

**Proceedings of the 3rd International Multi-Disciplinary
Conference:
“Integrated Sciences and Technologies”
(IMDC-IST 2023)**

25-27 October 2023, Yola, Nigeria

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Preface

We are delighted to introduce the proceedings of the second edition of the International Multi-Disciplinary Conference Theme: “Integrated Sciences and Technologies” (IMDC-IST-2023). This conference has brought researchers, developers and practitioners around the world who are leveraging and developing the rise of Big Data, Artificial Intelligence powered applications, Cognitive Communications, Green Energy, Adaptive Control and Mobile Robotics towards advance future technologies. In addition of digital health, well-being, home care, and patient-centred era for the benefit of patients and healthcare providers.

The technical program of IMDC-IST-2023 consisted of 29 full papers. The conference tracks were: Track 1 - Engineering Technologies; Track 2 - Health and Medical Sciences; Track 3 - Agricultural and Water Sciences; Track 4 - Computational and Informational Sciences; Track 5 - Energy and Climate Change; Track 6 - Finance and Business Technologies; Track 7- Green Industrial Technology; Track 8 - Natural Sciences and Technology; and Track 9 - Virtual Education, e-Learning Techniques, and Social Sciences. Aside from the high-quality technical paper presentations, the technical program also featured eight keynote speeches, six invited talk and. The six keynote speeches were Abubakar Sadiq Hussaini Interim Dean & Reader in Telecommunications Engineering, School of Engineering, American University of Nigeria (AUN), Yola, Adamawa State – Nigeria. Prof. Umar Ibrahim Gaya, Coordinating. Director Science Infrastructure (CDSI), National Agency for Science and Engineering Infrastructure (NASeni) Abuja, Nigeria. Prof. Bo Lio, University of Glasgow, Scotland. Mohammed Lashab, Larbi Ben M’hidi University, Oum El Bouaghi, Algeria. Dr. Vivek Arya, Department of Electronics & Communication Engineering, FET, Gurukula Kangri, Haridwar, India. Professor Rami Qahwaji University of Bradford, UK.

Coordination with the steering chairs, Prof. Raed A. Abd-Alhameed, Prof. Abubakar Sadiq Hussaini, Prof. Mathias Fonkam, Dr. Issa Elfergani, Prof. Jonathan Rodriguez, Dr. Bashir Gwandu, was essential for the success of the conference. We sincerely appreciate their constant support and guidance. It was also a great pleasure to work with such an excellent organizing committee team for their hard work in organizing and supporting the conference. In particular, the Technical Program Committee, led by our TPC Chairs, Prof. Jonathan Rodriguez, Prof. Walid A. Al-Hassaibi, Dr. Bashir Gwandu and Dr. Rana Zubo who have completed the peer-review process of technical papers and made a high-quality technical program.

We strongly believe that IMDC-IST-2023 conference provides a good forum for all researcher, developers and practitioners to discuss all science and technology aspects. We also expect that the future IMDC-IST conference will be as successful and stimulating as indicated by the contributions presented in this volume.

Prof. Raed A. Abd-Alhameed, Prof. Abubakar Sadiq Hussaini and Dr. Rana Zubo

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