



SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University)
(Accredited by NBA-AICTE, New Delhi, ISO 9001:2000 Certified Institution &
Accredited by NAAC with "A" Grade)

Madagadipet, Puducherry - 605 107



Department of Mechanical Engineering
Sri Manakula Vinayagar Engineering College
ASM Material Advantage Student Chapter

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Brief Overview Of ASM Chapter

ASM student chapters

ASM International is a renowned professional society dedicated to advancing materials science and engineering. ASM student chapters play a crucial role in connecting students with the broader materials community and fostering their professional development. This overview provides an in-depth look at ASM student chapters and their significance in shaping the careers of aspiring materials scientists and engineers.

Introduction:

The **Material Advantage students' chapter** will be inaugurated at Sri Manakula Vinayagar Engineering College on 10-10-2014, Friday at 10.00 a.m. SMVE chairman and Managing Director Shri. M.Dhanasekaran would inaugurate the chapter. Director Dr.V.S.K.Venkatachalapathy would deliver the keynote address. Dr. Kamatchi Mudali, Chairman, ASM Chennai Chapter and other ASM members would take part in the function. SMVEC-ASM Chapters were organized many workshops and seminars with the support of ASM Chennai chapters.

The ASM student chapter serves as a platform for students interested in materials science and engineering to come together and engage in various activities and initiatives. It aims to provide students with opportunities for networking, professional growth, and hands-on experience in their field of interest.

Membership:

Membership in an ASM student chapter offers numerous benefits to students. By becoming a member, students gain access to a vast array of resources, including technical publications, research databases, and career development tools. They also become part of a supportive community of like-minded individuals passionate about materials science.

Leadership and Organization:

ASM student chapters are typically led by a team of student officers who are responsible for organizing chapter activities and events. These officers, elected by the chapter members, include positions such as president, vice president, treasurer, and

secretary. The leadership team collaborates with faculty advisors and ASM professionals to ensure the chapter's smooth functioning.

Activities and Events:

ASM student chapters organize a wide range of activities and events to enrich the academic and professional lives of their members. These may include technical lectures by industry experts, workshops on advanced materials characterization techniques, lab tours to gain practical insights, and seminars on emerging trends in materials science.

Research and Projects:

ASM student chapters provide avenues for students to engage in research projects and gain hands-on experience in materials science. They collaborate with faculty members, industry professionals, and other research organizations to facilitate research opportunities. This involvement allows students to explore their research interests, present their findings at conferences, and potentially publish their work.

Collaboration and Networking:

ASM student chapters actively collaborate with other student chapters, professional societies, and industry organizations. These collaborations provide opportunities for students to network with professionals and fellow students, fostering connections that may lead to internships, job placements, or research collaborations. Such networking opportunities are invaluable for expanding students' professional networks and gaining industry insights.

Professional Development:

ASM student chapters prioritize the professional development of their members. They offer workshops and seminars on resume building, interview skills, and career pathways within the materials field. Mock interviews and mentorship programs connect students with experienced professionals who provide guidance and support as they navigate their careers.

Outreach and Community Engagement:

ASM student chapters understand the importance of community engagement and outreach. They organize events and initiatives to promote materials science within their local communities, such as science fairs, educational demonstrations at schools, and public lectures. These efforts aim to raise awareness about the field and inspire the next generation of materials scientists and engineers.

Awards and Recognition:

ASM student chapters often provide opportunities for members to be recognized for their achievements. This can include scholarships, awards for outstanding academic performance, or research grants to support student projects. Such recognition enhances students' resumes and encourages them to strive for excellence in their academic pursuits.

ASM student chapters play a pivotal role in shaping the academic and professional lives of students interested in materials science and engineering. Through their activities and initiatives, these chapters provide a supportive community, invaluable resources, and opportunities for networking, research, and career development. By joining an ASM student chapter, students gain access to a wealth of experiences and connections that contribute to their growth as materials scientists and engineers.

ASM student chapters provide a platform for students to engage in materials science and engineering beyond their academic coursework. By fostering collaboration, research opportunities, and professional development, these chapters lay the foundation for students' successful careers in the field.

Sl. No	Position	Name
1	College Dean or University Representative	Dr.V.S.K Venkatachalapthy Director cum Principal, SMVEC
2	Department Chair	Dr.K. Velmurugan Professor &Head/Mech, SMVEC
3	Faculty Advisor	Dr.A. Thiagarajan Associate Professor/Mech, SMVEC
4	Chair	Mr.S.Dhinessh Raj
5	Vice-Chair	Ms.K.Sivaranjani

6	Treasurer	Mr. V.Nanthakumaran
7	secretary	Mr.A.B.Sainnath

Calendar Of Events

Sl. No.	Date	Title	No. Of Students
1.	23-07-2022	Technical Seminar on IPR and Patent	39
2.	20-08-2022	Blood Donation Camp	39
3.	17-09-2022	Technical Seminar on Research Methodology	39
4.	15-10-2022	Seminar on Design Thinking for Entrepreneurs	39
5.	29-10-2022	Workshop on Start-up Opportunities	39
6.	12-11-2022	Rally of Awareness of AIDS	39
7.	10-12-2022	One Day Workshop on Additive Manufacturing	39
8.	24-12-2022	Seminar on Effective Time Management	39
9.	07-01-2023	Celebration of Earth Day	39
10.	21-01-2023	World Intellectual Property Day	39
11.	04-02-2023	Campus Cleaning	39
12.	25-02-2023	Tree Plantation	39
13.	11-03-2023	Technical Quiz on Materials	39
14.	22-04-2023	Start-up Ideas	39
15.	29-04-2023	Seminar on How to Increase the Efficiency on Solar Panel	39
16.	06-05-2023	Design Thinking and Material Selection for Modern Agriculture	39

Technical Programming

1. Technical Seminar on IPR and Patent

ASM and Sri Manakula Vinayagar Engineering College (SMVEC) has organized Technical Seminar on IPR and Patent from 23-07-2022. **Dr.K. Velmurugan**, Dean R&D welcomed the participants and gave an introductory speech as well as introduced Mr.P. Jayakumar, the resource person of session on IPR & Design Patent. **Dr. V.S.K. Venkatachalapathy**, Director cum Principal of SMVEC felicitate Mr.P. Jayakumar with a Shawl and flower bouquet. Dr. K.Velmurugan and Dr. A.Thiagarajan is the coordinators of the seminar. There were 39 enthusiastic participants from the Mechanical Department of SMVEC take part of this seminar. **Mr. P. Jayakumar**, JS ARA TECH, Design Project Consultant, Chaired the Session and gave his remarks to illustrate the importance of IP, patentability assessment and the efforts being carried out by IPO for registration of IPRs. He also explained the relation between inventions and innovations, the gaps between lab research and innovative research and gave a glimpse of various models of academia-industry interactions, constraints felt and the efforts of the Government of India for financial support for this endeavor.

The points discussed and key takeaways during the discussion are listed below.

- ❖ Introduction to IPR and patent filing procedures.
- ❖ Ways for Problem identification (Societal issues related).
- ❖ Areas of Society Oriented Projects.
- ❖ Doing Gap analysis.



Mr.P. Jayakumar presenting on IPR and filling

2. Technical Seminar on Research Methodology

3. ASM and Sri Manakula Vinayagar Engineering College (SMVEC) has organized One Day **Technical Seminar on Research Methodology** on 17-09-2022. Dr. K. Velmurugan welcomed the participants and gave an introductory speech as well as introduced **Dr. G. Balaganesan**, the resource person of session on design . Dr. V.S.K. Venkatachalapathy, Director cum Principal of SMVEC felicitate Dr.G.Balaganesan with a Shawl and flower bouquet. Dr.K.Hemalatha and Dr.L.Martin were the coordinators of the workshop. 39 participants from the mechanical engineering were the part of this seminar. Dr.G.G.Sozhamannan, Professor, Mech proposed the vote of thanks. The speaker discussed about the importance of creativity and innovation, in problem-solving.

Key Topics:

The course is organized according to the following topics:

- The logical steps for conducting scientific research
- Selection of appropriate information / data and consequently of methods and tools of analysis.
- Conducting research focusing on specialized and complex issues requires understanding and familiarity with appropriate Research Methods.



Students participation on research methodology seminar

4. Workshop on Additive Manufacturing

ASM and Sri Manakula Vinayagar Engineering College (SMVEC) has organized One Day Workshop on Additive Manufacturing on Date 10-12-2022 . Dr. K. Velmurugan welcomed the participants and gave an introductory speech as well as introduced **Dr. T. Ram Prabhu, DRDO** the resource person of session. Dr. V.S.K. Venkatachalapathy, Director cum Principal of SMVEC felicitate **Dr. T. Ram Prabhu** with a Shawl and Momento. Dr.A.Thiagarajan ASM Faculty advisors has the coordinators of the workshop. 39 ASM Members from the mechanical engineering were the part of this seminar. Dr.A.G.Ganesh kumar, Professor, Mech proposed the vote of thanks.



Dr. T. Ram Prabhu interacting with the participants

Objectives of work shop

- To bridge the gap between academic and industrial practice regarding additive manufacturing.
- To explore additive manufacturing.
- To describe the fundamentals of rapid prototyping, various processes related to rapid

prototyping, applications and implications.

- To make the participants aware about the concept, design of components, analysis of parts and manufacturing on 3D printer.
- To provide experience to the participants making the topic clearer.

Carrier Development

1. Seminar on Design Thinking for Entrepreneurs

ASM and Sri Manakula Vinayagar Engineering College (SMVEC) has organized Technical Seminar on Design Thinking for Entrepreneurs on 15-10-2022. Dr.K.Velmurugan welcomed the participants and gave an introductory speech as well as introduced Mr.Govindarajan, Managing Director, Prassana Precession Pvt Lt Puducherry the resource person of session on design thinking.

Dr. V.S.K. Venkatachalapathy, Director cum Principal of SMVEC felicitates Mr. Govindarajan with a Shawl and flower bouquet. Dr. A. Thiagarajan were the organizer of the seminar. 39 participants from the Mechanical engineering were the part of this workshop. Dr.A.G.Ganesh kumar, Professor, Mech proposed the vote of thanks.

Key Topics Covered:

- Leadership
- Business Management
- Time Management,
- Problem-Solving
- Creative Thinking
- Human-Centered
- Creative and Playful.
- Iterative.
- Collaborative.
- Prototype Driven



Students participation in Design Thinking for Entrepreneurs

2. Workshop on Start-up Opportunities

ASM and Sri Manakula Vinayagar Engineering College (SMVEC) has organized One Day Workshop on Start-up Opportunities on 29-10-2022 Dr.K.Velmurugan welcomed the participants and gave an introductory speech as well as introduced S.Ashwin, the resource person of session on Start-up Opportunities Dr. V.S.K.Venkatachalapathy, Director cum Principal of SMVEC felicitate .Dr. A. Thiagarajan the coordinators of the event. The engineering graduate from different discipline were the part of this workshop. Dr. Coumaressin , Associate Professor, Mech proposed the vote of thanks.



1. World Intellectual Property Day

The Material Advantage student chapter of SMVEC has organized One Day Workshop on IPR & Design Patent 21-01-2023 for the celebration of World Intellectual Property Day. **Mr. P. Jayakumar**, JS ARA TECH, Design Project Consultant, Chaired the Session and gave his remarks to illustrate the importance of IP, patentability assessment and the efforts being carried out by IPO for registration of IPRs.



Mr.P. Jayakumar Resource Person for 'World Intellectual Property Day' 21-01-2023

Social Activities

2. Campus Cleaning and Tree Plantation

ASM and Sri Manakula Vinayagar Engineering College (SMVEC) has organized a Campus cleaning and tree Plantation program on 25-02-2023



3. Celebration of Earth Day

The members of ASM Material Advantage student chapter participating the Slogan writing for the celebration of Earth Day on 07-01-2023.



Slogan Writing on 'Earth Day Celebration' 07-01-2023

INDUSTRY VISIT REPORT 2022-23

Industry visits at Prasanna Precision and GT Electronics on 29-04-2023



Group Photos of SMVEC Students with Faculty member at Prasanna Precision



Visit to GT Electronics

