AHIEVRAN

3rd International Conference on on Scientific Research



ABSTRACT BOOK

Editors
Assist. Prof. Dr. Mevlüde Alev ATEŞ
Dr. Elvan CAFAROV

ISBN - 978-625-367-076-4

ABSTRACT BOOK



AHI EVRAN 3rd INTERNATIONAL CONFERENCE ON SCIENTIFIC RESEARCH

May 3-4, 2023 Odlar Yurdu University, Baku, Azerbaijan

Editors

Assist. Prof. Dr. Mevlüde Alev ATEŞ Dr. Elvan CAFAROV

Institute Of Economic Development And Social Researches Publications®

(The Licence Number of Publicator: 2014/31220) TÜRKİYE

TR: +90 342 606 06 75

E posta: kongreiksad@gmail.com www.iksad.org www.iksadkongre.org

All rights of this book belong to IKSAD Publishing House Authors are responsible both ethically and jurisdically Iksad Publications - 2023© Issued: 15.05.2023

ISBN - 978-625-367-076-4

3Ahi Evran International Conference on Scientific Research May 3-4, 2023 / Abstract Book

CONTENT

CONFERENCE ID	I
SCIENTIFIC COMMITTEE	II
PHOTO GALLERY	III
PROGRAM	IV
CONTENT	V

Author	Title	No
Minodora MANU Marilena ONETE	CHEMICAL AND ORGANIC FERTILIZATIONS AS ENVIRONMENTAL DRIVERS FOR SOIL MITE COMMUNITIES IN GRASSLAND ECOSYSTEMS, ROMANIA	1
Nadiia ARTYUKHOVA Robert REHAK Artem ARTYUKHOV	IMMERSIVE MARKETING IN HIGHER EDUCATION: "INTERNAL" AND "EXTERNAL" VIEWS	2
Montassar BARHOUMI	HIGHER-ORDER TOPOLOGICAL ASYMPTOTIC FORMULA FOR THE ELASTICITY OPERATOR AND APPLICATION	4
Askar DUISENBIYEV	NAVIGATING THE MARITIME INDUSTRY: EFFECTIVE COMPETITIVENESS MANAGEMENT STRATEGIES	5
Alexander LAGEREV Igor LAGEREV	CHEMICAL METHODS FOR IMPROVING THE RELIABILITY OF ROPE TRANSPORT SYSTEMS	6
Anton KOROBKA Elena SIERIKOVA Ivan VIERUSHKIN	NUMERICAL SIMULATION OF VIBRATION FTEQUENCIES FOR THIN ELASTIC CIRCLE PLATE	7
Aisulu AYAPBERGENOVA	ROLE OF CREATIVE HUBS AND PRODUCING NEW MEDIA PRODUCTS TOWARDS THE SDGS, AS A TOOL FOR ACHIEVING THE GOAL OF SUSTAINABLE CİTİES SDG 11	8
Akhtarul I AMJAD	SUSTAINABLE APPROACHES FOR THE TEXTILE MANUFACTURING	9
Antonino M. LECONA Kalpana NANJAREDDY Manojkumar ARTHIKALA	THE FUNCTIONAL CHARACTERIZATION OF PvCRK12 GENE IN PHASEOLUS AND RHIZOBIA SYMBIOSIS THROUGH FORWARD AND REVERSE GENETICS APPROACHES	10
Priyanka Barinderjit SINGH	ISOLATION AND CHARACTERIZATION OF CAROTENOIDS PIGMENTS OF MURCOTT MANDARIN (Citrus reticulata x sinensis) PEEL	11
Kiranbeer KAUR Barinderjit SINGH	ISOLATION AND CHARACTERIZATION OF CAROTENOIDS PIGMENTS OF KINNOW (Citrus nobilis x citrus deliciosa) PEEL	12
Boban STANKOVIĆ	THE SPECIES COMPOSITION AND NUMBER OF MIGRATORY WATERBIRDS OF RIT FLOODPLAIN NEAR JAGODINA (SERBIA)	13
Jelena LUTOVAC Jugoslav JOVIČIĆ	THE INFLUENCE OF THE ECONOMIC AND SOCIAL ENVIRONMENT ON THE MANAGEMENT AND BUSINESS OF HETEROGENEOUS COMPANIES IN	14

NUMERICAL SIMULATION OF VIBRATION FTEQUENCIES FOR THIN ELASTIC CIRCLE PLATE

Anton KOROBKA

Student, V.N. Karazin Kharkiv National University

Elena SIERIKOVA

PhD, National University of Civil Defence of Ukraine, Kharkiv, Ukraine

ORCID: 0000-0003-0354-9720

Ivan VIERUSHKIN

PhD student, A.M. Podgorny Institute for Mechanical Engineering Problems NAS of Ukraine, Kharkiv, Ukraine

ORCID: 0000-0002-3837-5567

ABSTRACT

The problems of vibrations of critical structural elements have been the focus of attention of many researchers and engineers over the past decades [1,2]. Each new design requires additional research. New modern materials are being developed, special devices for vibration damping are being introduced [3-5]. At the same time, new efficient numerical methods are being developed [6,7].

Thin round elastic plates are often used as critical elements of complex engineering structures. Suppose, deformation of the plate is described by function w. Natural modes w_l and their corresponding natural frequencies Ω_l are determined by solving such a spectral problem

$$D\Delta\Delta w_k + (K - \rho_p h\Omega_k^2) w_k = 0, \tag{1}$$

$$w|_{r=R} = 0, \quad \frac{dw}{dr}|_{r=R} = 0.$$
 (2)

Keywords: vibrations, circle plate, numerical methods for evaluation of roots