



IITH TEST BED OPENING CEREMONY (MAY 2019)

# M2Smart NewsLetter

Vol.4

June 2019

M2SMART LAB AT IITH

## IITH Test Bed Opening Ceremony

by Haruka Katarao, M2Smart Resident Coordinator

**Under the mid hot summer, IITH launched the M2Samrt Test Bed in Hyderabad!**

M2Smart Test Bed at IITH was finally opened on 28 May 2019. Followed by the welcome speech from IITH and JICA, the M2Smart Lab at the IITH Block C Annex was opened. The guests from Ministry of Education, Culture, Sports, Science and Technology (MEXT) and Japan Science and Technology (JST) also participated in the ceremony.



IITH researchers and M2Smart Research Assistants conducted the video demonstration and showcased the research activities.

20 Indian media covered this event and it showed that the M2Smart project got the high attention because of its project goal.



*M2 Smart Lab tape cut ceremony*

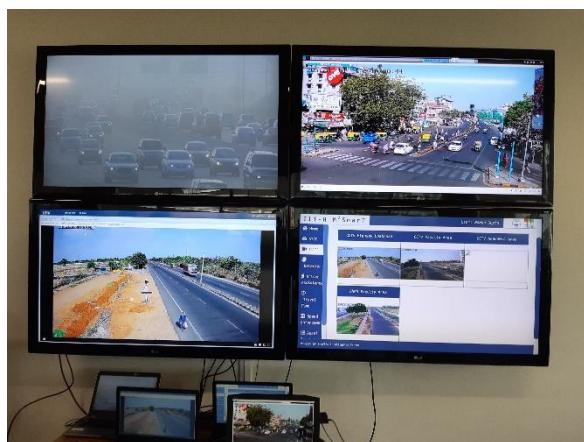


**Nagoya**  
NAGOYA ELECTRIC WORKS CO., LTD.

## IITH Test Bed

By Digvijay S. Pawar, Group 3 Leader

The testbed is now ready for the demonstration at IIT Hyderabad Campus. Small works such as sensor configurations is ongoing which is subjected to the data acquisition and modeling. The testbed comprises of various ITS technologies which are designed to result into efficient and safe traffic movement. This in return will help to understand and model the carbon emission from vehicular traffic. The proposed ITS system seeks to retrieve and combine the information available from vehicles and roadside in a synergistic framework so that a transferable and flexible yet sensible system can be deployed in the emerging low carbon smart cities.



*M2Smart Control Room*



*IITH Testbed Sensor Configuration*

## World Conference on Transportation Research (WCTR) Young Researchers Conference

Dr. Digvijay, chair of WCTR-Y young researchers conference, successfully conducted the conference on 26<sup>th</sup> May 2019 at IIT Bombay, Mumbai. More than 200 young researchers from more than 20 countries participated in the conference.



*Award for the WCTR Young Conference Chair*



*WCTR Young Conference attendance*

# 15<sup>th</sup> World Conference on Transportation Research (WCTR) at IIT Bombay

By Anand Kakarla

To gain more insight on the current State-of-the-Art of project objectives and to present our works, some members of the M2Smart project, Dr. Tsuboi, Prof. Fukuda, Dr. Ishizaka, Dr. Digvijay and myself attended WCTRS 2019 conference.

Dr. Tsuboi presented a poster on “Dynamic macro analysis for traffic safety”, which shows quantitative analysis for Japan and India traffic fatality by the enhanced Sneed’s law validation.

Some of them attended the session, ‘*Public Transport Integration with Active Travel*’, where Dr. Fukuda presented their research on evaluation of walking environment around urban railway station in Bangkok metropolitan area. Further, another important work on system dynamic model for transport mode behavior analysis was attended which relates and applies to our cities of interest i.e., Hyderabad and Ahmedabad. The modelling issues were discussed during this presentation and few of the implementation specifics were noted.

We presented on the effect of mixed traffic zones on BRTS in the session ‘*Transit Quality and Performance*’. How the travel times of BRTS are affected by the intersections were discussed in the presentation. Also, a few suggestions on how this work can be useful for making policy and improving the BRT were given by the session chairs.



WCTR Plenary Session



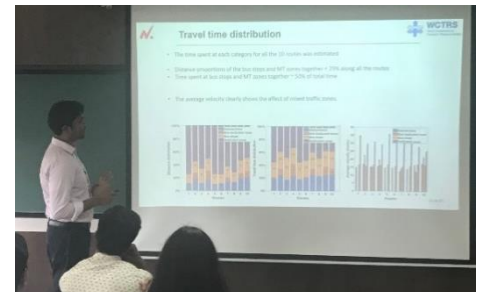
Prof. Fukuda’s presentation



Dr. Tsuboi’s poster session



Dr. Digvijay’s presentation



Anand’s presentation

## International workshop on Internet of Autonomous Vehicles (INAVEC) with VTC-2019

By Bhaskar Anand



I am working for traffic sensing using LiDAR in M2SMART project along with Mr. Vivek Barsaiyan. We are working with Dr. P Rajalakshmi. I presented a paper based on our work related to LiDAR point cloud compression and transmission in Vehicular Technology Conference (VTC-2019 spring), held at Kuala Lumpur, Malaysia from 28th April-1st May, 2019. The paper was presented in 1<sup>st</sup> International Workshop on Internet of Autonomous Vehicles (INAVEC) held with VTC-2019. The title of the paper is "Real Time LiDAR Point Cloud Compression and Transmission for Intelligent Transportation System". In this paper, a real-time Point cloud transmission over Wi-Fi is suggested. Also, in order to avoid the transmission of huge data, an Octree-based Point cloud Compression technique is used. It was a great learning experience to be a part of this conference as researchers from across the globe came to present their work related to autonomous vehicular technologies.

## Sakura Science Program in Nagoya

by Midori Ito

SAKURA SCIENCE High School Program (SSHP) invites excellent high school students and supervisors from mainly from Asian countries to Japan for a week, and they participate in the exchange programs specially coordinated by JST. The purpose of the program is to make contributions to the development of global science and technology by supporting the excellent talents overseas whom universities/research institutions and businesses in Japan desire by enhancing high school students' interest in science and technology of Japan when they visit Japan. On May 22, the group of students (42 India, 30 Philippines, 10 Mongolia, 10 Laos, and 10 Cambodia) of this year's program visited Nagoya Electric Works. Dr. Tsuboi gave them lecture of SATREPS project students enjoyed our factory tour.



Dr. Tsuboi



Explaining on Mobile VMS



In front of VMS showing SSHP logo

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SATREPS



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