

Volume 58 of PROCEEDINGS includes the papers presented at the scientific conference RU & SU'19, organized and conducted by University of Ruse "Angel Kanchev" and the Union of Scientists - Ruse. Series 9 contains papers reported in the Quality Assurance in Higher Education section.

Book	Code	Faculty and Section
Agrarian and Industrial Faculty		
1.1	FRI-8.121-1-AMT&ASVM	Agricultural Machinery and Technologies and Agrarian Science and Veterinary Medicine
	FRI-1.202-1-MR	Maintenance and Reliability
	FRI-9.3-1-THPE	Thermal, Hydro- and Pneumatic Equipment
1.2	FRI-9.2-1-EC	Ecology and Conservation
	FRI-16.203-1-ID	Industrial Design
Faculty of Mechanical and Manufacturing Engineering		
2	FRI-1.417-1-MEMBT	Mechanical Engineering and Machine-Building Technologies
Faculty of Electrical Engineering Electronics and Automation		
3.1	FRI-10.326-1-EEEA	Electrical Engineering, Electronics and Automation
3.2	FRI-2G.302-1-CSN	Communication Systems & Networks
3.3	FRI-2G.303-1-CST	Computer Systems & Technologies
Faculty of Transport		
4	FRI-2.203-1-TMS FRI-2.203-2-TMS	Transport and Machine Science
Faculty of Business and Management		
5.1	FRI-2G.404-1-EM FRI-2G.407-1-EM	Economics and Management
5.2	FRI-2G.509-1-LCSIPC	European Studies and International Relations: Linguocultural, Intercultural and Political Communication
Faculty of Natural Sciences and Education		
6.1	FRI-1.405B-1-MIP	Mathematics, Informatics and Physics
6.2	FRI-2G.405-1-PP	Pedagogy and Psychology
6.3	FRI-2G.307-1-LL	Linguistics and Literature
	FRI-2.205-1-AS	Art Studies
6.4	FRI-2G.305-1-ERI	Education - Research and Innovations
Faculty of Law		
7	FRI-2B.313-1-L FRI-2B.312-1-L FRI-2.101-1-L	Law
Faculty of Public Health and Health Care		
8.1	FRI-K.201-1-HP	Health Promotion
8.2	FRI-2.113-1-SW	Social Work
8.3	FRI-2G.104-1-HC	Health care
Quality of Education Directorate		
9	FRI-K1-1-QHE	Quality of Higher Education

Razgrad Branch of the University of Ruse		
10.1	FRI-CR-1-CT(R)	Chemical Technologies
10.2	FRI-LCR-1-BFT(R)	Biotechnologies and Food Technologies
Silistra Branch of the University of Ruse		
11	FRI-216-2 SSH(S) FRI-227-2 PPTM(S) FRI-110-2-TS(S)	Social Sciences and Humanities Pedagogy, Psychology, Teaching Methodology Technical Sciences
12		

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. Velizara Pencheva, PhD,**
University of Ruse, Bulgaria
- **Prof. Leon Rothkrantz,**
Delft University of Technology, Netherlands
- **Assoc. Prof. Antonio Jose Mendes,**
University of Coimbra, Portugal
- **Prof. Ville Leppanen,**
University of Turkey, Finland
- **Assoc. Prof. Marco Porta,**
University of Pavia, Italy
- **Prof. Douglas Harms,**
DePauw University, USA
- **Prof. Ismo Hakala, PhD,**
University of Jyväskylä, Finland
- **Prof. Dr. Artur Jutman,**
Tallinn University of Technology, Estonia
- **Prof. RNDr. Vladimir Tvarozek, PhD,**
Slovak University of Technology in Bratislava, Bratislava, Slovakia
- **Doc. Ing. Zuzana Palkova, PhD,**
Slovak University of Agriculture in Nitra, Nitra, Slovakia
- **Andrzej Tutaj, PhD,**
AGH University of Science and Technology, Krakow, Poland
- **Assoc. Prof. Behiç Tekin, PhD,**
EGE University, Izmir, Turkey,
- **Prof. Valentin Nedeff Dr. eng. Dr.h.c.,**
“Vasile Alecsandri” University of Bacău, Romania
- **Dr. Cătălin Popa,**
“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, Serbi
- **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
- **Assoc. Prof. Dr. Mehmet Şahin,**
Necmettin Erbakan University, Ahmet Keleşoğlu Faculty of Education, Konya, Turkey
- **Assoc. Prof. Erika Gyöngyösi Wiersum, PhD,**
Eszterházy Károly University, Comenius Campus in Sáro spatak, Institute of Real Sciences, Sarospatak, Hungary
- **Anna Klimentova, PhD,**
Constantine the Philosopher University in Nitra, Slovakia
- **Prof. Igor Kevorkovich Danilov, DSc,**
Yuri Gagarin State Technical University of Saratov, Russia

- **Prof. Aleksander Valentinov Sladkowski, DSc,**
Silesian University of Technology, Poland
- **Prof. Pether Shulte, PhD,**
Institute for European Affairs (INEA), Dusseldorf, Germany
- **Prof. Aslitdin Nizamov, DSc., PhD,**
Bukhara Engineering-Technological Institute, Bukhara, Uzbekistan
- **Prof. Marina Sheresheva, PhD,**
Lomonosov Moscow State University, Russia
- **Prof. Erik Dahlquist, PhD,**
Mälardalen University, Sweden
- **Prof. Erik Lindhult, PhD,**
Mälardalen University, Sweden
- **Prof. Annika Kunnasvirta, PhD,**
Turku University of Applied Sciences, Finland
- **Prof. Walter Leal, Dr. (mult.) Dr.h.c. (mult.),**
Hamburg University of Applied Sciences, Germany
- **Prof. Dr. Gerhard Fiolka,**
University of Fribourg, Switzerland
- **Prof. Haluk Kabaalioglu, PhD,**
Yeditepe University, Turkey
- **Prof. Silva Alves, PhD,**
University of Lisbon, Portugal
- **Hanneke van Bruggen,**
Appeldoorn, The Netherlands
- **Nino Žganec,**
President of European Association of Schools of Social Work, Prof. at the Department of Social Work,
University of Zagreb, Croatia
- **Prof. Violeta Jotova, MD, DSc,**
Pediatric department in University Hospital „St. Marina“ - Varna, Bulgaria
- **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 Hydroaerodynamics centre
- BAS, Bulgaria
- **Assoc. Prof. Mark Shamtsyan, PhD,**
Technical University, Saint Petersburg, Russia
- **Assoc. Prof. Oleksii Gubenia, PhD,**
National University of Food Technologies, Kiev, Ukraine
- **Assoc. Prof. Olexandr Zaichuk, DSc,**
Ukrainian State University of Chemical Technology, Dnepropetrovsk, Ukraine
- **Prof. Eugene Stefanski, DSc,**
Samara University, Russia
- **Doc. Dr. Tatiana Stokovskaya,**
International University of Nature “Dubna”, Dubna, Russia
- **Prof. DSc. Petar Sotirow,**
Maria Curie-Skłodowska University of Lublin, Poland
- **Prof. Papken Eghisyan Hovsepian,**
Sheffield Hallam University, Sheffield, UK
- **Assoc. Prof. Krassimir Dochev Dochev, PhD,**
University of Portsmouth School of Engineering, UK
- **Mariana Yordanova Docheva, PhD,**
University of Portsmouth School of Engineering, UK

- **Assoc. Prof. Ivan Antonov Lukanov, 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. Dr. Gabriel Negreanu,**
University Politehnica of Bucharest, Romania

ORGANISING COMMITTEE

- ♦ **ORGANIZED BY: University of Ruse (UR) and Union of Scientists (US) - Ruse**

- ♦ **ORGANISING COMMITTEE:**

- **Chairpersons:**

COR. MEM Prof. Hristo Beloev, DTSc - 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 (AMT)**
- **Agrarian Sciences and Veterinary Medicine (ASVM)**
- **Maintenance and Reliability (MR)**
- **Thermal, Hydro- and Pneumatic Equipment (THPE)**
- **Ecology and Conservation (EC)**
- **Industrial Design (ID)**
Assoc. Prof. Kaloyan Stoyanov, PhD
kes@uni-ruse.bg, 082/888 542
- **Mechanical Engineering and Machine-building Technologies (MEMBT)**
Assoc. prof. Velina Bozduganova, PhD,
velina@uni-ruse.bg, 0887119914
- **Electrical Engineering, Electronics and Automation (EEEA)**
Assoc. Prof. Kiril Sirakov, PhD,
csirakov@uni-ruse.bg, 082/888 364
- **Computer Systems and Technologies (CST)**
Assoc. Prof. Milko Marinov, PhD,
mmarinov@ecs.uni-ruse.bg, 082/888 356
- **Communication Systems and Networks (CSN)**
Pr. Assist. Elena Ivanova, PhD,
epivanova@uni-ruse.bg, 082/888 831
- **Transport and Machine Science (TMS)**
Assoc. Prof. Simeon Iliev, PhD,
spi@uni-ruse.bg, 082/888 331
- **Economics and Management (EM)**
Assoc. Prof. Pavel Vitliemov, PhD,
pvitliemov@uni-ruse.bg, 082/888 495
- **Linguistic and Cultural Science, Intercultural and Political Communication (LCSIPC)**
Prof. Juliana Popova, PhD,
jppopova@uni-ruse.bg, 0887 899 654
Pr. Assist. Hristina Sokolova, PhD,
hsokolova@uni-ruse.bg
- **Mathematics, Informatics and Physics (MIP)**
Pr. Assist. Magdalena Andreeva, PhD,
magie@ami.uni-ruse.bg, 082/888 470

- **Education - Research and Innovations (ERI)**
Assoc. Prof. Emilia Velikova, PhD,
evelikova@uni-ruse.bg, 0885 635 874
- **Pedagogy and Psychology (PP)**
Assoc. prof. Bagryana Ilieva, PhD,
bilieva@uni-ruse.bg 082 888 219
- **Linguistics, Literature and Art Science (LLAS)**
Pr. Assist. Velislava Doneva, PhD,
doneva_v@uni-ruse.bg, 0886 060 299
- **Health Prevention and Social Work (HPSW)**
- **Health Promotion (HP)**
Assoc. Prof. Stefka Mindova, PhD
smindova@uni-ruse.bg, 0882 895 149
- **Social Work (SW)**
Assoc. Prof. Sasho Nunev, DSc,
snunev@uni-ruse.bg, 0886 802466
- **Health Care (HC)**
Assoc. Prof. Despina Georgieva, PhD,
dpgeorgieva@uni-ruse.bg, 0889 789 100
- **Law (L)**
Assoc. Prof. Elitsa Kumanova, PhD,
ekumanova@uni-ruse.bg, 082/ 888 434
- **Quality of Higher Education (QHE)**
Assoc. Prof. Emil Trifonov, PhD, e-trifonov@abv.bg,
Daniela Todorova,
dtodorova@uni-ruse.bg, 082 888 378
- **Social Sciences and Humanities (SSH) (18.10., Silistra)**
Assoc. Prof. Todorka Georgieva, DfS,
tgeorgieva@uni-ruse.bg
- **Pedagogy, Psychology, Teaching Methodology (PPTM) (18.10., Silistra)**
Assoc. Prof. Galina Lecheva, PhD,
glecheva@uni-ruse.bg, +359 88 540 0647
- **Technical Sciences (TS) (18.10., Silistra)**
Pr. Assist. Prof. Milen Sapundzhiev, PhD,
msapundzhiev@uni-ruse.bg
- **Chemical Technologies (CT) (01-02.11., Razgrad)**
Assoc. Prof. Tsvetan Dimitrov, PhD,
conf_rz@abv.bg, 0887 631 645
- **Biotechnologies and Food Technologies (BFT) (01-02.11., Razgrad)**
Assoc. Prof. Nastya Ivanova, PhD,
nivanova@uni-ruse.bg, 0899 450 177

◆ **REVIEWERS:**

- Prof. Velizara Ivanova Pencheva, PhD
- Prof. Juliana Pencheva Popova, PhD
- Prof. Plamen Ivanov Daskalov, PhD
- Prof. Plamen Ganchev Kangalov, PhD
- Prof. Diana Antonova Antonova, PhD
- Assoc. Prof. Tanya Petkova Grozeva, PhD
- Assoc. Prof. Emil Georgiev Trifonov, PhD
- Assoc. Prof. Alexander Petkov Petkov, PhD
- Assoc. Prof. Milena Peneva Kirova, PhD

QUALITY ASSURANCE IN HIGHER EDUCATION

Content

1. FRI-K1-1-QHE-01	11
Higher Education Socialization in Europe and Bulgaria. On Some Aspects of The Social Dimension of Higher Education	
<i>Maria Fartunova</i>	
2. FRI-K1-1-QHE-02	18
Project Development Guidelines for Improving the Students Employability via Efficient Career Counseling	
<i>Nikolay Naydenov, Ivan Evstatiev, Vanya Nikolaeva</i>	
3. FRI-K1-1-QHE-03	24
Vision for the Classroom of the Future (Future Learning Space)	
<i>Angel Smrikarov, Galina Ivanova, Yuksel Aliev</i>	
4. FRI-K1-1-QHE-04	26
Improving the Quality of Education by M-Learning	
<i>Tzvetelin Gueorguiev</i>	
5. FRI-K1-1-QHE-05	32
Identity and its Projection on Digital World	
<i>Miglena Pencheva</i>	
6. FRI-K1-1-QHE-06	36
The National Ecosystem and the Place of the University of Ruse in the Ecosystem of Ruse and the Region	
<i>Tanya Grozeva</i>	
7. FRI-K1-1-QHE-07	42
Challenges to Ensuring Sustainability of a New Study Programme in a Competitive Context	
<i>Liliya Todorova</i>	
8. FRI-K1-1-QHE-08	48
Ensuring the Quality of Higher Education by Creating Transparency in Academic Staff Development Procedures	
<i>Orlin Petrov</i>	
9. FRI-K1-1-QHE-09	56
The Role and Contribution of the University Library to the Implementation of the Communication Strategy of the University of Ruse, Bulgaria and University's Image	
<i>Juliana Popova, Elisaveta Nedeva</i>	
10. FRI-K1-1-QHE-10	63
Research and Evaluation of Lighting Systems and Lighting Design	
<i>Teodor Kyuchukov</i>	
11. FRI-K1-1-QHE-11	69
Digital Models of Technological Entrepreneurship. A Methodological Guide to Starting a Business in Digital Technology Entrepreneurship	
<i>Irina Kostadinova, Diana Antonova, Svilen Kunev</i>	
12. FRI-K1-1-QHE-12	77
Concept for Database Management System for Tracing of Graduates' Professional Realization	

Hristo Beloev, Daniela Yordanova, Ivan Evstatiev, Miroslav Mihailov

13. FRI-K1-1-QHE-13

79

Methodology for Examination of Stakeholders' Opinion Related with University Graduates' Professional Realization

Daniela Yordanova, Milena Kirova