



**Ministry of Education and Science
of the Russian Federation**

**National Research
Tomsk Polytechnic University**

ISSN 2312-2978

JOURNAL OF ECONOMICS AND SOCIAL SCIENCES

School of Core Engineering Education

<http://jess.esrae.ru/>

№ 14, 2019

Tomsk

**JOURNAL OF ECONOMICS
AND SOCIAL SCIENCES**

Editorial Board

Editor in chief

Yulia Zeremskaya, Cand. Sc. (Russia)

Deputy chief editor

Olga Solodovnikova, Cand. Sc. (Russia)

Members of editorial staff

Nina Nikolaenko, Cand. Sc. (Russia)

Luba Averkieva, (Russia)

Yuliya Chayka, (Russia)

JOURNAL INFO

The major purpose of the online “Journal of Economics and Social Sciences” is the presentation of student and young scientist research results.

ISSN 2312-2978

Russian Science Citation Index (RISC)

UDC 30+33

LBC 60+65

The main headings:

- Business studies
- Social philosophy
- Resource-efficient technologies
- Engineering development
- Innovations and technologies
- Social responsibilities of modern engineering

Issue of journal is two times a year (December and May); extra issues are possible

Founder:

Institute of Humanities, Social Sciences and Technologies of National Research Tomsk Polytechnic University

Open access full-text articles can be found on websites: www.elibrary.ru,
www.e.lanbook.com.

CONTENTS

SOCIAL SCIENCES

- Production of construction materials based on drilled cuttings for the road industry** 7-10
Galeev V.R.
- Investigation of modified plasmon nanoparticles for theranostics application** 11-17
Averkiev A.A.
- Structural techniques of reducing vibration and noise of axial fans** 18-22
Panfilov D.S.
- Study of the influence of feedstock of the processed raw materials at naphtha catalytic reforming and isomerization** 23-26
Chabanenko V.V.
- Study of the influence of catalyst activity on the reaction rate during hydrotreating of diesel fractions using mathematical modeling** 27-29
Kotkova E.P.
- Post-traumatic stress disorders and psychotherapies for their treatment** 30-36
Averkiev A.A..
- Conversion of propane-butane fraction to arenes on zeolite catalysts modified by gallium oxides** 37-41
Dmitriev A.V.
- Analysis of the causes of accidents occurring in drilling** 42-47
Lukyanov A.K.
- Confucius principles as an essential element of Chinese management culture** 48-51
Skalnaya O.A.
- The history of the paradigm in the system of scientific knowledge** 52-54
Antonova A.A.

Fourth Industrial Revolution: knowledge and skills needed for employees 55-58
Emelyanenko E.E.

Synergetic approach to entrepreneurship 59-64
Maksimova N.G., Kazakov D.A.

Innovative methods for socializing students with disabilities 65-68
Peremitin F.V.

ECONOMICS

Method of knowledge resources management "Strategy of Columbus" 69-71
Galimova A.S.

V-ZrSiO₄ ceramic pigments obtained from chemically activated natural zircon 72-75
Sharafeev Sh.M.

Comparative studies on the application of 3D cadastre in Russia and other countries 76-81
Gatina N.V., Kadetova T.A.

The Vasugan Swamp peats (Tomsk region) as a promising source of organic matter with antioxidant properties 82-88
Bratishko K.A., Buyko E.E., Zykova M.V., Belousov M.V.

Review of modern inorganic scintillation materials 89-92
Kharisova A.E., Dzhadaeva D.I.

PHILOLOGICAL SCIENCES

The relevance of the Dostoevsky's "One special mot about the Slavs" in the context of the modern "Russian world" 93-97
Lilenko I.Yu., Dorofeeva I.I., Malysheva A.K., Krymskaya L.A.

Some peculiarities of translating the 19th century text on the example of Dostoevsky's "A Writer's Diary" 98-100
Lilenko I.Yu., Nikitina Ya.V., Mityasova A.V., Elkina A.N.

**Structural analysis of terms and terminological units of the sphere
'nuclear energy' in modern English** 101-105

Yastrebov V.O., Makhendradatta M., Zyablova N.N.

**Analysis of codification of terms and terminological units of the
sphere of nuclear physics in modern English** 106-110

Zyablova N.N., Zaytsev I.K., Turkasov V.A.

SCIENTIFIC PUBLICATION

JOURNAL OF ECONOMICS AND SOCIAL SCIENCES

Journal site is created on the platform RAE Editorial System

Site: <http://jess.esrae.ru/>

Correspondence address:

School of Core Engineering Education,
Division for Foreign Languages
National Research Tomsk Polytechnic University
30, Lenin Street,
634050, Tomsk
Russia