



SciPub.de

# European Academic Science and Research

**ACADEMIC EDITION**

ISSN xxxx-xxxx

Proceedings  
of the scholarly abstracts  
**European Academic  
Science and Research**

November,  
2021

The material published in the journal reflects the opinions of the authors, which may not always coincide with the position of the Editorial Board.

**Publisher:**  
“EASR”  
**SciPub.de**

© EASR  
© SciPub.de

2021

---

## **Editorial Board:**

**Hasso Edenhofer,**

Professor,

European Academy of Sciences and Research

**Ann Shevchenko,**

Professor,

Ukrainian State University of Railway Transport: Kharkiv, Ukraine

**Cristina Copaceanu,**

Professor, Faculty of Economics,

University of political and economic studies "Constantin Stere": Chisinau, Moldova

**Lazzat Karasholakova,**

Professor, Head of Department of Geography and Ecology,

Zhetysu State University named after I.Zhansugurov, Kazakhstan

**Svitlana Holovchuk,**

Professor,

NLA University College, Bergen, Norway

**Tatiana Fotina,**

Professor,

Sumy National Agrarian University, Ukraine

**Tkach Tamara,**

Professor,

Pereyaslav-Khmelnytskyi State Pedagogical University named after Hryhoriy Skovoroda,

Pereyaslav- Khmelnytskyi, Ukraine,

**Zurab Khurtsia,**

Professor,

Kutaisi Ak. Tsereteli State University, Georgia

**Yana Arustamyan,**

Professor, Department of Comparative Linguistics,

National University of Uzbekistan, Uzbekistan

**Kraleva Radoslava Stankova,**

Professor,

South-West University "Neofit Rilski": Blagoevgrad, Bulgaria

**Berdnik Tatiana,**

Professor,

Don State Technical University, Russia

**Sacara Victoria,**

Professor,

Institute of Mother and Child, Moldova

---

**CONTENTS**

---

<b>BUSINESS, ECONOMICS &amp; MANAGEMENT .....</b>	<b>3</b>
IMPACT OF VACCINATION ON THE DEVELOPMENT OF THE ECONOMY .....	4
PROPOSAL FOR THE IMPROVEMENT SELECTION SYSTEM .....	7
PLATFORM EMPLOYMENT: IS IT A GOOD THING? .....	8
<b>ENGINEERING &amp; COMPUTER SCIENCE .....</b>	<b>9</b>
IMPACT OF CLIMATE CHANGE ON THE GROWTH OF TOXIC ALGAE IN WATER BODIES .....	10
THE INFLUENCE OF THE SOVIET DESIGN EXPERIENCE ON MODERN UKRAINIAN VILLAGES .....	11
<b>HEALTH &amp; MEDICAL SCIENCE .....</b>	<b>13</b>
DETERMINE THE THRES HOLD FOR TASTE SENSITIVITY OF THE TONGUE IN PATIENTS WITH GLOSSALGIA WHO UNDERWENT COVID-19 .....	14
BIOETHICS PRINCIPLES IN LITERARY AND PHILOSOPHICAL CREATIVITY OF MEDIEVAL AZERBAIJANI POETS AND THINKERS .....	16
THE ROLE OF FUNCTIONAL REFLEX TRAINING IN THE CONTROL OF MYOPIA IN CHILDREN .....	17
CLINICAL ANALYSIS OF OTOGENIC INTRACRANIAL COMPLICATIONS IN CHILDREN .....	18
PSYCHOSOMATIC STATUS OF PATIENTS SUFFERING FROM TYPE 2 DIABETES MELLITUS .....	19
OXIDATIVE STRESS AND ANTIOXIDANT SYSTEM IN THE ORAL FLUID OF PATIENTS WITH CHRONIC GENERALIZED PERIODONTITIS .....	20
СПОСОБ КРАНИОТОМИИ, ПРЕДУСМАТРУВАЮЩИЙ ГЕРМЕТИЧНОЕЗАКРЫТИЕ ПОЛОСТИ ЧЕРЕПА* .....	21
OPHTHALMOPATHY IN DYSLIPIDEMIA .....	23
PROSPECTIVE STUDY OF EYE PATHOLOGY IN RETINOPATHY OF PREMATURITY .....	24
FEATURES OF THE VITREORETINAL INTERFACE IN PATIENTS WITH COVID-19 ASSOCIATED PNEUMONIA.....	25
<b>HUMANITIES, LITERATURE &amp; ARTS .....</b>	<b>27</b>
B.BARTOK'S CREATIVE METHOD FOR COMPOSERS OF UZBEKISTAN: MEANING AND RESULT .....	28
<b>SOCIAL SCIENCES.....</b>	<b>29</b>
MODERN TRENDS IN HUMAN RESOURCE MANAGEMENT .....	30
ГЕОПОЛИТИКА ДЛЯ БИЗНЕС-ЭЛИТЫ: РИСКИ И ВОЗМОЖНОСТИ .....	32

## OXIDATIVE STRESS AND ANTIOXIDANT SYSTEM IN THE ORAL FLUID OF PATIENTS WITH CHRONIC GENERALIZED PERIODONTITIS

**Khudiakova Maryna**

PhD, Associate Professor, Kharkiv National Medical University, Kharkiv, Ukraine

**Introduction.** The role of oxidative stress in periodontitis has been studied for decades. The main source of reactive oxygen species is thought to be neutrophils, which are the first line of defense against bacteria. During the process of respiratory inflammation, a superoxide radical is formed. This may then be released into the phagosomal and extracellular space causing the subsequent formation of other radical and non-radical derivatives. Nanoforms of pharmaceuticals, in particular liposomes, can solve the problem of giving new unique properties to known active pharmaceutical ingredients and consequently increase therapeutic efficacy. The efficacy and safety of Lipoflavon for systemic and local use in different clinic branches reflect the versatility of the mechanism of action of phospholipid liposomes and quercetin with an emphasis on antioxidant, antihypoxic, membrane-protective and immunomodulatory activity.

The **aim of this study** is to measure lipid peroxidation (MDA as an end product of oxidative stress) and corresponding antioxidant activity (SOD) in patients with CGP of I-II degrees of severity and assess the influence of periodontal treatment with gel from the Granules of Quercetin (GQ) and Liposomal Quercetin-Lecithin Complex (LQLC) on these parameters.

**Material and Methods.** Oral fluid (OF) sampling of all observed patients was taken every morning before treatment and one, six and twelve months after the treatment for biochemical researches. The patients of basic group received base therapy with the local application LQLC (injection form of «Lipoflavon») as a suspension, prepared ex tempore, containing 137.5 mgs of lecithin and 3.75 mgs of Quercetinum. The state of prooxidant-antioxidant protection was determined by the level of MDA and SOD. Level determination MDA was performed by the method Uchiyama M. & Michara M. in the modification of Volchegorsky I.A. et al. according to the test with thiobarbituric acid (TBA). Superoxide dismutase activity determined by the method of oxidation of quercetin in the modification of VA Kostyuk and co-authors.

**Results and discussion.** The level of MDA in patients of control group was  $4.62 \pm 0.23 \mu\text{mol/l}$ , whereas that SOD was  $4.73 \pm 0.11 \text{ y.o.}$

The level of MDA of the patients with I-II degrees of severity in the basic group through 1 month after treatment was  $4,23 \pm 0,79 \mu\text{mol/l}$  and level of SOD was  $5,12 \pm 0,17 \text{ y.o.}$ , which was 8% lower than and 1% higher than that in the C groups. The patients in the comparison group through 1 month after treatment were determined with MDA -  $5,14 \pm 0,48 \mu\text{mol/l}$  and SOD -  $4,88 \pm 0,17 \text{ y.o.}$ , which was 11% and 3% higher than that in the C groups.

**Conclusion.** Considerable therapeutic efficacy of the LQLC for treatment patients with CGP, especially that of I-II degrees of severity is based on its marked anti-inflammatory and periodontoprotecting effects.