

Editorial

This volume honors Prof. João Ruggiero Neto and Prof. Márcio Francisco Colombo, two experimental physicists who made relevant contributions to Biophysics' development in the worldwide scientific community. They were also foundering of the Physics Department of the Institute of Biosciences, Humanities and Exact Sciences, Universidade Estadual Paulista (UNESP), campus of São José do Rio Preto, SP, Brazil. Both are Full Professors from this institution.

The scientific contributions of the honorees in the field of Molecular Biophysics are remarkable. Prof. Colombo centered his work on the role of hydration on the mechanism of allosteric regulation, having published a seminal paper on the role of water in the structure of hemoglobin¹. On his part, Prof. Ruggiero Neto had worked along with drug intercalation and condensation of DNA molecules, with phase transition on lipidic mono and bilayers and on the membrane lytic activity of peptides. An important paper is on the anticancer properties of a peptide extracted from the venom of a São Paulo wasp, *Polybia paulista*².

Beyond their scientific production, including some mutual collaborations, another essential feature of the two honorees for academic life is their kindness, friendship, collaboration, and disposition to work for the greater good. Regarding this, it is better to mention a colleague who has known and nurtured their friendship for decades, Prof. Oswaldo Baffa Filho (Full Professor-University of São Paulo, USP). He reports, "João and I did our doctorate in the same period and defended our theses on the same day. We had an intense and fruitful interaction; I learned a lot from him. His academic rigor, supported on deep basic knowledge, critical vision, and camaraderie, resulted in a strong friendship that remains despite time and distance. With Márcio I also had an intense relationship. I met him while he was still an undergraduate, we participated in the student movement, and I think our friendship brought him to the laboratory where he developed his master and doctoral programs. We lived in a student community in São Carlos with many research activities and healthy social life. Márcio's restless and questioning spirit was always noticeable".

This volume focuses on Biochemistry and Molecular Biophysics. The first article written by Pereira and Oliveira Jr shows the recent advances in cell membrane models. Olivier, Cespedes, Pazin, Cilli and Ito present results involving membrane models and their interaction with dengue peptides. The authors Ângelo, Cruz, Pattaro Jr, Zanzarin, Rodrigues, Pilau, Kioshima, Fernandez and Seixas show results on *Glycine max* and its possible application as an antifungal agent. Zaroni, Oliveira, Perrone, Ortega, Boscolo, Gomes and Rodriguez sign a paper on the characterization of xylanases produced by a thermophilic fungus. Kinoshita, Lima, Guidelli and Baffa Filho show results on the study of gold and platinum nanoparticles using electron spin resonance (ESR). The text of da Silva, Vasconcellos and Nery rationalize aspects of biodiesel production.

Prof. Colombo recently retired, while Prof. Ruggiero Neto is yet active on academic tasks. This special edition is to honor these two academics, recognizing and thanking their trajectory of more than three decades dedicated to higher education and scientific research in Brazil.

Prof. Dr. Elso Drigo Filho (Guest Editor)

Prof. Dr. Fernando Luis Fertonani (Guest Editor)

References

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2. Leite, N. B., Aufderhorst-Roberts, A., Palma, M. S., Connell, S. D., Ruggiero Neto, J., Beales, P. A. PE and PS Lipids Synergistically Enhance Membrane Poration by a Peptide with Anticancer Properties, *Biophysical Journal* 109 (5) (2015) 936-947. <https://doi.org/10.1016/j.bpj.2015.07.033>