

Institute Seminar on “Shaping of Ambitious TRAIN-18” (India's First Semi High Speed Train)”

Topic: Shaping of Ambitious “TRAIN-18” (India's First Semi High Speed Train)

Speaker: Shri. Sudhanshu Mani, Former GM, Integral Coach Factory; Team Leader 'Train-18'

Venue: Community Center, Arugul Campus, IIT Bhubaneswar

Date/Time: 6th March 2019, 6.00 PM onwards

The seminar began with welcome by Dr. C. N. Bhende (PIC Seminar) followed by brief introduction of the speaker.

Mr. Mani started with achievements made by the Integral Coach Factory (ICF), Chennai. He mentioned, today ICF is the world’s largest coach manufacturing industry. Moreover, he talked about how women are empowered to do heavy fabrication jobs at ICF. He told our young students about one of the prime and first qualities of leader is “Love your Organization”. Then he started with the challenges came across for initiating and completing ambitious ‘Train-18’ project which is the India’s first semi-high speed train which can run at speed of 180 km/hr. He mentioned that by adopting deterministic and focused paths, his team completed the ‘Train-18’ project in very short time of about 20 months. As a ‘Make in India’ initiative, ‘Train 18’ is one of such examples, this is the first time a train conceptualized, designed, engineered and built in India.

Students gathered in large numbers and they were highly enthusiastic to listen and interact with the speaker. One of the students asked about the safety issue of the train, Mr. Mani responded the measures taken care in the design for the safety of passengers and he told that ‘Train-18’ is one of the safest train.

The seminar concluded with the Dr. Perumalla C. of SES felicitating Mr. Mani with a memento of appreciation.

Biography of Speaker:

Shri Sudhanshu Mani started his journey in 1976 when he joined Indian Railways (IR) as a trainee in a four year Engineering course at the Institute of Mechanical & Electrical Engineering, Jamalpur. After graduation with degrees in Mechanical Engineering and Electrical Engineering, he started his career as an officer in eastern part of the country, in Railway divisions and workshops. Later, he had held a number of important assignments in India and abroad and spent 37 years in Indian Railway Service of Mechanical Engineers (IRSME), gaining vast experience in Projects, Railway operations, R&D & Technology and Rolling stock designs. Some of the important assignments held by Mr. Mani are: **General Manager, Integral Coach Factory (Chennai), Chief Mechanical Engineer, Rail Wheel Factory (Bangalore), Railway Advisor/Minister, Embassy of India, (Berlin, Germany), Divisional Rly. Manager (Bangalore), Executive Director/Motive Power, RDSO (Lucknow), Addl. Divisional Rly. & Manager Chief Works Manager, South Central Rly. (Secunderabad) and Chief Design Engineer, Diesel Locomotive Works (Varanasi)**. He had independently handled a large number of locomotive technology projects at both domestic and international levels. He had interacted extensively with several global technology leaders such as Siemens, Alstom, ABB, Bosch etc. It would not be an exaggeration to state that his experience in the field of Rolling stock engineering and technology is exceptional and unmatched. As ADRM (Secunderabad) and DRM (Bangalore) he was instrumental in initiating several passenger amenities at railway stations and in implementing environment management, afforestation and green energy. These topics are discussed in detail in a book co-authored by him and is entitled '**Greening of a factory, verdant makeover of a factory and its habitat**'. Mr. Mani signed off his glorious career in Indian Railways with the turnout of Train 18, the first indigenous 180/160 km/h train set, christened Train 18, designed and manufactured entirely through in-house effort of Integral Coach Factory. This train has caught the imagination of the country; it

was the first time that a rolling stock project of this magnitude was done from concept to manufacture entirely in India.

A truly versatile person, Mr. Mani along with some of his divisional colleagues, started the Art movement, *Safar*, in the year 2011, which is being emulated all over Indian Railways today. The experiment is chronicled in a coffee-table book titled '***Art and Railways, A Bangalore Saga***', co-authored by him with Ms. Lily Pandeya. He later continued this experiment, even in an industrial setting, and brought out his experiences in his second book titled, '***Reinventing the wheel, Another Bangalore saga***' and subsequently his third book on the experiences in art-related work at ICF, titled, '***A skein of trains, recounting a Chennai story***'.

Mr. Mani is a Fellow of the Institution of Mechanical Engineers, London. He had published many articles in technical journals. He prepared nearly 500 technical reports for RDSO covering specifications, guidebooks etc. Mr. Mani has delivered several talks and made presentations at reputed organizations and institutions in recent past, including IIMs, IITs, Entrepreneur Organizations, blue chip companies etc., mainly focussing on how culture, structure, environment and productivity related transformation can be brought about in a Govt. Organization.

Mr. Mani is known among his friends and colleagues as a lover of art, theatre, comedy, rock music from the sixties & seventies and Urdu poetry. He is an avid reader and a keen sportsman.



