

## EDITORIAL

### Second International Virtual Conference on Multidisciplinary Research 2020, Walnut, USA

**November 14, 2020**

The following papers were submitted by the participants in the conference, then refereed and accepted for publication in a special issue of the *Advances in Science, Technology and Engineering Systems Journal*. Details about the conference are available in a <https://astesj.com/conferences/ivcmr-2020/> by the editors of the proceedings:

Prof. Yu Xiao Yan, Prof. Passerini Kazmerski and Prof. Wang Xiu Ying

Foreword

The purpose of the conference was to present recent progress and new trends in multidisciplinary science and technology.

#### **The speakers are consisted of:**

Dr. Ahmed Abdelgawad, College of Science and Engineering, Central Michigan University, USA

Dr. Mohamed Yacoab, Computer Science and Information Department, Prince Sattam Bin Abdulaziz University, Saudi Arabia

Dr. Habib Hadj-Mabrouk, French Institute of Science and Technology of Transport, France

Prof. Sarhan M. Musa, Roy G. Perry College of Engineering, Prairie View A&M University, United States

Prof. Rehan Ullah Khan, Information Technology Department, College of Computer, Qassim University, Saudi Arabia

#### **The Technical Program Committee was composed by:**

Prof. Sarhan M. Musa, Prairie View A&M University, United States

Dr. Ahmed Abdelgawad, Central Michigan University, United States

Dr. Tareq Khan, Eastern Michigan University, United States

Dr. Habib Hadj-Mabrouk, IFSTTAR, France

Dr. Tiago Oliveira Machado de Figueiredo Cardoso, New University of Lisbon, Portugal

Dr. Carlos Manuel Jose Alves Serodio, Escola de Ciências e Tecnologia da Universidade de Trás-os-Montes e Alto Douro, Portugal

Dr. Amevi Acakpovi, Accra Polytechnic, Ghana

Dr. Mohammed Ramadan, University of Electronic Science and Technology of China, China

Mr. Shadrack Yaw Nusenu, University of Electronic Science and Technology of China, China

Dr. Muhammad Tauhidur Rahman, King Fahd University, Saudi Arabia

Dr. Mohamed Yacoab, Wadi Addawasir Prince Sattam Bin Abdulaziz University, Saudi Arabia

Dr. Zain Anwar Ali, Nanjing University of Aeronautics & Astronautics NUAU, China

Prof. Nicolae Tudoroiu, John Abbott College, Canada

Mr. Muhammad Tanveer Riaz, University of Engineering & Technology, Faisalabad Campus, Pakistan

#### **The list of reviewers consists of following:**

Abdelkhalek Benjjar, EMSI, Morocco

Ahmed Gad, Faculty of Computers and Information, Menoufia University, Egypt

Amer Saeed, Tikrit University, Iraq

Andreea Vescan, Babes-Bolyai University, Romania

Anu Disney D, Sethu Institute of Technology, India

Ashish Kumar, I.T.S Engineering College, India

Asmaa Muhammed, Middle Technical University, Iraq

Awadhesh Kumar, Delhi Technological University, India

Baskaran Rajendran, Kumaraguru college of Technology, India

Bikash Behea, International Institute of Information Technology Bhubaneswar, India

Chaman Singh, H.P. University Shimla, India

Cheryl Cordeiro, University of Gothenburg, Sweden

Fan Yang, University of Pittsburgh, United States  
Farhad, University Putra, Malaysia  
Hamad Almohamedh, King Abdulaziz City for Science and Technology Kingdom, Saudi Arabia  
Hanifi Guldemir, Firat University, Turkey  
Harvinder Singh, Guru Nanak Dev Engineering College, India  
Hilary Frank, Ken Saro-Wiwa Polytechnic, Nigeria  
Himanshu Dehra, Egis Group, India  
Jagathy Raj V. P., Cochin University of Science and Technology, India  
K.R. Baskaran, Kumaraguru College of Technology, India  
Khaled Slhoub, Florida Institute of technology, United States  
Laud Ochei, Robert Gordon University, Scotland  
Mahmud Abubakar, Federal University of Technology Minna, Nigeria  
Majid Ali, Changchun University of Science and Technology, China  
Manoj Kumar Jain, Oracle University, India  
Abilash, BTTL, India  
Palash Mandal, Charusat University, India  
Rim Koulali, Faculte des sciences AIn Chok Universite, Morocco  
Rohola Rahnvard, Clarkson University, United States  
Sagar Mukundrao Gawande, University of Pune, India  
Sarbartha Sarkar, Indian Institute of Technology, Indian School of Mines, Dhanbad, India  
Seema Nihalani, Parul University, India  
Senthil Kasilingam, NIT Jalandhar, India  
Shafinah Kamarudin, Universiti Putra, Malaysia  
Shrikant M Harle, Prof Ram Meghe College of Engineering and Management, India  
Sidi Med Bourdim, University of Abdelhamid Ibn Badis of Mostaganem, Algeria  
Sophia Faris, EnseM Casablanca, Morocco  
Subhrendu Chattopadhyay, Indian Institute of Technology, India  
Sudha Thiyyakat, APJ Kerala Technological University, India  
Sutarman Sutarman, University of Technology Yogyakarta, Indonesia  
Syeda Abida Ejaz, Quaid-i-Azam University, Pakistan  
Teodor Lucian Grigorie, Technical Military Academy of Bucharest, Romania

Thangakumar Jeyaprakash, Hindustan Institute of Technology and Science, India  
Uttara Sawant, University of North Texas, United States  
Yassine Al Amrani, Abdelmalek Essaadi University, Morocco

### **Table of contents**

Some of the papers presented at the conference have been publishing in the proceedings and reflect the authors contribution to the conference. Please see the table of contents: <https://astesj.com/conferences/ivcmr-2020/>

This conference was made possible thanks to the Editor from the “Advances in Science, Technology and Engineering Systems Journal”.

---

### Special Issue Editors

Prof. Jessy Miller (e-mail: [jessy.miller@ieee.org](mailto:jessy.miller@ieee.org), [info@ivcmr.com](mailto:info@ivcmr.com))