



**3rd International Conference on Science,  
Technology and Management**

**ICSTM-16**

**INDIA INTERNATIONAL CENTRE, NEW DELHI**

**17<sup>th</sup> JANUARY 2016**

---

**ISBN: 978-81-932074-0-6**

**3rd International Conference on Science,  
Technology and Management**

**ICSTM-16**

**Editors**

**DR. RAJARAO P**

OSMANIA UNIVERSITY, HYDERABAD

**PROF. (DR.) K.K. SAINI**

*HINDU COLLEGE OF ENGINEERING, SONEPAT, HARYANA*

**ABDUL RAOUF KHAN,**

*KING FAISAL UNIVERSITY, SAUDI ARABIA*

**VINAY KUMAR SINGH**

*DSMNRU, LUCKNOW,*

---

---

***Publish By:***

*A.R. Research Publication  
International Research Publication*

## *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, Phd Chamber; New Delhi, YMCA New Delhi and many more places across the country.

We are very pleased to introduce the proceedings of the 3rd International Conference on Science, Technology and Management organized at India International Centre, New Delhi on 17 January 2016. As for previous conferences, the theme was the link between the information provided by conferenceworld and made use of this. The level of interest in the subject matter of the conference was maintained from previous events and 123 suitable papers were submitted for presentation at the conference. This required the programme to be organized in three parallel sessions, each on a specific theme, to provide each paper with sufficient time for presentation and to accommodate all of them within the overall time allocated.

One of the sessions contained all the science and engineering papers. A second session was devoted to the theme of development in management and social sciences. Papers were well represented in the conference to arouse a high level of international interest. Many foreign authors also showed their interest in conference from Nigeria, Egypt , Malaysia , Iran .... In the event, the conference was highly successful. The 123 presented papers maintained the high promise suggested by the written abstracts and the conference 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 delegates from different states. This Proceeding provides the permanent record of what was presented. Finally, it is appropriate that we record our thanks 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.

Proceeding of the conference has been published with ISBN: 978-81-932074-0-6.

**All the accepted and presented papers of the duly registered authors will be published in the special conference issues of the following international journals**

- *International Journal of Advance Research in Science and Engineering (IJARSE, ISSN-2319-8354) [www.ijarse.com]*
- *International Journal of Electrical & Electronic Engineering (IJEEE, ISSN-2321-2055) [www.arresearchpublication.com]*
- *International Journal of Advance Technology in Engineering & Science (IJATES, ISSN-2348-7550) [www.ijates.com]*
- *International Journal of Science Technology and Management (IJSTM, ISSN-2394-1537) [www.ijstm.com]*
- *International Journal of Innovative Research in Science and Engineering (IJIRSE, ISSN-2454-9665) [www.ijirse.com]*

**Published by**

**AR Research Publication,**

3/186 SantpuraGovindpuriModinagar- 201201 .Dist: Ghaziabad

3rd International Conference on Science, Technology and Management **ICSTM-16**

(Vol-3) Copyright © 2016, by AR Research Publication (India)

No part of this publication may be reproduced or distributed in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise or stored in a database or retrieval system without the prior written permission of the publishers. The program listing (if any) may be entered, stored and executed in a computer system, but they may not be reproduced for publication.

This edition can be exported from India only by the publishers, AR Research Publication (India)

ISBN:978-81-932074-0-6

Managing Director: Ms. Reshu Gupta

Senior Researcher—Product Development: Ms. Pratima Singh

Head—Production (Higher Education and Professional): Satinder Kulkarni

Information contained in this work has been obtained by AR Research Publication (India), from sources believed to be reliable. However, neither AR Research Publication (India) nor its authors guarantee the accuracy or completeness of any information published herein, and neither AR Research Publication (India) nor its authors shall be responsible for any errors, omissions, or damages arising out of use of this information. This work is published with the understanding that AR Research Publication (India) and its authors are supplying information but are not attempting to render engineering or other professional services. If such services are required, the assistance of an appropriate professional should be sought.

**Cover Design: Sumit Kumar**