N. Malikova, M. Serucnik, V. Vlachy, **Frontiers in Water Biophysics**, Perugia, Italy, September 2012.
- 12) *Behaviour of Hydrophobic ions in aqueous media*, D. Bhowmik, N. Malikova, J. Teixeira, G. Meriguet, O. Bernard and P. Turq, **International Conference on Solution Chemistry**, La Grande Motte, France, 28th August – 2nd September 2011.

- 13) *Behaviour of ionenes, model hydrophobic polyelectrolytes, in aqueous solution*, N. Malikova, S. Cebasek, V. Glenisson, G. Carrot and V. Vlachy, **5th European Conference on Neutron Scattering**, Prague, 17-22 July 2011.
- 14) *Microscopic dynamics under hard and soft confinement*, N. Malikova et al., **Journées de la Matière Condensée**, Troyes, 24-27 August 2010.
- 15) *Behaviour of Hydrophobic ions in aqueous media*, D. Bhowmik, N. Malikova et al, **Journées de la Diffusion Neutronique (JDN18)**, Remuzat (Drome), France, 4-10 June 2010.
- 16) *Water and ion dynamics in clays – temperature effect*, N. Malikova et al, '**4th International Workshop on Dynamics in Confinement**', Grenoble 3-5 March, 2010
- 17) **International Conference on Solution Chemistry**, Innsbruck, Austria, 21-25 August 2009, *Dynamics of water and ions in clays - neutron scattering and microscopic simulation*
- 18) **17th Interdisciplinary Surface Science Conference**, University of Reading, UK, 30 March – 2 April 2009, *Dynamics of water and ions in clays: experiment and simulation*
- 19) **Dynamics in Soft Matter** – satellite meeting of the autumn MRS conference, Boston, USA, 4-6 Dec 2008, *Dynamics and confinement in clays*
- 20) ESF Research Conference: **Water Interfaces in Physics, Chemistry and Biology: a multi-disciplinary approach**, Innsbruck, Austria, 8-13 Dec 2007, *Dynamics of water and ions in clays: combining experiment and simulation*
- 21) **4th European Neutron Scattering Conference**, Lund, Sweden, 25-29 June 2007, *Proton environment in a perovskite : a simultaneous structural and dynamic neutron scattering study - N. Malikova, A. Kolesnikov, C.-K. Loong, J.-M. Zanotti.*
- 22) **Workshop: Dynamics of Molecules and Materials**, Institut Laue Langevin, Grenoble, France, 31 Jan - 2 Feb 2007, *Proton environment in yttrium doped barium cerate - N. Malikova, C.-K. Loong, A. Kolesnikov, J.-M. Zanotti.*
- 23) **14^e Journées de la Diffusion Neutronique (JDN14)**, Murol, France, 17-19 May 2006; *Dynamics in low-hydrated clays – a neutron scattering and microscopic simulation study*, N. Malikova, V. Marry, A. Cadène, E. Dubois, P. Turq
- 24) **Neutron Spin Echo 2005, Workshop**, 7–10 September 2005, Grenoble, France; *Dynamics of water in clays, microscopic simulation and neutron scattering*, N. Malikova, V. Marry, A. Cadène, E. Dubois, P. Turq
- 25) **13th International Clay Conference**, 22–27 August 2005, Tokyo, Japan; *Dynamics of water in clays, microscopic simulation and neutron scattering*, N. Malikova, V. Marry, A. Cadène, E. Dubois, P. Turq
- 26) New developments in the study of clay minerals and fine-grained materials, meeting of the **Clay mineral group of the Mineralogical Society**, 19 October 2004, London, UK; *Dynamics in clays – microscopic simulation and neutron scattering*, N. Malikova, V. Marry, A. Cadène, E. Dubois, P. Turq
- 27) **Neutrons and Numerical Methods 2**, Workshop, 13-18 September 2004, Grenoble, France; *Dynamics in clays, multiscale modelling*, N. Malikova, V. Marry, A. Cadène, E. Dubois, P. Turq

Poster presentations at conferences

- 1) *Flocculation of clay colloids: combining scattering and imaging techniques*, Y. Sakhawoth, L. Michot, P. Levitz, A.-L. Rollet, J. Sirieix-Plénet and N. Malikova **33rd Conference of the European Colloid and Interface Society**, Leuven, Belgium, 8-13th September 2019.
- 2) *Flocculation of anisotropic particles induced by model polyelectrolytes*, Y. Sakhawoth, L. Michot, P. Levitz and N. Malikova, **4th International Soft Matter Conference**, 12-16 September 2016, Grenoble, France.
- 3) *Deviations from current polyelectrolyte theory: counterion specific effects*, N. Malikova, A.-L. Rollet, S. Cebasek, M. Tomsic and V. Vlachy, **6th European Conference on Neutron Scattering**, 30 August – 4 September 2015, Zaragoza, Spain.
- 4) *Flocculation of clay suspensions by model polyelectrolytes*, Y. Sakhawoth, L. Michot, P. Levitz and N. Malikova, **Euroclay – International Conference on Clay Science and Technology**, 5-10 July 2015, Edinburgh, UK.
- 5) *Ionenes – cationic ‘hydrophobic’ polyelectrolytes: interactions and counterion specific effects in aqueous solution*, N. Malikova, S. Cebasek, G. Carrot and V. Vlachy, **Faraday Discussion 160 – Ion Specific Hofmeister Effects**, 3-5 September 2012, Oxford, UK.
- 6) *Structure and dynamics of large hydrophobic ions in concentrated aqueous solutions*, D. Bhowmik, N. Malikova, G. Meriguet, O. Bernard, J. Teixeira and P. Turq, **26th Conference of the European Colloid and Interface Society**, 3-7 September 2012, Lund, Sweden.
- 7) *Ionenes – cationic ‘hydrophobic’ polyelectrolytes: interactions and counterion specific effects in aqueous solution*, N. Malikova, S. Cebasek, G. Carrot and V. Vlachy, **9th International Symposium on Polyelectrolytes**, 9-12 July 2012, Lausanne, Switzerland.
- 8) *Behaviour of Hydrophobic ions in aqueous media*, D. Bhowmik, **24th conference of the European Colloid and Interface Society**, 5-10 Sep 2010, Prague, Czech Republic.
- 9) *Microscopic dynamics under hard and soft confinement*, N. Malikova, **Gordon Conference on "Water and aqueous solutions"**, New Hampshire, USA, 8-13 August 2010
- 10) *Solute and solvent dynamics in hydrophobic charged systems*, D. Bhowmik, **'4th International Workshop on Dynamics in Confinement'**, Grenoble 3-5 March, 2010
- 11) *Solute and solvent dynamics in hydrophobic charged systems*, D. Bhowmik, **International Conference on Solution Chemistry**, Innsbruck, Austria, 21-25 August 2009
- 12) *Solute and solvent dynamics in hydrophobic charged systems*, D. Bhowmik, **Journées de la Diffusion Neutronique (JDN17)**, La Grande Motte, France, 23-29 May 2009
- 13) **4th European Neutron Scattering Conference**, Lund, Sweden, 25-29 June 2007; *Dynamics of water in clays studied by quasi-elastic neutron scattering and microscopic simulation*, N. Malikova, V. Marry, A. Cadène, E. Dubois, S. Durand-Vidal, P. Turq, S. Longeville, J.-M. Zanotti and J. Breu
- 14) **American Conference on Neutron Scattering**, St Charles, Illinois, USA, 18-22 June 2006; *Dynamics of water in low-hydrated clays by quasi-elastic neutron scattering and microscopic simulation*, N. Malikova, V. Marry, A. Cadène, E. Dubois, P. Turq
- 15) **ANDRA International Symposium – Using Natural and Engineered Clay-Based Barriers for the Containment of Radioactive Waste**, 14 – 18 March 2005, Tours, France; *Dynamics in*

clays by microscopic simulation, neutron scattering and dielectric spectroscopy, N. Malikova, A. Cadène, B. Rotenberg, V. Marry, E. Dubois, P. Turq.

- 16) **Conference on Computational Physics 2004**, 1- 4 September 2004, Gennes, Italy; *Dynamics in clays*, N. Malikova, V. Marry, J.-F. Dufrêche, P. Turq.
- 17) **Euroclay 2003** conference, 22-26 June 2003, Modene, Italy; *Microscopic simulation of Montmorillonite by Monte Carlo and Molecular Dynamics*, N. Malikova, V. Marry, J.-F. Dufrêche, P. Turq.
- 18) **2^{eme} Colloque du Groupe Français des Argiles**, 3 April 2003, Orléans, France; *Microscopic simulation of montmorillonite*, N. Malikova, V. Marry, J.-F. Dufrêche, P. Turq.

Seminars and workshops

- 1) ISIS pulsed neutron source at the **Rutherford Appleton Laboratory**, Oxfordshire, UK – 18 Jan 2011, *Hydrophobic ions and polyelectrolytes in aqueous solutions* (invitation Dr S. Imberti)
- 2) Faculty of Chemistry and Chemical Technology, **University of Ljubljana**, Slovenia, 22 October 2010, *Polyelectrolyte solutions: probing conformation and dynamics by neutron scattering* (invitation Prof V. Vlachy)
- 3) Institute of Organic Chemistry and Biochemistry, **Academy of Science of the Czech Republic**, Prague, Czech Republic, 26 March 2008, *Microscopic dynamics in clays, experiment and simulation* (invitation Dr P. Jungwirth)
- 4) Laboratoire de Cristallographie, **CNRS Grenoble**, France, 25 April 2007, *L'hydrogène comme une sonde de la dynamique locale: Applications au stockage des déchets radioactifs et piles à combustibles*, (invitation Prof O. Isnard)
- 5) Laboratoire de Physique de la Matière Condensée, **Ecole Polytechnique**, France, 19 April 2007, *L'hydrogène comme une sonde de la dynamique locale: Applications au stockage des déchets radioactifs et piles à combustibles*, (invitation Dr P. Levitz)
- 6) Department of Earth and Environmental Sciences / Department of physics, **University of Illinois at Chicago**, USA, 30 November 2006, *Diffusion studied by neutron scattering and microscopic simulation, clay and perovskite as examples* (invitation Prof K. Nagy / Prof M. Schlossman)
- 7) Département de Recherche Fondamentale sur la Matière Condensée, **CEA Grenoble**, France, 15 September 2006, *Combining microscopic simulation and neutron scattering: Dynamics in clays* (séminaire présenté en français, invitation Dr O. Diat)
- 8) Laboratoire de Chimie Physique, **Université de Paris Sud**, 12 September 2006, France, *Combining microscopic simulation and neutron scattering: Dynamics in clays and perovskites* (séminaire présenté en français, invitation Prof C. Alba-Simionesco)
- 9) Laboratoire Léon Brillouin, **CEA Saclay**, France, 21 October 2005, *Dynamics of ions and water in montmorillonite clays by microscopic simulation and quasi-elastic neutron scattering*, (séminaire présenté en français, invitation Dr S. Longeville).

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Book chapters

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