Preface

The International Conference on Innovative Technology for Sustainable Development - ICITSD-2021 is a joint venture of Vellore Institute of Technology, Chennai and University of Technology, Sydney, Australia. Any education makes real sense only if it reaches the hands of the common man and it is helping him in some ways. The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by2030.

The 17 SDGs are integrated—that is, they recognize that action in one area will affect outcomes in others and that development must balance social, economic and environmental sustainability. Everyone is needed to reach these ambitious targets. The creativity, know-how, technology, and financial resources from all of society are necessary to achieve the SDGs in every context. This ICITSD conference is one marked step in helping us to contribute towards the global goals, in terms of engineering solutions.

As per the technical committee norms, to assure the quality of the papers; we involved reviewers who are experts in the field across many countries. 150 reviewers involved in reviewing the conference manuscripts, out of which 50 international reviewers were involved in the review process of this conference. It was a rigorous exercise for the technical committee of this conference to assign the manuscript to the right reviewers and get back the reviewers' valuable comments on time. Considering the assurance of the quality of the manuscripts, we limited to 171 unpublished manuscript submissions, after a preliminary technical content check of the manuscripts. After a stringent review process, 60 quality technical papers qualified for presentation and were accepted out of which 25 high-quality papers are selected for the ITM Web of Conference. Hence, the acceptance ratio of this conference is 35%, which inherently portrays the quality of the conference. To list few topics on which the technical papers that were submitted and presented in our the conference was: Artificial Intelligence and Machine learning, Cloud Computing, Data Analytics, Data Security and Privacy for CPS, Block Chain, Virtual/Augmented reality and Internet of Things, on domains like agriculture, education, health care, Sports, Tourism Recommendations, etc.

This book is the collection of remarkable works related to Innovative Technology for sustainable Development that was submitted and presented in the First International Conference on Innovative Technology for Sustainable Development – ICITSD -2021.This prestigious event was hosted by School of Computer Science and Engineering, Vellore Institute of Technology, Chennai Campus, India and Centre for Cyber Physical Systems (CPS) in collaboration with University of Technology Sydney, Australia. The conference hosted the main theme – "Smart and Sustainable Computing" with topics related to computer science and engineering and also to allied

topics. Over the three days of January 27th to 29th 2021, ICITSD 2021, brought together a large number of stakeholders, including engineers, faculty members, researchers, students, industry, governmental organizations, private sectors, etc., to learn, share, and build fruitful and long-term collaborations. 171papers were submitted from different countries. Of these papers, only 60 papers were accepted for presentation and publications – Keeping the acceptance ratio to be 35%.The conference would not have been successful without the support of the Program Committee members, Organizing Committee members, keynote/plenary speakers, authors, tutorial presenters, special events organizers, reviewers and the conference attendees.

We greatly appreciate the meticulous reviews provided by the Program Committee members, and additional reviewers and thank the authors for having revised their papers to address the comments and suggestions by the referees. Our sincere thanks to the Steering committee members for their timely help and supervision. We want to thank all the Keynote speakers and plenary speakers of the conference. The conference program was enriched by the outstanding talks by Dr. Jeevan Prakash Kulkarni, Indian Institute of Tropical Meteorology (IITM), Pune, Dr. Jeganathan L, Professor, SCOPE, Vellore Institute of Technology, Chennai, Dr. Mariofanna (Fanny) Milanova, IEEE Senior Member, Professor, Computer Science Department, NVIDIA Certified Instructor for Deep Learning, University of Arkansas Little Rock , AR, USA, Dr. Nabin Sharma PhD, SMIEEE, Co-Director (Intelligent Drone Lab), Faculty of Engineering and Information Technology, University of Technology Sydney, Australia, Dr. Nebojsa Bacanin, Department of Informatics and Computing, Singidunum University, Belgrade, Serbia, Dr Vimal Kumar, Department of Computer Science, University of Waikato, New Zealand, and Dr. Sivakumar V, Centre for Development of Advanced Computing (CDAC), Pune.

We would like to express our sincere thanks to the Chancellor, Vice Presidents, Asst. Vice President, Executive Director, Vice-Chancellor, Pro Vice Chancellor, Registrar, Additional Registrar and other members of VIT University family for extending all facilities and support for the smooth conduct of the conference. We wish to express our thanks to the ITM Publisher for producing and publishing theICITSD2021 proceedings, and especially to Mr. Isabelle Houlbert and for the excellent support. We would also like to thank all those who contributed to the success of ICITSD2021 but whose names may not be listed. We hope you will find this book informative and resourceful.

March 2021

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