

# Journal of the Turkish Chemical Society, Section A: Chemistry (JOTCSA)

e-ISSN: 2149-0120

A biannual, open-access chemical journal, hosted by Dergipark (Published, in English, in every February, June, and October)

### **Editorial Board (sorted by the lastnames)**

Prof. Dr. Göktürk, Sinem (Physical Chemistry, Marmara University, Turkey)

Prof. Dr. Kadıoğlu, Yücel (Electrochemistry, Atatürk University, Turkey)

Prof. Dr. Karagözler, A. Alev (Biochemistry, Adnan Menderes University, Turkey)

Prof. Dr. Köse, Dursun Ali (Inorganic Chemistry, Hitit University, Turkey)

Prof. Dr. Küçükbay, F. Zehra (Analytical Chemistry, İnönü University, Turkey)

Prof. Dr. Küçükbay, Hasan (Organic Chemistry, İnönü University, Turkey) Editor-in-Chief

Assoc. Prof. Dr. Olgac, Abdurrahman (Computational Chemistry, Gazi University, Turkey)

Assoc. Prof. Dr. Sevim, Altuğ Mert (Editor, Istanbul Technical University, Turkey)

Prof. Dr. Taşdelen, M. Atilla (Polymer Chemistry, Yalova University, Turkey)

Prof. Dr. Yalçın, Esin A. (Computational Chemistry, Ankara University, Turkey)

Address: Halaskargazi Str. Uzay Apt. No: 15/8, 34373 Harbiye, Istanbul/Turkey.

Fax: +90 212 231 70 37

E-mail: jotcsa@turchemsoc.org

Website: <a href="https://dergipark.org.tr/jotcsa">https://dergipark.org.tr/jotcsa</a>

(\*)JOTCSA is a peer-reviewed publication of the Turkish Chemical Society.

(\*)The ideas outlined by the authors cannot be attributed to the journal management nor the editorial board.

# Aim and Scope of the Journal

The journal will publish, after a peer-reviewing process, the following:

a) Research articles,

i

- b) Review articles,
- c) Letters to the editor.

If requested, the journal will also publish the following, without committing a peer review:

- d) Book reviews,
- **e)** Thesis abstracts.

The journal's scope will include, but not limited to, the following disciplines of chemistry:

- i) Analytical chemistry,
  - ii) Biochemistry,
- iii) Computational chemistry,
  - iv) Electrochemistry,
  - v) Inorganic chemistry,
  - vi) Organic chemistry
  - vii) Physical chemistry,
  - viii) Polymer chemistry.

### **ETHICAL GUIDELINES**

### **Guidelines for the Editors**

An editor (editors, associate editors, etc.) should provide impartial consideration to all manuscripts offered for publication, judging each on its particular feature without regard to race, religion, nationality, sex, seniority, or institutional affiliation of the author(s). An editor should review and treat a manuscript submitted for publication with all reasonable speed. An editor takes the sole responsibility for accepting or rejecting a manuscript for publication. An editor may seek assistance on a manuscript from specialists chosen for their expertise and fair judgment. An editor should not reveal any information about the manuscript under consideration to anyone other than the author and designated reviewers until after the evaluation process is complete. An editor should respect the intellectual independence of authors.

#### **Authors**

Our journal considers a person as an author who is responsible at least for a part of the work. Authors should be able to explain the problem in study in a deep manner. For our journal, all authors are responsible for the content they submitted. The corresponding author is responsible for the agreement of all the authors and to keep them informed about the submission process since first submission of their manuscript. He/she is responsible for providing the license to publish, in case of acceptance, on behalf of all the authors. Our journal assumes that submitting the paper implies in total agreement from all the authors. For manuscripts with more than 8 authors, all the authors should provide a declaration specifying what was their contribution to the manuscript. It is not acceptable for JOTCSA to consider for publication anything that was previously published, neither entirely nor partly, in other journals. Anything sent to our journal must not be under analysis by anywhere else. Simultaneous submissions to JOTCSA and any

other journal, is considered a major conduct flaw, and all the authors will be definitely banned, and all their previous publications in JOTCSA will be publicly retracted. Plagiarism and self-plagiarism will be treated in the same way. Multiple manuscripts, dealing with closely related subjects and/or variables are discouraged as long as they could figure in a single paper.

#### **Reviewers**

JOTCSA invites peers to review its submissions, relying on their expertise, curricula, and their will to review them as volunteers. By accepting to review a manuscript, the reviewer commits himself to do so in due time. Delays are extremely negative to the review process and makes it last much longer than it should. When a reviewer is requested, he/she is gently asked to answer the invitation e-mail, informing if he/she is willing or not willing to review the manuscript. It is a gesture of politeness, and it avoids delays too. By accepting to review a manuscript, the reviewer declares that no conflicts of interests do exist, and he/she is doing his/her revision for the wealth and progress of Science. Those reviewers who answer our requests, agreeing or not, and those who respect the deadlines, are scored positively, and eventual submissions they could send to JOTCSA will be treated with priority.

### Journal of the Turkish Chemical Society, Section A: Chemistry (JOTCSA)

e-ISSN: 2149-0120

A biannual, open-access chemical journal, hosted by Dergipark (Published, in English, in every February, and June, and October)

### **Editorial Advisory Board Members**

(sorted alphabetically by the last names)

Abo-dya, Nader Elmaghwry (Zagazig University, Egypt)

Ates, Burhan (Inonu University, Turkey)

Bachawala, Praveen (Sigma-Aldrich, USA)

Beatriz, Adilson (Federal University of Mato Grosso do Sul, Brazil)

Carta, Fabrizio (Università degli Studi di Firenze, Italy)

do Amaral, Marcos Serrou (Federal University of Mato Grosso do Sul, Brazil)

Döndaş, Hacı Ali (Mersin University, Turkey)

El-Khatib, Mirna (University of Pennsylvania, USA)

Florio, Saverio (CINMPIS, Italy)

Isa, Seema Habib (G.M. Momin Women's College, Mumbai, India)

Jishkariani, Davit (University of Pennsylvania, USA)

Karagözler, A. Ersin (Adnan Menderes University, Turkey – retired)

Köksoy, Baybars (Gebze Technical University, Turkey)

Köytepe, Süleyman (Inonu University, Turkey)

Külcü, Nevzat (Mersin University, Turkey)

Lebedeva, Iryna (Augusta University, USA)

Mahmoudi, Ghodrat (University of Maragheh, Iran)

Nájera, Carmen (Royal Spanish Academy of Sciences, Spain)

Orhan, Ersin (Düzce University, Turkey)

Panda, Siva S. (Augusta University, USA)

Panmand, Deepak S. (India)

Pillai, Girinath G. (University of Tartu, Estonia)

Seçen, Hasan (Atatürk University, Turkey)

Seçkin, Turgay (Inonu University, Turkey)

Souizi, Abdelaziz (University of Ibn Tofail, Morocco)

Stanovnik, Branko (University of Ljubljana, Slovenia)

Supuran, Claudiu T. (University of Florence, Italy)

Sütay, Berkay (Former PhD student, Istanbul Technical University, Turkey)

Tural, Bilsen (Dicle University, Turkey)

Tüfekçi, Mehmet (Karadeniz Technical University, Turkey)

Yaman, Mehmet (Firat University, Turkey)

Yılmaz, İsmet (İnönü University, Turkey)

Yus, Miguel (Universidad de Alicante, Spain)

No	Authors	Title	Page range
1	Pervin Soyer, Yağmur Tunalı	Actinobacteria Isolation from Forest Soils and Determination of Biological Activities  Orman topraklarından Actinobacteria izolasyonu ve biyolojik aktivitelerinin belirlenmesi	327-334
2	Abdullateef Baba, Shuaibu Tela Garba, Hauwa Suleman Bello	Bioremediation Potential of Immobilized Corynebacterium kutsceri in the Treatment of Tannery Industry Effluent from Challawa Industrial Estate, Kano State, Nigeria Challawa Endüstri Bölgesi, Kano Şehri, Nijerya'daki Sepileme endüstrisi atığının terbiyesinde kullanılmak üzere immobilize edilmiş Corynebacterium kutsceri'nin biyolojik terbiye potansiyeli	335-350
3	Nil Ertekin Binbay	Comparative DFT Study of a Ruthenium Complex Bir rutenyum kompleksinin karşılaştırmalı DFT çalışması	351-360
4	Huseyin Gumus	Catalytic performance of polyvinylidene fluoride (PVDF) supported TiO2 additive at microwave conditions  Mikrodalga koşullarında poliviniliden florür (PVDF) destekli TiO2 katkısının katalitik performansı	361-374
5	Ali Tuncay OZYILMAZ, Begüm OZGEN, Cumali CELIK	Poly(o-aminobenzyl alcohol) Films with and without Organic Compound on AISI 316 Surface; Synthesis and the Corrosion Performances AISI 316 yüzeyinde organic bileşik var veya yok iken poli(o-aminobenzil alkol) filmlerinin sentezi ve korozyon performansları	375-382
6	Kader ŞAHİN, Serdar DURDAĞI	Identifying the Novel Pyrimidine-Based CDK2 Inhibitors as Anticancer Agents Using Text-Mining and Combined Molecular Modeling Approaches	383-404

No	Authors	Title	Page range
		Metin madenlemesi ve kombine moleküler modelleme yaklaşımları kullanarak antikanser araçları olarak yeni pirimidin esaslı CDK2 inhibitörlerinin tanımlanması	
7	Nagihan Karaaslan Ayhan	Assessment of Elemental Content, Antioxidant Activity, and Total Phenolic Content of Vitis sylvestris Gmelin  Vitis sylvestris Gmelin'in elementel içeriği, antioksidan aktivitesi ve toplam fenolik içeriğinin değerlendirilmesi	405-410
8	Paniz Tashakkori, Aylin Altinisik Tagac, Melek Merdivan	Graphene Oxide-Ionic Liquid Used as Solid-Phase Microextraction Coating for Polyphenolic Compounds' Extraction and Determination with GC-MS After On-Fiber Derivatization in Wine  Şarap analizinde lif üzeri türevlendirmeyi takiben GC-MS ile tayinde katı faz mikroekstraksiyon kaplama olarak kullanılan grafen oksit iyonik sıvının polifenolik bileşiklerin ekstraksiyonu ve belirlenmesinde kullanımı	411-426
9	Badr Malek, Imane Bahammou, Omar Zimou, Achraf El Hallaoui, Rachida Ghailane, Said Boukhris, Abdelaziz Souizi	Eco-friendly Synthesis of Quinoxaline Derivatives Using Mineral Fertilizers as Heterogeneous Catalysts  Heterojen katalizörler olarak mineral gübreler kullanmak suretiyle kinoksalin türevlerinin ekoloji dostu sentezi	427-440
10	Gábor Nagy, Mária Ambrus	The Evaluation of Syngas Loss from Disposable Syringe Sampling System: A Case Study  Atılabilir şırınga örnekleme sisteminden sentez gazı kaybının değerlendirilmesi: Bir vaka çalışması	441-448
11	Manjuraj T, Yuvaraj TCM, Jayanna N.D, Shreedhara SH, Sarvajith MS	Spectral, DFT, molecular docking and antibacterial activity studies of Schiff base derived from furan-2-carbaldehyde and their metal(II) complexes  Furan-2-karbaldehitten türeyen Schiff bazının spektral, DFT, moleküler yerleştirme ve antibakteriyel aktivite çalışması ve metal(II) kompleksleri	449-462

No	Authors	Title	Page range
12	Demet Gürbüz	Dyeing Polyester, Cotton and Wool with Some Schiff Bases Derived from 4-chloroaminophenol and Various Benzaldehydes  Polyester, pamuk ve yünün 4-kloroaminofenol ve çeşitli benzaldehitlerle türetilen bazı Schiff bazları ile boyanması	463-470
13	Khalil El Khatabi, Ilham Aanouz, Reda El-Mernissi, Ayoub Khaldan, Mohammed Aziz Ajana, Mohammed Bouachrine, Tahar Lakhlifi	Design of Novel Benzimidazole Derivatives as Potential a-amylase Inhibitors by 3D-QSAR Modeling and Molecular Docking Studies  3D-QSAR modelleme ve moleküler yerleştime çalışmaları ile potansiyel a-amilaz inhibitörleri olarak yeni benzimidazol türevlerinin tasarlanması	471-480
14	Mamman Sulaiman, Yusuf Hassan, Tugba Taskin-Tok, Xavier Siwe Noundou	SYNTHESIS, ANTIBACTERIAL ACTIVITY AND DOCKING STUDIES OF BENZYL ALCOHOL DERIVATIVES  Benzil alkol türevlerinin sentezi, antibakteriyel aktivitesi ve yerleşme çalışmaları	481-488
15	Aminat Aderonke MOHAMMED, Pascal Okiroro INIAGHE, Taofeeqat Omotayo ABU, Mojeed Olalekan BELLO and Mariam Damilola ABDULKADIR	Source Analysis of Heavy Metals and Polycyclic Aromatic Hydrocarbons from a Popular Dumpsite, Lagos State, Nigeria  Lagos Şehri, Nijerya'da popüler bir çöp dökme alanında polisiklik aromatik hidrokarbon ve ağır metal kaynak analizleri	489-504
16	Süreyya Oğuz TÜMAY	A novel selective "turn-on" fluorescent sensor for Hg2+ and its utility for spectrofluorimetric analysis of real samples  Hg2+ için yeni bir "açık" selektif floresan sensörü ve gerçek örneklerin spektroflorimetrik analizinde kullanılması	505-516
17	Zeki Ünal YÜMÜN and Erol KAM	Radionuclide Potential of Holocene Sediments in the West of Marmara Sea (Turkey)  Marmara Denizi (Türkiye) batısında holosen sedimentlerinin radyonüklid potansiyeli	517-524

No	Authors	Title	Page range
18	Ahmet ŞENOCAK	Simple and sensitive detection of quercetin antioxidant by TEOS coated magnetic Fe2O3 core-shell  TEOS kaplı manyetik Fe2O3 çekirdek kabuğu ile kuersetin antioksidanının basit ve hassas tayini	525-534
19	Cansu KURTULUŞ, M. Serhat BAŞPINAR	Effect of Calcium Stearate on the Thermal Conductivity of Geopolymer Foam  Jeopolimer köpüğün ısıl iletkenliği üzerine kalsiyum stearatın etkisi	535-544
20	Ayhan YILDIRIM, Serkan ÖZTÜRK, Haluk TÜRKDEMIR, Atakan KOLALI, Beyza Gökçem ATALAY, Hatice KOCATAŞ	An improved isolation of trimyristin from Myristica fragrans as a renewable feedstock with the assistance of novel cationic gemini surfactant  Yeni katyonik ikiz yüzey aktif maddesi yardımıyla yenilenebilir hammadde olarak Myristica fragrans'tan trimiristinin ileri izolasyonu	545-560
21	Selda Doğan Çalhan, Mustafa Gündoğan	Copper Oxide Nanoparticles: Synthesis, Characterization, Antimicrobial Activities and Catalytic Reduction of Methylene Blue  Bakır oksit nanopartikülleri: Sentez, karakterizasyon, antimikrobiyal aktiviteler ve metilen mavisinin katalitik indirgenmesi	561-570
22	Utku KARAKAYA, Burak DERKUS, Emel EMREGUL	Development of Gelatin-Alginate-TiO2-SOD Biosensor for the Detection of Superoxide Radicals  Süperoksit radikallerinin tayininde biyosensör olarak jelatin-alginat-TiO2-SOD geliştirilmesi	571-580
23	Burcu Menekşe BALKAN, Öğünç MERAL, Görkem KISMALI, Tevhide SEL	Antioxidant Enzyme Activities in Ascorbic Acid and Selenium Applied Hepatocellular Carcinoma Cells  Askorbik asit ve selenyum ilaveli hepatosellüler karsinoma hücrelerinde antioksidan enzim aktiviteleri	581-588

No	Authors	Title	Page range
24	Esra KASAPGİL, Alper NERAT, Buse M. POYRAZ, İlke ANAÇ	Fabrication of Superhydrophobic Coatings on Glass based on Poly(dimethylsiloxane) and Fumed Silica  Poli(dimetilsiloksan) ve füme silika esaslı cam üzerine süperhidrofobik kaplamaların üretilmesi	589-596
25	Mehmet ARSLAN	In situ Crosslinking System of Gelatin with Acrylated β-cyclodextrin Towards the Fabrication of Hydrogels for Sustained Drug Release  Süreklilik arzeden ilaç salınımı için hidrojellerin üretilmesine doğru akrilli β-siklodekstrinli in situ çapraz bağlanmalı jelatin sistemi	597-608
26	Gökhan AÇIK	A comprehensive study on electrospinning of poly (vinyl alcohol): effects of the TCD, applied voltage, flow rate, and solution concentration  Poli(vinil alkol)ün elektrodöndürülmesi üzerine detaylı bir çalışma: TCD, uygulanan gerilim, akış hızı ve çözelti derişiminin etkileri	609-616
27	Sema CARIKCI	Antioxidant and Anticholinesterase Properties of Sideritis perfoliata subsp. athoa (Papan. & Kokkini) Baden and Sideritis trojana Bornm. Teas from Mount Ida-Turkey and Their Phenolic Characterization by LC-MS/MS  İda Dağı'ndan (Türkiye) elde edilen Sideritis perfoliata subsp. athoa (Papan. & Kokkini) Baden ve Sideritis trojana Bornm. Çaylarının antioksidan ve antikolinesteraz özellikleri ve fenolik bileşiklerin LC-MS/MS ile karakterizasyonu	617-634





# Editorial, JOTCSA 7(2), 2020

We have launched our new issue, namely JOTCSA 7(2), 2020, just a few days ago and provided you with this editorial document. In this issue, twenty-seven articles were published and as every time, they are free to download. We wish our readers to cite our works, so that our journal can elevate further into the main event. Queries may be placed to myself at kucukbay@inonu.edu.tr or to our managing editor at jotcsa@turchemsoc.org.

See you in the new issue in October...

Kind regards,

Prof. Dr. Hasan KÜÇÜKBAY

Editor-in-chief, JOTCSA