



***VIRTUAL INTERNATIONAL AWARD  
CONFERENCE ON MULTI- DISCIPLINARY  
RESEARCH AND INNOVATION  
MDRI-2021***

***JOINTLY ORGANIZED BY:***

**DOLPHIN (PG) COLLEGE OF SCIENCE & AGRICULTURE  
CHUNNI KALAN, PUNJAB, INDIA**

***IN COLLABORATION WITH:***

**INTERNATIONAL ASSOCIATION OF RESEARCH AND DEVELOPED ORGANIZATION**

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**Editors**

**DR. ARVIND PANDIT KHARAT**

**DR. PRADEEP GOEL**

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***Publish By:***

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## ***Preface***

Conference World and AR Research Publication is fast growing group of academicians in Engineering, Sciences and Management. AR Research Publication is also known for fast reply and zero error work. Conference world has organized a various conferences at renowned places namely Delhi University; New Delhi, Jawaharlal Nehru University; New Delhi, PHD Chamber of Commerce and Industry New Delhi, YMCA New Delhi, India International Centre New Delhi Sri Venkateswara college of Engineering and Technology, Andhra Pradesh, Dhananjay Mahadik Group of Institutions (BIMAT), Shivaji University, Maharashtra, Vedant Engineering Kota and many more places across the country.

We are very pleased to introduce the proceedings of the *Virtual International Award Conference on Multi- Disciplinary Research and Innovation MDRI-2021*. As for previous conferences, the theme was the link between the information provided by conference world and the use made of this information in assessing structural integrity. These were the issues addressed by the papers presented at the conference. The level of interest in the subject matter of the conference was maintained from previous events and over 30 suitable papers were submitted for presentation at the conference.

Papers were well represented in the conference to arouse a high level of international interest. Three countries were represented in the final program from Europe, North America and Asia. In the event, the conference was highly successful. The presented papers maintained the high promise suggested by the written abstracts and the program was chaired in a professional and efficient way by the session chairmen who were selected for their international standing in the subject. The number of delegates was also highly gratifying, showing the high level of international interest in the subject. This is also indicated by the large number of countries, 14 represented by the delegates. This Proceeding provides the permanent record of what was presented. They indicate the state of development at the time of writing of all aspects of this important topic and will be invaluable to all workers in the field for that reason. Finally, it is appropriate that we record our thanks to our fellow members of the Technical Organizing Committee for encouraging participation from those areas. We are also indebted to those who served as chairmen, without their support, the conference could not have been the success that it was. We also acknowledge the authors themselves, without whose expert input there would have been no conference. Their efforts made a great contribution to its success.

### **About Dolphin (PG) College of Science & Agriculture**

Dolphin (PG) College of Science & Agriculture (formerly Dolphin (PG) College of Life Sciences) started functioning on 2006. The college is sponsored by the Yuva Education Society- New Delhi. It has grown to its Present stature under the able and dynamic leadership of Chairman Dr. Vinod Mittal. Dolphin (PG) College is an independent, coeducational, premier institution provides opportunities to the student community to make mark as Life Sciences/Agriculture professionals and to transform & globalize their personalities. Currently the College offers 12, Post Graduate and Under Graduate and New Courses 2019-20 in the field of Life Sciences & Agriculture Sciences.

### **About IARDO**

International Association of Research and Developed Organization (IARDO) is a leading organization in the field of academic research activities under the banner of India Educational Charitable Trust (Regd).

International Association of Research and Developed Organization (IARDO) is an apex body that promotes and encourages commendable achievements from all over the country. The organization under conference world regularly organizes national and International level conferences with the help of its members to promote socially responsible education practices and sustainable development in economic as well social front in India.

In past, we have organized international conferences in different universities and colleges of the country like JNU New Delhi, University of Delhi, Punjab University, Pune University and many other renowned organizations in India.

### **About Conference**

This conference provides an international forum for researchers, developers, engineers and practitioners who are involved in real time projects that provide solutions to exchange their valuable ideas and showcase the ongoing works which may lead to path breaking foundation of the futuristic engineering. It accentuates indispensability of interdisciplinary and cross – linked thinking with respect of innovation and market opportunities. All the accepted paper will be published in International Journal with ISSN & Conference proceeding having ISBN .

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Faculty of Computers & Artificial Intelligence

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*Virtual International Award Conference on Multi- Disciplinary Research and Innovation MDRI-2021* Jointly organized by Dolphin (PG) College of Science & Agriculture, Chunni Kalan, Punjab, India **on 18 August 2021**. Total 67 papers were received for the conference and 30 papers were shortlisted by the committee. The Conference was took place through online Google platform.

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Managing Director: Gauri Sharma

Senior Researcher—Product Development: Ms. Pratima Singh

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