A Half-Day Automotive Roundtable 2019 program was organized jointly by Siemens India and SAEINDIA Western Section on April 30, 2019 at Hotel Hyatt Regency Pune. SAE Professional members from western section were invited for this program. About 25 members were registered for this Round Table Program.

The program was planned in two sessions.

**SESSION 1 – TECHNICAL SESSION**

**Inaugural Function**

Mr. Sudhir Vaidya, Manager SAEINDIA Western Section, bid welcome to all participants and apprised them with SAEINDIA activities.

Mr. Kumar Swamy of Siemens introduced speakers of this session, Mr. Renaud Kenda, Sr. Director – Simcenter Engineering, Siemens PLM and Mr. Mark Farrall of Siemens. The topic of this session was "**ACCELERATE HYBRID AND ELECTRIC VEHICLE DEVELOPMENT WHILE ENSURING THE RIGHT LEVEL OF PERFORMANCE**".

The speakers explained following points;

- **THE DIGITAL TWIN APPROACH FOR ADDRESSING VEHICLE ELECTRIFICATION CHALLENGES**
- **CHOOSING THE RIGHT SYSTEM ARCHITECTURE FOR ELECTRIC & HYBRID ELECTRIC VEHICLE**
- **BATTERY MODELING & SIMULATION (PRESALES)**
- **ELECTRIC DRIVE SYSTEMS**
- **SUCCESSFUL INTEGRATION OF MULTIPLE SUBSYSTEMS**
- **MULTI-ATTRIBUTE BALANCING FOR VEHICLE PERFORMANCE – RANGE, THERMAL COMFORT, DURABILITY, VEHICLE DYNAMICS, NVH ETC.**
During the Tea Break, Siemens PLM products were explained to participants.

After the break, Mr. Bhavuk Nagpal of Siemens introduced speakers of the second session, Mr. Renaud Kenda, Dr. Ajinkya Bhave and Mr. Peter Dodd, all from Siemens.

The topic of this session was “Implementing the right methodologies for safer autonomous driving systems using virtual, semi-virtual and physical validation”.

The speakers explained following points;

- The digital twin approach for ADAS and autonomous vehicles
- Simulating a higher-fidelity vehicle dynamics model inside PreScan
- Control strategy solutions for ADAS and AV systems
- Sensor modelling and environment simulation
- Verification and validation of ADAS and AV systems
- Multi-attribute balancing for vehicle performance evaluation

SESSION 2 – EXECUTIVE SESSION

Inaugural Function
Mr. Sanjay Nibandhe, Chairman SAEINDIA Western Section, bid welcome to all participants and apprised them with importance of SAEINDIA initiatives in knowledge dissemination in Automotive Industry through Seminars, Workshops, Symposiums, Round Table programs etc.

Mr. Sanjay Nibandhe introduced to Mr. Prashant Pawar of ARAI.

Mr. Prashant Pawar spoke on Development of Electric Vehicles at ARAI

Mr. Sanjay Nibandhe, then introduced Key Note Speaker, Mr. Avijit Roy, General Manager - Digital Product Development & PLM Solutions, Tata Motors

Mr. Roy explained Journey of New Product Development and PLM at Tata Motors starting with 2D/3D CAE to using new techniques like Digital Twin comprising of Simulations and Data Analytics.
Key Note by Mr. Avijit Roy

After the Key Note, Mr. Prakash Pandey & Mr. Renaud Kenda spoke about use of Digital Twin Techniques at Siemens.

**ROUND TABLE PANEL DISCUSSION -**

A Round Table Panel moderated by Mr. Gautam Dutta, Sr. Director - Marketing siemens PLM and comprising of panelists:

- **Nikanth Devshetwar**  
  Head - Competency, Technology and Labs, John Deere India

- **Lalit Suryawanshi**  
  Director, HMLD Engineering - Engine Business Unit, Cummins Technologies Limited

- **Dr. A.K. Jindal**  
  Vice President Engineering - Electric Vehicle Development and Defence Vehicle, Tata Motors

- **Mr. Rawal**  
  Sr. Director

- **Mr. Renaud Kenda**  
  Sr. Director - Simcenter Engineering, Siemens PLM
The Topic of Panel Discussion was; 
"Leveraging the Digital Twin for Innovation, Productivity and New Product Development"

The Panel agreed that Vehicle has various systems and simulation, interdisciplinary communication including suppliers, optimum integration has become necessary for New Product Development & Testing. This is possible using new techniques like Digital Twin.

The Panel Discussion was followed by Q&A

Mr. Bhavuk Nagpal proposed Vote of Thanks.

The session was followed by networking Dinner.