



Personal Information

Name: Luigi Petraccone
Location: Napoli, IT
AICAT member since: 2002



Position: Associate Professor of Physical Chemistry (CHIM/02)

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Education and positions: Chemistry, University of Naples Federico II (1998); Ph.D. in Chemical Sciences, University of Naples Federico II (2002); post-doc student at the school of Pharmacia of the University of Salerno (2003-2006); Researcher at the Department of Chemical Sciences, University of Naples Federico II (2006), Associate Professor of Physical Chemistry at the Department of Chemical Sciences, University of Naples Federico II (2015).

Main fields of interest: conformational stability of biological macromolecules and their interactions with small molecule or model membranes.

Methods: Differential Scanning Calorimetry (DSC), Isothermal Titration Calorimetry (ITC), Circular Dichroism (CD) and Fluorescence Spectroscopies.

Professional activities: Member of the Ph.D. Board in Chemical Sciences of the University of Naples Federico II. Member of the Italian Chemical Society (S.C.I.), Division of Physical Chemistry. Member of the Board of the Interdivisional Group of Calorimetry and Thermal Analysis (GICAT). Member of the Italian Association of Calorimetry and Thermal Analysis (AICAT).

Publication record Scopus (March 2019): documents (67), citations (1235), h-index (23)

Equipments: Nano-ITC III and nano-DSC (TA Instruments), JASCO J-715 spectropolarimeter (Jasco Corporation, Tokyo, Japan), Fluoromax-4 spectrofluorimeter (Horiba, Edison, NJ, USA).

5 most important publications:

Oliva R, Del Vecchio P, Grimaldi A, Notomista E, Cafaro V, Pane K, Schuabb V, Winter R, Petraccone L. "Membrane disintegration by the antimicrobial peptide (P)GKY20: lipid segregation and domain formation." *Phys Chem Chem Phys*. 2019 21(7) 3989.

Oliva R, Chino M, Pane K, Pistorio V, De Santis A, Pizzo E, D'Errico G, Pavone V, Lombardi A, Del Vecchio P, Notomista E, Nastri F, Petraccone L. "Exploring the role of unnatural amino acids in antimicrobial peptides." *Sci Rep*. 2018 8(1) 8888.

Fotticchia I, Giancola C, Petraccone L. "G-quadruplex unfolding in higher-order DNA structures". *Chem Commun* (2013) 49(82) 9488.

Petraccone L, Spink C, Trent JO, Garbett NC, Mekmaysy CS, Giancola C, Chaires JB "Structure and stability of higher-order human telomeric quadruplexes" *J. Am. Chem. Soc.* (2011) 133(51) 20951.

Petraccone L, Trent JO, Chaires JB "The Tail of the Telomere" *J. Am. Chem. Soc.* (2008), 16530.