

Distinguished Guests. Ladies and Gentlemen.

Thank you for being with us today. The Organizing Committee granted me, once again, the honour to address our warm welcome message to all the attendees to the 14th International Conference on Communications – COMM-2022, Bucharest, Romania.

Having in view the tremendous advance in the field, we decided to extend the Conference Agenda, such as to grant the participants the opportunity to tackle a wider range of topics. Meantime this will offer a good ground for exchanging experience on the exciting field of communications

Accordingly the scientific program of COMM-2022 includes one plenary session, 12 parallel regular sessions and 2 workshops. A number of 77 papers were selected and accepted for publication from among a total of 128 submitted papers. The research papers belong to 280 authors from 23 countries. The papers presented to the conference will be published in IEEE Xplore and the proceedings will be included in the ISI Database

In connection with the development of conference works, a special mention should be made regarding our Organizing Committee, the enthusiastic work of which worth high appreciation.

Our special thanks go also to our sponsors namely Orange – Gold sponsor, Orion Innovation – Silver sponsor, MarcTel, Hella – Bronze sponsors, which we were fortunate enough to get supported by.

As I have already mentioned in my speeches addressed to the previous conferences, the tradition of technical education and, implicitly of the “Politehnica” University of Bucharest, goes back in the past, as far as 1818. Here is the place to recall the huge number of research studies made by our predecessors that laid the foundation for the subsequent advances in various technical fields including communications.

One of the most prominent scientists, who were acting as professors in our University, is, beyond doubt, Edmond Nicolau. As the current month there are 100 years since his birth, I regard this event as an opportunity to dedicate our Conference to his memory and bring to your attention some of his important number of achievements.

Professor Edmond Nicolau was born on the 3rd of June 1922. After finishing his higher education technical studies, in 1945, he became an engineer specialized in radio-communications. His subsequent interests and concerns regarded cybernetics, theory of electromagnetic field, radio waves propagation, mathematical linguistics and modelling. It worth mentioning that, at the end of sixties, a faculty of economic cybernetics was established as a result of his endeavours. Some of his works in cybernetics were highly appreciated as for example those regarding cybernetic models of nervous system. Other studies were devoted to various different areas such as artificial intelligence, propagation of electromagnetic waves, measurements in radiotechnics, antennas, synthesis of radiant elements and others.

Due to his exceedingly high international reputation Edmond Nicolau acted as an invited professor at several universities in France, Great Britain, Germany, Mexico and so on. He was also elected as a member of several international scientific councils and held high positions in different field-oriented organizations as for example World Organization of Systems and Cybernetics, the Institute of Superior Studies in Nice, Scientific Association of

Engineers and Technicians in Romania. Professor Edmond Nicolau was also awarded important excellence diplomas and prizes by both Romanian and international scientific and academic organizations.

There is much more to be said about the work of Romanian professors and scientists who acted in the “Politehnica” University of Bucharest dedicating their lives to teaching activity and research .Their work granted the progress in the field of communications, paving also our way to future developments. They are really the pylons that sustain the solid scientific edifice our activity relies on and, as successors, we are grateful to all of them.

Now, concluding my address, I would like to address my thanks to all the attendees to the Conference for their participation, together with my wishes of success.

Prof. Ph.D.Em. Victor Croitoru

*Chairman, Communication 2022
Bucharest, Romania*

Dear Friends and Colleagues,

The 14th edition of the IEEE International Conference "Comm 2022", organized by the "Politehnica" University of Bucharest and the Military Technical Academy "Ferdinand I" under the auspices of the IEEE Romanian Section and the Romanian Academy of Technical Sciences, takes place virtually because of the risk associated with the Covid pandemic. Papers presented at the conference will be published in IEEE Xplore and Proceedings of Comm 2022 will be included in the ISI database.

The main objective of the conference is to provide a forum for scientists, PhD students and teachers to discuss and share the results of scientific research in the fields of telecommunications, electronic systems and information technology with civil, military and national security applications.

The Military Technical Academy "Ferdinand I" conducts educational activities and scientific research at the highest standards to meet the requirements of the Ministry of National Defense and other structures within the national security system. To this end, many investments have been made in the procurement of high quality laboratory equipment in the field of ITC and 3 new research centers had been created in this field.

Academic research and education are strongly supported by international cooperation under the Erasmus + program and are based on bilateral agreements, such as those with the NATO Communications and Information Agency and the European Defense Agency, to develop joint scientific research projects and provide students with the opportunity to work in an international environment.

A number of 128 papers had been submitted to this edition of the conference by authors from 23 countries. After carefully reviewed by 92 well-known experts, 77 papers were accepted for presentation at the conference.

I take this opportunity to thank to the members of the Department of Communications and Information Technology and the Department of Electronic Systems and Military Equipment of the Military Technical Academy "Ferdinand I", actively involved in organizing this edition of the conference and to colleagues

from the Department of Telecommunications from "Politehnica" University of Bucharest.

I am grateful to all the members of the Organizing Committee for their efforts in organizing the conference, to the Technical Program Committee (TPC) for their reviews, to the sponsors (Orange – Gold sponsor, Orion Innovation – Silver sponsor, MarcTel, Hella – Bronze sponsors) who support the conference and last but not least to you, the authors of the papers, for choosing this conference to present your scientific contributions in the field of telecommunications and electronic systems.

Enjoy the conference!

Ioan Nicolaescu,



Conference Chair

Professor, Department of Military Equipment

and Electronic Systems

Military Technical Academy "Ferdinand I"