

REVUE ROUMAINE DE CHIMIE (ROMANIAN JOURNAL OF CHEMISTRY)

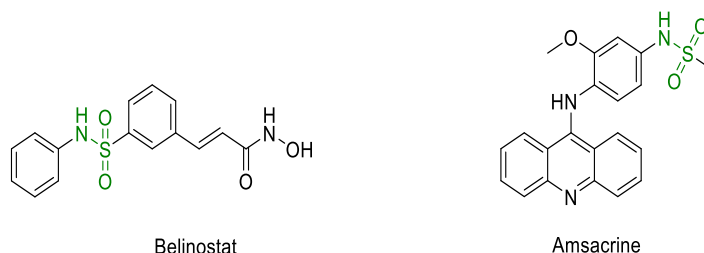
Tome 71, N^{os} 1–2

Janvier–Février 2026

MINI-REVIEW

Li-Ping WANG and Yan TU

The anti-breast cancer therapeutic applications of sulfonamide-six-membered heterocycle hybrids: A mini review



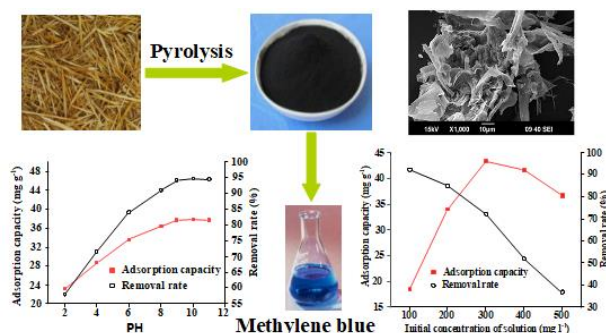
DOI: 10.33224/rrch.2026.71.1-2.01
Rev. Roum. Chim., 2026, 71(1–2), 5–15

Key words: sulfonamide, hybrid molecules, breast cancer, mechanisms of action, structure-activity relationship.

PAPERS

Guizhen GONG and Dandan XIE

Preparation and characterization of activated carbon derived from straw and the adsorption of methylene blue

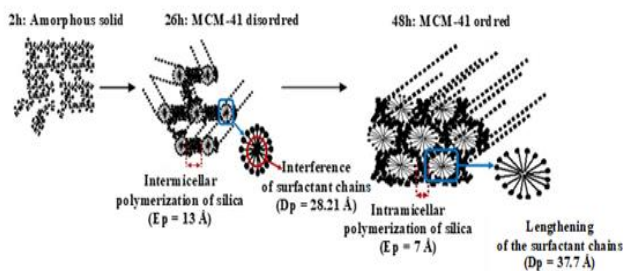


DOI: 10.33224/rrch.2026.71.1-12.02
Rev. Roum. Chim., 2026, 71(1–2), 17–25

Key words: activated carbon, wheat straw, pyrolysis, adsorption, methylene blue.

Tewfik ALI-DAHMANE,
Lamia BRAHMIT, Naceur BENHADRIA and
Rachida HAMACHA

Evolution of textural parameter during the formation of MCM-41 mesoporous silica

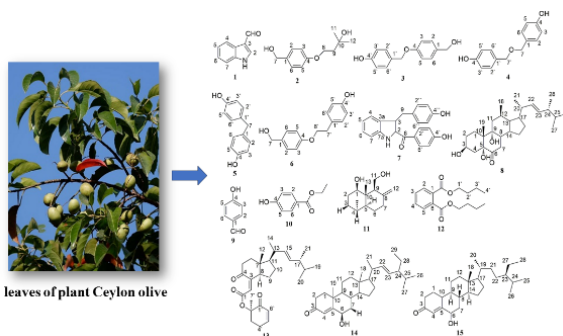


DOI: 10.33224/rrch.2026.71.1-2.03
Rev. Roum. Chim., 2026, 71(1–2), 27–34

Key words: MCM-41, kinetic evolution, structure, texture, mechanism of formation.

Hua-Guang LIU, Si-Qian QI, Run-Yan WANG,
Yue CUI, Zhen-Sheng LI, Hong-Liang TANG,
Xiao-Long ZHAO and Du-Qiang LUO

Compounds from *Pestalotiopsis neglecta* with
PTP1B and SHP2 inhibitory effects

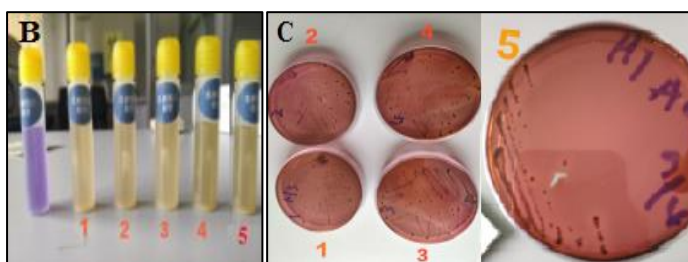


DOI: 10.33224/rrch.2026.71.1-2.04
Rev. Roum. Chim., 2026, 71(1–2), 35–42

Key words: secondary metabolites, plant endophytic fungi, PTP1B, SHP2.

Mengxi ZHAO, Chenxi XU, Ruifang CHENG,
Zhangxu XU, Zelong SHI and Qijie XU

The investigation on the activity of photocatalytic
degradation of organic pollutants enhanced by TiO₂
composite with antibacterial properties against
Escherichia coli

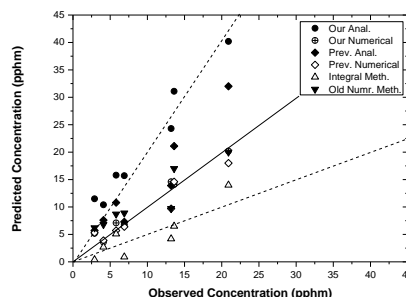


DOI: 10.33224/rrch.2026.71.1-2.05
Rev. Roum. Chim., 2026, 71(1–2), 43–51

Key words: photocatalytic performance, degradation, antibacterial property, free radical.

Khaled S. M. ESSA and Ahmed M. MOSALLEM

The effect of logarithmic and power law of wind
speed on ground level concentration in area sources

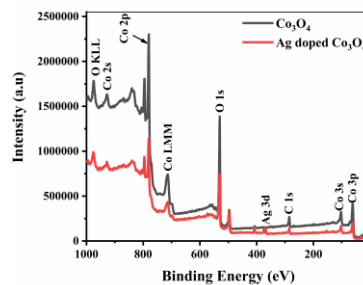


DOI: 10.33224/rrch.2026.76.1-2.06
Rev. Roum. Chim., 2026, 71(1–2), 53–57

Key words: analytically and numerical solutions, power and logarithmic laws of wind velocity, sulphur dioxide concentration.

Harikumar Renuka UMA and Jessica
FERNANDO

Green synthesis, structural and optical properties of
Clorodendrum infortunatum mediated-silver doped
cobalt oxide nanoparticles: Assessment of its
anticancer activity

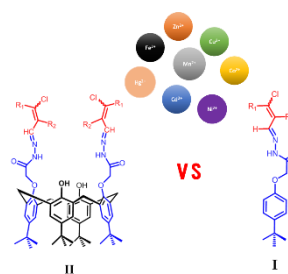


DOI: 10.33224/rrch.2026.71.1-2.07
Rev. Roum. Chim., 2026, 71(1–2), 59–68

Key words: green synthesis, nanoparticles, clorodendrum infortunatum leaves, anticancer activity, cell viability.

**Imane HAMZI,
Thouraya M. BARHOUMI-SLIMI and
Rym ABIDI**

Synthesis and metal binding properties of 1,3-N,N'-diacylhydrazone-p-tert-butylcalix[4]arenes and analogues derived from β -chlorovinyl aldehydes

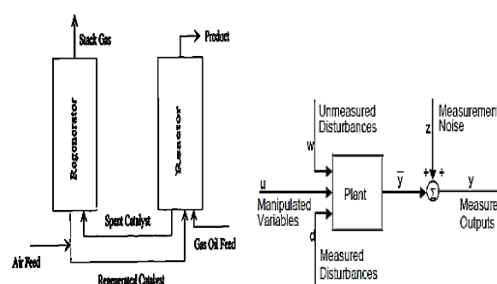


Key words: p-tert-butylcalix[4]arene-N,N'-diacylhydrazone; β -chlorovinyl-aldehydes; p-tert-butylphenoxyacylhydrazone; transition metal ions; complexation.

DOI: 10.33224/rrech.2026.71.1-2.08
Rev. Roum. Chim., 2026, 71(1–2), 69–77

Peiyasamy ELAMURUGAN

Simulation of a fluid catalytic cracking unit by using a linear algebraic controller

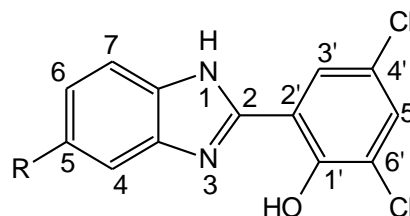


Key words: FCCU, modeling, simulation, control, model predictive control.

DOI: 10.33224/rrech.2026.71.1-2.09
Rev. Roum. Chim., 2026, 71(1–2), 79–88

**Dildora PARDAEVA, Aydin TAVMAN,
Demet GÜRBÜZ, Mayram HACIOĞLU,
Fatma Nur YILMAZ, Adem CINARLI and
A. Seher BIRTEKSÖZ TAN**

Physico-chemical characterization and antibacterial, fungal and antiviral activity of two new benzimidazolylphenol derivatives and their complexes

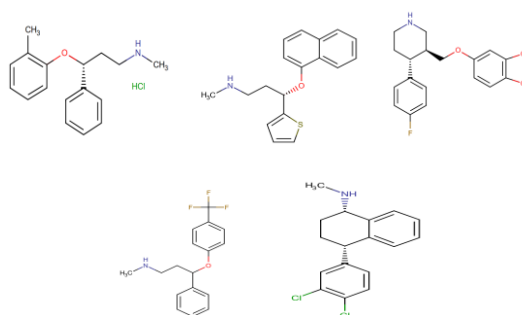


Key words: benzimidazole, phenol, metal complex, antibacterial, antifungal, antiviral.

DOI: 10.33224/rrech.2026.71.1-2.10
Rev. Roum. Chim., 2026, 71(1–2), 89–101

**Cem ÖNAL, Burhan CEYLAN and
Armağan ÖNAL**

Ultra-fast liquid chromatographic determination of atomoxetine, duloxetine, paroxetine, fluoxetine and sertraline in tap water, urine, and pharmaceutical formulations using 7,7,8,8-tetracyanoquinodimethane as a derivatization reagent

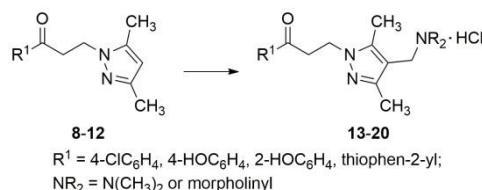


Key words: antidepressants, ultra fast liquid chromatography, 7,7,8,8-tetracyanoquinodimethane, human urine, pharmaceutical preparation, tap water.

DOI: 10.33224/rrech.2026.71.1-2.11
Rev. Roum. Chim., 2026, 71(1–2), 103–110

Gheorghe ROMAN and Irina ROȘCA

Synthesis and reactivity of Mannich bases. Part 33. Multi-step synthesis of aminomethylated 1-(hetero)aryl-3-(3,5-dimethyl-1H-pyrazol-1-yl)propan-1-ones and examination of their antimicrobial activity

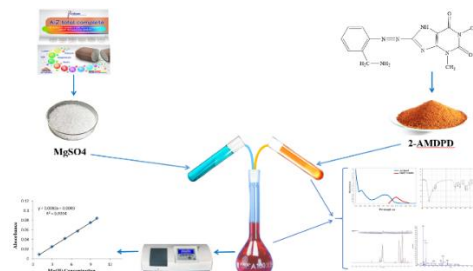


DOI: 10.33224/rrech.2026.71.1-2.12
 Rev. Roum. Chim., 2026, 71(1–2), 111–120

Key words: ketone Mannich base; amine exchange; 3,5-dimethylpyrazole; aminomethylation; antimicrobial.

Esraa Rasool RADHI

Spectrophotometric determination of Mg(II) by using theophylline-derived azo ligand as analytical reagent in pharmaceutical supplements

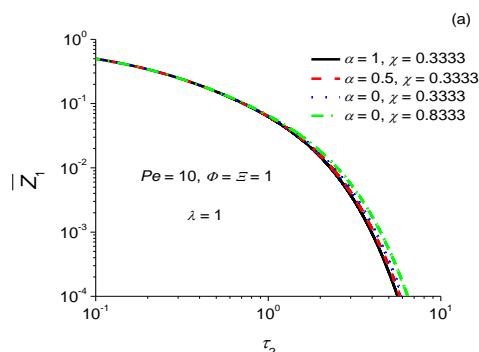


DOI: 10.33224/rrech.2026.71.1-2.13
 Rev. Roum. Chim., 2026, 71(1–2), 121–132

Key words: Mg(II) spectrophotometric determination, azo theophylline derivative ligand, 2-aminobenzylamine, synthesis and characterization, pharmaceutical samples.

Gheorghe JUNCU

Conjugate heat transfer between a sphere and a micropolar fluid in creeping flow

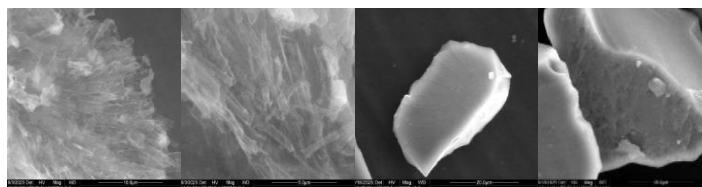


DOI: 10.33224/rrech.2026.71.1-2.14
 Rev. Roum. Chim., 2026, 71(1–2), 133–139

Key words: conjugate heat transfer, sphere, micropolar fluid, forced convection, creeping flow.

Crina ANASTASESCU, Diana PELINESCU, Ionela AVRAM, Emilian CHIFOR, Ion BORDEIANU, Veronica BRATAN, Silviu PREDA, Catalina GIGU, Elvira ALEXANDRESCU, Mihai ANASTASESCU, Maria ZAHARESCU and Ioan BALINT

Hybrid modifiers for Ti dental implants



DOI: 10.33224/rrech.2026.71.1-2.15
 Rev. Roum. Chim., 2026, 71(1–2), 141–150

Key words: hybrid materials, Ti dental implants, ROS photogeneration, singlet oxygen.