

Volume 60 of PROCEEDINGS includes the papers presented at the scientific conference RU & SU'21, organized and conducted by University of Ruse "Angel Kanchev" and the Union of Scientists - Ruse. Series 9.1. contains papers reported in the Quality in Higher Education.

Book	Code	Faculty and Section
Agrarian and Industrial Faculty		
1.1.	FRI-ONLINE-1-AMT&ASVM	Agricultural Machinery and Technologies, Agrarian Science and Veterinary Medicine
	FRI-ONLINE-1-MR	Maintenance and Reliability
	FRI-ONLINE-1-THPE	Thermal, Hydro- and Pneumatic Equipment
	FRI-ONLINE-1-EC	Ecology and Conservation
	FRI-ONLINE-1-ID	Industrial Design
1.2.	WED-ONLINE-SSS-AMT&ASVM	Agricultural Machinery and Technologies, Agrarian Science and Veterinary Medicine
	WED-ONLINE-SSS- MR	Maintenance and Reliability
	WED-ONLINE-SSS-THPE	Thermal, Hydro- and Pneumatic Equipment
	WED-ONLINE-SSS-EC	Ecology and Conservation
	WED-ONLINE-SSS-ID	Industrial Design
Faculty of Mechanical and Manufacturing Engineering		
2.1.	FRI-ONLINE-1-MEMBT	Mechanical Engineering and Machine-Building Technologies
2.2.	WED-ONLINE-SSS-MEMBT	Mechanical Engineering and Machine-Building Technologies
Faculty of Electrical Engineering Electronics and Automation		
3.1.	FRI-ONLINE-1-EEEA	Electrical Engineering, Electronics and Automation
3.2.	FRI-ONLINE-1-CCT	Communication and Computer Technologies
3.3.	THU-ONLINE-SSS-EEEA	Electrical Engineering, Electronics and Automation
	THU-ONLINE-SSS-CCT	Communication and Computer Technologies
Faculty of Transport		
4.1.	FRI-2.209-1-TMS	Transport and Machine Science
4.2.	FRI-2.204-SITSTL	Sustainable and Intelligent Transport Systems, Technologies and Logistics
4.3.	WED-ONLINE-SSS-TMS	Transport and Machine Science
Faculty of Business and Management		
5.1.	FRI-ONLINE-1-EM	Economics and Management
5.2.	FRI-ONLINE-1-LIPC	Linguoculturology, Intercultural and Political Communication
5.3.	THU-ONLINE-SSS-EM	Economics and Management
5.4.	FRI-ONLINE-1-ESIS	European Studies and International Security
8.2.	FRI-ONLINE-1-SW	Social Work
Faculty of Natural Sciences and Education		
6.1.	FRI-ONLINE-1-MIP	Mathematics, Informatics and Physics
6.2.	FRI-ONLINE-1-PP	Pedagogy and Psychology
6.3.	FRI-ONLINE-1-LL FRI-ONLINE-1-AS	Linguistics and Literature Art Studies
6.4.	FRI-ONLINE-1-ERI	Education - Research and Innovations

6.5.	THU-ONLINE-SSS-FM	Financial Mathematics
	THU-ONLINE-SSS-PP	Pedagogy and Psychology
Faculty of Law		
7.1.	FRI-ONLINE-1-LS	Law Studies
7.2.	FRI-ONLINE-1-NS	National Security
7.3.	MON-ONLINE-SSS-L	Law Studies
Faculty of Public Health and Health Care		
8.1.	FRI-ONLINE-1-HP	Health Promotion
8.3.	FRI-ONLINE-1-HC	Health Care
8.4.	FRI-ONLINE-1-MCDA	Medical and Clinical Diagnostic Activities
8.5.	THU-ONLINE-SSS-HP	Health Promotion
	FRI-ONLINE-SSS-HC	Health Care
	THU-ONLINE-SSS-MCDA	Medical and Clinical Diagnostic Activities
Quality of Education Directorate		
9.1.	FRI-ONLINE-QHE	Quality of Higher Education
Razgrad Branch of the University of Ruse		
10.1.	FRI-LCR-1-CT(R)	Chemical Technologies
10.2.	FRI-LCR-1-BFT(R)	Biotechnologies and Food Technologies
10.3.	TUE-ONLINE-SSS-BFT(R)	Biotechnologies and Food Technologies
	TUE-ONLINE-SSS-CT(R)	Chemical Technologies
Silistra Branch of the University of Ruse		
11.1.	FRI-ONLINE-DPM(S)	Didactics, Pedagogy and Methodology of training in...
	FRI-ONLINE-LTLHF(S)	Linguistics; Theory of Literature and History; Philosophy
	FRI-ONLINE-ELENSTS(S)	E-Learning; Electrical; Technical Sciences
11.2.	FRI-ONLINE-SSH(S)	Humanities
	FRI-ONLINE-SSS-PPTM(S)	Pedagogy, Psychology, and Teaching Methodology
	FRI-ONLINE-SSS-TS(S)	Technical Sciences

The papers have been reviewed.

ISSN 1311-3321 (print)

ISSN 2535-1028 (CD-ROM)

ISSN 2603-4123 (on-line) Copyright © authors

The issue was included in the international ISSN database, available at <https://portal.issn.org/>.
The online edition is registered in the portal ROAD scientific resources online open access



PROGRAMME COMMITTEE

- **Prof. Amar Ramdane-Cherif**
University of Versailles, France
- **Assoc. Prof. Manolo Dulva HINA**
ECE Paris School of Engineering, France
- **Prof. Leon Rothkrantz**
Delft University of Technology, Netherlands
- **Assoc. Prof. Antonio Jose Mendes**
University of Coimbra, Portugal
- **Prof. Ville Leppanen**
University of Turky, Finland
- **Assoc. Prof. Marco Porta**
University of Pavia, Italy
- **Prof. Douglas Harms**
DePauw University, USA
- **Prof. Zhanat Nurbekova**
L.N.Gumilyov Eurasian National University, Nur Sultan, Kazakhstan
- **Prof. Mirlan Chynybaev**
Kyrgyz State Technical University, Bishkek, Kyrgyzstan
- **Prof. Ismo Hakala, PhD**
University of Jyväskylä, Finland
- **Prof. Artur Jutman, PhD**
Tallinn University of Technology, Estonia
- **Prof. RNDr. Vladimir Tvarozek, PhD**
Slovak University of Technology in Bratislava, Bratislava, Slovakia
- **Assoc. Prof. Ing. Zuzana Palkova, PhD**
Slovak University of Agriculture in Nitra, Nitra, Slovakia
- **Andrzej Tutaj, PhD**
AGH University of Science and Technology, Krakow, Poland
- **Prof. Valentin NEDEFF Dr. eng. Dr.h.c.**
“Vasile Alecsandri” University of Bacău, Romania
- **Cătălin POPA, PhD**
“Mircea cel Bătrân” Naval Academy, Constantza, Romania
- **Prof. dr Larisa Jovanović**
Alfa University, Belgrade, Serbia
- **Prof. dr hab. Edmund LORENCOWICZ**
University of Life Sciences in Lublin, Poland
- **Assoc. Prof. Ion MIERLUS - MAZILU, PhD**
Technical University of Civil Engineering, Bucharest, Romania
- **Prof. Dojčil Vojvodić PhD**
Faculty of Philosophy, University of Novi Sad, Serbia
- **Assoc. Prof. Alexandrache Carmen, PhD**
Departament of Teacher Training, “Dunarea de Jos”, Galati University, Romania
- **Prof. Alberto Cabada**
University of Santiago de Compostela, Faculty of Mathematics, Santiago de Compostela, Spain
- **Kamen Rihev, PhD**
Institute of Slavic Philology, Maria Curie-Skłodowska University in Lublin, Poland

- **Anna Klimentova, PhD**
Constantine the Philosopher University of Nitra, Slovakia
- **Prof. Ricardo Gobato, PhD**
Secretariat of State of Parana Education and Sport (SEED/PR), Laboratory of Biophysics and Molecular Modeling Genesis
- **Prof. Fatima Rahim Abdul Hussein, PhD**
University of Misan, College of Basic Education, English Department, Iraq
- **Prof. Emilia Gjorgjeva, PhD**
Goce Delchev University - Shtip, Nord Macedonia
- **Prof. Igor Kevorkovich Danilov, DSc**
Yuri Gagarin State Technical University of Saratov, Russia
- **Prof. Aleksander Valentinov Sladkowski, DSc**
Silesian University of Technology, Poland
- **Prof. Vera Karadjova, PhD**
“St. Kliment Ohridski” University – Bitola, Faculty of tourism and hospitality – Ohrid, Republic of North Macedonia
- **Prof. Aleksandar Trajkov, PhD**
“St. Kliment Ohridski” University - Bitola, Faculty of tourism and hospitality – Ohrid, Republic of North Macedonia
- **Prof. Petar Pepur, PhD**
University of Split, Croatia
- **Prof. Korhan Arun, PhD**
Namik Kemal University, Tekirdağ, Turkey
- **Prof. Yuliya Yorgova, PhD**
Burgas Free University, Bulgaria
- **Jelena Stankovic, PhD**
University of Nis, Serbia
- **Jovica Stankovic, PhD**
University of Nis, Serbia
- **Prof. Gerhard Fiolka, PhD**
University of Fribourg, Switzerland
- **Prof. Haluk Kabaalioglu, PhD**
Yeditepe University, Turkey
- **Prof. Silva Alves, PhD,**
University of Lisbon, Portugal
- **Hanneke van Brugge, DHC mult**
Appeldoorn, The Netherlands
- **Prof. Elena Torina**
Tula State Pedagogical University "L. N. Tolstoy", Tula, Russia
- **Prof. Violeta Jotova**
Direction Pediatrics at St. Marina University Hospital - Varna, Bulgaria, Chair ESPE Postgraduate Qualification Committee
- **Prof. Tanya Timeva, MD, PhD**
Obstetrics and Gynecology Hospital "Dr. Shterev", Sofia, Bulgaria
- **Prof. Kiril Stoychev, PhD,**
Institute of Metal Science, Equipment and Technologies “Acad. A. Balevski” with Hydroaerodinamics centre – BAS, Bulgaria
- **Assoc. Prof. Mark Shamtsyan, PhD**
Technical University, Saint Petersburg, Russia

- **Assoc. Prof. Oleksii Gubenia, PhD**
National University of Food Technologie, Kiev, Ukraine
- **Prof. Olexandr Zaichuk, DSc**
Ukrainian State University of Chemical Technology, Dnepropetrovsk, Ukraine
- **Prof. Eugene Stefanski, DSc**
Samara University, Russia
- **Assoc. Prof. Tatiana Strokovskaya, PhD**
International University of Nature “Dubna”, Dubna, Russia
- **Prof. DSc. Petar Sotirov**
Maria Curie-Sklodowska University of Lublin, Poland
- **Prof. Papken Ehiasar Hovsepian**
Sheffield Hallam University, Sheffield, UK
- **Assoc. Prof. Krassimir Dochev, PhD**
University of Portsmouth School of Engineering, UK
- **Mariana Yordanova Docheva, PhD**
University of Portsmouth School of Engineering, UK
- **Assoc. Prof. Ivan Antonov Lukyanov, PhD**
University of Botswana, Faculty of Engineering and Technology, Gaborone, Botswana
- **Assoc. Prof. Petko Vladev Petkov, PhD**
Research Associate Cardiff University, UK
- **Prof. Stepan Terzian DSc**
Bulgarian Academy of Science, Bulgaria
- **Prof. Gabriel Negreanu, PhD**
University Politehnica of Bucharest, Romania

ORGANISING COMMITTEE

♦ **ORGANIZED BY: UNIVERSITY OF RUSE (UR) AND UNION OF SCIENTISTS (US) - RUSE**

♦ **ORGANISING COMMITTEE:**

• **Chairperson:**

Prof. DTSc. Hristo Beloev, DHC mult., Academician of Bulgarian Academy of Sciences - Rector of UR, Chairperson of US - Ruse

• **Scientific Secretary:**

Prof. Diana Antonova PhD, Vice-Rector Research,
dantonova@uni-ruse.bg, 082/888 249

• **THEMATIC FIELDS:**

▪ **Agricultural Machinery and Technologies, Agrarian Sciences and Veterinary Medicine**

▪ **Maintenance and Reliability**

▪ **Thermal, Hydro- and Pneumatic Equipment**

▪ **Ecology and Conservation**

▪ **Industrial Design**

Assoc. Prof. Plamen Manev,
pmanev@uni-ruse.bg, 082 888 485

▪ **Didactics, Pedagogy and Methodology of training in...; (16.10., Silistra)**

Assoc. Prof. Diana Zhelezova-Mindizova, PhD,
dmindizova@uni-ruse.bg

▪ **Linguistics; Theory of Literature and History; Philosophy; (16.10., Silistra)**

Assoc. Prof. Todorka Georgieva, DcS,
tgeorgieva@uni-ruse.bg

▪ **E-Learning; Technical Sciences; (16.10., Silistra)**

Assoc. Prof. Evgenia Goranova, PhD,
egoranova@uni-ruse.bg

▪ **Chemical Technologies (05-06.11., Razgrad)**

▪ **Biotechnologies and Food Technologies (05-06.11., Razgrad)**

Assoc. Prof. Tsvetan Dimitrov, PhD,
conf_rz@abv.bg, 0887 631 645

▪ **Mechanical Engineering and Machine-building Technologies**

Prof. Ivelin Ivanov, PhD
ivivanov@uni-ruse.bg, +359 82 888 472

▪ **Electrical Engineering, Electronics and Automation**

Assoc. Prof. Boris Evstatiev, PhD,
bevstatiev@uni-ruse.bg, 082 888 371

▪ **Communication and Computer Systems**

Assoc. Prof. Galina Ivanova, PhD, giivanova@uni-ruse.bg, 082 888 855
Pr. Assist. Ivanka Tsvetkova, PhD, itsvetkova@uni-ruse.bg, 082 888 836

▪ **Transport and Machine Science**

Assoc. Prof. Simeon Iliev, PhD,
spi@uni-ruse.bg, 082 888 331

▪ **Sustainable and intelligent transport systems, technologies and logistics**

Prof. Velizara Pencheva, PhD,
vpencheva@uni-ruse.bg, 082 888 558, 082 888 608

▪ Economics and Management

Pr. Assist. Miroslava Boneva, PhD, mboneva@uni-ruse.bg, 082/888 776
Pr. Assist. Elizar Stanev, PhD, eastanev@uni-ruse.bg, 082/888 557

▪ European studies and International Security

Prof. Vladimir Chukov, DSc, vlachu1@gmail.com, +359 82 825 667
Assoc. Prof. Mimi Kornazheva, PhD, mkornazheva@uni-ruse.bg, +359 82 825 667

▪ Linguoculturology, Intercultural and Political Communication

Prof. Juliana Popova, PhD, jppopova@uni-ruse.bg, +359 82 888 255
Pr. Assist. Hristina Sokolova, PhD, hsokolova@uni-ruse.bg, +359878537015

▪ Mathematics, Informatics and Physics

Prof. Tsvetomir Vasilev, PhD,
tvasilev@uni-ruse.bg, 082/888 475

▪ Education – Research and Innovations

Assoc. Prof. Emilia Velikova, PhD,
evelikova@uni-ruse.bg, 0885 635 874

▪ Pedagogy and Psychology

Assoc. Prof. Bagryana Ilieva, PhD,
bilieva@uni-ruse.bg 082 888 219

▪ History, Ethnology and Folklore

Pr. Assist. Reneta Zlateva, PhD
rzlateva@uni-ruse.bg, 082/888 752

▪ Linguistics, Literature and Art Science

Assoc. Prof. Velislava Doneva, PhD,
doneva_v@uni-ruse.bg, 0886 060 299

▪ Health Promotion

Assoc. Prof. Stefka Mindova, PhD,
smindova@uni-ruse.bg, 0882 895 149

▪ Social Work

Assoc. Prof. Silvia Krushkova, PhD, skrushkova@uni-ruse.bg, 0882517554
Pr. Assist. Ana Popova, PhD, apopova@uni-ruse.bg, 0889 874219

▪ Medical and Clinical Diagnostic Activities

Prof. Nikola Sabev, DSc,
nsabev@uni-ruse.bg, 0882 123 305

▪ Health Care

Pr. Assist. Tsveta Hristova, PhD,
tshristova@uni-ruse.bg, 0878 389 793

▪ Law

Assoc. Prof. Elitsa Kumanova, PhD,
ekumanova@uni-ruse.bg, 0884 980 050

▪ National Security

Assoc. Prof. Milen Ivanov, DSc,
poligon@abv.bg, 082 888 736

▪ Quality of Higher Education

Prof. Ivanichka Serbezova, PhD, iserbezova@uni-ruse.bg
Daniela Todorova, dtodorova@uni-ruse.bg, 082 888 378

• REVIEWERS

- Prof. Velizara Pencheva, PhD
- Prof. Juliana Popova, PhD
- Assoc. Prof. Valentina Voynohovska, DSc
- Assoc. Prof. Galina Ivanova, PhD
- Assoc. Prof. Rumen Rusev, PhD
- Assoc. Prof. Svetlozar Tsankov, PhD
- Assoc. Prof. Radoslav Kyuchukov, PhD

QUALITY IN HIGHER EDUCATION

Content

1. THURS- ONLINE-1-QHE-01	11
Challenges for Universities in the Conditions of Online Training in Covid Pandemic	
<i>Tanya Grozeva</i>	
2. THURS- ONLINE-1-QHE-02	16
Participation of the universities in International rating system: an evitable need or challenge	
<i>Hristo Beloev, Desislava Atanasova, Ivanichka Serbezova</i>	
3. THURS- ONLINE-1-QHE-03	22
The Role of Interinstitutional Cooperation for the Quality of STEM-Oriented Higher Education	
<i>Desislava Atanasova, Daniela Todorova</i>	
4. THURS- ONLINE-1-QHE-04	27
Relationship between “Soft Skills” and the Role of the Career Development Center for Successful Application of Students for Work	
<i>Kaloyan Stoyanov, Petya Angelova</i>	
5. THURS- ONLINE-1-QHE-05	32
Services and Policies for the Users of Ruse University Computer Network	
<i>Miroslav Mihaylov</i>	
6. THURS- ONLINE-1-QHE-06	37
Concept for a Unified Electronic Information System for Processing and Storing the Exchange of Information Resources at the University Level	
<i>Orlin Petrov</i>	
7. THURS- ONLINE-1-QHE-07	39
A Model for Building and Fostering Key Competences in Academic English to Incorporate 21st Century Skills	
<i>Elitsa Georgieva, Diana Stefanova</i>	
8. THURS- ONLINE-1-QHE-08	45
The Development of Communication Skills - a Pledge for the Successful Career of the Students in "Social Activities"	
<i>Nataliya Venelinova</i>	
9. THURS- ONLINE-1-QHE-09	49
Online Teaching in Higher Education in the Field of Industrial Design	
<i>Teodor Kyuchukov</i>	
10. THURS- ONLINE-1-QHE-10:	53
Comparative Analysis of Some Aspects of the European and Bulgarian Program Frameworks for STEM Education	
<i>Daniela Todorova</i>	
11. THURS- ONLINE-1-QHE-11	59
Acsea2 Principles of PM Knowledge and Skills Acquisition as a Driver for the Quality of Education	
<i>Nataliya Venelinova</i>	