

REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 66, N^{os} 10-11

October-November 2021

In memoriam Prof. Petre T. FRANGOPOL

Rev. Roum. Chim., 2021, 66(10-11), 785-787

REVIEW

Gheorghe BENGA

Spin label studies of some biological materials performed by collaborative work of roumanian and foreign scientists – a brief review



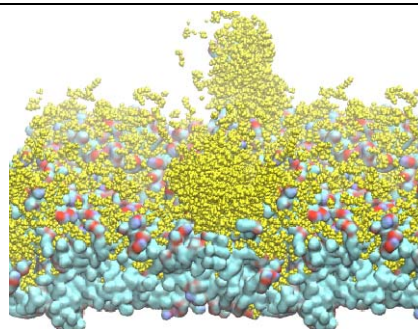
DOI: 10.33224/rch.2021.66.10-11.01

Rev. Roum. Chim., 2021, 66(10-11), 789-795

Key words: ESR, albumin, biomembranes, chlorpromazine, erythrocytes.

Micholas Dean SMITH, Loukas PETRIDIS,
James G. ELKINS, Jonathan D. NICKELS,
John KATSARAS and Jeremy C. SMITH

Microbial membranes: a challenge for bioenergy



DOI: 10.33224/rch.2021.66.10-11.02

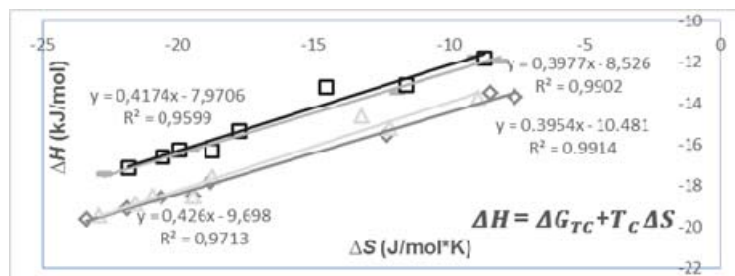
Rev. Roum. Chim., 2021, 66(10-11), 797-804

Key words: modeling, biofuels, membrane, neutrons, dynamics.

PAPERS

Edvin CAIALI, Serban C. MOLDOVEANU and
Victor DAVID

Enthalpy-entropy compensation in reversed-phase high-performance liquid chromatography investigated for the mobile phases containing alcohols from methanol to octanol



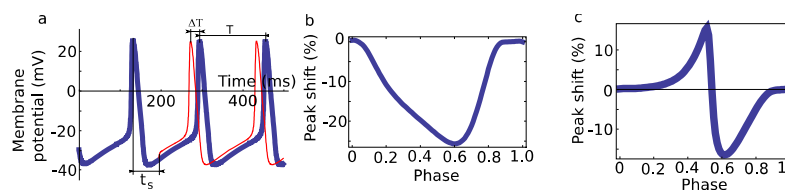
DOI: 10.33224/rch.2021.66.10-11.03

Rev. Roum. Chim., 2021, 66(10-11), 805-811

Key words: enthalpy-entropy compensation, liquid chromatography, van't Hoff, thermodynamics, mobile phase with alcohols.

Davy C. VANDERWEYEN, Derek R. TUCK and Sorinel A. OPRISAN

Is the net electric charge injected into a cell the only driver of its response?

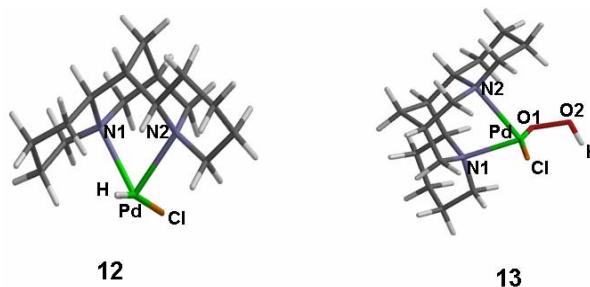


DOI: 10.33224/rrch.2021.66.10-11.04
Rev. Roum. Chim., 2021, 66(10-11), 813-818

Key words: action potential, neuron model, non-stereotypical, phase resetting curve, Hodgkin-Huxley.

Ioana-Alexandra SUCIU, Alexandru LUPAN and Radu SILAGHI-DUMITRESCU

Peroxo-transition metal systems: examples of redox isomerism in palladium structures

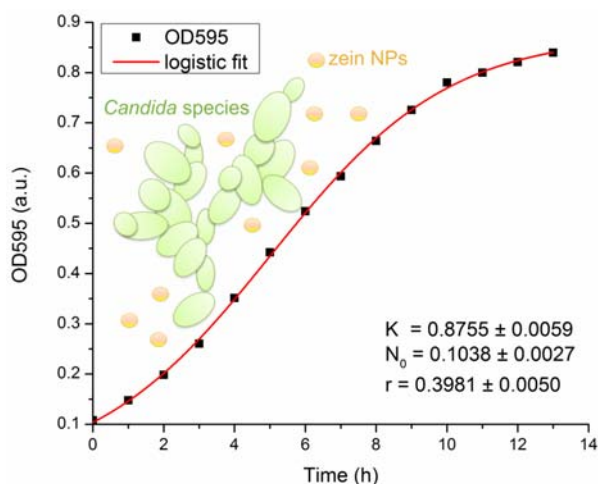


DOI: 10.33224/rrch.2021.66.10-11.05
Rev. Roum. Chim., 2021, 66(10-11), 819-828

Key words: peroxide, palladium, redox isomerism, hydride.

Rawaa SHAKIR SHNAIN AL-SHAMMARI, Ahmed KAREEM HAMMOOD JABERI, Ana LUNGU, Ioana BREBENEL, Waleed KHALED KADDEM AL-SUDANI, Jasim HAFEDH MOHAMMED AL-SAEDI, Cristian-Emilian POP, Maria MERNEA, Gheorghe STOIAN and Dan Florin MIHAILESCU

The antifungal activity of zein nanoparticles loaded with transition metal ions

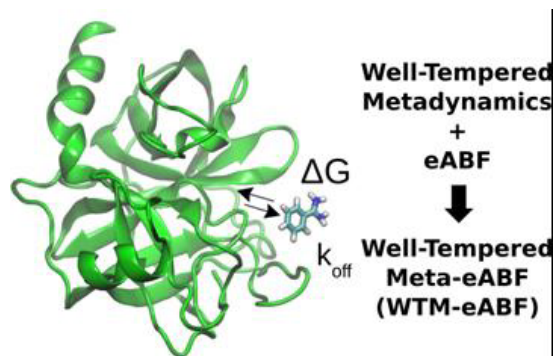


DOI: 10.33224/rrch.2021.66.10-11.06
Rev. Roum. Chim., 2021, 66(10-11), 829-834

Key words: nanoparticles, zein, transition metal ions, *Candida*, antifungal.

Sharon E. STONE, Dhiman RAY and Ioan ANDRICIOAEI

Studying the association of trypsin-benzamidine complex using enhanced sampling molecular dynamics



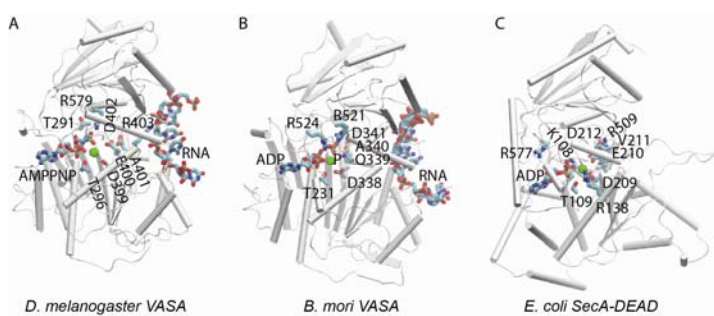
DOI: 10.33224/rrch.2021.66.10-11.07
Rev. Roum. Chim., 2021, 66(10-11), 835-844

Key words: molecular dynamics, protein-ligand binding, free energy, trypsin-benzamidine, enhanced sampling.

Konstantina KARATHANOU[†] and Ana-Nicoleta BONDAR

Conformational coupling *via* hydrogen-bonding in the DEAD-box protein VASA

DOI: 10.33224/rrch.2021.66.10-11.08
Rev. Roum. Chim., **2021**, 66(10-11), 845-853

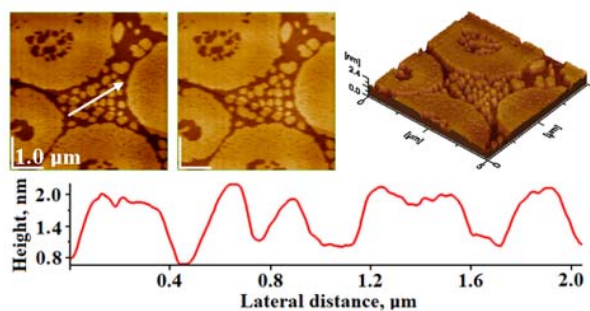


Key words: hydrogen-bonding, DEAD-box, RNA, ATP, VASA.

Aurora MOCANU, Peter J. QUINN, Cristina NICULA, Sorin RIGA, Gheorghe TOMOAI, Ciprian-Alin BARDAS and Maria TOMOAI-COTISEL

Interaction of local anesthetic procaine with phospholipid model membrane

DOI: 10.33224/rrch.2021.66.10-11.09
Rev. Roum. Chim., **2021**, 66(10-11), 855-869



Key words: phospholipid model membrane, dipalmitoyl phosphatidylcholine, procaine, compressional isotherms, thermodynamic approach, membrane structure, LB technique, AFM.

