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**ONE DAY NATIONAL CONFERENCE ON  
“RECENT INNOVATIONS IN SCIENCE,  
TECHNOLOGY AND ENGINEERING”**

**RISTE'2017**

**ORGANIZED BY:**

**NATIONAL INSTITUTE OF TECHNOLOGY, SRINAGAR  
JAMMU AND KASHMIR**



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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 *One Day National Conference on “Recent Innovations in Science, Technology and Engineering”*. 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 49 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, 01 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 Conference**

*One Day National Conference on “Recent Innovations in Science, Technology and Engineering* is a global event organized by NIT Srinagar & Conference World. 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 without any additional fee.

### **About NIT Srinagar**

The venue for the forthcoming conference is the campus of NIT Srinagar, located at Hazratbal Srinagar on the banks of world famous Dal lake.

National Institute of Technology, Srinagar is one of the premier educational institutes in the northern region of the country. It was established in 1960 and was one of the eighteen Regional Engineering Colleges sponsored by the Govt. of India during the 2nd Plan. The Institute acquired the status of National Institute of Technology with deemed to be University status during August, 2003 and so attained full autonomy in its academics.

The Institute is situated near revered Hazratbal Shrine and University of Kashmir. NIT Srinagar is a residential institute with accommodation facility in hostels and staff-quarters. There are four boys and one girls hostel housing about 1500 boys and 200 girls. Besides running the B.Tech programme the Institute also offers M.Tech programme in many streams. In addition to that a large number of students are registered for M.Phil and Ph.D programmes.

## Secretaries Message



It is a great honor for me to bring you this collection of revised articles to be presented in the one day national conference on ‘Recent Innovations in Science, Technology and Engineering (RISTE-2017)’ by the Chemical Engineering Department of National Institute of Technology (NIT) , Srinagar and A.R. Research Publications (Conference World).

The primary focus of this conference isto bring together academicians, researchers and scientists for sharing their knowledge in their respective fields of expertise. I hope RISTE-2017 will serve as a good platform for the scientific community where about 100 research papers were received in short time. We would like to thank all participants for their contributed papers. I offer my special thanks to all the members of national level andlocal organizing committees.I extend my sincere regards and appreciation to Prof.(Dr.)Rakesh Sehgal ,Director NIT Srinagar and Prof. Md. N.S.Khan, Head Chemical Engineering Department for facilitating the conduct of this conference.Finally I acknowledge the contributions of everyonehaving made the publication of these proceedings possible.

*(Dr. M.A.Rather)*

*Assistant Professor,*

*Chemical Engineering Department*

*Secretary RISTE-2017*

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Total 203 papers were received for the conference and 77 papers were shortlisted by the committee.

**All the accepted and presented papers of the duly registered authors will be published in the UGC Approved International Journals**

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