ASPIRE

ACHIEVEMENTS IN SPORTS, PROJECTS, INDUSTRY, RESEARCH AND EDUCATION

MONTHLY NEWSLETTER

DEPARTMENT OF MECHANICAL ENGINEERING

VOLUME - 12 ISSUE - 10 OCTOBER

SRI SIVASUBRAMANIYA NADAR
COLLEGE OF ENGINEERING

RAJIV GANDHI SALAI (OMR), KALAVAKKAM, CHENNAI, TAMIL NADU, INDIA

FROM THE HOD'S DESK...

We are elated to showcase the October edition of Aspire!!!

In the Nobel Laureates section, we profile Amano Hiroshi; a Japanese Material Scientist awarded the 2014 Nobel Prize for inventing the blue light emitting diode.

It is heartening to note that SSN topped the college preferences ahead of CEG and MIT in round 1 of the ongoing TNEA admissions process, which is reflective of the vibrancy and caliber of the Institution. Glad to note that the prestigious Shiv Nadar school is coming up in Chennai, and a flagship five-year integrated MBA course has been initiated by HCL in collaboration with IIM Nagpur.

It's raining offers in the placement section, with students from the current batch being placed in Core, Banking, and IT companies ranging from Caterpillar to Citibank to Amazon. A one-week placement training program was conducted to benefit the students in topics relevant to the industry.Faculty members add to the Institution and department publication profile with quality research papers in noteworthy journals and engage in consultancy work. An industrial visit was arranged for the PG students to Axles India. Faculty have attended an online FDP on Universal human values and organized a workshop on Robotics with active participation from academia.

One of our full-time Ph.D. students, Vishal, has received a fully funded, prestigious PDF offer from Pacific Northwest National Laboratory (PNNL), USA. Students' internship is an evergreen area for us, and happy to share that many students are interning at elite institutions such as IISC, IITM, IITT, etc.

In the mech marvel section, we see how thick electrodes can enhance EV utility and how battery-less underwater camera systems have been developed. In the alumni section, we profile Karthik Mukundan, 2013 batch, who shares his journey from SSN to Ohio to Amazon Pathways, USA, and a note on alumni talk on higher studies.

We believe we can excel as individuals even as we move ahead as a Team!!!

Best wishes,

K.S. Vijay Sekar | vijaysekarks@ssn.edu.in

AMANO HIROSHI

> Wisdom comes out of dialogue so you have to develop the capacity to expose your own ignorance in order that they may discover their own wisdom.

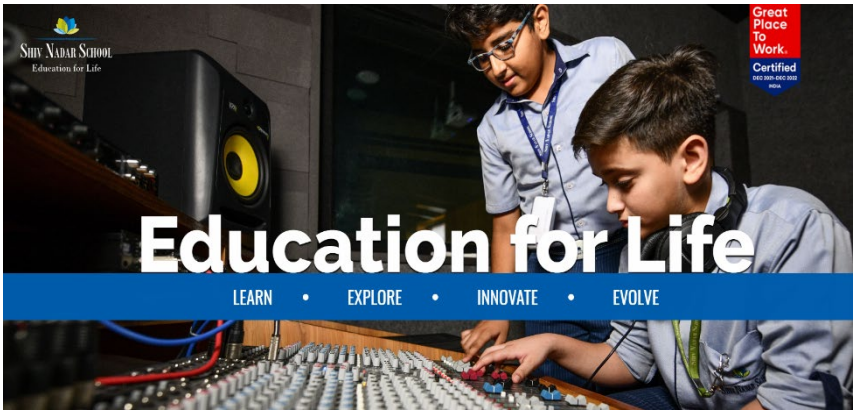
Amano Hiroshi was a Japanese Material Scientist who was awarded the 2014 Nobel Prize for inventing the blue light emitting diode (LED)s along with two other material scientists, Akasaki Isamu and Japanese-born American materials scientist Shuji Nakamura.

He attended his undergraduate studies in Nagoya University in 1982.He received his bachelor's (1983), master's (1985), and doctoral degrees (1989) in engineering, and he was a research associate from 1988 to 1992. Akasaki moved to Meijo University, where Amano became an assistant professor. He later became an associate professor in 1998, and a professor in 2002 and returned to Nagoya University as a professor in 2010.

When current flows across a *p-n* junction, light is emitted, thus being called Light Emitting Diode. LEDs are very energy-efficient light sources. Before the work of Amano, red and green LEDs existed but, because attempts to make blue LEDs were unsuccessful, LEDs could not be used as a source of white light, which requires a combination of blue, red, and green light. The production of Blue LED required zinc selenide (ZnSe) as the semiconducting material. However, the three decided to use gallium nitride (GaN), even though no one had produced usable GaN crystals and *p*-type GaN. By the year 1986 Amano and his colleagues created high-quality GaN crystals by placing an aluminum nitride layer on a sapphire substrate and then growing the crystals on that. Into the 1990s Amano and Akasaki worked to make the GaN blue LEDs more efficient.

CAMPUS UPDATE

SHIV NADAR SCHOOL NOW IN CHENNAI!!

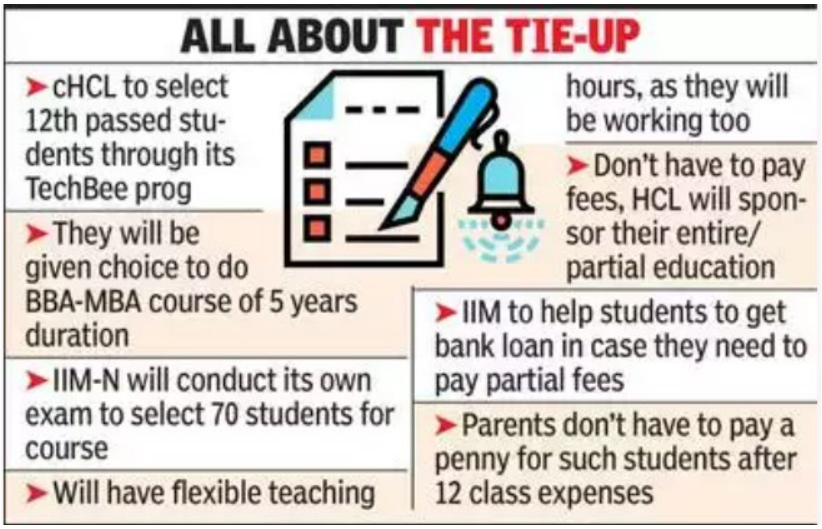


Shiv Nadar, a philanthropist, a scholar who found SSN College of Engineering and SNU universities, for the welfare of students. Now, the same is initiated for the children, Shiv Nadar School now in Chennai. A great step taken to enhance the ability of student's perception of learning from the very beginning. With an international curriculum aimed at the holistic development of our students, Shiv Nadar School Chennai will commence its academic journey from June 2023 onwards to children from Nursery to Grade 4.

Shiv Nadar School Chennai is on a sprawling 14-acre lush green campus located in the heart of the city, Adyar. The campus has been designed by Padma Bhushan awardee Mr. B. V Doshi, who has been at the forefront of designing ecologically sustainable architecture.

MBA INTEGRATED COURSE BY HCL & IIM-NAGPUR

IIM-Nagpur and HCL Technologies have joined hands to offer a unique five-year integrated BBA-MBA course. This will give Std XII passed students from entire India a chance to get a postgraduate degree from the premier management institution, with a full-time job on offer by the technology bellwether. A formal pact between the two institutions will be inked on September 29, with some 70 students slated to be selected for the first batch.



Another brave initiative by Roshni Nadar, CEO of HCL technologies. A chance for students in management the

field to have job security. A big step taken along IIM-Nagpur, for the betterment of the student's future.

SSN TOPPED THE TNEA ROUND 1 COUNSELLING!!

SSN is known for its academics, sports, culture, placements etc. It topped many colleges in Tamil Nadu and grabbed the number one position of the private colleges in Tamil Nadu, in round 1 TNEA Counselling. As we all seen SSN emerged to be one of the best colleges in and around Tamil Nadu to achieve this feat, all credits to the students and faculty who work rigorously to make this college No.1. As the results were announced for round 1, many students opted SSN College of Engineering as their 1st preference, leading other government colleges in Tamil Nadu.

THE TIMES OF INDIA, CHENNAI
MONDAY, SEPTEMBER 26, 2022

TIMES CITY

3 city engg colleges most preferred

Fee Payment Rule Reduces Seat Wastage

Ragu.Raman@timesgroup.com

ENGG COUNSELLING FIRST ROUND

- Out of 446 colleges, 269 could not fill a single seat
- 140 colleges filled less than 10% seats
- 17 filled 10% to 20% of seats
- 20 colleges alone filled more than 30% of the seats

TOP COLLEGES (% SEATS FILLED)
- SSN College of Engineering | 87.8%
- College of Engineering, Guindy (CEG) | 86.8%
- MIT, Chromepet | 85.5%

MOST PREFERRED BRANCHES
- Computer Science Engineering
- Information Technology
- ECE
- AI and Data Science

Chennai: SSN College of Engineering, College of Engineering, Guindy (CEG) and Madras Institute of Technology (MIT), Chromepet have been preferred the most by students in the first round of counselling this year.

The new rule mandating fee payment within seven days of seat allotment has helped 80% of students who had opted for better seats/colleges and paid fees in the first round, to move upward in the first round itself. Officials say it has helped to reduce wastage of seats in top colleges.

TNEA called 14,524 students who have scored cut-off marks from 200 to 184.5 to attend the first round of online counselling. Of them, 10,340 got the provisional allotment and 9,594 paid fees in colleges and TNEA facilitation centres (TFCs).

In the general category, SSN college has filled 87.8% of seats, CEG 86.8% of seats and MIT 85.5% of seats. Only 20 colleges got more than 30% of their seats filled. Of 446 colleges that took part in the first round, 269 could not fill a single seat.

"Clearly, students gave importance to colleges with good reputation, facilities and placements," career consultant Jayaprakash Gandhi said. Computer science, information technology and electronics and communication are preferred the most in the first round. Courses such as BTech AI and Data Science also had many takers. He added that, as expected, the preference for civil and mechanical branches was less.

However, top colleges have bucked the trend. "We have admissions even in the civil engineering branch," said V E Annamalai, principal of SSN College of Engineering.

"Students prefer colleges over courses. It was clear as we were able to fill seats in all circuit branches," said R M Kishore, vice-chairman, RMK Engineering College.

The move to reduce the wastages in top colleges also yielded good results. "Of 3,707 students who opted for better seats/colleges and paid fees at TFCs, 3,046 (80%) got upward movement in the first round. Last year, the number was only 1,312," said T Purushothaman, secretary, TNEA committee.

TNEA has added more than 2,800 seats to vacancies after students neither confirmed their seat allotment nor paid the fees within seven days of seat allotment. Last year, more than 1,800 seats allotted in the counselling were wasted as students did not join the courses after participating in the counselling.

Many news articles stated that many students started to prefer private colleges over government colleges, boasting our college to high excellence.

Tamil Nadu topper, who got *200/200*, preferred SSN over other government colleges. The cut-Off list for SSN is also provided, based on the marks obtained by the students.

SSN was preferred with an overall percentage of 87.8%, giving preference to Computer science Engineering, Information Technology and AI & Data Science.

"Students gave importance to colleges with a good reputation, facilities, and placements," career consultant Jayaprakash Gandhi said.

TN engg admission: Toppers choose pvt colleges over Anna univ, govt institutes

BINITA JAISWAL @Chennai

IN a new trend in engineering admissions, more top-ranking Tamil Nadu students are choosing private engineering colleges over government colleges. One city private college even Anna University's CEG and MIT campus colleges have filled only 86.82 % and 85.58% seats, respectively. Only 83.87% seats in (Central ElectroChemical Research Institute) CECRI, affiliated to Anna University, have been filled after the first CEG, MIT, and CECRI are the most preferred colleges by top rankers in the first round of counselling. Top scorers usually prefer government colleges over private ones because of lower fee and better quality of faculty. But the scenario is dif-

SSN OC	TNEA2022 Opening Mark (out of 200)	TNEA2022 Closing Mark (out of 200)
CSE	200	198.5
IT	198	197.5
ECE	198	197
EEE	197	195.5
BME	196.5	193.5
Mech	196	192
Chem	194	190
Civil	191	188.3

Department Update

Placement Update - Mech 2023 batch

37 got placed in the first month of Placement Drive.

Six of our Final Year Students got selected in Caterpillar.

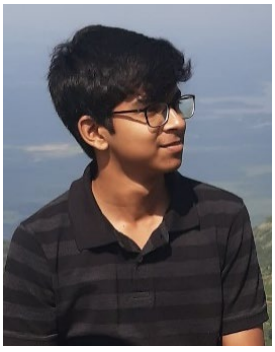
Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines, and diesel-electric locomotives.

1. Vallikannan M (Full time only)
2. Lakshmi Swetha S (Full time only)
3. Siddharth S (Full time + Internship)
4. Akshaj Verma P (Internship)
5. Subramanian B S (Internship)
6. Ponayappan A (Internship)

CTC: 10.77 LPA

Intern Stipend: 20K






Manav Damani got selected(Full time) in CITI Bank .

CTC: 18 LPA

Citi, the global bank's core activities are safeguarding assets, lending money, making payments, and accessing the capital markets on behalf of their clients. They have 200 years of experience helping clients meet the world's toughest challenges and embrace its greatest opportunities.

Akshaj Verma P got selected(Full time) in McKinsey & Company

CTC: 12 LPA

McKinsey & Company is a global management consulting firm founded in 1926 by University of Chicago professor James O. McKinsey, that offers professional services to corporations, governments, and other organizations.

Five of our Final Year Students got selected(Full time) in Technip Energies

1. Rufus Derrick R
2. Ronak Bagmar
3. Chandresh V
4. Sricharan S S
5. Subramanian B

CTC: 5.8 LPA

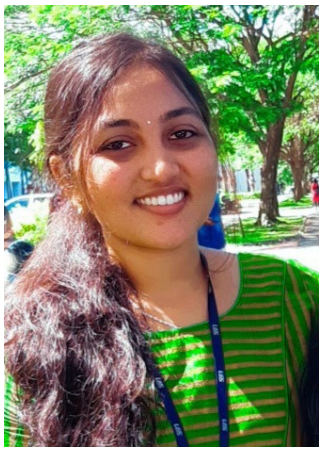
Technip Energies is a leading Engineering & Technology company for the energy transition, with leadership positions in Liquefied Natural Gas (LNG), hydrogen and ethylene as well as growing market positions in blue and green hydrogen, sustainable chemistry, and CO2 management.

Three of our Final Year Students got selected(Intern) in Amazon

1. Shivani
2. Bhavish
3. Bhooshan

Stipend: 70K (6 months)

Amazon.com is a vast Internet-based enterprise that sells books, music, movies, housewares, electronics, toys, and many other goods, either directly or as the middleman between other retailers and Amazon.com's millions of customers.



Booshan got selected(Intern) in AMADEUS.

Amadeus' solutions connect travellers to the journeys they want, linking them via travel agents, search engines and tour operators to airlines, airports, hotels, cars, and railways.

32 GOT CTS/TCS OFFERS

Manav Damani
TCS Ninja, Cognizant GenC

Lakshmi Swetha S
Cognizant GenC

Vallikannan M
TCS Ninja, Cognizant GenC

Chandresh V
Cognizant GenC

Subramanian BS
Cognizant GenC

Nitish M
TCS Ninja, Cognizant GenC

Adarsh Sahu
Cognizant GenC

Charan Vinayak
Cognizant GenC

Harsh Mishra
Cognizant GenC

L Nitish Aadithya
Cognizant GenC

Ramasamy RM
Cognizant GenC

Simon Victoria A
Cognizant GenC

Vivek Sridhar
Cognizant GenC

Dev Chaurasia
Cognizant GenC

Ajith M
Cognizant GenC


Niranjan M
Cognizant GenC


MAHESH RAGAVAN Mahesh
Cognizant GenC


A Guruprakash
Cognizant GenC


Varun S
Cognizant GenC


Bhavish Athreya K
Cognizant GenC, TCS Ninja

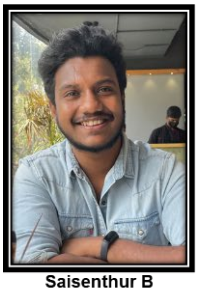

Dhanush N
TCS Ninja


Gokul Prasath Venkatesh
TCS Ninja


Roshan Natarajan Natarajan
Cognizant GenC


Inzaman Iqbal
TCS Ninja


Krithik K
TCS Ninja


Saisenthur B
TCS Ninja


Sarvesh Karthikeyan S
TCS Ninja


Shahul Sameer
TCS Ninja


Shivani Sathyanarayan
Cognizant GenC


Harihara Sudhan M
TCS Ninja


Pon Ayappan Anathakumar
Cognizant GenC


Ram Praakash
TCS Ninja

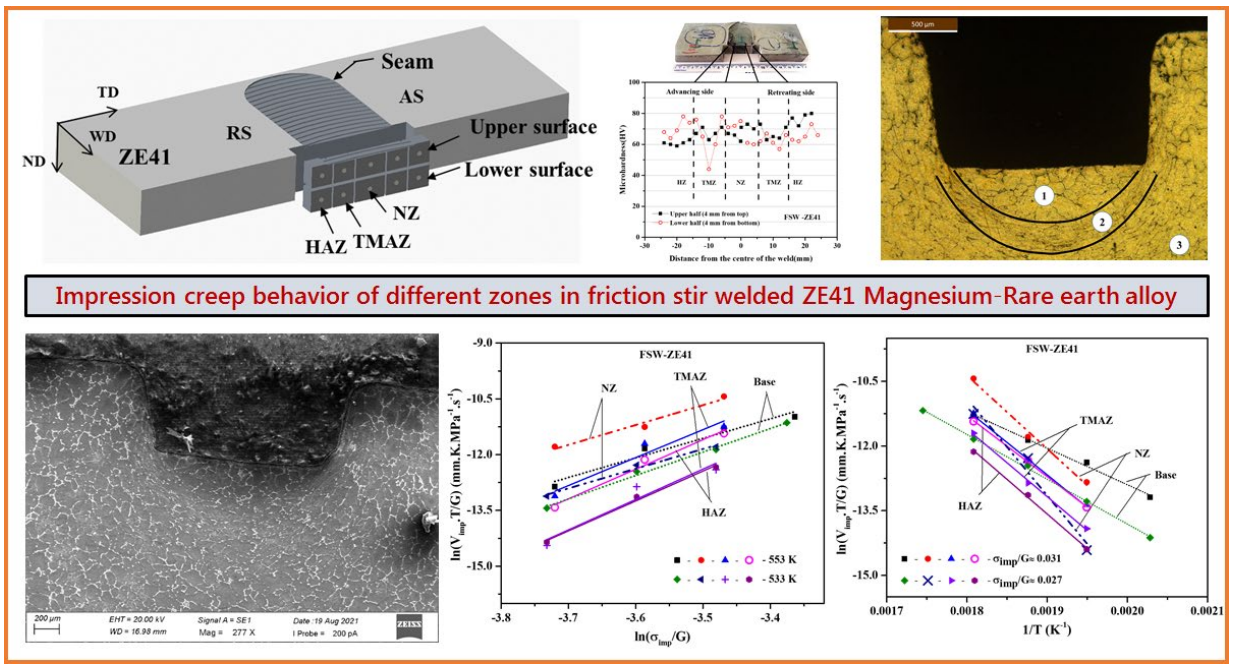
Two M.E students from Mech Got placed in MNCs Cognizant and TCS

Name	Company Placed	Reg No	M.E Specialization
JEFRIN HARRIS W B	Cognizant	3122212002004	Manufacturing Engineering
RATHNA SABHAPATHY A S	TATA Consultancy Services - TCS Ninja	3122212002007	Manufacturing Engineering

International Journal Publication - SCI /Clarivate Indexed



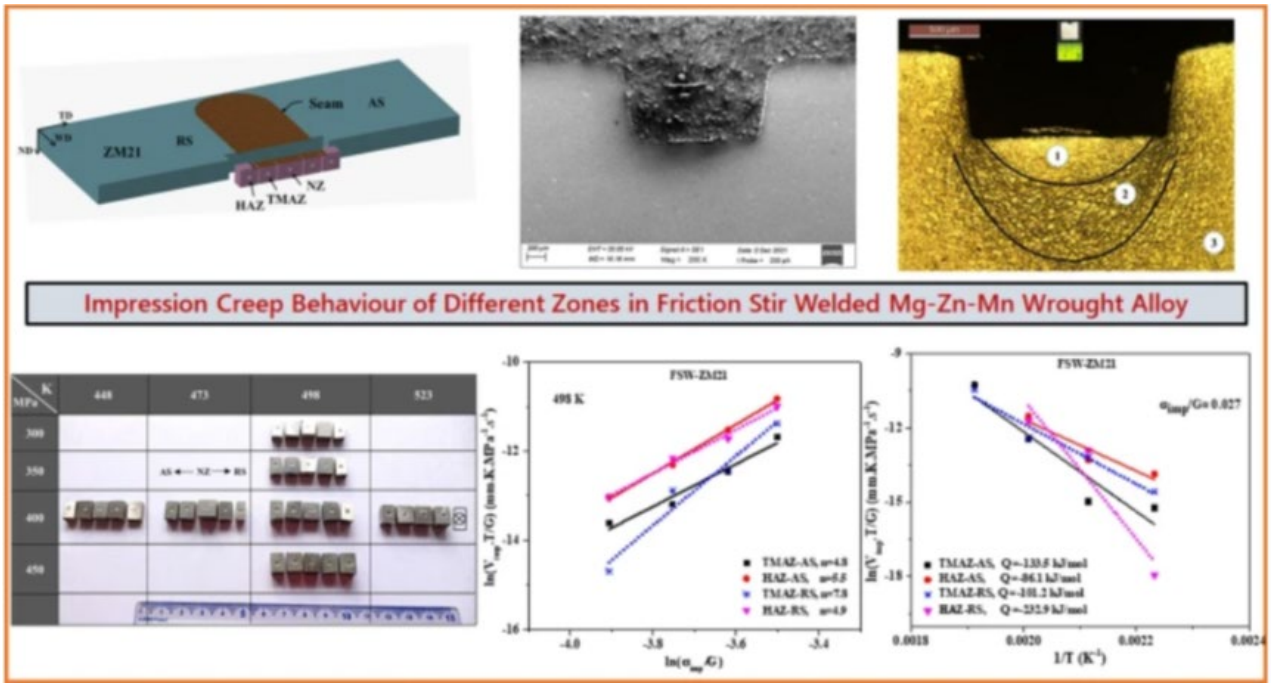
Ebenezer, D., SR Koteswara Rao, K. L. Harikrishna, and G. Madhusudhan Reddy. "Impression creep behavior of different zones in friction stir welded ZE41 magnesium-rare earth alloy." *Materials Science and Engineering: A* 851 (2022): 143615. Clarivate Impact Factor: 6.044



International Journal Publication - SCI /Clarivate Indexed



Ebenezer, D., S. R. Koteswara Rao, and K. L. Harikrishna. "Impression creep behavior of different zones in friction stir welded Mg–Zn–Mn wrought alloy." *Journal of Materials Science* 57.31 (2022): 15059-15077.Clarivate Impact Factor: 4.682



International Journal Publication - SCI /Clarivate Indexed

M. Sunilkumar, and M. S. Alphin. "Influence of Fe–Cu-SSZ-13 and hybrid Fe–Cu-SSZ-13 zeolite catalyst in ammonia-selective catalytic reduction (NH3-SCR) of NOx." *Reaction Kinetics, Mechanisms and Catalysis* 135.5 (2022): 2551-2563.Clarivate Impact Factor: 1.843

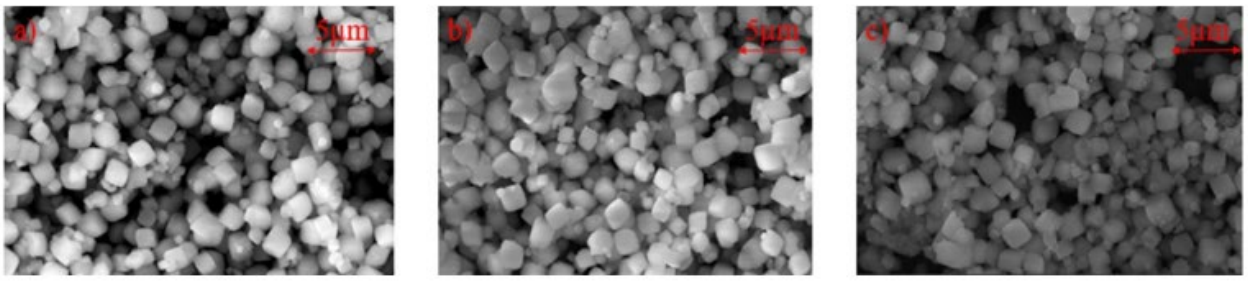


Fig. 1 SEM images of hybrid catalyst. **a** Fe-Cu-SSZ-13 Catalyst, **b** Zn/Fe-Cu-SSZ-13 Catalyst, **c** Zn-CNT/Fe-Cu-SSZ-13 catalyst

International Journal Publication - SCI /Clarivate Indexed

Paul, Rajdeep, Divya Zindani, and Sumit Bhowmik. "Investigation on Physicomechanical, Tribological and Optimality Condition for Coir Filler-Reinforced Polymeric Composites." *Arabian Journal for Science and Engineering* (2022): 1-16. Clarivate Impact Factor: 2.807

Conversion of raw coconut to micro-coir particulates

International Journal Publication - SCI /Clarivate Indexed

Madhan Kumar, A., and K. Jayakumar. "Mechanical and drilling characterization of biodegradable PLA particulate green composites." *Journal of the Chinese Institute of Engineers* 45.5 (2022): 437-452.Clarivate Impact Factor: 1.107

Figure 2. PLA composites plates before drilling.

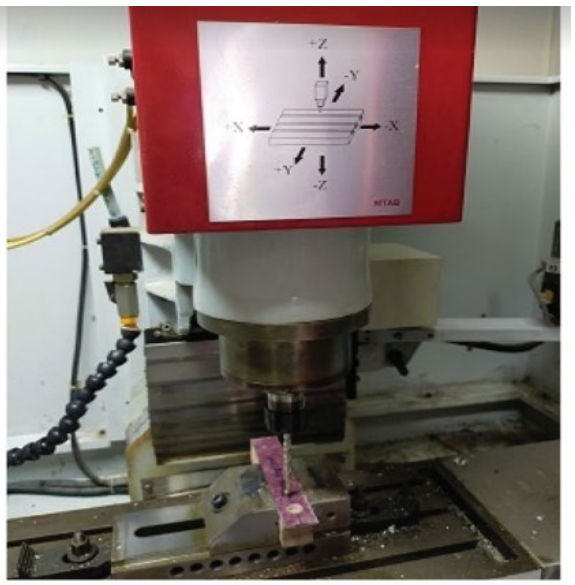


Figure 4. Drilling study in a CNC machine.

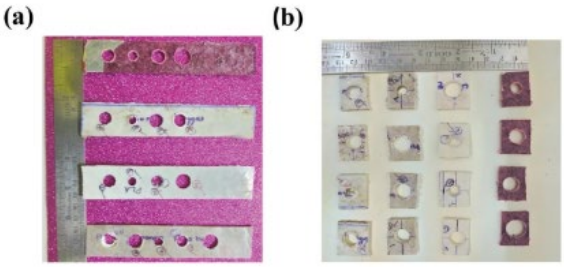


Figure 5. (a) and (b). drilled composites.

International Journal Publication - SCI /Clarivate Indexed

Balasubramaniyan, C., S. Santosh, and K. Rajkumar. "Surface quality and morphology of NiTiCuZr shape memory alloy machined using thermal-energy processes: an examination of comparative topography." *Surface Topography: Metrology and Properties* 10.3 (2022): 035019. Clarivate Impact Factor: 2.185

Figure 2. (a) Surface roughness measurement SJ210 (b) Taylor Hobson Instrument for 3D Surface topography.

International Journal Publication - SCI /Clarivate

Ganesan, Gnanakumar, Selvaraj Muthunadar, and Murugan Ramasamy. "Experimental investigation on mechanical properties and free vibration characteristics of epoxy-based glass/flax laminates." *Polymer Composites* (2022). Clarivate Impact Factor: 2.5

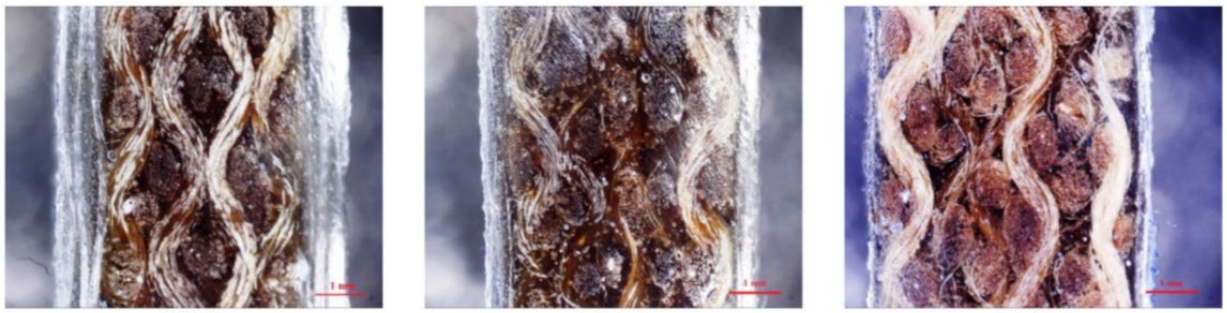


FIGURE 1 Macroimages showing the layer arrangement and thickness of three types of glass/flax hybrid laminates

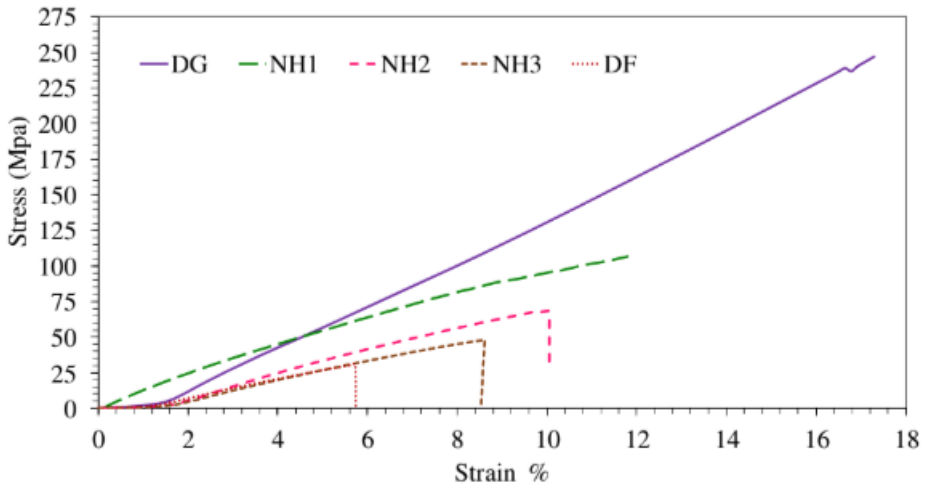


FIGURE 5 Stress–strain plots of dedicated and hybrid laminates obtained from tensile test

Scopus Publication

Selvaraj, M. "Investigation on vibrational characteristics on vinyl ester/glass fibre composite with intermediate polyurethane layer." *AIP Conference Proceedings*. Vol. 2460. No. 1. AIP Publishing LLC, 2022. ***Scopus Impact factor:0.5.***

Selvaraj, M. "Regression model for obtaining peak temperature and heat generation during friction stir welding of stainless steel." *Materials Today: Proceedings* (2022). ***Scopus Impact factor:0.6.***

Selvaraj, M. "Effect of magnetorheological elastomer thickness and magnetic flux on vibrational characteristics." *Materials Today: Proceedings* (2022)., ***Scopus Impact factor:0.6.***

FACULTY WRITE-UP

Industrial Visit
Write up by Dr. K.L Hari Krishna and Mr. Suresh Krishna

An industrial visit to M/s Axles India Ltd., Sriperumbudur was arranged on 21-09-2022 for the First Year, M.E. (Manufacturing Engineering) & M.E. (Energy Engineering) students. A team consisting of nine students accompanied by Dr. K. L. Hari Krishna, Assoc. Prof/Mech had visited the plant. Axles India manufactures axles for prestigious clients like Dana, Tata motors, Volvo, Daimler, Bharath Benz, SML, Mahindra, etc. Upon arrival, **Mr. Manivannan (Junior Engineer),** Production department received the team and introduced **Mr. Badrinath, General Manager (HR).** Mr. Badrinath gave a nice introduction about the company and its

processes. Then we visited the Technical Training Center where Mr. Manivannan explained the complete process layout of the plant. Then we visited the Shopfloor where the entire process commencing from cutting of the raw materials to completion of the product (axle) was demonstrated. We observed all 29 processes on the shop floor. We also had a chance to see the modern kitchen with full electronic machines for cooking purposes with absolutely no requirement of LPG for the cooking process. The visit concluded with a general summary and lunch. We would like to Thank Mr. Badrinath, Mr. Manivannan, and Axles India for making the visit memorable and useful. Our special thanks to our Management, Principal, Mr. Dhakshinamoorthy D. (for the Transport arrangements), Dr. K.S Vijay Sekar, Prof & Head (Mech), Dr. N. Lakshmi Narasimhan, Dr. K.L. Hari Krishna, for their consent and kind support in organizing this visit. A special Thanks to Axles India for the very kind hospitality during the visit. Overall, that was a great learning experience for all of us and would like to have many more such Industrial visits which give us an opportunity to experience real-world Engineering from an Industrial perspective. Post this visit, we now have a feeling that one should never miss any opportunity of visiting an Industry of this magnitude.

REPORT ON THE 5 DAY ONLINE FDP ON UNIVERSAL HUMAN VALUES

Universal Human Values of late has been in focus due to growing indiscipline at all levels of the society. To promote harmony in all sections of society and with nature UGC- AICTE has undertaken an important step towards implementation of value-based education from skill-based education. As part of the initiative a five-day online FDP was organized. Dr. Ramana and Dr. Ananthapadmanaban were nominated by the Department of Mechanical Engineering to attend the 5-day FDP offered by AICTE, New Delhi. The course was offered in English from 19th to 23rd September 2022 and was completely online. This course is mandatory for faculty who are offering Universal human values for the 2nd year students next academic year. The course consisted of 10 morning-sessions and

4-afternoon sessions. There was a tutorial session every day from 4.00 to 5 P.M, where we all could ask questions and both of us raised a lot of queries during this time. There were interesting and informative lectures dealing with complexities and solutions in understanding self, family, society, and nature. There was an assignment daily and we were kept on our toes. There were 2 or 3 quizzes at random times, and we were kept absorbed to the computer screen.

There were tutorial sessions as well to discuss issues about transforming present level of competence to the level of completeness of right understanding and right living. FDP enhanced our knowledge on living in harmony with self, others and nature to have happiness and prosperity in continuity. On the last day, we took a 30-minute multiple choice test and we gave our best in the exam. Results will be out within a month. On the whole, it was a tough experience, but a new one and a challenge for us. The next challenge would be to put across the concepts learned to the students in a mature way. We plan to share our learnings among students, faculty and society. We are planning to hold a one-day FDP on this subject for the benefit of other college faculty and some interested students.

Postdoctoral venture by our research scholar - An article by Dr. K. Rajkumar

Where Great Minds Meet Great Challenges

Pacific Northwest National Laboratory, USA, is a world-class research facility for C**hemistry, Data analytics, and Earth science**, as well as for technological innovation in **sustainable energy and national security**. The Pacific Northwest National Laboratory (PNNL) is one of the **United States Department of Energy national laboratories** managed by the Department of Energy's (DOE) Office of Science. The main campus of the laboratory is in **Richland, Washington, USA**.

Vishal K joined as a full-time research scholar in the 2019 July Session. He is currently waiting for the viva. In July, he applied for the post-doctoral fellowship at PNNL through LinkedIn. Around **3000 candidates** applied for this post around the globe. Most of the candidates completed their doctoral degrees. Only a few were about to finish their doctoral degree. Vishal was one among the few. Of the **3000 candidates**, only **10 were shortlisted** for the next round (Interview). Of 10 candidates, **3 were given an offer** for work in PNNL. **My scholar K. Vishal is**

one of the 3 who got an offer in PNNL as a Post-Doctoral Research Associate. He appeared for the interview on August 31. The interview went around 120 mins with a presentation and a QA session. He was able to provide appropriate responses to all of the questions asked of him, the last round of discussion went smoothly, and a committee comprised of high-level management from PNNL expressed contentment with the research being conducted

at SSN at present.

Also, he presented a paper on SSN Scholars day conducted by Prof. P. Ramasamy, Dean Research on September 7-9. He won the best oral presentation award in the Mechanical department. He was awarded a certificate and cash prize to encourage him.

Words from Mr. K. Vishal

I thank the SSN trust and management for providing me with the research fellow scheme, which helped me to carry out my research. I sincerely thank Principal SSN, who mentored me and gave valuable suggestions on how to conduct my research. Also, I thank the Vice Principal of SSN for providing research funding. I would like to express my heartfelt thanks to the Head of the Department for allowing me to work after working hours and for motivating me in all aspects. I want to express my sincere thanks to

my supervisor, Dr. K. Rajkumar, for his guidance. I want to thank Dean Research SSN very much for letting me do research in his lab.

ONE-DAY NATIONAL WORKSHOP (OFFLINE) ON "HANDS-ON SESSION ON CODING, SIMULATION, ASSEMBLY & TESTING OF APPLICATION ROBOTS"

As part of the activities of the Institution of Engineers India (IEI) Chapter in our department of Mechanical Engineering, SSNCE, a One day National level Workshop on "HANDS-ON SESSION ON CODING, SIMULATION, ASSEMBLY & TESTING OF APPLICATION ROBOTS" was Organized on 27.9.2022 in association with M/s Roboram, Nagercoil. The workshop was conducted offline. About 36 participants across the state had registered for the workshop. We are glad to have received emails from participants from far off locations like Agartala. The workshop covered the necessary theory with exclusive attention to offering a hands-on experience to the participants on coding, simulation and testing of Arduino controlled sensors integrated to different robotic applications. Mr. Sriram Nagarajan, Founder & CEO, Roboram Education, Nagercoil handled the hands-on-sessions. Overall, the workshop was inspirational and the feedback was overwhelming. As coordinators, we extend our sincere thanks to our Management, Principal, HoD/Mech, Mr. Sriram Nagarajan and all the participants for the kind support and encouragement. A special Thanks to our Transport Incharge (Mr. D. Dhakshinamoorthy) for the arrangements. Thanks to Dr. S. Ramaprabhu, and Mr. K. Kannan for the hostel arrangements to our participants from Coimbatore. Our Thanks are always due to all our dear colleagues and staff for the great support. Overall, the workshop became a memorable one !!

TECHNICAL TRAINING PROGRAM

To gear up our Mechanical Final year students (Batch-2023) to give their best during the upcoming placement opportunities from core companies, a Technical Training Program was conducted in the department. During the program the subject experts from our department delivered the expert sessions on basics of IPR, industrial problem solving skills, fluid mechanics, heat Transfer, thermodynamics, engineering mechanics, manufacturing processes etc. – The program would not have been successful without the unwavering support of subject matter expertise from the department. I thank respected Principal sir, our HoD sir and all the faculty members for giving their necessary support and guidance during the program and for expending their precious time in delivering their expert sessions during the program.

S.No.	Faculty	Topics covered
01	Dr. V.E. Annamalai	• Basics of IPR for survival in industry • Industrial Problem Solving Tools
02	Dr. K.S.Vijay Sekar	• FEA refresher course
03	Dr. N. Lakshmi Narasimhan	• Fluid Mechanics - A refresher course for interviews • Heat Transfer- A refresher course for interviews

04	Dr. Satheesh Kumar Gopal	• Engineering Mechanics
05	Dr. R.Prakash	• Engines
06	Dr. S. Suresh Kumar	• Engineering Design Fundamentals
07	Dr. A. K. Lakshminarayanan	• Manufacturing Processes (Advanced welding techniques and metal 3D printing)
08	Dr. M. Suresh	• Thermal Engineering
09	Dr. S. Rajkumar	• Basics of Thermodynamics
10	Dr. L. Poovazhagan	• Process planning
11	Dr. R. Damodaram	• Manufacturing process and coatings
12	Dr. S. Santosh	• Fundamentals of Materials and Manufacturing

Principal's department visit
Write up by HOD

Dr VE Annamalai, Principal visited the department on 14th September 2022 and made a presentation on "Opportunities and Challenges, 2022-23" whereupon he motivated faculty to primarily focus on publishing quality journal papers, work on external funded projects and seek opportunities for industrial consultancy, which would help us go higher in the NIRF rankings. He also touched upon the STARS rating system, materiality goals and the opportunity to start up, with the support of the SSN incubation foundation.

NON-TEACHING STAFF

9/20/2022 8:19	MR. BALASUNDARAM P / LAB ASSISTANT / MECHANICAL / COMPLETED ALISON COURSE OF DIESEL ENGINE BASICS ON 08.SEP.2022 AT 9.00 AM
9/21/2022 11:20	Mr. P Nandakumar /Turner Grade - II / Mechanical Dept. involved in Physical interview for the short-list candidate BE Admission for SSN Chennai. During 24/08/22 to 26/08/22
9/24/2022 13:27	Nagarajan S / Lab Instructor / Department of Mechanical Engineering involved in admission duty for First yea B.E/B.Tech admissions 2022-2023, from 24/08/2022 to 26/08/2022.
9/24/2022 13:31	Nagarajan S / Lab Instructor / Department of Mechanical Engineering involved in Consortium Form Filling work for First Year B.E/B.Tech 2022-2023 on 22/09/2022.

INDUSTRY COLLABORATION

8/30/2022 12:13	Dr. R. Vimal Samsingh, Dr.C. Arun Prakash and Dr.S. Esther Florence of our college conducted a training program on Data processing and Analysis for Industrial Management for the employees of Nova Carbon Private Limited, Tirunelveli on August 18th and 19th

8/30/2022 12:13	Dr. R. Vimal Samsingh, Dr.C. Arun Prakash and Dr.S. Esther Florence of our college received a consultancy project of worth Rs.3,24,500/- from LIFO Technologies Private Limited for the designing and developing a customized cloud connected cashless Vending machine with e-commerce compatibility.

FDP ATTENDED

9/20/2022 20:50	Dr. Satheesh Kumar Gopal attended two days FDP on "Robotics Simulation for Manufacturing" as part of the NAAN MUDHALVAN initiative by the Government of Tamil Nadu, TNSDC (Tamil Nadu Skill Development Corporation) and Anna University on Sep 19 & 20, 2022
9/24/2022 15:31	Dr. A.S. Ramana, Associate Professor, attended UGC-AICTE Incorporating Universal Human Values in Education (A joint initiative of UGC and AICTE) webinar from 19.09.2022 to 23.09.2022.

SCHOLAR INFO

8/29/2022 18:47	Dr.R Vimal Samsingh, ASP/Mech conducted the Pre confirmation seminar for his part-time research scholar, Ms. Amos Gamaleal David on 17.08.2022
9/5/2022 14:37	Dr.R.Prakash, ASP/Mech., conducted the Synopsis meeting for his full time research scholar Mr.Chilambarasan L (18142991310) on 02.09.2022
9/7/2022 15:47	Dr. K. Jayakumar, Associate Professor, conducted synopsis seminar (Seminar – II) and 3rd DC meeting for his 8th PhD scholar Mr. K. Muruganantham (1613299182-Part Time) on 02.09.2022 (Friday).
9/20/2022 10:08	Dr.L. Poovazhagan, ASP/Mech conducted the Synopsis DC Meeting for his part-time research scholar, Mr. A. Arun on 29.09.2022.

PROJECT APPLIED

9/19/2022 14:56	**Project Title:** "Additive Manufacturing of Inconel 718 tubes using Cold Metal Transfer MIG Welding" PI: Dr. KL. Harikrishna/ Assoc. Prof/ Mechanical; Co - PI: Dr. S R Koteswara Rao/ Prof/

	Mechanical, Total budget of Rs.27,67,833, Funding Agency: DST - SERB - SURE
9/20/2022 8:26	**Project Title:** Design and Development of Magnetic Levitated Centrifugal Pump used in the Wearable Artificial Lungs-Pump Device PI: Dr. T. Micha Premkumar/AP/Mechanical, Co-PI: Dr. Vijay J / ASP/ BME. Total Budget (INR): 29,99,560. Funding Agency: SERB-SURE
9/21/2022 02:40	**Project Title:** Fabrication of printed flexible supercapacitors (FSCs) as self-powered wearable electronic devices through surface defect engineering of vanadium hexacyanoferrate (VHCF) incorporated polymethylmethacrylate (PMMA) nanocomposite PI: Dr. Julie Charles/ASP/Physics, Co-PI: Dr. Satheesh Kumar Gopal / ASP/ Mech. Total Budget (INR): 29,43,250. Funding Agency: SERB-SURE

EXTERNAL RECOGNITION

9/20/2022 10:03	Dr. L. Poovazhagan, ASP/Mech delivered a guest lecture (Online) on “Aluminum nano-composites” at the department of Mech., Bharat University, Chennai on 19.09.2022
9/25/2022 13:15	Dr. Satheesh Kumar Gopal was the session chair on 25.09.2022 with the Third Virtual International Conference on Robotics, Intelligent Automation and Control Technologies on 23 - 25th September 2022 (www.riact.co.in). organized by VIT Chennai

Student Write-Up

S.NO	DATE	ACTIVITY DONE DURING THE MONTH
		THIRD YEAR
1)	21/08/2022	Muthuvelan M • Internship in App Development at Maxelerator Foundation, Madurai.
		FOURTH YEAR
2)	02/09/2022	Dhineshkumar
3)	15/09/2022	• Completed an online course on Data Visualization from Harvard Thaaneswaran V
4)	03/09/2022	• Completed an online course on Manufacturing in Welding Akshaj Varma Penmetcha • Participated in SAE Aero Design Challenge

DEPARTMENT OF MECHANICAL ENGINEERING, SSNCE CONGRATULATES ALL THE PLACED STUDENTS

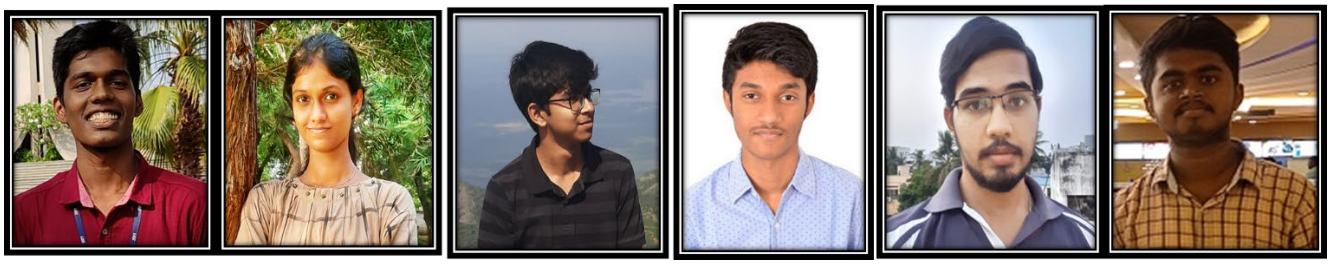
VIGNESHWARAN M got placed in ShopUp with CTC of 18 LPA. Round 1 and Round 2 for the ShopUp recruitment process was based on the candidates' choice from either an aptitude based test or coding test. Vigneshwaran was able to crack most of the aptitude questions (30 questions in an hour) and was shortlisted for the subsequent 3 eliminator rounds of one-on-one interviews. These interviews consisted of aptitude questions, logical reasoning and coding questions and puzzles. These rounds tested the logic thinking ability of the candidate. He was able to answer many of the puzzle and coding questions as well as exhibited his logical thinking approach to the interviewers during the 3 one-to-one interview rounds. Final round was another interview with CTO of the company wherein he was asked a puzzle and this time again he solved it using his logical thinking skill set. Dedicated practicing, preparation and perseverance aided him in getting his super dream offer from ShopUp.

MANAV DAMANI got his super dream offer from CITI bank (18 LPA). The process was completely online and had three rounds: General and Technical aptitude, Technical interview and HR interview. The aptitude round tested the speed and accuracy of the

candidate (50 questions in 30 minutes). Questions during this round were from topics like time and work, time and distance, probability and data interpretation. This round also tested the programming and coding ability of candidate (25 questions for programming and 2 questions for coding). Question were based on OOPS, C and C++ concepts. To judge the programming ability the candidates were asked to identify the error in the code and hence the output. Manav was asked to solve two coding questions related to class and structures in an hour using any language. He was shortlisted for the technical interview wherein he was asked everything from his resume as for instance the best project, the reason for shifting from mechanical to IT job etc. Manav did well during this round as he was aware about the vision and missions of the company and was able to relate all his answers well. Sublime confidence structured answers and exquisite communication helped him going through the next round which was HR interview.

Akshaj Varma Penmetcha got his super dream offer from **McKinsey** (12 LPA). McKinsey recruitment process consisted of six rounds (1 Game + 5 interviews). Round 1 was about solving two games (70 minutes) and it tested the candidate's critical thinking ability. Next five rounds were eliminator rounds and most of the questions asked were guesstimates (How many cars are bought in India per year?), case studies (What went wrong with Ferrari this year and what different strategic decision would you take?) and personal questions based on the resume.

Vallikannan M, Lakshmi Swetha S and Siddharth S got their full time core/super dream offers from **Caterpillar** (10.77 LPA). **Akshaj Varma Penmetcha, Subramanian BS and Ponayappan A** got internship offers from **Caterpillar.**



The recruitment process for Caterpillar consisted of three rounds: Online Assessment, group discussion and technical interview. Online assessment had four sections namely: Aptitude, Verbal, Logical Reasoning and Mechanical engineering. Considering mechanical engineering section, out of 40 questions, majority of questions were from manufacturing, Strength of Materials, Engineering Mechanics, Thermodynamics, etc. The shortlisted candidates appeared for group discussion (20 minutes) which saw discussion sustainable technologies (EV effect on IC Engine market etc.). This round shortlisted around 18 candidates for the final technical interview round which had questions based on resume, favourite subjects (concepts and application based) and internships. Also, going through the job role helped the candidates to prepare accordingly and get their offers from Caterpillar.

Rufus Derick R, Ronak Bagmar, Chandresh V, Sicharan S S and Subramanian BS got their full time core/dream offers from **Technip Energies (**5.8 LPA**)**

Technip Energies conducted 4 rounds: basic aptitude, group discussion (non-eliminatory round), technical Interview and HR interview rounds. The basic aptitude round comprised of questions from quants, verbal, logical reasoning, and core mechanical subjects. The shortlisted candidates from initial round went into group discussion round (discussion example: Indian goods vs Chinese goods? Has cricket in India lost its sheen?). After group discussion round, technical rounds had questions from candidates resume, internships, projects and core mechanical subjects such as SOM, Thermodynamics, Engineering Metallurgy and Fluid Dynamics. Candidates clearing the technical interview round went in for the final HR interviews which had general questions such as that on the experiences related in-plant training, hobbies, plans for higher studies etc.

Booshan S, Bhavish Athreya K and Shivani Sathyanarayan got internship offers from Amazon. **Booshan S** also got internship offer from **Amadeus. Congratulations to all!!!**

NOW, LET US HAVE A LOOK AT THE VARIOUS STUDENT ACTIVITIES OF THE MONTH

Akshaj Varma Penmetcha, IV-Year writes...

Competition Name: **SAE Aero Design Challenge**

Team Name: **Team Precisio**

Team:

Gokhul VS (Captain)	Sricharan S	Chandraesh M	Shreyas Murali
Durai Aaditiya	Akshaj Varma	Sivan Sriram	

We the members of Team Precisio have participated for the first time in the history of our college in an event conducted by SAE where we went head-to-head against the best teams across the country. We secured a rank of 17 out of 40 teams which were highly established and experienced in this competition. We would like to thank our mentor Dr. Jayakishan B, Dr, K Vijay Sekar and the department faculties for their continued support towards participating in competitions like these. Events like these have helped us in both placements and college applications. We urge our juniors to participate in such competitions establish our team as a formidable force.

Muthuvelan M, III-Year writes...

"Stay foolish to stay sane." This is one of my favourite quotes, which I repeat to myself because the day I think I'm smart is the day I fail to learn. This attitude helped me never feel embarrassed to ask questions and understand things much better.

As I had had a long break from active learning due to the so-called "COVID outbreak", I realised that I had started to feel less confident in whatever role I played in life. That was a really difficult task to handle. So, I thought I should get into action rather than feeling worried or unmotivated and get things done.

I started to develop a mobile application this month in Android App Studio with the Flutter language (it uses Google's Dart code). I learnt to build basic UI and followed a project based learning approach. Anything when I started was difficult for me and I used to quit, but this time I thought to break the chain and bring some meaningful output. So, I decided to stay on the path even though it was frustrating and painful at times. I discovered that only the path followed is important, and after we cross the threshold, things become easy and interesting.

I did an internship in IITM research parks startup incubation and worked in real time projects of authentication and digital twin. I learnt software such as Unity to collect real-time data and assisted in developing apps. The experience I gained in this internship helped me to be confident again and get back on track.

I understood that only hard work can bring beautiful outputs; whether it is hard or smart, it doesn't matter. We shouldn't be "ambitious, lazy people." I've started to discover life and it's interesting!

Vallikannan M, IV-Year shares his Caterpillar Recruitment Process experience.....

Round1: AMCAT Online Assessment

After applying for caterpillar company through the neopat portal (college placement portal), company will send the AMCAT link to all those who got shortlisted for Round 1(based on eligibility criteria set by caterpillar). Regarding AMCAT assessment it had Four sections namely Aptitude, Verbal, Logical Reasoning and Mechanical engineering. We were provided two hours for the test. First three sections had basic questions which could be solved with basic English and Quants knowledge. Considering mechanical engineering section, out of 40 questions for me majority of questions (10-15) came from manufacturing and some from all the other subjects like Strength of Materials, Engineering Mechanics, Thermodynamics, etc. Try to attend all the questions as this round doesn't have negative marking and have a look on your time sometimes getting stuck in a question could cost you not attending lot of easy questions.

Round2: GROUP DISCUSSION

Out of 85 students who wrote first round, 41 were shortlisted for second round which was a GROUP DISCUSSION. Attend the group discussion and technical interviews in a formal attire. We were split into 4 groups. Group 1 had 11 members. Except group 1 every team had 10 members. We were asked to have a discussion of 15 minutes on topic "EV effect on IC Engine market". Try to convey your points whenever you could have your chance to speak and be crisp, speaking 2-3 good points will fetch you a chance to clear this round. Try not to deviate from the topic.

DON'T interrupt while someone is speaking, wait till they finish and Never target someone's point always which may also bring you a negative impact. From Group 1 and Group 2, 5 members got selected, and from Group 3 and Group 4, 4 members got selected. It depends on your panel members, so try to be in top 3 to assure your selection to next round.

Round3: TECHNICAL INTERVIEW

Out of 41 students, 18 students were shortlisted for the interview round. Try to build a good resume which means not dumping lot of unnecessary things and never add things which you don't have a depth knowledge in resume. They started off my interview in the pattern of resume. They asked lot of questions based on my school life, CGPA, fav subject, NPTEL courses. You have done those things in your life, so be confident and reply whatever comes to your mind. Then as I said my favorite subject is Finite element analysis, they asked some questions like why we should use Finite element analysis when we have Strength of Materials. Then they started off with some Strength of materials questions which I was able to answer. If you don't know the concept or subject, be honest with them and say what your interests are and what subjects are your strengths. They asked me whether they can ask from fluid mechanics, I answered that I haven't revised concepts and I will try my level best to answer. So they left Fluid mechanics and started asking about my projects and internships. Have a thorough knowledge of the internship you have done and the projects you have done. After the whole process they hired 2 full-time, 1 intern + full-time and 3 interns.

Don't worry about the exact correct answer, try to approach the question in a well-structured manner. They will help you in the interview if you get stuck somewhere. So, don't worry be confident and attend the interview!

Mech Marvel

Thick Electrodes, tackle EV problems.

A new type of electrode for Li ion batteries could unleash greater power and faster charging, by making them more thick. using magnets to create a unique alignment that sidesteps common problems associated with sizing up these critical components resulting in an electrode that could potentially support the charging twice the range on a single charge.

Typically ,thicker electrodes force the ions to travel longer distances to move throughout the battery leading to a slower charging time,but by using a thin two-dimensional materials as the building blocks of the electrode, stacking them to create thickness and then using a magnetic field to manipulate their orientations. The research team used commercially

available magnets during the fabrication process to arrange the two-dimensional materials in a vertical alignment, creating a fast lane for ions to travel through the electrode.

A horizontally arranged electrode using the same materials for experimental control purposes was also fabricated. It was observed that they were able to recharge the vertical thick electrode to 50% energy level in 30 minutes, compared with 2 hours and 30 minutes with the horizontal electrode.

Amazing Innovation 225

Battery-less Wireless Underwater Camera!

Almost 95% of the ocean has been unexplored, implying that have seen less of our planet's ocean than we have the far side of the moon or the surface of Mars. A recent innovation from MIT from boasts the creation of an underwater camera that Is wireless and does not require a battery for power source which tackles the steep challenge of powering an underwater camera for a long time, by tethering it to a research vessel or sending a ship to recharge its batteries.

The camera is

powered by sound, by converting mechanical energy from sound waves into electrical energy, providing power to its imaging and communications equipment. After capturing and

encoding the data it uses the sound energy to transmit data. Because there is no inter power source the camera could run for weeks to observe the unexplored parts of the ocean.

To build a camera that must operate autonomously for long periods, a device that extracts energy from the ocean. The camera uses piezoelectric materials that produce electricity when a mechanical force is induced on them, henceforth when sound wave traveling through the water hits the transducers, they vibrate and convert that mechanical energy into electrical energy. This sound energy can come from passing ships or marine life. To keep the power source under check a low power imaging sensor and power light source since there is minimal light. But these sensors can only produce grayscale images. This was solved by using red, green and blue LEDs. When the camera captures an image, it shines a red LED and then uses image sensors to take the photo. It repeats the same process with green and blue LEDs, thus producing colour images.

A hydrophone next to the transmitter senses if a signal is reflected from the camera. If it receives a signal, that is a bit-1, and if there is no signal, that is a bit-0. The system uses this binary information to reconstruct and post-process the image.

Alumni Write-Up

KARTHIK MUKUNDAN, 2013 BATCH SHARES...

A passionate tech-enthusiast who optimizes business operations, Karthik Mukundan of 2009-2013 , has a proven track- record of leading and developing path-breaking and innovative innovations across organizations . Let us walk through his journey from being a student at SSN to working in Amazon in Pathways Leadership development program at San Francisco.

He did his Undergraduate degree in Mechanical engineering from SSN college and passed out in 2013. From being a university rank holder bagging the 21st position among 6600 fellow undergraduate students, to being a recipient of Chairman's award for outstanding overall performance, Karthik was indeed a studious, inquisitive person. His undergrad

research work included studying the Mechanical Properties of Submerged Friction Stir welding of AA6061 Aluminium alloy and published the paper in International Conference of Sustainable Manufacturing ·

He gained wide experience at Ashok Leyland for three years. Initially, joined the company as a graduate trainee and went on to become the Deputy manager and finally the program manager -New product strategy.

To expand his horizons of interest, he went on to pursuing masters degree from the Ohio State University Fisher College Of Business. He specialized at MBA in operations, Strategy and Analytics

Even their he showcased extrordinary talent in being an MBA consultant at the Global Water Institute in Tanzania, Kenya. He developed business model for water franchising services in rural Tanzania. Moreover, he interacted with 10+ social investors to refine model and ensured that all aspects of the model (such as marketing, operations, finance) are integrated comprehensively. This opened his doors for being an operation manager intern in the Amazon pathways. Now, he is working full time at amazon pathwyas in LDP.

He sincerely thanks the SSN faculties for laiding the building blocks for his current bright future. The roles he undertook, projects , and the baisc knowledge imbibed during the college days have defenitely added wings to his abilities.

ALUMNI TALK ON HIGHER STUDIES

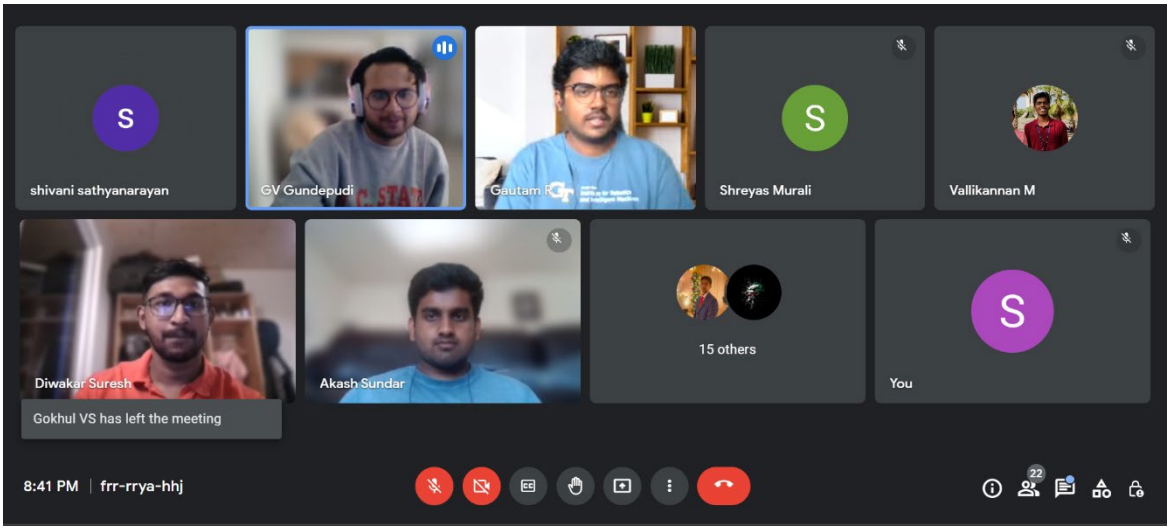
EVENT TOPIC: HIGHER STUDIES ABROAD

STAFF INCHARGE: DR C ARUN PRAKASH

STUDENT COORDINATORS: SRICHARAN S; SRIRAM M

EVENT OCCURRENCE: 7PM-8:30PM; 17 SEP 2022

NUMBER OF PARTICIPANTS: 34 (2^{nd},3^{rd} ,4^{th})

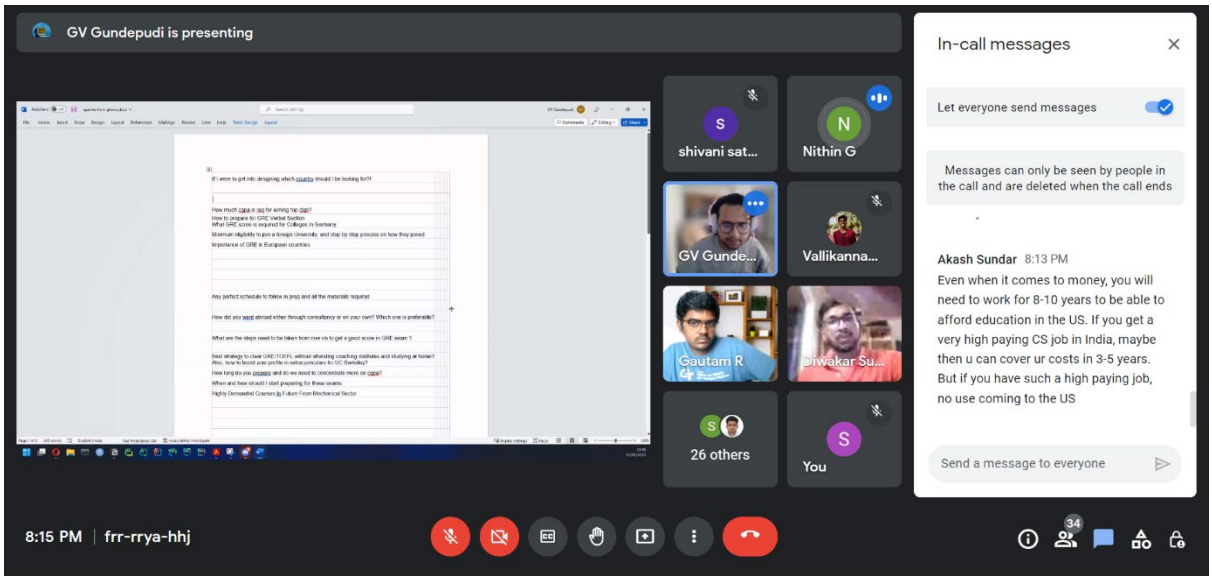


On 17 September, an Alumni talk regarding Higher Studies was conducted by ALUMNI ASSOCIATION OF MECH DEPT. We invited four alumni- Gautam, Gundepudi Sashank, Akash Sundar (2018-22) from US and Mr. Diwakar (2014-18) from Netherlands. The event was conducted online via Google Meet at 7:30pm. The audience ranged from 2nd year to 4th year.

The event kickstarted with GV presenting a screen on 'What is GRE, TOEFL and IELTS?'. Just as the event began, the audience were very enthusiastic and fired questions at them. Mr. Gautam took over to explain 'How to prepare for GRE? ', the materials to be used, resources, sites through which we can attempt mock tests were elaborated by Akash and Gautam. Parallelly Mr. Diwakar explained 'How to prepare for IELTS?'. Through this, the audience got a clear picture how to write exams for higher studies abroad.

Mr. GV made a systematic plan and explained the audience on how to apply for various Universities on their own Mr. Gautam explained how to write SOPs and LOR. Mr. Akash stressed on the point that SOPs play a vital role in admission process. Mr. Diwakar added on to this by quoting SOPs, IELTS and GPA are the only requirements to get into European Universities.

A comprehensive and detailed study was done by Mr. GV which was shared to the audience. Since the meeting was going on in full swing, we asked the audience to post their queries in the chat box, which was continuously being answered by Mr. Akash. In addition to that, he insisted to maintain GPA and stressed that it is one of the key deciding factors.



Mr. Diwakar elaborately explained why he chose Netherlands, studies and job opportunities in Netherlands and the process he went through. He pointed out the fact that US will provide better return of investments whereas Netherlands is much safer and balanced work life can be experienced.

The event came to an end with one our alumni explaining about the various job opportunities out there.

The meet was very useful for the audience and the second and third years got great insight regarding how to plan their schedule to prepare for applying to masters.

Research news & Forthcoming events

Project Proposal Submission

Source: SERB Call for Proposals 2022.pdf

Programs/ Schemes		Call opening date	Call closing date
1.	Start-up Research Grant (SERB-SRG)	01-02-2022 (Tuesday)	01-03-2022 (Tuesday)
2.	Core Research Grant (SERB-CRG)	01-02-2022 (Tuesday)	18-04-2022 (Monday)
3.	Teachers Associateship for Research Excellence (SERB-TARE)	10-02-2022 (Thursday)	15-03-2022 (Tuesday)
4.	SERB-MATRICS	23-02-2022 (Wednesday)	22-03-2022 (Tuesday)
5.	Scientific and Useful Profound Research Advancement (SERB-SUPRA)	11-04-2022 (Monday)	10-05-2022 (Tuesday)
6.	Accelerate Vigyan – ABHYAAS (For Winter Events)	02-05-2022 (Monday)	31-05-2022 (Tuesday)
7.	National Postdoctoral Fellowship (SERB-NPDF)	02-05-2022 (Monday)	01-06-2022 (Wednesday)
8.	Empowerment and Equity Opportunities for Excellence in Science (SERB-EMEQ)	01-06-2022 (Wednesday)	30-06-2022 (Thursday)
9.	Science and Technology Award for Research (SERB-STAR)	15-06-2022 (Wednesday)	28-07-2022 (Thursday)
10.	Technology Translation Award (SERB-TETRA)	04-07-2022 (Monday)	03-08-2022 (Wednesday)
11.	SERB International Research Experience (SERB-SIRE)	01.08.2022 (Monday)	30.08.2022 (Tuesday)
12.	Promoting Opportunities for Women in Exploratory Research (SERB-POWER)	01-09-2022 (Thursday)	30-09-2022 (Friday)
13.	National Science Chair	01-09-2022 (Thursday)	31-10-2022 (Monday)

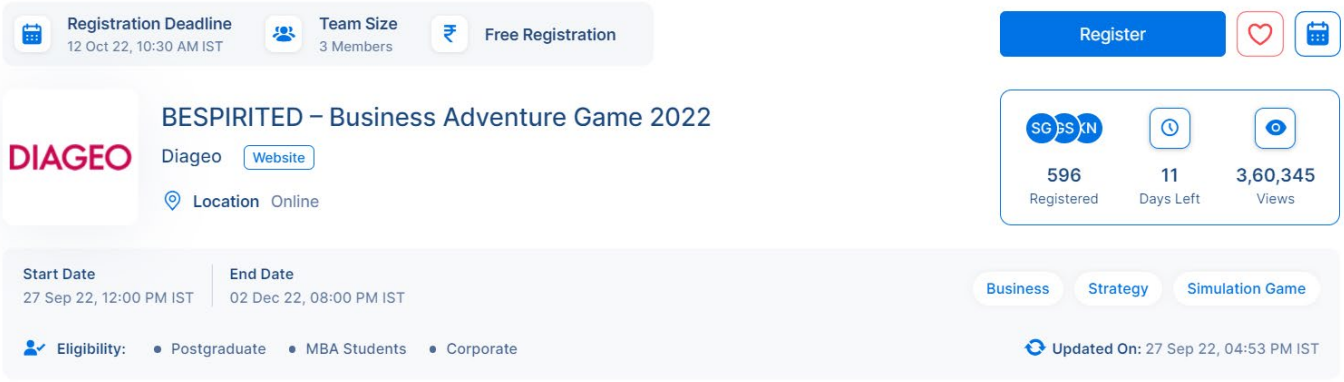
COMPETITIONS UPDATE

Pitch-A-Glitch Competition:

Link: Pitch Competition

Business Adventure Game:

Link: Game Link



CORPORATE WISDOM

From the desk of Ramki -– Aspire to Inspire

From the desk of Ramki — Aspire to Inspire

Happy Morning

Throughout our life we should make ourselves accountable for 3 questions .

1. Am I doing justice to my potential ?
2. Year after year, in how many more lives I am becoming useful?
3. Day by day , am I living my life in ways by which I am moving closer and closer to my potential ?

No matter how much you accomplish in your life, keep asking yourself, " Am I doing justice to my potential?" . Human being was created to create. We are all designed to design our lives. The very process of birth and then through parents, relatives, teachers and society- a lot of investment has gone into making each one of us. As a result, every one of us have a moral responsibility to live a life worthy of our potential.

Success is not what you achieve compared to others, but what you achieve compared to what you are capable of. And what you are capable of is defined by the infinite potential sleeping within you.

The question is "How will I know if I am doing justice to my potential?". Measure your success by the usefulness of your life . It is a shame to live a life of mediocrity .

None of us are useless . Just that , we are used less .

We are living in times when people believe even murder is okay to produce results. No it is not okay!. Without ethical and moral accountability, as mentioned earlier , Success may be possible, but being happily successful is not. It is easier for a camel to go through the eye of a needle than for a rich man to enter the Kingdom of God . Here " rich man" is not an absolute reference , but a reference to men who chose to be rich by hook or crook.

Arjuna sought Krishna and Duryodhana chose Krishna's resources. The rest is history. We all know who triumphed. Let us not trade god for the kingdom of super natural power.

Money is wonderful by-product and very poor point of focus.

- When your work becomes your self-expression, money comes in search of you as a natural by-product.
- It cannot be the other way around, where money is the point-of focus and work is only a means to it.

I keep telling from my experience – If you chase in building your capability to build a career , then money , designations will follow. But if we chase money and designations without building your capability there is no career growth. Change of designations with higher title without relevant skills, competence and capability has no meaning. Don't ask for promotion , ask for challenges , higher responsibilities – then the promotions will chase you.

#WishingMostAndMore

Have a wonderful day

Ramakrishnan Ramamurthy

GMR Group India,

Email: r.ramakrishnan@gmrgroup.in

EDITORIAL TEAM

Dr. Alphin M S

Dr. Satheesh Kumar G

Shivani S

Rufus Derrick

Vallikannan M

Nithin G

Ponroshan D

Kavya s

Harish

feedback to ***aspire @mech.ssn.edu.in***