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World Conference
on Information Technology

12th
WORLD CONFERENCE on INFORMATION
TECHNOLOGY

Turan University
Almaty, Kazakhstan
06-07 October 202

Abstracts
Books

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KEYNOTES



Dr. Natalya Khokholova

Kazakh National and Pedagogical University, Almaty,
Kazakhstan

Keynote Title: “Implementation of sustainable development goals in the training of science teacher”

Abstract: Coined by the Russian formalist Mikhail Bakhtin, the term chronotope in 1937 helps the reader scholars to understand the context of the time and socio-economic conditions in which the given text was conceived. Chronotope is an interaction between time and space that provides the full tempo and progression of the provided story. Thus, consideration of this semiotic field generated by the amalgamation of time and space aids readers in understanding the development of the narrative and appreciating its emotion-fused rhythmic effects. The same approach of acknowledging time and space to recognize the issues in Education is advisable to eliminate or deal with them. There are three main issues in the World right now: Crisis in Education, CoVid-19, and Climate Change. Although there is a palpable and overwhelming crisis in Education, it is hard to define this tendency’s specific reasons and chronological line. Contemporary Issues in Education began earlier than the pandemic of CoVid-19 that caused distancing and isolation and made the classroom teaching/learning experience redundant. And perhaps, it is contemporary to Climate Change, an outcome of the inhumane and exploitative methods of men harvesting and using the planet’s natural resources to their dangerous short-term gain. However, the recent studies reveal that the issues in or with Education began with the occurrence of the new language: a language of coding, a digital linguistic unit, the one that can create and augment the alternative and virtual reality, and is making the classical languages subsidiary. This post-millennia phenomenon affected the learners’ ability to keep their focus long enough to tolerate the entire standard fifty- minutes lecture or to finish reading Leo Tolstoy’s masterpiece War and Peace (1869). Therefore, the solution is to come to terms with accepting the new norm, the illusory digital dominance, and by interconnecting it with the traditional methods of searching for the ultimate truth.

Bio: Dr. Natalya Khokholova holds a position of Associate Professor at Yeosu Technical Institute in Tashkent, at the Department of Humanities and also performs her duties as an examination assessment specialist for the Quality Assurance Board. She teaches a variety of courses from Teaching methods of ESL to the Introduction to Economics for the Art and Design

department. She received her Ph.D. degree in 2015, from University of Illinois, Urbana-Champaign from the Department of Slavic Languages and Literature.

She is the author of articles on financial adventures of characters of the 19th century Russian novels, and the matters of gender in Soviet film, in Sergei Eisenstein's aesthetics.



Prof. Dr. Jesus Garcia Laborda

Dean of the College of Education
Universidad de Alcala

Keynote Title: "Changes and trends in Teacher Education after the COVID pandemic"

Abstract: This presentation deals with the current challenges that are imposed in the training of teachers in the World. Based on experiences in European teacher training seminars, this paper will review some of the totally necessary aspects such as internships, formative and summative assessment, transnational policies, and significant changes in training in the upcoming situation after the COVID pandemic.

Bio: Jesús García Laborda has a Master's in ESL (University of Georgia), a Master's in Comparative Language and Literature (University of Wisconsin), a Ph.D. in English Philology (Complutense University of Madrid) and a Ph. European in Didactics (Complutense University of Madrid). He has been an assistant professor at the University of Georgia and the University of Wisconsin. He has also been a Visiting Scholar at Penn State University and the University of Antwerp and has taught courses in Colombia, Lithuania, Cyprus, Turkey, and Brazil. He has been principal investigator in four R&D projects and participated in seven more. He has also directed five teaching innovation projects at the University of Alcalá and the Polytechnic University of Valencia. He was director of the Department of Modern Philology at the University of Alcalá (2016-19) and since 2019 he is Dean of the Faculty of Education at the same university. He is also Editor-in-Chief of the journals Global Journal of Foreign Language Teaching, Internal Journal of Learning & Teaching and co-editor of Computer Assisted Language Learning Electronic Journal (SCOPUS), as well as a member of the scientific committee or evaluator of another 15 impact journals (JCR/SCOPUS/ESCI). He is a specialist in language teaching, assessment, educational technology and bilingual education. He has published more than 85 articles indexed in SJR / SCOPUS / WOS <https://www.uah.es/es/estudios/profesor/Jesus-Garcia-Laborda/>



Dr. Kulyash Kaimuldinova

Doctor of Geographical Sciences, Professor
Director of the Institute of Natural Sciences and Geography
Abai Kazakh National Pedagogical University, Kazakhstan

Keynote Title: “Implementation of sustainable development goals in the training of science teachers”

Abstract: “Will be announced”

Bio: Date of birth - July 25, 1966

Professional experience

- ❑ **Assistant Lecturer** Physical Geography dept. Abai Kazakh Pedagogical Institute, Almaty. Sep 1988 – September 1997
- ❑ **Senior Lecturer** Regional Geography dept. Abai Kazakh National Pedagogical University, Almaty. September 1997 – September 2002
- ❑ **Associate Professor** and Senior researcher Regional Geography dept. Abai Kazakh National Pedagogical University, Almaty. September 2002 – September 2006
- ❑ **Head of the Department of Regional Geography and Tourism.** Abai Kazakh National Pedagogical University, Almaty. September 2006 – March 2016
- ❑ **Director of the Institute of Natural Sciences and Geography** Abai Kazakh National Pedagogical University, Almaty. March 2016 - the current time

Education

Doctor of Geographical Sciences, Physical geography **June 2010**
Institute of Geography of the Ministry of Education and Science of Kazakhstan, Almaty, Kazakhstan

Candidate of Geographical Sciences (PhD), Nature protection **December 1998**
Al-Farabi Kazakh National University, Almaty, Kazakhstan

Higher education **1983-1988**
Abai Kazakh Pedagogical Institute, Almaty, Kazakhstan



Prof. Dr. Huseyin Uzunboylu

Professor of Educational Technology

Member, Higher Education Planning, Supervision, Accreditation and Coordination Board, Nicosia, **CYPRUS**

President, Cyprus Educational Sciences Association
(Members of EERA & WERA)

Keynote Title: "Internationalization in Higher Education"

Abstract: "Will be announced"

Bio: Prof. Dr. Huseyin Uzunboylu he had completed high school at 20 Temmuz High School in Cyprus. In 1995, his higher education career began by winning the Anatolia University, Department of Communication and Planning on Education in Turkey. And after he had completed his preparatory education in one year and he has completed his undergraduate degree in 1991. Prof. Dr. Huseyin Uzunboylu has started his graduate education in Ankara University, the Department of Curriculum and Instruction in 1993 and graduated in 1995. He was accepted into the doctoral program in the same university, Educational Technology Department of Educational Sciences in 1995 and he has completed his PhD degree in 2002. In 2003, he became an Assistant Professor in the Department of Computer Education and Instructional Technology at the Near East University, he was an Associate Professor in 2005 in Ataturk Faculty of Education, and in December 2010, with respect to the members of juries he was appointed as a professor. After doctoral studies he started working at the Near East University, Faculty of Arts and Sciences Department of Psychology in 1996 and he taught courses that educational sciences and research methods. He coordinated of 'Pedagogy Certificate Program' which was conducted by the University from 1997 to 1999, and since he conducted Chairman of the Department of Computer Education and Instructional Technology from 2004 to 2013. From 2013 to 2018, he serves as a Dean of Faculty of Education.

Since 23 October 2019, he is appointed to member of Higher Education Planning, Supervision, Accreditation and Coordination Board by President of North Cyprus (TRNC). Prof. Dr. Uzunboylu has five academic books published by Turkey's respected publishing firms; he has supervised five doctoral and 63 master's theses up to now. He has 103 high-level articles that searching by Web of Science (SSCI, SCI, SCI-Expanded, ESCI); He has 27 searching article and published papers are presented on the international or national conferences. He is editor-in-chief of the Cypriot Journal of Educational Sciences; also, Prof. Dr. Uzunboylu serves as the boards of many journals referee within the searching in the Social Sciences Citation Index. Since 2004, he is taking place on the list as founders, and he is president of the Cyprus Educational Sciences Association (KEB-DER). In 2010, Prof. Dr. Uzunboylu has a major role

representing KEB-DER and put effort on being a full member of European Educational Research Association.



Prof. Dr. Ablet Kamalov
Turan University, Kazakhstan

Keynote Title: “Will be announced”

Abstract: “Will be announced”



Prof. Dr. Serik Akhanov
Chairman of the Board of the Association of Financiers of
Kazakhstan, Turan University, Kazakhstan

Keynote Title: “Will be announced”

Abstract: “Will be announced”



Prof. Dr. Boris Japarov
Member of European Academy of Science and Arts, Turan
University, Kazakhstan

Keynote Title: “Will be announced”

Abstract: “Will be announced”

The rise of digital higher education during the pandemic

Liudmila Kompaneeva, Volgograd Institute of Management

Evgenia Gulyaeva, Volgograd Institute of Management

Yulia Semikina, Volgograd Institute of Management

Abstract

The relevance of the article is determined by the need to analyze the changes that occurred in higher education institutions in the area of the use of digital technology during the pandemic. Within the framework of this research, we conducted a content-analysis of the websites and curricula of Volgograd higher education institutions and a questionnaire survey of students in order to identify the advantages and disadvantages of the use of digital technology and e-learning in the modern context. Digitalization came into the process of the management of higher education institutions long ago, however, rapid changes in e-learning have occurred in the last two years, which was confirmed in the results of our study. 70-80% of students' independent work was transferred to electronic form, the classroom workload is replaced with online lessons, the teaching methods change: the use of mixed learning as well as blended and flipped learning increases. The results of the study make us think about the excessive enthusiasm for e-learning, possibilities and risks of its use. Digital education brings significant changes in the role of professors and students in the process of learning, which requires appropriate adaptation and causes changes in the management of the organizations and the introduction of new actors in the educational process. At the institutional level, our conclusions indicate the need to support the academic staff in the area of methodological and technical assistance since the process of digital transformation of higher education institutions is irreversible and its intensiveness continues growing.

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Internet as a tool for countering terrorist crimes

Irina Kulagina, Volgograd Institute of Management

Dmitry Semikin, Volgograd Institute of Management

Evgenia Gulyaeva, Volgograd Institute of Management

Julia Semikina, Volgograd Institute of Management

Abstract

The article gives a view on some aspects revealing how terroristic activities appear in the Internet and the main ways to deal with the threats. The research results in presenting Internet portals for general use to discuss problems connected with terroristic activity in the Russian Federation. The authors reveal step-by-step an idea that in the Russian Federation there is a positive experience of countering terrorist crimes on the Internet. Internet users living on the territory of Russia, thanks to various portals and websites, are familiar with the struggle of the state against terrorist organizations and their ideology. The authors propose the ways to solve the problems arising in front of the specialists in the sphere of information confrontation and point out the necessity to find the ways to intensify and accelerate the exchange of operational information on the use of information technologies by terrorist groups and to stop the recruitment of terrorists.

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Efficient methods for detection and prevention of ARP spoofing attacks

Kymbat Zhumagulkyzy Seilkhanova, L.N. Gumilyov Eurasian National University
Sabyrzhan Kubeisinovich Atanov, L.N. Gumilyov Eurasian National University

Abstract

The ARP protocol is widely used on the internet to map IP addresses to their associated MAC addresses. It is vulnerable to an attack known as an "ARP spoofing attack" since it lacks authentication. This spoofing may also result in a Man-in-the-Middle attack, a denial-of-service attack, etc. This document suggests a few techniques to identify and stop ARP spoofing.

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CREATION OF A COMPUTER LAUNCH MODEL FOR VERTICAL LAUNCH ROCKETS

Kamila Kariyeva, L.N. Gumilyov Eurasian National University

Khuralay Moldamurat, L.N. Gumilyov Eurasian National University

Dinara Kalmanova, L.N. Gumilyov Eurasian National University

Galymzhan Anuar, L.N. Gumilyov Eurasian National University

Abstract

The article considered the movement of the rocket in the starting part of the trajectory. In the course of the work, motion parameters were studied and a calculation program was created. The generated program is used to ensure the passage of the aircraft's trajectory from initial violations and deviations, or to ensure the programmatic rotation (deviation) of the aircraft in the trajectory during Vertical Takeoff.

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Formation Control of Robotic Swarm

Abzal Kyzyrkanov, Astana IT university

Sabyrzhan Atanov, L.N. Gumilyov Eurasian National University

Shadi Aljawarneh, L.N. Gumilyov Eurasian National University

Nazira Tursynova, L.N. Gumilyov Eurasian National University

Abstract

Robotics is an extremely evolving area of modern industrial science. It deals with the development of automatic devices and their integration into human life, greatly facilitating both the industrial sphere of human activity and daily life. At the same time, it became clear that a single robot, no matter how intelligent it may be, can only be used to solve some particular tasks, or perform reasonably simple operations, since it, as a rule, has relatively little ability to complete the task. An obvious solution to the above problems is to use several robots, that is, groups of robots, to solve complex problems. This approach is commonly referred to as group robotics. The main challenge lies in finding efficient algorithms for coordinating autonomous mobile robots to achieve high-quality overall performance. Recently, most research has focused on swarm robotics - the simplest type of group robotics, which focuses on groups of homogeneous robots designed to solve a single task. And, if we are talking about a huge number of robots, the problems of interaction between these robots are, anyway, reduced to the problems of interaction between homogeneous robots, since creating a large number of different robots to solve a single problem is beyond practical interest. One of the main problems in swarm robotics is the decision-making algorithm in an uncertain environment. Here also, several problems such as avoiding collision with each other or with an obstacle, and moving towards the goal must be solved simultaneously. One of the most common methods for solving such problems is to move while maintaining a certain geometrical structure or, in short, formation control. Formation control is a control technique aimed at achieving certain shapes by a group of robots. Here, robots can move without collision while forming a certain block to improve the performance of the whole system. This paper provides an algorithm for movement with a certain geometric structure of a group of autonomous mobile robots. Also, will be presented simulation results of the movement of a swarm.

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