GUJARAT TECHNOLOGICAL UNIVERSITY

SCHOOL OF ENGINEERING AND TECHNOLOGY

Report of One Day Seminar On "A Vision for India to Lead in Semiconductor R&D and Manufacturing (What, Why & How?)"

Date:	16.10.2024	
Time:	11:00 AM to 05:00 PM	
Event Organized by:	R&D Cell, GTU	
Coordinator@ GTU-SET:	Prof. Dr. Gautam Makwana, Associate Professor	
	Prof. Sanjivkumar Shakya, Assistant Professor	
Expert:	Prof.Dr.Mayank Srivastava, Professor, IISc- Bangalore	
Convener:	Dr.K.N.Kher, Registrar, GTU	

Event Summary:

The session began with a traditional **Saraswati Vandana**, followed by a warm welcome delivered by Dr.K.N.Kher, Registrar (GTU) and Dr.Rajesh Thakker, Director (R&D Cell), who introduced the expert speaker for the session, Prof. Dr.Mayank Srivastava, Professor, DESE, IISc- Bangalore. Dr.Rajesh Thakker expressed his gratitude for the presence of the distinguished speaker and set the tone for an insightful discussion on Semiconductor.



Topics Covered:

1. Introduction to Semiconductors

- Overview of semiconductor technology and its importance.
- Current global landscape and trends in semiconductor manufacturing.

2. India's Current Position

- Analysis of India's existing semiconductor ecosystem.
- Strengths and weaknesses in the current landscape.
- Key players in the industry (government, private sector, startups).

3. Importance of Semiconductor R&D and Manufacturing

- Role of semiconductors in emerging technologies (AI, IoT, automotive, etc.).
- Economic implications: job creation, GDP contribution, and tech independence.
- Strategic importance in global supply chains.

4. Challenges Facing India

- Infrastructure gaps and investment needs.
- Skill shortages in semiconductor technology and engineering.
- Regulatory hurdles and policy environment.

5. Vision for India

- Defining a roadmap for leadership in semiconductor R&D and manufacturing.
- Key sectors to focus on (e.g., automotive, consumer electronics, defense).
- The role of government policy and support.

6. What needs to be done?

- Investment in research institutions and collaboration with academia.
- Incentives for private sector investment and startups.
- Development of a skilled workforce through education and training programs.

7. Collaborative Efforts

- Importance of partnerships with global semiconductor companies.
- Collaborations with other nations for technology exchange and development.

8. Case Studies and Success Stories

- Examples from other countries that have successfully developed their semiconductor industries (e.g., Taiwan, South Korea).
- Lessons learned and best practices applicable to India.

9. Future Outlook

- Predictions for the semiconductor industry in India over the next decade.
- Potential for innovation and leadership on the global stage.

Facilitation and Vote of Thanks:

The guest, **Prof. Dr.Mayank Srivastava**, was facilitated by **Dr.K.N.Kher**, followed by a heartfelt vote of thanks to the speaker and the organizing team for their efforts and insights, expressing gratitude on behalf of the faculty and students.

Glimpses of the Event:



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No. of Students Attended the Seminar: 31 No. of Faculties Attended the Seminar: 3

Conclusion:

Prof. Dr. Mayank Srivastava concluded the session with remarks on the nation's potential to become a global hub in this sector. Key takeaways emphasized the critical role of technological innovation, policy frameworks, and industry-academia collaborations in advancing semiconductor research and production capabilities.

The session ended with an active Q&A session, where faculty and students engaged with the expert, making the discussion highly interactive and informative.

Attendance Sheet of the Seminar			
Sr.No.	Roll No.	Name of Student	GSET
1	2024BEEC40	Darsh Dobariya	1st Sem EC
2	2024BEEC47	Md Ali Ibna Tawsim	1st Sem EC
3	2024BEEC27	Pratham Modi	1st Sem EC
4	2024BEEC48	Niloy Kishor Roy	1st Sem EC
5	2024BEEC44	Dutt Risheeka	1st Sem EC
6	2024BEEC22	Mariya Fakih	1st Sem EC
7	2024BEEC01	Patel Ved Jayeshbhai	1st Sem EC
8	2024BEEC50	RATUL MOHORY NIL	1st Sem EC
9	2024BEEC26	Nidhi	1st Sem EC
10	2024BEEC06	Mahir Patel	1st Sem EC
11	2024BEEC37	Sarva Patel	1st Sem EC
12	2024BEEC53	Aayankhan Malek	1st Sem EC
13	2024BEEC46	Mit Panchal	1st Sem EC
14	2024BEEC23	Kashish patel	1st Sem EC
15	2024BEEC32	Dhairyaraj Sumesara	1st Sem EC
16	2024BEEC30	Krishnarajsinh Dodiya	1st Sem EC
17	2024BEEC16	Prabha Dubey	1st Sem EC
18	2024BEEC18	Kaavya Kamdar	1st Sem EC
19	2024BEEC28	Makwana vir sureshbhai	1st Sem EC
20	2024BEEC39	Padariya kashyap	1st Sem EC
21	2024BEEC45	Patel Suchi Dilipkumar	1st Sem EC
22	2024BEEC26	Nidhi	1st Sem EC
23	2024BEEC33	Harsh prajapati	1st Sem EC
24	2024BEEC14	Harsh patel	1st Sem EC
25	2024BEEC03	Chauhan ritika	1st Sem EC
26	2024BEEC05	Prajapati Helly Govindbhai	1st Sem EC
27		Mithun Kumer Dev	1st Sem EC
28	2024BEEC38	KHUNT NEEL JAGDISHBHAI	1st Sem EC
29	2024BEEC04	PRAJAPATI AVANI HITENDRA	1st Sem EC
30	2024BEEC43	JAIN PRANAV MOHIT	1st Sem EC
31	2024BEEC49	Gourab Biswas	1st Sem EC
	Sr.No.	Name of Faculty	
	1	Prof.S.K.Hadia	GSET
	2	Prof.Gautam Makwana	GSET
	3	Prof.Sanjivkumar Shakya	GSET