

# EMCTECH-2022: FINAL INFORMATION AND STATISTICS

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## ABSTRACT

Technology evolution opens novel opportunities to employ the technology in many businesses. The internet opened e-commerce and marketing and that also changed global marketing strategies as well as discovery of new application areas. For utilizing these technologies, new personal skills are necessary which can help build products that enable essentials so we can make advanced solutions for biomedical systems, transportation, education, manufacturing, and many other areas. Annual international conference "Engineering Management of Communication and Technology" (EMCTECH-2022) was held on October 20-22, 2022 in Vienna, Austria. Special topic of conference in 2022 was "Transport Technologies in the Arctic". This article presents final information and statistic following the results of the conference.

**KEYWORDS:** *EMCTECH, Internet of Things (IoT), Transport Technologies, Arctic.*



**Annual international conference "ENGINEERING MANAGEMENT OF COMMUNICATION AND TECHNOLOGY" (EMCTECH-2022) was held on October 20-22, 2022 in Vienna, Austria. This article presents final information and statistics following the results of the conference.**

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. All accepted and presented Papers following the conference will be submitted for inclusion into IEEE Xplore [1-3].

Conference organizers:

- Institute of Electrical and Electronics Engineers (IEEE);
- Institute of Radio and Information Systems (IRIS Association, Vienna, Austria)

Field of interest on EMCTECH-2022:

- Technology advancements in IoT devices;
- Technology advancements in Artificial Intelligence;
- New opportunities using technology in BioMedical, Farming, Transportation, and Cyber Physical Systems;
- Broadcast technologies advancements – radio, IP, cellular, interactive;
- Technology advancements in wire and optical communication and control systems;
- Information process management in digital society and industry 4.0;
- Digital transformation and Data Risk Management in ICT/Telecommunication;

- Enhancing industry, university, and/or government collaboration;
- Developing personal skills for leading innovation initiatives;
- Leading societal change, e.g., smart cities, public policy.

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	Countries/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	45	48	10	140	129	44	29	11/3

45 reports presented at the conference in 8 chapters.

#### CHAPTER 1-2

**Transport and collective systems: smart control technology in transportation, biomedical, farming and cyber physical systems**

**(Special Topic: Transport Technologies in the Arctic)**

**Section chair: Marcelo Sampaio de Alencar, Ph.D.** (University of Waterloo, Canada, 1993), IEEE Senior Member, Chair Professor at the Department of Electrical Engineering, Federal University of Campina Grande, Republic of Brasil

## CHAPTER 3-4

### **Broadcast technologies advancements – radio, IP, cellular, on demand, interactive, wire and optical communication**

**Section chair: Bayram Ibrahimov, Professor (2007), Doctor of Technical Sciences (2003), Senior Science Researcher Degree in Telecommunication Networks and Teletraffic (1990, Ph.D.), Professor of Azerbaijan Technical University (AzTU)**

## CHAPTER 5-6

### **Digital transformation and data risk management in ICT/Telecommunication**

**Section chair: Vladimir Dokuchaev, Professor (2001), Doctor of Technical Sciences (1999), Senior Science Researcher Degree in Telecommunication Networks and Teletraffic (1992), Ph.D. Degree (1990). GCBI, International Telecommunication Union, Geneva, Switzerland**

## CHAPTER 8

### **Engineering technology leading to social and economical change**

**Section chair: Valery Tikhvinskiy, Professor, Doctor of Economics Sciences (2003), Ph.D. Degree in Radio engineering (1988), International Information Technology University, Almaty, Kazakhstan**

Representatives from 11 countries took part in the conference as speakers and listeners: Austria, Azerbaijan, Iraq, Kazakhstan, People's Republic of China, Poland, Republic of Belarus, Republic of Brasil, Republic of Serbia, Russia, Switzerland.

**As part of the conference, the Workgroup for undergraduate and graduate students "Technical facilities implementation methodology detecting borrowings in educational, scientific organizations, media and commercial companies" was held.**

Digital tools already today make it possible to identify borrowings in student papers and scientific articles, to identify fraudulent publishers and websites. However, until a strong artificial intelligence appears, the final decision remains with a competent expert.

In modern conditions, technology is a tool that can limit the growth of dishonesty at the operational level. Borrowing can be absolutely legal, neutral and illegal.

What should we detect in general: plagiarism or fair citation? The lines between plagiarism and bona fide returns are always neat. The format of a scientific article does not differ from the fact that it was some completely original genre. The growth of scientific knowledge, i.e. novelty, there can be no criterion. And its presence or absence should be established only by a deep examination of the thought, but not by the text. Currently there is no computer analysis of the scientific work originality from the point of

view of text perception. The higher the originality, the sooner the text will have a prestigious science [4].

The big problem facing the scientific community is to detect and control. Retraction of scientific publications, or their withdrawal due to any violations, is a phenomenon already quite common in the world publishing practice.

The published ethical value is justice, achieved by maintaining the integrity of scientific knowledge, reducing scientometric violations and the work of reputational mechanisms. A scientific article is an increment of scientific knowledge. If there are no grounds for self-citation and the publication does not require an increment, then it can be considered multiple. There must be logic in everything. Only specialists who improve the text of your professional community can solve this issue.

These and many other examples in the field of plagiarism and the ethics of scientific publications were considered at the seminar.

Media partner of EMCTECH-2022 – an open access journal by MDPI – *Sensors* (open access: free for readers, with article processing charges (APC) paid by authors or their institutions; high visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, Ei Compendex, Inspec, and many other databases). This Special Issue will look at advanced technologies for increasing the efficiency of telecommunication systems and devices globally speaking.

**The next EMCTECH conference – October 23-25, 2023, Vienna, Austria**

## REFERENCES

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