

José Nuno Canongia Lopes, PhD, Habilitation
Full Professor at Chem. Eng. Dept. (DEQ/IST/ULisboa)
President of Centro de Química Estrutural (CQE/IST/ULisboa)



Research and Teaching Experience

1993-2011 Assistant Professor, Chemical Engineering Department, IST/ ULisboa
2011-2019 Associate Professor, Chemical Engineering Department, IST/ ULisboa
2019-present Full Professor, Chemical Engineering Department, IST/ ULisboa
2005-2011 Invited Assistant Professor, Instituto de Tecnologia Química e Biológica, U. Nova de Lisboa
2011-2016 Invited Associate Professor, Instituto de Tecnologia Química e Biológica, U. Nova de Lisboa
1996 Invited Scientist, Chemistry Department, Imperial College, London, UK
2006 Professeur Invité, Department de Chémie, Université Blaise Pascal, Clermont-Ferrand, France

Scientific Output Metrics

Publications: 232 (listed at Web of Science)
Citations: over 16,607 (15,514 without self citations)
h-index (ISI-WoS): 59
11 highly cited papers (present and past) listed at ISI/WoK (top 1% most cited articles).
Reference links <http://web.ist.utl.pt/~jnlopes/ZNHP/index.html>
<http://orcid.org/0000-0002-4483-6294>
<https://www.scopus.com/authid/detail.uri?authorId=55993354900>
<http://www.researcherid.com/rid/B-8109-2008>

Skills & Recent Scholar Activities

His research interests are in the areas of molecular modeling of complex fluids and materials, namely, ionic liquids, organometallic compounds, apatites, carbon materials, cement clinkers, dendrimers, and polycyclic organic compounds. He is also involved in experimental work, namely in the measurement of thermophysical properties that lead to the description of fluid phase equilibria and other related thermodynamic properties.

During the last 10 years was the PI of eight funded research projects (ionic liquids, carbon nanomaterials) with a total funding of approximately 820 kEuros. He has oriented ten post-doc researchers, three PhD students, one MSc student and ca. seventeen other students/researchers at different stages of their careers. Between 2012 and 2019 he was the coordinator of group 9 of the research unit *Centro de Química Estrutural* (CQE) at IST/UL. Between 2017 and 2018 he was the vice-president (scientific area) of the Chemical Engineering Department of IST/UL. Since 2019 he is the head of CQE, the largest research centre of ULisboa centred in the area of Chemistry with ca. 400 researchers.

Publication Highlights.

Book Chapters (recent/representative)

- Canongia Lopes, JN, Simulation and modeling in computational chemistry, *in* A Portrait of state-of-the-art research at the Technical University of Lisbon, Ed: Springer, pp 121-135 (2007).
- Gomes, MFC; Canongia Lopes, JN; Pádua, AAH, Thermodynamics and Micro Heterogeneity of Ionic Liquids, *in* Ionic Liquids (Topics in Current Chemistry Series 290), Ed: Springer Verlag, pp 161-183 (2009)
- Faria, B; Silvestre, N; Canongia Lopes, JN, Influence of Bond Kinematics on the Rupture of Non-Chiral CNTs under Stretching–Twisting, *in* Modeling of Carbon Nanotubes, Graphene and their Composites (Springer Series in Materials Science 188), Ed: Springer Verlag, pp 275-302 (2014).
- Tariq, M; Shimizu, K; Canongia Lopes, JN*; Saramago, B; Rebelo, LPN, Ionic Liquids in Bulk and at an Interface, *in* Ionic Liquid-Based Surfactant Self-Assemblies (Wiley Series in Surface and Interfacial Chemistry 188), Ed: Wiley, pp 101-126 (2015).
- Canongia Lopes, JN; Costa Gomes, M; Pádua, AAH, Molecular Modelling of Ionic Liquids, *in* Ionic liquids completely unCOILed, Ed: Wiley, pp 83-107 (2016).

Journal Publications (selected/highly cited)

- Earle *et al.*, [The distillation and volatility of ionic liquids](#) *Nature* (2006), 439, 831; cited 1470 times. Ranked #1 as most cited article in chemistry in June/July 2007 by Science Watch – Web of Knowledge. Highly cited paper (last ten years) by Essential Science Indicators (ESI).
- Canongia Lopes and Pádua, [Nanostructural organization in ionic liquids](#) *J. Phys. Chem. B* (2006), 110, 3330; cited 1355 times. ESI Highly cited. Ranked 1st at *JPCB Most-Cited articles* of 2006.
- Canongia Lopes *et al.*, [Modeling ionic liquids using a systematic all-atom force field](#) *J. Phys. Chem. B* (2004), 110, 2038; cited 887 times. ESI Highly cited paper.
- Rebelo *et al.*, [On the critical temperature, normal boiling point, and vapor pressure of ionic liquids](#) *J. Phys. Chem. B* (2005), 109, 6040; cited 402 times. Hot Article by Ionic Liquids Today.
- Canongia Lopes and Pádua, [Molecular force field for ionic liquids composed of triflate or bistriflylimide anions](#) *J. Phys. Chem. B* (2006), 110, 16893; cited 631 times. ESI Highly cited paper.
- Santos *et al.*, [Ionic liquids: First direct determination of their cohesive energy](#) *J. Am. Chem. Soc.*, (2007), 129, 284; Cited 255 times. ESI Highly cited paper, ranked 3rd as JACS most cited in 2007.
- Pádua *et al.*, [Molecular solutes in ionic liquids: A structural, perspective](#) *Acc. Chem. Res.* (2007), 40, 1087; cited 372 times. ESI Highly cited paper.
- Tariq *et al.*, [Densities and refractive indices of imidazolium- and phosphonium-based ionic liquids: Effect of temperature, alkyl chain length, and anion](#) *J. Chem. Thermodyn.* (2009) 41, 790; cited 271 times. ESI Highly cited paper.
- Karina *et al.*, [Structure and Aggregation in the 1-Alkyl-3-Methylimidazolium Bis\(trifluoromethylsulfonyl\)imide Ionic Liquid Homologous Series](#) *J. Phys. Chem. B* (2014), 118, 567; cited 148 times. ESI Highly cited paper.
- Freire *et al.*, [Aqueous biphasic systems: a boost brought about by using ionic liquids](#) *Chem. Soc. Rev.* (2012), 41, 4966; cited 448 times. ESI Highly cited paper.

Communication and France-Portugal Cooperation Highlights.

Co-author of more than 200 oral/poster presentations in more than 20 different countries. Presented around 50 invited oral presentations, of which 12 were plenary or keynote lectures. These include prestigious events in the field such as the Congress on Ionic Liquids (COIL), IUPAC Meetings, ACS National Meetings, the Gordon Conference on Liquids or different Faraday Discussions.

The Web of Science (WoS) retrieves around 2000 articles with both the words “France” and “Portugal” in their address in all WoS Categories related to Chemistry (Analytical, Applied, Inorganic & Nuclear, Medicinal, Multidisciplinary, Organic and Physical). Three articles by Canongia Lopes and Pádua are in the top-five most cited articles, including the first and second positions.