## INDUSTRIAL VISIT TO KMML CHAVARA

The IEEE SB CEK in association with Industry Applications Society conducted a visit to the Kerala Minerals and Metals Ltd. Which is one of India's prestigious public sector organizations operating under Indian Space Research Organization (ISRO) and Defense Research Development Organization (DRDO).

The student members including 2 faculty members visited the Kerala Minerals and Metals Ltd. Chavara on 7<sup>th</sup> December 2018. The unit is focusing on Titanium dioxide mining, separation of synthetic rutile and pigment separation production plant.

At first we were taken by an employee and gave a brief explanation about pigment production plant and also made all of us aware of safety measures that need to be followed. Later we were guided by another staff and he gave explanations about functioning of

- 1. Chlorination.
- 2. Oxidation.
- 3. Slurry formation.
- 4. Filtering/washing.
- 5. Pigment surface treatment and finishing.

And the session concluded with a meal.

Then we were taken to mineral separation plant by Mr. Sudharshan, production manager of Mineral Seperation Plant. Explained the plant's functioning. There we saw the mineral-rich sand taken from captive beaches for separation of ilmenite, rutile, monazite, siliminate. MS unit employs gravitional, magnetic and high tension electrostatic technique for separation of minerals from the sand. At last students expressed their thanks to officials for the tremendous opportunity given. The visit contributed lots and lots of beneficial informative about advanced mining technologies and all of the information considered to be useful for recruitment opportunities for such industries and also help us to acquire theoretical and practical knowledge.