



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

e-ISSN: 2149-0120

A triannual, 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. Kadiođlu, 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. Olgaç, Abdurrahman (Computational Chemistry, Gazi University, Turkey)

Assoc. Prof. Dr. Sevim, Altuđ 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: <https://dergipark.org.tr/jotcsa>

(*)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,

- 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. The online version of this declaration can be viewed on <https://dergipark.org.tr/tr/pub/jotcsa/page/2796>.

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

e-ISSN: 2149-0120

A triannual, 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 Elmaghwy (Zagazig University, Egypt)

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

Ateş, 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)

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, India)

Jishkariani, Davit (University of Pennsylvania, USA)

Karagözler, Ali Ersin (Adnan Menderes University, Turkey – retired)

Köytepe, Süleyman (İnönü University, Turkey)

Külcü, Nevzat (Mersin University, Turkey)
 Lebedeva, Iryna (Augusta University, USA)
 Nájera, Carmen (Royal Spanish Academy of Sciences, Spain)
 Orhan, Ersin (Düzce University, Turkey)
 Panda, Siva S. (Augusta University, USA)
 Panmand, Deepak S. (India) Pillai,
 Pillai, Girinath G. (University of Tartu, Estonia)
 Souizi, Abdelaziz (University of Ibn Tofail, Morocco)
 Seçen, Hasan (Atatürk University, Turkey)
 Seçkin, Turgay (Inonu University, Turkey)
 Souizi, Abdelaziz (Ibn Tofail University, Morocco)
 Stanovnik, Branko (University of Ljubljana, Slovenia)
 Supuran, Claudiu T. (University of Florence, Italy)
 Sütay, Berkay (Istanbul Technical University, Turkey)
 Tural, Bilsen (Dicle University, Turkey)
 Tüfekçi, Mehmet (Karadeniz Technical University, Turkey)
 Yaman, Mehmet (Fırat University, Turkey)
 Yılmaz, İsmet (İnönü University, Turkey)
 Yus, Miguel (Universidad de Alicante, Spain)

No	Author(s)	Title of the study	Pages
1	Nesrin KÖKEN, Serdar AYDIN	Synthesis of Reactive Polyurethane Adhesives and Studying the Effect of Ketonic Resins / Reaktif Poliüretan Yapıştırıcıların Sentezi ve Ketonik Reçinelerin Etkilerinin Çalışılması	1-10
2	Fatma Eda ÖZGÜVEN, Abdullah Devrim PEKDEMİR, Müşerref ÖNAL, Yüksel SARIKAYA	Characterization of a bentonite and its permanent aqueous suspension / Bir Bentonitin ve Sürekli Sulu Süspansiyonunun Karakterizasyonu	11-18
3	Hüseyin AKBAŞ	Synthesis and Spectroscopic Characterization of Protic Tris(2-Hydroxyethyl)-Ammonium Ionic Liquids / Protik Tris(2-Hidroksietil)Amonyum İyonik Sıvıların Sentezi ve Spektroskopik Karakterizasyonu	19-24

No	Author(s)	Title of the study	Pages
4	Arif MERMER	Microwave and ultrasound promoted greener synthesis of thiazolyl-pyrazoline derivatives and investigation of their biological activities / Tiyazolil Pirazolil Türevlerinin Mikrodalga ve Ultrases Yardımlı Yeşil Sentezleri ve Biyolojik Aktivitelerinin İncelenmesi	25-36
5	F. Zehra KÜÇÜKBAY, Zehra TEKİN	Evaluation of phytochemical contents and antioxidant activity of pomegranate flower / Nar Çiçeğinin Fitokimyasal İçeriği ve Antioksidan Aktivitesinin Değerlendirilmesi	37-42
6	Figen ARSLAN BİÇER	Hydrothermal Synthesis and Crystal Structure of Zn(II) Coordination Polymer with the Rigid 4,4'-azobispyridine / Rijid 4,4'-azobispiridin ile Zn(II) Koordinasyon Polimerinin Hidrotermal Sentezi ve Kristal Yapısı	43-48
7	Ertuğrul Gazi SAĞLAM, Elif BULAT, Nurcan ACAR, İbrahim DEMİREL	New Homodinuclear Alkyl and Aryl Dithiophosphonato Cd(II) and Hg(II) complexes: Syntheses and Characterizations / Yeni Homodinükleer Alkil ve Aril Ditiyofosfonato Cd(II) ve Hg(II) Kompleksleri: Sentez ve Karakterizasyon	49-64
8	Ezgi GÜLÇAY, İlknur ERUCAR FİNDİKÇİ	Computational Screening of Covalent Organic Frameworks for Hydrogen Storage / Hidrojen Depolanması için Kovalent Organik Yapıların Hesaplamalı Görüntülenmesi	65-76
9	Shola ELIJAH	Density Functional Theory (DFT) approach for kinetic and thermodynamic study of reaction mechanism of copper (II) complex from 2-hydrazinyl-4,5-dihydro-1H-imidazole and anthracene-9-carbaldehyde / 2-Hidrazinil-4,5-dihidro-1H-imidazol ve Antrasen-9-karbaldehitten Oluşan Maddenin Bakır(II) Kompleksinin Reaksiyon Mekanizmasının Yoğunluk Fonksiyonel Teori (DFT) ile Kinetik ve Termodinamik Çalışması	77-86
10	Hülya ÇELİK ONAR, Hasniye YAŞA, Oktay SİN	Comparison of Antioxidant Activities of Mono-, Di- and Tri-substituted Coumarins / Mono-, Di- ve Tri-süstitüe Kumarinlerin Antioksidan Aktivitelerinin Karşılaştırılması	87-96
11	Ersin ORHAN, Mustafa NARİN	Investigation of Photochromic Fluorescence Features and Synthesis of Diarylethene Type Naphthalimide Compounds / Diariletene Türü Naftilimid Bileşiklerinin Sentezi ve Fotokromik Floresans Özelliklerinin İncelenmesi	97-106
12	Sinem TEMİZEL, Altuğ Mert SEVİM	Synthesis and photophysical properties of A3B-type non-symmetrically substituted anthracene-based zinc(II) phthalocyanine / Antrasen Grubu İçeren A3B	107-116

No	Author(s)	Title of the study	Pages
		Türü Simetrik Olmayan Süstitüsyona Sahip Çinko(II) Ftalosiyanın Sentezi ve Fotofiziksel Özellikleri	
13	Fatih Mehmet AVCU, Mustafa KARAKAPLAN	FINDING EXACT NUMBER OF PEAKS IN BROADBAND UV-VIS SPECTRA USING CURVE FITTING METHOD BASED ON EVOLUTIONARY COMPUTING / Evrimsel Programlamaya Dayalı Eğri Uydurma Yöntemi Kullanarak Geniş Bantlı UV-Vis Spektrumlardaki Tam Pik Sayısının Bulunması	117-124
14	Ömer KESMEZ	Preparation of anti-bacterial biocomposite nanofibers fabricated by electrospinning method / Elektrospinning Yöntemi ile Üretilen Antibakteriyel Biyokompozit Nanoliflerin Üretilmesi	125-142
15	Özgür YILMAZ	Synthesis of trans-diamide derivatives from fumaryl chloride and determination of DPPH scavenging activity of synthesized molecules / Fumaril Klorürden Trans-Diamid Türevlerinin Sentezi ve Sentezlenmiş Moleküllerin DPPH Süpürme Aktivitesinin Belirlenmesi	143-150
16	Gülden ASAN, Abdurrahman ASAN	Corrosion Protection of AISI 1010 Using Doped MoS2 Conductive Polymers / AISI 1010'un Aşılmiş MoS2 İletken Polimerler ile Korozyondan Korunması	151-154
17	Khusna ARİF RAKHMAN, Zulkifl ZAM ZAM, Sudir UMAR, Muhammad İkhlas ABDJAN	Study of Electronic Transition of Complex Fe (III), Ni (II) and Zn (II)-1.10-Phenanthroline: Modelling and UV-Vis Spectra Analysis / Fe(III), Ni(II) ve Zn(II)-1,10-Fenantrolin Komplekslerinin Elektronik Geçişlerinin İncelenmesi: Modelleme ve UV-Vis Spektral Analiz	155-168
18	İşıl ÖZTÜRK, Şenay ŞANLIER, Armağan KINAL	Determination of Gluconate Binding Properties on Magnetite Surface and Investigation of Carboxymethylation and Hydrazination Mechanisms of the Gluconated Magnetite Surface: A Computational Study / Magnetit Yüzeyi Üzerinde Glukonat Bağlama Özelliklerinin Belirlenmesi ve Glukonatlanmış Magnetit Yüzeyinin Karboksimetilleme ve Hidrazinleme Mekanizmalarının İncelenmesi	169-178
19	Sabitu Babatunde OLASUPO, Adamu UZAIRU, Gideon Shallangwa, SANI UBA	Quantitative Structure-Activity Relationship (QSAR) Studies and Molecular docking Simulation of Norepinephrine Transporter (NET) Inhibitors as Anti-psychotic Therapeutic Agents / Anti-psikotik Terapötik Araçlar Olarak Norepinefrin Transporter (NET) İnhibitorlerinin Kantitatif Yapı-Aktivite İlişkisi (QSAR) Çalışmaları ve Molekül Kenetlemesi Simülasyonu	179-196

No	Author(s)	Title of the study	Pages
20	Dr. Shaza ALSHAAL, Manal DAGHESTANİ, Francois KARABET	Determination of the isolated Rutin And Quercetin Contents In Syrian Ficus Carica L. Leaves Extracts / Suriye'den Elde Edilmiş Ficus Carica L. Yaprak Ekstrelerinin İzole Edilmiş Rutin ve Kuersetin İçeriklerinin Belirlenmesi	197-206
21	Zeki Ünal YÜMÜN, Erol KAM, Melike ÖNCE	GAMMA DOSE VALUES OF STRATIGRAPHIC UNITS SURFACED IN BEHRAMKALE (ÇANAKKALE) - ZEYTİNLİ (EDREMİT-BALIKESİR) SECTION OF KAZ MOUNTAINS / Kaz Dağları'nın Behramkale (Çanakkale) ve Zeytinli (Edremit-Balıkesir) Bölgesinde Yüzeylemiş Stratigrafik Birimlerin Gamma Doz Değerleri	207-214
22	Yasemin TÜMER, Mahmut ÇAYIRBAŞI, Onur ŞAHİN, Tuncer HÖKELEK	The Synthesis of New Phosphazene-Bearing Ethyl p-Hydroxybenzoate and Ferrocenyl Pendant Groups and their Spectroscopic and Crystallographic Characterizations /Etil p-Hidroksibenzoat ve Ferrosenil Bağlı Gruplar İçeren Yeni Fosfazenlerin Sentezi ve Spektroskopik ve Kristalografik Karakterizasyonları	215-224
23	Emine ÜLKER	The Effect of Polymer Capping Group to the Electrocatalytic Water Oxidation Activities of Prussian Blue Analogues / Prusya Mavisi Analoglarının Elektrokatalitik Su Yükseltgenme Aktiviteyerine Polimer Baş Grubun Etkisi	225-232
24	Atolani ATOLANİ, Olorundare O.E, Banerjee PRIYANKA, Osin O, Preissner R, Njan A.A	Isolation, Characterisation and In Silico Toxicity Evaluations of Thiocarbamates, Isothiocyanates, Nitrile, Glucosinolate and Lipids from Moringa oleifera Lam. Seed / Moringa oleifera Lam. tohumlarından tiyokarbamat, izotiyosiyanat, nitril, glukozinolat ve lipidlerin izolasyonu, karakterizasyonu ve in silico zehirlilik değerlendirmeleri	233-242
25	Burak AY, Emel YILDIZ, Jon ZUBİETA	pH effect on hydrothermal synthesis of the coordination polymers containing pyrazine-2,3-dicarboxylate: Investigation of thermal stability, luminescence and electrical conductivity properties / Pirazin-2,3-dikarboksilat içeren koordinasyon polimerlerinin hidrotermal sentezi üzerine pH etkisi: Isıl kararlılık, lüminesans ve elektriksel iletkenlik özelliklerinin incelenmesi	243-258
26	Vladimir SULİMOV, İvan İLİN, Danil KUTOV, Alexey SULİMOV	Development of docking programs for Lomonosov supercomputer / Lomonosov süperbilgisayarı için kenetleme programlarının geliştirilmesi	259-276

No	Author(s)	Title of the study	Pages
27	Ziya AYDIN	A Turn-on Fluorescent Sensor For Cadmium Ion Detection In Aqueous Solutions / Sulu çözeltilerde kadmiyum iyonu tayini için açılmalı floresans algılayıcı	277-286
28	Dr. Esra GÜL, Dr. Asli Özge AVCI TUNA, Özlem ESEN	The Investigation of the Effect of Mineral Oils which Have Different Specifications on The Performance of Palm- and Tallow-Based Soap Recipes / Palm ve iç yağı esaslı sabun reçetelerinin performansı üzerine farklı özelliklere sahip olan mineral yağlarının etkisinin incelenmesi	287-294
29	Ayfer YILDIRIM, Hilal ACAY	Biosorption studies of mushrooms for two typical dyes / İki tipik boyar madde için mantarların biyo-tutulma çalışmaları	295-306
30	Zeynep Mine ŞENOL, Selçuk ŞİMŞEK	Removal of Pb ²⁺ ions from aqueous medium by using chitosan-diatomite composite: equilibrium, kinetic and thermodynamic studies / Kitosan-diatomit kompoziti kullanarak sulu iyondan Pb ²⁺ giderimi: denge, kinetik ve teromdinamik çalışmalar	307-318
31	Ahmet Ozan ÖZGEN, Ozan Emre EYÜPOĞLU	Antibiotic Susceptibility Of Klebsiella pneumoniae Strains Isolated From Clinical Samples / Klinik örneklerden izole edilen Klebsiella pneumonia ırklarının antibiyotik duyarlılığı	319-330

ERRATUM

The following publication in JOTCSA, 6(3) (2019) has two errors in the references section:

Ciftci M. Synthesis of Polysulfone Based Amphiphilic Graft Copolymers by a 'Grafting to' Approach. JOTCSA. 2019; 6(3): 365-372.

Corrected references (journal names were missing):

2.Watanabe S, Kobayashi A, Kakimoto M-A, Imai Y. Synthesis and characterization of new aromatic polyesters and polyethers derived from 1,2-bis(4-hydroxyphenyl)-1,2-diphenylethylene. J Polym Sci Part A: Polym Chem. 1994;32(5):909-15.

18.Acik G, Altinkok C. Polypropylene microfibers via solution electrospinning under ambient conditions. J Appl Polym Sci. 2019;136(45):48199.



Editorial, JOTCSA 7(1), 2020

We have launched our new issue, namely JOTCSA 7(1), 2020, just a few days ago and provided you with this editorial document. In this issue, thirty-one articles were published and as everytime, 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 next issue.

Kind regards,

Prof. Dr. Hasan KÜÇÜKBAY

Editor-in-chief, JOTCSA