INTERNATIONAL CONFERENCE

«ENGINEERING MANAGEMENT OF COMMUNICATION AND TECHNOLOGY» (EMCTECH)

IEEE Conference Record #55220

Vienna, Austria
October 20 – 22, 2022

FINAL INFORMATION AND STATISTICS

"Connecting Development of Technology, Engineering Management and Personal Skills"

International conference

"ENGINEERING MANAGEMENT OF COMMUNICATION AND TECHNOLOGY" (EMCTECH) was held on October 20-22, 2022 in Vienna (Austria)

On EMCTECH-2022 was invited researchers, educators, managers, and students, which research activity, case studies or best practices, shedding light on the theory or practice of engineering, technology, innovation management, or development of personal skills, business and entrepreneurship.

CONFERENCE ORGANIZERS:
- INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE);
- INSTITUTE OF RADIO AND INFORMATION SYSTEMS (IRIS ASSOCIATION, VIENNA, AUSTRIA)
- RUSSIA SECTION TEM/GRS/ITSS JOINT CHAPTER

CONFERENCE EMCTECH-2022 WILL PRODUCE A PUBLICATION. All accepted and presented Papers following the conference will be submitted for inclusion into IEEE Xplore and will be submitted also for indexing in Scopus and Web of Science data bases.

FIELD OF INTEREST ON EMCTECH-2022:
- Technology advancements in IoT devices, artificial Intelligence, Broadcasting, wire and optical communication;
- New opportunities using technology in BioMedical, Farming, Transportation, and Cyber Physical Systems;
- Digital Transformation and Data Risk Management in ICT/Telecommunication, smart cities, public policy;
- Engineering technology leading to social, political and economical change.

On EMCTECH-2022 IEEE in cooperation with Institute of Radio and Information Systems (IRIS) provide various opportunities for publishing results of research, based on international scientific and technical cooperation of researchers, PhD students and students in the field of radio and information systems.

EMCTECH TOTAL STATISTICS

IEEE Conference Record # 55220

Year	Applications	Accepted papers	% of accepted papers	IEEE Members - Conference Participants	Conference participants	Conference authors	Organizations	Cities	Countires/ Continents
2020	95	57	60	10	201	139	38	17	12/5
2021	46	28	60	10	80	65	31	25	22/5
2022	95	46	48	10	140	122	44	29	11/3

46 reports presented at the conference in 8 sections:

The papers which are discussed at the conference can be divided into the following chapters:

CHAPTER 1. TECHNOLOGY ADVANCEMENTS IN IOT DEVICES & ARTIFICIAL INTELLIGENCE

CHAPTER 2. TRANSPORT AND COLLECTIVE SYSTEMS: SMART CONTROL TECHNOLOGY IN TRANSPORTATION, BIOMEDICAL, FARMING AND CYBER PHYSICAL SYSTEMS (new opportunities using technology in biomedical, farming, transportation, and cyber physical systems)

CHAPTER 3. BROADCAST TECHNOLOGIES ADVANCEMENTS – RADIO, IP, CELLULAR, ON DEMAND, INTERACTIVE

CHAPTER 4. TECHNOLOGY ADVANCEMENTS IN WIRE AND OPTICAL COMMUNICATION AND CONTROL SYSTEMS

CHAPTER 5. DIGITALIZATION PROCESS AND SECURITY MANAGEMENT IN DIGITAL SOCIETY AND INDUSTRY 4.0

CHAPTER 6. DIGITAL TRANSFORMATION AND DATA RISK MANAGEMENT IN ICT/TELECOMMUNICATION

CHAPTER 7. DEVELOPING PERSONAL SKILLS FOR LEADING INNOVATION INITIATIVES

CHAPTER 8. ENGINEERING TECHNOLOGY LEADING TO SOCIAL, POLITICAL AND ECONOMICAL CHANGE

44 companies took part in the conference:

1. Al Rasheed General Contracting Company, Baghdad, Iraq
2. Azerbaijan Technical University (AzTU), Baku, Azerbaijan
3. Belarusian National Technical University (BNTU), Minsk, The Republic of Belarus
4. Belgorod State Technological University. V.G. Shukhov, Belgorod, Russia
5. China Construction Eighth Engineering Bureau Co. Ltd, Shanghai, People's Republic of China
6. Don State Technical University, Rostov-on-Don, Russia
7. Emperor Alexander I St. Petersburg State Transport University, St. Petersburg, Russia
8. Far Eastern State Transport University, Khabarovsk, Russia
9. Federal University of Campina Grande, Republic of Brasil
10. Financial University under the Government of the Russian Federation Financial University, Moscow, Russia
11. Industrial University of Tyumen, Tyumen, Russia
12. Information Technology Faculty, GCBI, Geneva, Switzerland
13. Institute for Regional Economic Studies of Russian Academy of Sciences, St.Petersburg, Russia
14. Institute of Radio and Information Systems (IRIS), Vienna, Austria
15. International Information Technology University, Almaty, Kazakhstan
16. Kazan Federal University, Naberezhnye Chelny, Russia
17. Moscow Automobile and Road Construction State Technical University (MADI), Moscow, Russia
18. Moscow Aviation University, Moscow, Russia
19. Moscow Polytechnic University (Mospolytech), Moscow, Russia
20. Moscow Technical University of Communications and Informatics, Moscow, Russia
21. NLC A. Baitursynov Kostanay Regional University, Kostanay, Kazakhstan
22. Orel State University named after I.S. Turgenev, Orel, Russia
23. Pacific National University, Khabarovsk, Russia
24. Peter the Great St. Petersburg Polytechnic University, Saint Petersburg, Russia

25. Peoples' Friendship University of Russia (RUDN University), Moscow, Russia
26. Rostov Law Institute (branch), The All-Russian State University of Justice (RLA of the Ministry of Justice of Russia) Rostov Institute (branch) of the ASUJ, Rostov-on-Don, Russia
27. Ryazan State Agrotechnical University named after P.A. Kostychev, Ryazan, Russia
28. Saint Petersburg Mining University, Saint Petersburg, Russia
29. Saint Petersburg State Agrarian University, Saint Petersburg, Russia
30. Saint Petersburg State University of Architecture and Civil Engineering, Saint Petersburg, Russia
31. Shandong Jiaotong University School of Navigation and Shipping, Shandong, China
32. South Ural State Agrarian University, Troitsk, Russia
33. St. Petersburg University of the State Fire Service of EMERCOM of Russia, St. Petersburg, Russia
34. State Agricultural Academy of Velikie Luki, Velikiye Luki, Pskov Region, Russia
35. State University of Management, Moscow, Russia
36. The University "Union - Nikola Tesla", Belgrade, Republic of Serbia
37. Togliatti State University, Togliatti, Russia
38. Tula state University, Tula, Russia
39. Ukhta State Technical University, Ukhta, Russia
40. University of Silesia, Katowice, Poland
41. Ural State University of Railway Transport, Ekaterinburg, Russia
42. V.G. Shukhov State University of Technology in Belgorod, Belgorod, Russia
43. Vladimir State University, Vladimir, Russia
44. Voronezh State Forestry Engineering University, Voronezh, Russia

Participants with reports from 29 cities took part in the conference:

1. *Almaty, Kazakhstan*
2. *Baghdad, Iraq*
3. *Baku, Azerbaijan*
4. *Belgorod, Russia*
5. *Belgrade, Republic of Serbia*
6. *Campina Grande, Republic of Brazil*
7. *Ekaterinburg, Russia*
8. *Geneva, Switzerland*
9. *Katowice, Poland*
10. *Khabarovsk, Russia*
11. *Kostanay, Kazakhstan*
12. *Minsk, The Republic of Belarus*
13. *Moscow, Russia*
14. *Naberezhnye Chelny, Russia*
15. *Orel, Russia*
16. *Rostov-on-Don, Russia*
17. *Ryazan, Russia*
18. *Shandong, China*
19. *Shanghai, People's Republic of China*
20. *St. Petersburg, Russia*
21. *Togliatti, Russia*
22. *Troitsk, Russia*
23. *Tula, Russia*
24. *Tyumen, Russia*
25. *Ukhta, Russia*
26. *Velikiye Luki, Russia*
27. *Vienna, Austria*
28. *Vladimir, Russia*
29. *Voronezh, Russia*

Representatives from 11 countries and 3 continents took part in the conference as speakers and listeners:

(Austria, Azerbaijan, Iraq, Kazakhstan, People's Republic of China, Poland, Republic of Belarus, Republic of Brazil, Republic of Serbia, Russia, Switzerland)

EMCTECH-2022
22 October 2022

Workgroup

"TECHNICAL FACILITIES IMPLEMENTATION METHODOLOGY DETECTING BORROWINGS IN EDUCATIONAL, SCIENTIFIC ORGANIZATIONS, MEDIA AND COMMERCIAL COMPANIES"

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Message from the Guest Editor

Prof. Dr. Oleg Varlamov
Institute of Radio and Information Systems (IRIS),
Vienna, Austria

Telecommunications is progressively being implemented all around the world, connecting not only people with each other, but also many technical devices around us. At the same time, the resources that they can use are fundamentally limited—in both spectral and energy efficiency.

This Special Issue will look at advanced technologies for increasing the efficiency of telecommunication systems and devices globally speaking. This is an increase in spectral efficiency, and energy efficiency, taking into account their possible coexistence. A wide range of applications for these solutions is required in various levels of the development surrounding telecommunications infrastructure, characteristics of objects in terms of mass and speed, and differences in the conditions of radio wave propagation. These solutions will be energetically locally optimal for each specific condition, and that is the purpose of this Special Issue.

We invite all the academic community, researchers, and leaders from the industry, and innovators to contribute with great new ideas for our common and global connected world.

Message from the Editor-in-Chief

Prof. Dr. Vittorio M.N. Passaro
Dipartimento di Ingegneria Elettrica e dell'Informazione
(Department of Electrical and Information Engineering),
Politecnico di Bari, Bari, Italy

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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The next EMCTECH conference – October 16-18, 2023
Vienna, Austria