

REVUE ROUMAINE DE CHIMIE (ROMANIAN JOURNAL OF CHEMISTRY)

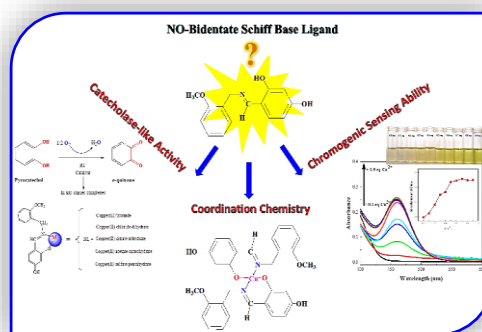
Tome 70, N^{os} 1–2

Janvier–Février 2025

PAPERS

Djoughra AGGOUN, Salima TABTI,
Raúl BERENGUER, Emilia MORALLÓN
and Ali OURARI

A novel colorimetric naked eye detection probe for M^{2+} and M^{3+} ions based on a N,O-donor ligand: synthesis, characterization and catalytic properties

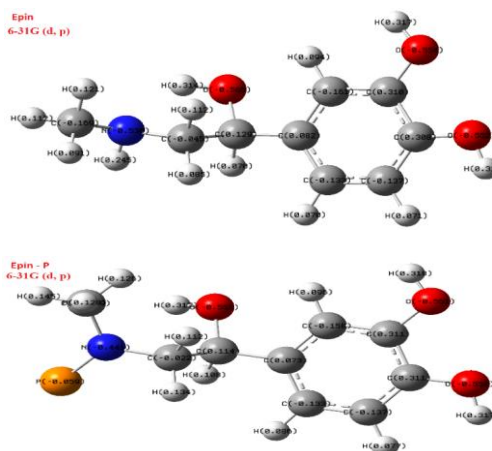


Key words: N,O-donor Schiff base, copper complex, electrochemistry, colorimetric chemosensor, X-ray photoelectron spectroscopy, catecholase activity.

DOI: 10.33224/rrch.2025.70.1-2.01
Rev. Roum. Chim., 2025, 70(1–2), 5–23

Yousif Hussein AZEEZ,
Rebaz Obaid KAREEM
and Rebaz Anwar OMER

Correlation between band gap, refractive index, optical electronegativity and dielectric constant of epinephrine substitution with phosphorus (P) and selenium (Se): DFT study

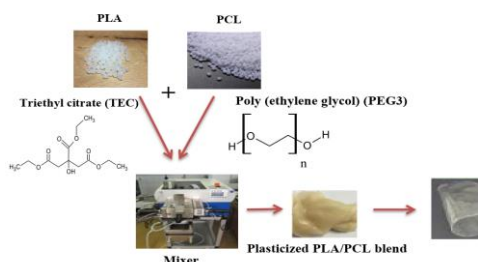


Key words: epinephrine, HOMO-LUMO, refractive index, optical electronegativity, DOS.

DOI: 10.33224/rrch.2025.70.1-2.02
Rev. Roum. Chim., 2025, 70(1–2), 25–34

Mounira MAIZA and Abderrazak HAMAM

Preparation and characterization of plasticized poly(lactic acid) and poly(ϵ -caprolactone) blend with poly(ethylene glycol) (PEG) and triethyl citrate (TEC)



Key words: PLA, PCL, PEG, TEC, polymer blends, plasticizer.

DOI: 10.33224/rrch.2025.70.1-2.03
Rev. Roum. Chim., 2025, 70(1–2), 35–42

Sana DALLALI, Hajer RIGUENE,
Sondes FKIRI, Lamjed TOUMI,
Ramon CANELA–GARAYOA,
Ridha Ben SALEM, Ghayth RIGANE,
Hanene GHAZGHAZI and Jordi ERAS



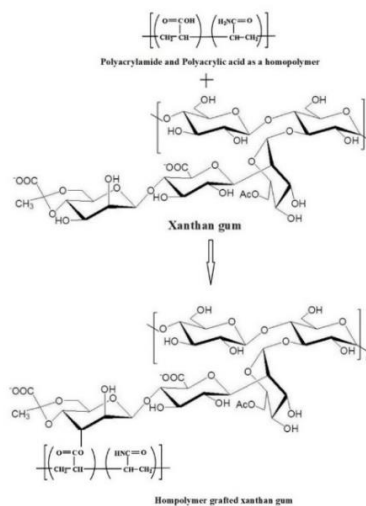
Pistacia lentiscus L., *Phillyrea latifolia* L.,
Globularia alypum L. and *Ceratonia siliqua* L.:
UPLC-PDA-MS-tQ analysis of the phenolic
content leaves' in relation to their growing area

DOI: 10.33224/rrch.2025.70.1-2.04
Rev. Roum. Chim., 2025, 70(1–2), 43–52

Key words: polyphenols, *Pistacia lentiscus* L., *Pistacia latifolia* L.,
Globularia alypum L., *Ceratonia siliqua* L., UPLC-PDA-
MS/MS-tQ, Djebel Zaghouan.

Narges SALEHI, Ali MOGHIMI
and Hossein ANARAKI-ARDAKANI

Fabricated a novel magnetic hydrogel
nanocomposite from xanthan gum for removal of
Cu(II) from water and waste water samples

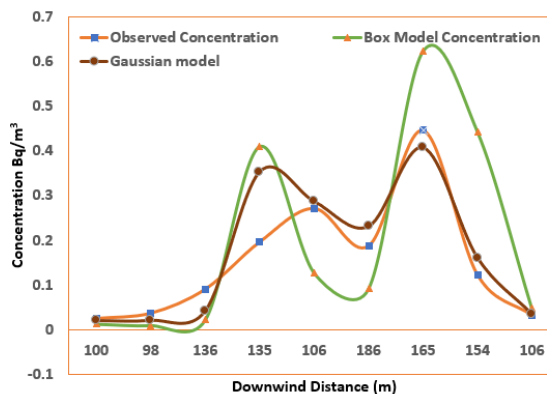


DOI: 10.33224/rrch.2025.70.1-2.05
Rev. Roum. Chim., 2025, 70(1–2), 53–63

Key words: magnetic solid phase extraction, removal, nanocomposite, Cu
(II), xanthan gum.

Khaled S. M. ESSA
and Ahmed M. MOSALLEM

Urban diffusion and air quality models

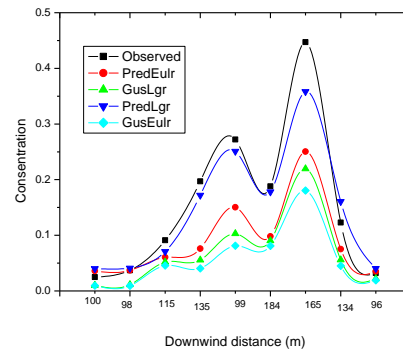


DOI: 10.33224/rrch.2025.70.1-2.06
Rev. Roum. Chim., 2025, 70(1–2), 65–72

Key words: ATDL, Gaussian and box models, iodine-135, sulphur hexi-
fluoride (SF6).

Khaled S. M. ESSA and Hanaa M. TAHA

Study the effect of wind variance, Eulerian and the Lagrangian integral time scales on the dispersion parameters

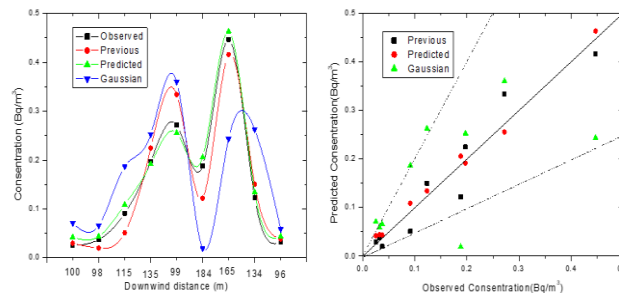


DOI: 10.33224/rrch.2025.70.1-2.07
Rev. Roum. Chim., 2025, 70(1–2), 73–81

Key words: variances of Lagrangian velocity fluctuations, Eulerian velocity variances, mean-square particle displacement.

Khaled S. M. ESSA and Hanaa M. TAHA

Comparison between analytical solution of advection diffusion equation and Gaussian plume model in three dimensions through different stabilities

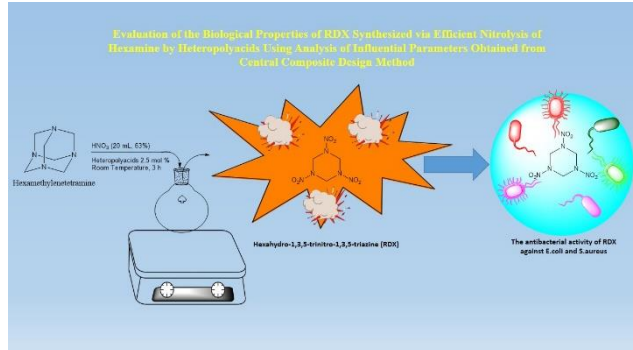


DOI: 10.33224/rrch.2025.70.1-2.08
Rev. Roum. Chim., 2025, 70(1–2), 83–91

Key words: Gaussian model, eddy diffusivity, friction velocity, diffusion equation, logarithmic wind speed.

Vahid AZIZKHANI, Bagher MOHAMMADI, Mahdi KALANTARI and Fouzieh MOGHADAMI

Evaluation of the biological properties of RDX synthesized via efficient nitrolysis of hexamine by heteropolyacids using analysis of influential parameters obtained from central composite design method

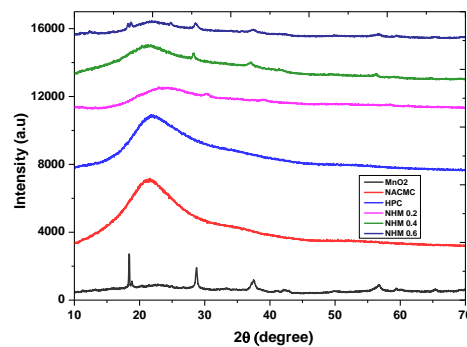


DOI: 10.33224/rrch.2025.70.1-2.09
Rev. Roum. Chim., 2025, 70(1–2), 93–100

Key words: hexahydro-1,3,5-trinitro-1,3,5-triazacyclohexane; central composite design, response surface methodology; heteropolyacids; antibacterial activity.

Mannala SRIDEVI, Uppara NARESH, Rapole JEEVAN KUMAR and Talluri RAMPRASAD

Structural, morphological and thermal analysis of NaCMC/HPC/MnO₂ polymernanofilms synthesized by using solution casting technique

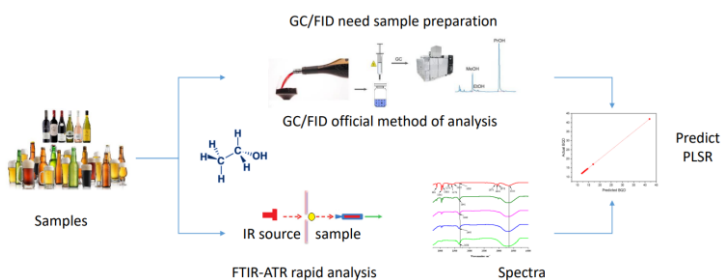


DOI: 10.33224/rrch.2025.70.1-2.10
Rev. Roum. Chim., 2025, 70(1–2), 101–110

Key words: preparation of MnO₂, nanoparticles, NaCMC/HPC/MnO₂, XRD, SEM, FTIR, DSC.

**Fatos REXHEPI, Andreea PUȘCAȘ
and Valdet GJINOVI**

Determination of ethanol content of fermented alcoholic beverages with FTIR spectroscopy and multivariate calibration

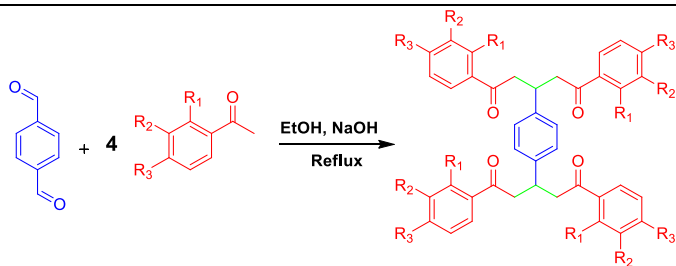


DOI: 10.33224/rch.2025.70.1-2.11
Rev. Roum. Chim., 2025, 70(1–2), 111–118

Key words: PLSR, FTIR-ATR, ethanol, fermented beverage, prediction.

**Miloudi YOUSRA, Kedjadja ALLAOUA,
Ikhlef SOFIANE and Kabouche ZAHIA**

One-pot and efficient synthesis of some new bis(1,5-diaryl-1,5-diketones) via Claisen Schmidt condensation



DOI: 10.33224/rch.2025.70.1-2.12
Rev. Roum. Chim., 2025, 70(1–2), 119–125

Key words: 1,5-diketones, Claisen-Schmidt, Michael addition, terephthalaldehyde.

MEDICINE, MOLECULAR AND ENVIRONMENTAL SCIENCES 2025 (MedMolMed 2025),
10–15 November 2025, Chișinău, Republic of Moldova

Rev. Roum. Chim., 2025, 70(1–2), 127