## INTERNATIONAL CONFERENCE "Trending Moments and Steer Forces-Civil Engineering Today" (TMSF-2019)

A two day International conference was organised by the Department of Civil Engineering, Don Bosco college of Engineering in association with National Institute of Technology Karnataka on October 31<sup>st</sup> and November 1<sup>st</sup> 2019 at Don Bosco college of Engineering, Fatorda, Goa.

The conference was inaugurated by the chief guest Dr. Vivek Kamat, Guest of honour Prof. M.R Madhav, visiting Professor from AICTE-INAE, invited guest Dr. Rishi Gupta from University of Victoria, Canada, Director Fr. Kinley D'Cruz, Principal Dr. Neena S. Panandikar ,Convenor and HOD, DBCE, Dr. Shwetha Prashana, Prof. Varghese George the convener NITK-Surathkal. An abstract proceeding of International Conference was released during the Inaugural function. Vote of thanks was delivered by Assistant Professor Satyesh Kakodkar. The co-ordinators for the conference were Assistant Professor Satyesh Kakodkar, Swaroopa Sail from Don Bosco College of Engineering, Goa and Prof. Babunarayan from NITK, Surathkal.



This conference aimed to explore innovative applications and researchers in the areas of Structural and Concrete Engineering, Geotechnical Engineering, Transportation Engineering, Environmental Engineering, and Construction Technology and Management. The conference had 4 keynote lectures and the speakers were **Prof. Madhav**, Researcher, Educator and consultant, Visiting Professor IIT Hyderabad, **Dr. Rishi Gupta**, Associate Professor and Director of undergraduate program in the Department of Civil Engineering at the University of Victoria, **Dr. Christy P. Gomez**, Associate Professor, Former Deputy Director of Commercialization & Innovation, Universiti Tun Hussein Onn Malaysia and **Dr. Akanshu Sharma**, assistant Professor, Institute of Construction Materials, University of Stuttgart, Germany.



Altogether 149 delegates from different Institutions across different parts of the world registered for the conference. Total 99 abstracts and 99 full length papers were received out of which 79 papers got accepted after the meticulous review and those papers were presented during the conference at different sessions. Out of 79 papers, 29 papers from structural and concrete Engineering, 19 papers from geotechnical engineering, 16 from construction Technology and Management, 11 papers in Environmental Engineering and 4 in the area of Transportation Engg. Paper presenters were from various institutions like National Institute of Technology Karnataka, Surathkal, Karanataka, JSS Science and Technology University, Mysuru, Karanataka, MIT, MAHE, Manipal, Karanataka, M.S. Ramaiah Institute of Technology, Karanataka, Visvesvaraya Technological University, Bangalore, Karnataka, A. J. Institute of Engineering and Technology, Mangalore, Karanataka, Goa College of Engineering, Farmagudi, Goa, Don Bosco College of Engineering, Fatorda-Goa, National Institute of Technology, Farmagudi, Ponda-Goa, PSG College of Technology, Coimbatore, National Institute of Construction Management and Research, Goa, Birla Institute of Technology & Science, Pilani, Rajasthan, Acharya Institute of Technology, Karanataka, KLE Technological University, Hubballi, Karnataka, Shree Devi Institute of Technology, Mangalore, Karanataka, K.L.S Gogte Institute of Technology, Udyambag, Belagavi, Karnataka, S.D.M Institute of Technology, Karanataka, Ujire, College of Engineering Pune, Maharashtra, Central University of Karnataka, Gulbarga India. Karthikeyan Associates. Tamilnadu, and Shekhar Panandiker & Associates, Goa.



1<sup>st</sup> key note lecture was addressed by **Prof. M.R. Madhav**, he spoke about "Practice of Geotechnical Engineering-Examples". Based on his years of experience he mentioned the IS code doesn't always necessarily help to solve a problem. He also spoke about the gabions provided for coastal protection along the Gujarat coast and development of the new airport in Pakyong Sikkim, the tower of Pisa.



The second keynote speaker **Dr. Aakanshu Sharma** from University of Stuttgart, Germany spoke about "Performance based seismic assessment and retrofitting of RC structures with focus on fastenings". He explained how reinforced concrete was used for the elevation about 600 m in Dubai for Burj Khalifa, also the Stuttgart tower which was built 60 years ago. He elaborated about different ways that seismic structures are designed for nonlinear response, force re-distribution, ductility and energy dissipators. He mentioned the use of seismic performance graphs, also explaining about moment distribution which is the relative stiffness method developed by Hardy cross, non-linearity, joint failure, horizontal cracks due to shear force, the degradation of strength, anchorage and strengthening performance of fastening.





In the afternoon technical paper presentation (Structural Engineering and Materials, and Geotechnical Engineering) was held parallel in Auditorium and Seminar hall respectively.



On second day Dr. Christy P Gomes from Malaysia commenced the lecture on "Holistic planning for better construction project site performance" by explaining how a project has a definite start and a definite end. He also stated that how planning a project is important for proper implementation, the sequence of activities, degeneration role of planning, Importance of performance than productivity and the difference between work structure and WBS.





Dr Rishi Gupta from Canada spoke about "The innovations in infrastructure monitoring using UAV's. He explained how to inspect bridges not by visually looking at them but by actually performing tests. One of the test that he mentioned was using a survey chain and dragging it on the bridge and wherever a change in sound is heard, mark and check the depth of the cracks. He mentioned the benefits and limitations of drones/UAVs.

In the afternoon sesstion, technical paper presentations with parallel sessions were held on construction technology and management, Environmental engineering and transportation engineering.

The Technical sessions were chaired by Dr Christy Gomes, Dr Akanshu Sharma, Prof. Varghese George, Prof. K. E. Prakash, Dr. K. G. Gupta, Dr. Purnanand Savoikar, Prof. B. B. Das, Prof. Srihari S and Prof. B. M. Sunil.

The two day event ended with the Valedictory function with Dr. Christy Gomes as the chief guest and Dr. Akanshu Sharma as Guest of honour. Director Fr. Kinley D'Cruz, Principal Dr. Neena Panandikar, the HOD and convener Dr. Shwetha Prashana, the co-ordinator from NITK Prof. Babu Narayan and editor of the proceedings Prof. P.B Das were present. Three best paper awards from Springer, three best paper awards from Don Bosco College of Engineering, Goa and two poster presentation awards were given. Vote of thanks was delivered by Assistant Professor Satyesh Kakodkar.



