



MANAS JOURNAL OF ENGINEERING

MJEN

*Special Issue is dedicated to 25th Anniversary of the Establishment of
Kyrgyz-Turkish Manas University*



BISHKEK 2021



ISSN: 1694- 7398

Year: 2021

Volume: 9

Special Issue: 1

<http://journals.manas.edu.kg>

journals@manas.edu.kg

PUBLICATION PERIOD

Manas Journal of Engineering (MJEN) is published twice year, MJEN is a peer reviewed journal.

OWNERS On Behalf of Kyrgyz - Turkish Manas University
Prof. Dr. Alpaslan CEYLAN
Prof. Dr. Asylbek KULMYRZAEV

EDITOR Prof. Dr. Nahit AKTAŞ

ASSOCIATE EDITOR Asist. Prof. Dr.Rita İSMAİLOVA

FIELD EDITORS

Prof. Dr. Asılбек ÇEKKEEV	(Mathematics, Topology)
Prof. Dr. Anarkül URDALETOVA	(Mathematics)
Prof. Dr. Osman TUTKUN	(Chemistry and Chemical Engineering)
Prof. Dr. İbrahim İlker ÖZYİĞİT	(Biotechnology and Bioengineering)
Prof. Dr. Özgül SALOR DURNA	(Electrical and Electronic Engineering)
Assoc. Prof. Dr. Anarseyit DEYDİEV	(Food Engineering, Food Technology)
Assoc. Prof. Dr. Gülbübü KURMANBEKOVA	(Biology, Biochemistry)
Assoc. Prof. Dr. Raimbek SULTANOV	(Computer Engineering, Information Technology)
Assoc. Prof. Abdullah Erdal TÜMER	(Computer Engineering, Information Technology)
Asist. Prof. Dr. Emil OMURZAKOĞLU	(Nanoscience, Nanotechnology, Nanomaterials)
Asist. Prof. Dr. Rita İSMAİLOVA	(Computer Engineering, Information Technology)

EDITORIAL BOARD

Prof. Dr. Nahit AKTAŞ	(Chemistry)
Prof. Dr. Mustafa DOLAZ	(Environmental Engineering)
Prof. Dr. Zarlık MAYMEKOV	(Environmental and Ecological Engineering)
Prof. Dr. Coşkan İLICALI	(Food Engineering)
Prof. Dr. Ulan BİRİMKULOV	(Computer Engineering)
Prof. Dr. Fahreddin ABDULLAEV	(Applied Mathematics and Informatics)
Assoc. Prof. Dr. Tamara KARAŞEVA	(Physics)

ASSISTANTS Dr. Ruslan ADİL AKAI TEGİN
Kayahan KÜÇÜK
Jumagul NURAKUN KYZY

CORRESPONDENCE ADDRESS

Kyrgyz Turkish Manas University
Chyngyz Aitmatov Avenue 56 Bishkek, KYRGYZSTAN
URL: <http://journals.manas.edu.kg>
e-mail: journals@manas.edu.kg
Tel : +996 312 492763- Fax: +996 312 541935



CONTENT

Şakir Yılmaz Ümit Ecer Tekin Şahan	<i>An optimization study for bio-removal of lead from aqueous environments by alkali modified Polyporus Squamosus</i>	1-9
Ozben Kutlu Fatma Zehra Ozcelik	<i>Exergy analysis of petroleum refinery hydrogen network integration based on reaction system</i>	10-23
Vildan Evren Ilker Ali Ozkan	<i>Comparison of artificial neural network models of categorized daily electric load</i>	24-34
Karwan Talaat Mohammed Muhamad Arshad Javed Fahru Huyop Yilmaz Kaya	<i>Plant tissue culture of Nicotiana tabacum cv. TAPM 26 and its minimum inhibition against herbicide-Dalapon</i>	35-42
Adem Zengin	<i>Molecularly-imprinted silica nanoparticles for rapid and selective detection of atenolol in artificial urine samples</i>	43-48
Yener Altun	<i>Asymptotic behaviours of the solutions of neutral type Volterra integro-differential equations and some numerical solutions via differential transform method</i>	49-57
Mehmet Pişkin Ömer Faruk Öztürk Zafer Odabaş	<i>Synthesis, spectroscopy, and photophysical properties of newly magnesium (II) phthalocyanine</i>	58-64
Ömür Acet	<i>Investigation of BSA adsorption performances of metal ion attached mineral particles embedded cryogel discs</i>	65-71
Selma Ayaz Mehmet Dilaver	<i>Determination and assessment of phosphorus assimilation capacity applying Vollenweider approach for Hazar Lake</i>	72-81
Ömür Kıvanç Kürkçü	<i>A novel numerical implementation for solving time fractional telegraph differential equations having multiple space and time delays via Delannoy polynomial</i>	82-96