SANDIP UNIVERSITY

Industrial Visit

to

DELTA MAGNETS GROUP'S

DELTA MAGNETS LIMITED,

AMBAD, NASHIK

[Delta Magnets Limited (Formerly known as G. P. Electronics Limited) was established in 1985 with technical know-how from TKS Japan. The company's manufacturing facility is located at Nashik]

Date:

Saturday, 10th August 2019

SUN Faculty Members

Dr. Mahendra Shinde
Assistant Professor,
Physics

Mr. Laxman Mekala
Assistant Professor,
Physics

Mr. Sachin Kakde
Assistant Professor,
Electrical Engineering

Mr. Shishir Dadhich
Assistant Professor,
Civil Engineering

Mr. Vishal Lonikar
Assistant Professor,
Physics

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1. List of Interacting persons from Industry

DELTA MAGNET LIMITED,

Ambad, Nashik

Mr. Mahesh Nikam General Manager	Mr. SP. Annamalai General Manager, Operations
Dr. Akshay Kumar Swain Manager, New Initiatives	Dr. Pankaj Kumar Head, Research & Development

On 10th August 2019, a group of faculties from different departments in SANDIP UNIVERSITY, NASHIK visited the DELTA MAGNET GROUP'S, DELTA MAGNET LIMITED, a soft as well as hard magnet manufacturing plant situated in Ambad, Nashik.

2. Welcome meet & initial interaction

The authorities of DML, Nashik greeted the Sandip University members before giving a brief introduction of the DELTA MAGNETS Limited, DELTA MANGENTS GROUP & MagDev UK Limited. The introduction was given by Mr. Mahesh Nikam, The General Manager and Mr. SP. Annamalai, General Manager, Operations.

Along with the introduction a brief discussion was held about the need of academic research in industries and vice versa. With this initial interaction the SUN group was invited for the visit to different section of the industry.

3. Visit to the industrial sections

Delta Magnets Limited manufactures the magnets for various applications ranging from Automotive Sector to soft magnetic materials for electronics & electrical applications.

D	Soft Magnets	Dry Process
		Various moulds
		Testing
M	Hard Magnets	Wet Process
		Moulding with spin alignment
		Drying
		Testing
L	Quality Check	Particle Size check for dry and wet process
		Hysteresis
		Magnetization & Demagnetization
		Hardness
		Other properties

SUN group was given a detailed information about manufacturing of the magnets through both the sections as well as about the quality check facility by Dr. Pankaj Kumar & Dr. Akshay Kumar Swain.

Molding Section for forming the magnetic cores for different applications (Dry Process)

Furnace for sintering of the soft magnetic cores (Dry process)

Soft Magnetic Cores being tested for defects, mechanical & magnetic properties (Dry Process)

Dr. Pankaj Kumar giving information about Moulding of the hard magnetic materials (Wet Process)

4. Visit to the R&D section

DML, Nashik is willing to and needs to **expand their expertise and catalogue of manufactured products in various areas (eg. Nanotechnology, Paints, Ferro-fluids etc)** to offer solutions for magnetic material requirement, globally. With the same agenda in mind they have extended this opportunity to SUN for collaboration.

The DML has already taken few steps in this direction. **They have allocated a dedicated infrastructure, purchased some of the basic instruments as well as recruited some employees for the R & D Purpose.**

Here, they **ask SUN to provide our expertise, interns and future employees** for them.

They have also advised their **existing employees to upgrade their knowledge and qualification with the help of SUN**.

5. Possible outcomes from the industrial visit

After the discussion with DML experts, we feel that following are the possible outcomes from this visit:

1. Industrial visits for Students of different streams.
2. Internships for UG and PG students of SUN.
3. Campus Placements.
4. Research Proposals in collaboration with Delta Magnet Limited.
5. Consultancy for the experts of SUN.

6. Acknowledgement

We are thankful to DML, Managers, R & D Department experts. Team members are also thankful for the opportunity given by Dr. Anil Maheshwari, Dean, SOET, SUN and support from The Honorable Management of SF, Nashik.