

Prof Giuseppe Pellicane



BIO

Prof Pellicane has been working since 2011 in the School of Chemistry and Physics of the University of Kwazulu-Natal (UKZN), where he was an Associate Professor, before moving to Italy at the end of 2019. Currently, he works at the BIOMORF department of the University of Messina in Italy, and he is still an honorary Associate Professor at UKZN. He is the author of more than 60 peer-reviewed articles indexed in the web of Science – core collection database.

RESEARCH INTERESTS

Prof Pellicane's field of expertise is the theory and computer simulation of fluid materials. His research interests are broadly in the field of Soft Matter and Phase Transitions of statistical models of simple/complex fluids.

DISCIPLINE

Theoretical Physics

CV

Prof Giuseppe Pellicane
Italian citizenship, South-African permanent resident since July 2011.

ACADEMIC POSITIONS

1 November 2019 - current
Assistant Professor, Department of, Biomedical, Dental, Morphological and Functional images Sciences (BIOMORF), University of Messina, Italy

1 November 2019 - 31 October 2024
Honorary Associate Professor, School of Chemistry and Physics, University of Kwazulu-Natal, South Africa.

01 January 2018-31 October 2019
Associate Professor, School of Chemistry and Physics, University of Kwazulu-Natal, South Africa.

01 January 2013- 31 December 2017
Senior Lecturer, School of Chemistry and Physics, University of Kwazulu-Natal, South Africa.

01 January 2011- 31 December 2012
Lecturer, School of Chemistry and Physics, University of Kwazulu-Natal, South Africa.

ACADEMIC MEMBERSHIPS

Individual Associate of the National Institute for Theoretical Physics (NITheP), now National Institute for Theoretical and Computational Sciences (NITheCS) South Africa.

Ordinary member of the South African Institute of Physics (SAIP), South Africa.

Editorial Board Member of the journals *Advances in Mathematical Physics*, *Advances in Condensed Matter Physics*, *Hindawi* (<https://www.hindawi.com/journals/acmp/>; <https://www.hindawi.com/journals/acmp/>).

Rated *C1* by the National Research Foundation (NRF), South Africa, for the period 2018-2023
("It is the firm belief of all of the reviewers that you are a well-established researcher that is recognized nationally and internationally by your peers with a body of high quality research output in the area of Condensed Matter Physics and a sound international standing in your field. Your reviewers have acknowledged you for having made important contributions to the field of Condensed Matter Physics, in particular your application of Statistical mechanics and Molecular simulation to the study of Biomolecules, with particular emphasis in proteins.")

Rated *C1* by the National Research Foundation (NRF), South Africa, for the period 2012-2017.

h-index (Hirsch index): 23.

SERVICE-MAN

July-November 1996
Officer cadet of the Italian Army.

December 1996 - October 1997
Officer (lieutenant) of the Italian Army.

EDUCATION

March 2017
Academic Development Program (Assessing Learning in Higher Education; Supervising Research in higher Education; Designing and Evaluating Curricula in Higher Education; Teaching and Learning in higher Education)

TOP 10 PUBLICATIONS

Malescio, G & Pellicane, G 2003, "Stripe phases from isotropic repulsive interactions", *Nature Materials*, vol. **2**, pp. 97-100.

Pellicane, G, Costa & Caccamo, C 2004, "Microscopic determination of the phase diagrams of lysozyme and γ -crystallin solutions", *Journal of Physical Chemistry B*, vol. **108**, pp 7538-41 (2004).

Lucentini, PG & Pellicane, G 2008, "Critical behavior of symmetrical fluid mixtures in random pores", *Physical Review Letters*, vol. **101**, 246101.

Pellicane, G, Smith, G & Sarkisov, L 2008, "Molecular dynamics characterization of protein crystal contacts in aqueous solutions", *Physical Review Letters*, vol. **101**, 248102.

Pellicane, G 2012, "A colloidal model of lysozyme aqueous solutions: a computer simulation and theoretical study", *Journal of Physical Chemistry B*, vol. **116**, 2114-20.

Pellicane, G & Cavero, M 2013, "Theoretical study of interactions of BSA protein in a NaCl aqueous solution", *Journal of Chemical Physics*, vol. **138**, 115103.

Pellicane, G & OW, Pandaram 2014, "Gibbs ensemble Monte Carlo of nonadditive hard-sphere mixtures", *Journal of Chemical Physics*, vol. **141**, 044508.

Pellicane, G, Tchoukouegno, MM, Mola, GT & Tsige, M 2016 "Surface enrichment driven by polymer topology", *Physical Review E Rapid Communications*, vol. **93**, 050501.

Pellicane, G, Lee, LL & Caccamo, C 2020, "Integral equation theories of fluid phase equilibria in simple fluids", *Fluid Phase Equilibria*, vol. **521**, 112665.

Workineh, Z, Pellicane, G & Tsige, M 2020, "Tuning solvent quality induces morphological phase transitions in miktoarm star polymer films", *Macromolecules*, vol. **53**, 6151-62.

LIST OF PUBLICATIONS IN HARVARD STYLE FORMAT

- [LINK TO PUBLICATIONS DOI/ARXIV](#)
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- [LINK TO PUBLICATION 10: DOI/ARXIV](#)
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