

Achievements in Sports, Projects, Industry, Research and Education

MONTHLY NEWSLETTER

DEPARTMENT OF MECHANICAL ENGINEERING

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BY

SRI SIVASUBRAMANIYA NADAR COLLEGE OF
ENGINEERING

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ALL DIMENSIONS ARE IN "mm"

From The HOD's Desk...

Dear all,

We are happy to bring out the August edition of Aspire!!!

In the Nobel laureate's section, we feature Gerard Mourou who shared the Physics Nobel of 2018 for his innovative work in the field of ultra-fast lasers.

Roshni Nadar continues to be one of the most venerated and influential persons of the global IT sector and adds another feather to her cap by becoming the wealthiest woman in our nation for the second consecutive time.



The department successfully submitted the SAR document to NBA in support of the accreditation for the ME Manufacturing Engg program. Our faculty share their research work in high quality journals. I had the privilege of being a chief guest at an online chess valedictory function that had players from four continents. Faculty of the department bid farewell to two colleagues Dr Vinoth & Dr Dhamodharan, whose one-year tenure ended and wished them the absolute best in life. A workshop on Finite element analysis was conducted with active participation by student.

Our students share their experiences in a hit the road event and on how they coped with offline exams after a brief hiatus. In Mech marvel, we feature 3d printing of robots and sensors in aviation safety. Our notable alumni Yashaswin Harathi shares his experience in working at CMU and expresses his immense gratitude to SSN for having given him merit scholarships and internal project funding which has been pivotal to his career.

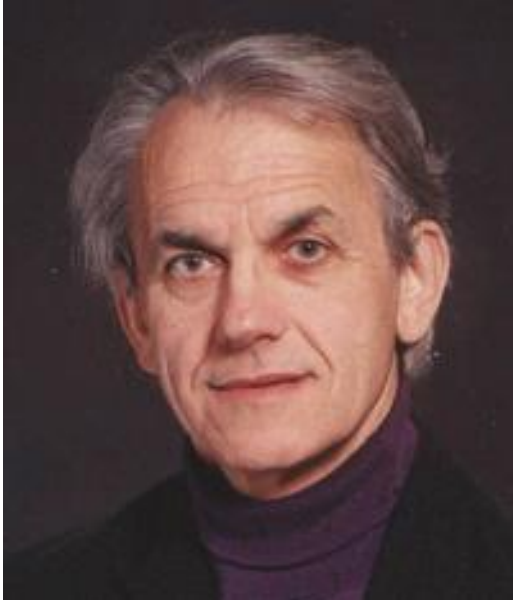
We hope you enjoyed reading this edition of Aspire, your feedback will help us be on a learning curve right through.

We wish you have a rejuvenated August, full of happiness and wisdom with equal felicity!!

Best wishes,

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

Gérard Mourou



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.

Professor Gérard Mourou has pioneered the field of ultrafast lasers and their applications in scientific, engineering, and medical disciplines for more than 30 years. He was awarded the 2018 Nobel Prize for Physics for his invention of chirped pulse amplification (CPA), a method of making pulses of laser light of high power and short duration sharing with

American physicist Arthur Ashkin and Canadian physicist Donna Strickland.

Mourou received a diploma in physics from the University of Grenoble Alpes in 1967. He then worked on his doctoral thesis at Laval University in Quebec City, and he received his doctorate from Pierre and Marie Curie University (now Sorbonne University) in Paris in 1973. Later he had a postdoctoral fellowship at the University of California at San Diego and spent three years at the École Polytechnique in Paris. He then joined the Laboratory for Laser Energetics at the University of Rochester.

In the 1970s a short pulse of laser light could be delivered only at limited amplitude and on further amplification would damage laser components.

In 1985, with his graduate student, Strickland devised CPA (Chirped Pulse Amplification) a method to generate short powerful laser pulses. The pulse was stretched to reduce its peak power. (When the pulse was stretched, its frequency changed into a pattern called a chirp, hence the name of the method.) That pulse was then safely amplified. The pulse was then compressed, amplifying it still more.

Now this method is widely used in field science, industry, and medicine, where it is the basis of LASIK eye surgery (a type of refractive surgery for the correction of myopia, hyperopia, and an actual cure for astigmatism).

CAMPUS UPDATE

ROSHNI NADAR, THE RICHEST INDIAN WOMAN



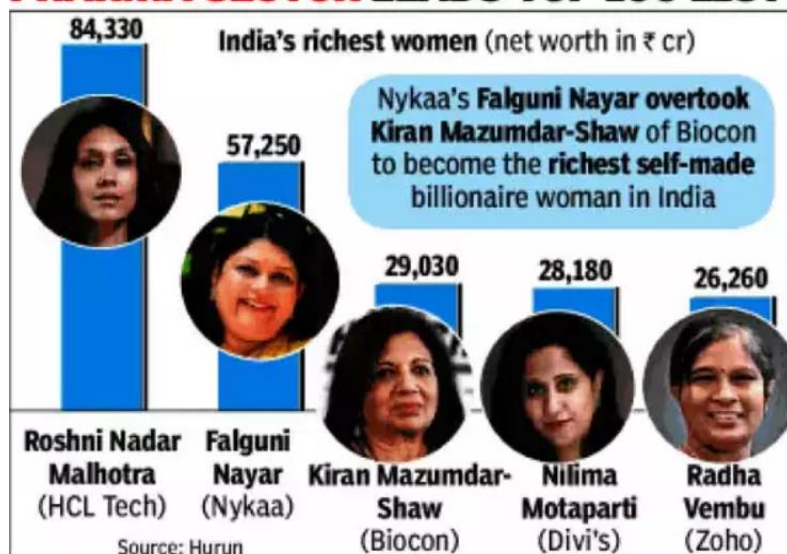
Roshni Nadar, the chairperson of HCL Technologies, remains the richest person in India for the second consecutive year. The achievements and the laurels never cease, making sure to resonate her success all around the globe, to show the growth of female entrepreneurs in the IT field.

She continues to be on the throne as the wealthiest Indian woman for a second year, with assets of over Rs. 84,330 crores. An inspiration in terms of bringing forth talent and highlighting our entire nation as inspiring women.

The pride our nation holds because of her, and being a pillar of support to our country, is indeed a moment of happiness for all students and teachers in our country. Achievements breaking down stereotypes, and highlighting women leaders is an example set by her.

Growing not only in IT fields but accelerating the education field by the SSN Institutions is the greatest feat achieved by our nation's entrepreneur, Shiv Nadar.

PHARMA SECTOR LEADS TOP 100 LIST



Growth like this and entrepreneurs like herself, accelerate India's growth and richness to the next level. Indeed, India will turn a new leaf with budding billionaires. Soar high with modern technology and advancements in all aspects and in all fields. The sky is never our limit.

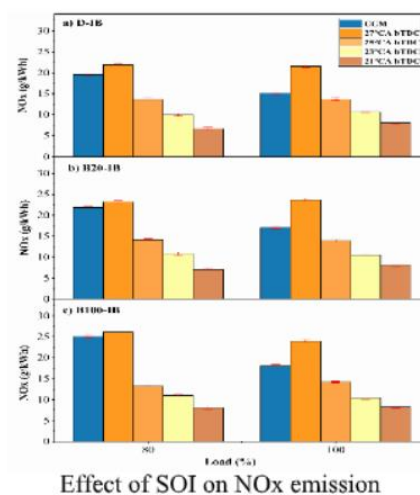
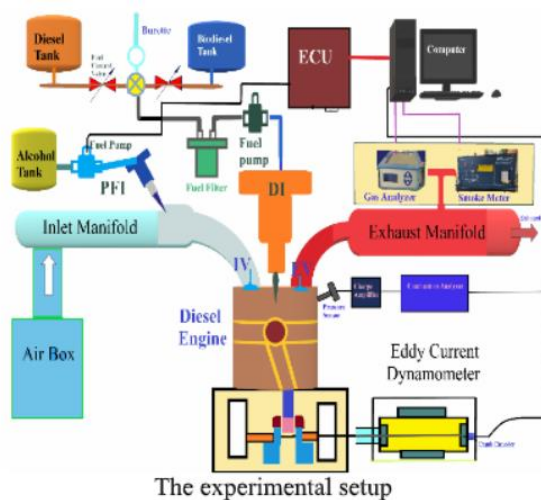
DEPARTMENT UPDATE

International Journal Publication - SCI /Clarivate Indexed



Krishnan, M. Gowthama, and Sundararajan Rajkumar. "Effects of start of injection and exhaust gas recirculation on dual fuel combustion of isobutanol with diesel and waste cooking oil biodiesel in a diesel engine at higher loads." *Fuel* 327 (2022): 125097. Clarivate Impact Factor: 8.035

doi: <https://doi.org/10.1016/j.fuel.2022.125097> . This paper can be downloaded at <https://authors.elsevier.com/a/1fLU63iH4IHO->



Dual fuel combustion (DFC) is one of the current emission reduction methods adopted widely for diesel engines. In DFC, high-octane fuels (alcohol, gasoline) are port injected and high cetane fuels (diesel, biodiesel) are directly injected into the cylinder. However, DFC is reported to increase nitrogen oxides (NO_x) compared to conventional combustion mode (CCM) at higher loads. Hence, to mitigate NO_x emission in DFC of isobutanol (IB) with diesel, B20, and B100 fuels at higher loads (80 and 100%), the influences of start of injection (SOI) and exhaust gas recirculation (EGR) are investigated. The baseline SOI of DFC fixed at 27°C A before top dead center (bTDC) is retarded to 25, 23, and 21°C A bTDC, and varying EGR (10, 15, and 20%) is implemented at the baseline SOI. Significant NO_x reductions of 47.11, 52.53, and 54.45% at the

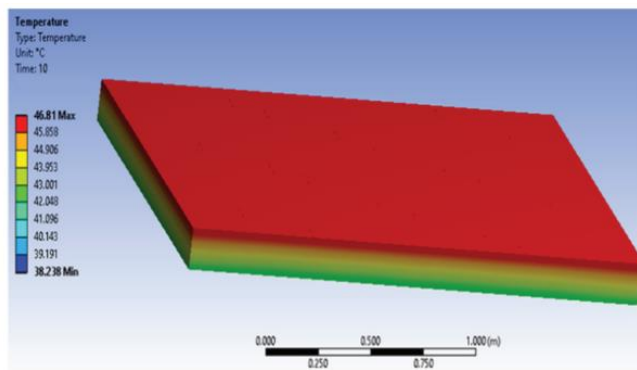
SOI of 21 o CA bTDC (at 100% load) and 41.74,46.38, and 47.81% at 20% EGR (at 80% load) are achieved in the DFC of diesel, B20, and B100respectively, vis-a-vis their CCM. In DFC of D-IB and B20-IB, retarded SOIs and 10% EGR exhibited better NOx/smoke trade-off than their CCM. Overall, all the DFCs with SOI of 25 o CA bTDC as well as 10% EGR is suitable operating conditions

International Journal Publication - SCI /Clarivate Indexed

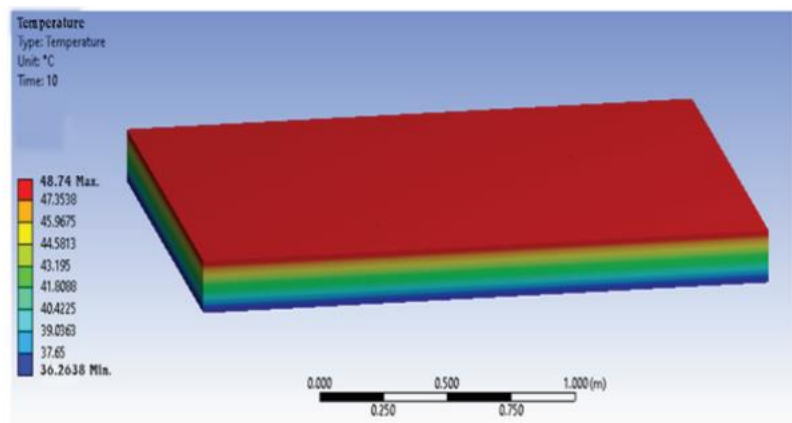


Haridass, Karthick, and **S. Rajkumar**. "Experimental and numerical investigation on phase change material filled reinforced cement concrete roof slab for mitigating the heat transfer." *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects* 44.2 (2022): 3850-3865. **Clarivate Impact Factor: 3.447**

compared to CCM.



Numerical analysis of non-PCM roof building on the maximum temperature day.

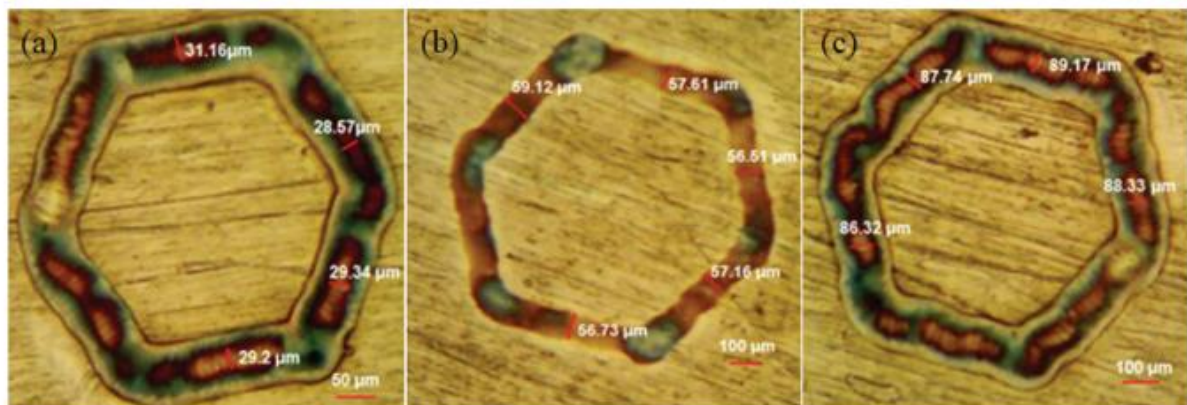


Numerical analysis of PCM roof building on the maximum temperature day.

International Journal Publication - SCI /Clarivate Indexed



Kulothungan, S., **Poovazhagan Lakshmanan**, Sarangapani Palani, and S. Sathiyamurthy. "Micro-hexagonal Profile Making on Alloy276 by Fiber Laser: Desirability Approach." *MATERIALS AND MANUFACTURING PROCESSES* (2022). **Clarivate Impact Factor: 4.616**



Optical microscope images of hexagonal profile (a) minimal kerf width (sample 2) (b) moderate kerf width (sample 8) (c) higher kerf width

International Journal Publication - SCI /Clarivate Indexed

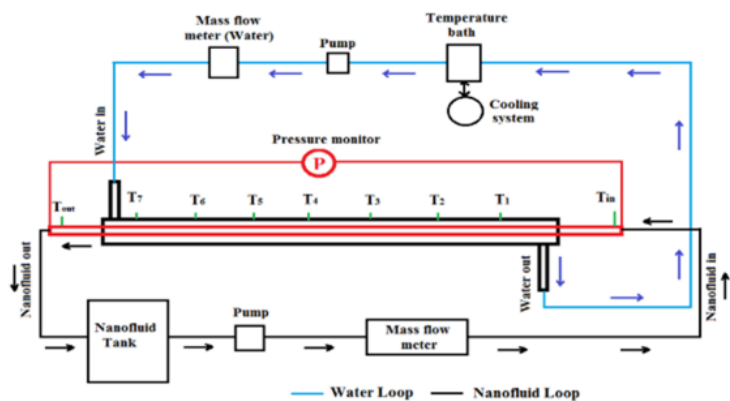


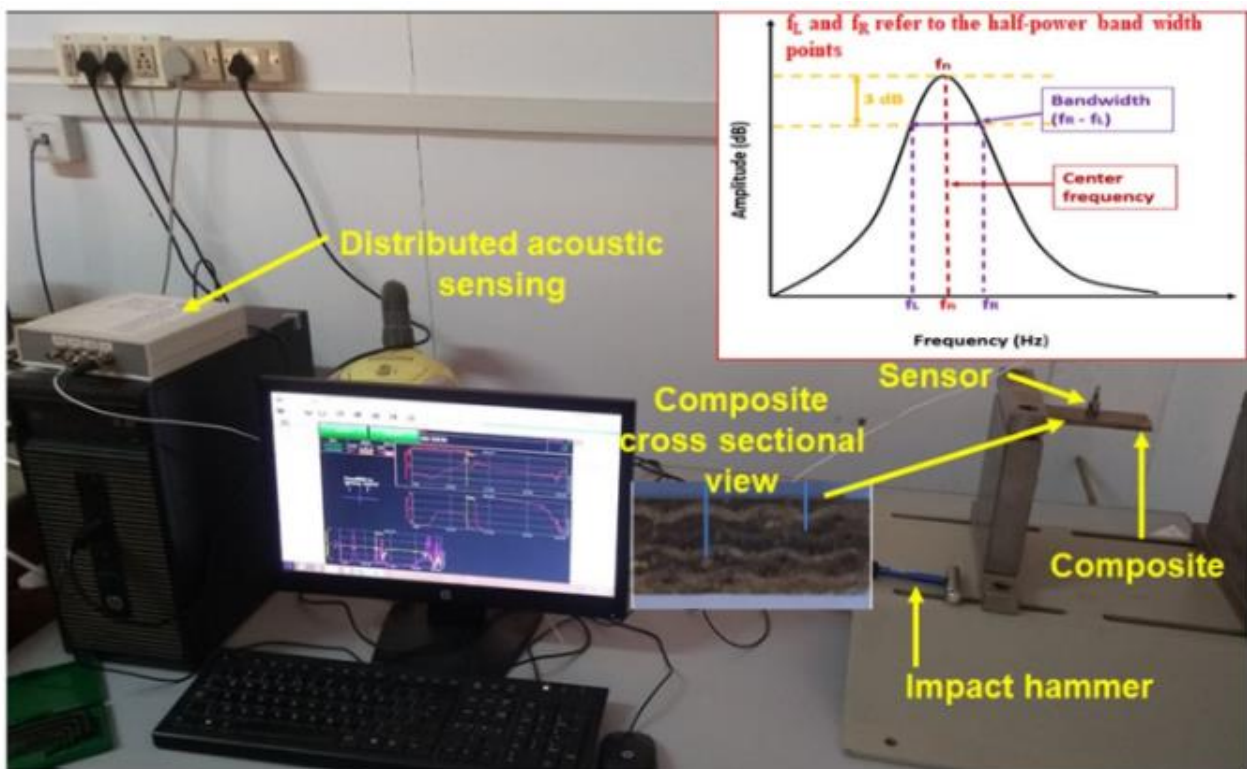
Figure 6. Test rig for estimating the heat transfer characteristics of MWCNT-Mustard oil nanofluid.

Vignesh, V., **S. Vijayan**, **G. Selvakumar**, and D. Prince Sahaya Sudherson. "Experimental investigation and mechanism analysis: Effect of concentration and temperature on the heat transfer characteristics of novel MWCNT-mustard oil nanofluid." *Bulletin of the Chemical Society of Ethiopia* 36, no. 3 (2022): 675-686. **Clarivate Impact Factor: 1.33**

International Journal Publication - SCI /Clarivate Indexed



Kirubakaran, Ramraji, **Kaliyamoorthy Rajkumar**, and Munusamy Rajesh. "Influencing Behaviour Study of Natural Almond Shell Filler on the Tensile, Thermal, and Free Vibrational Properties of Flax Fiber Intertwined Vinyl Ester Composites." *Journal of Natural Fibres* (2022): 1-12. **Clarivate Impact Factor: 3.507**



Free vibration setup of almond shell filler intertwined flax fiber composites.

Scopus Publication

Yadav, Batta Sai Chandu, A. Muniappan, K. L. Harikrishna, and K. Rajkumar. "Performance of different wire electrode materials on kerf width in WEDM of aluminium hybrid composite." *Materials Today: Proceedings* (2022). **Scopus Impact factor: 0.36.**

Ramraji, K., K. Rajkumar, K. L. Harikrishna, and P. Sarmaji Kumar. "Mechanical and dynamic mechanical analysis of calcium carbonate filler interleaved with basalt polymeric laminates." *Materials Today: Proceedings* (2022). **Scopus Impact factor:0.36.**

Kulothungan, S., Poovazhagan Lakshmanan, Parthiban Krishnan, Sarangapani Palani, and Arun Arumugam. "Assessment of factors influencing the transfer efficiency in electrostatic spray coating process." *Materials Today: Proceedings* (2022). **Scopus Impact factor:0.36.**

Krishnan, Parthiban, Poovazhagan Lakshmanan, Sarangapani Palani, Arun Arumugam, and S. Kulothungan. "Friction stir processing of Al/B4C nanocomposites prepared by Stir-Ultrasonication casting method." *Materials Today: Proceedings* (2022). **Scopus Impact factor:0.36.**

Krishnan, Parthiban, Poovazhagan Lakshmanan, Sarangapani Palani, Arun Arumugam, and S. Kulothungan. "Analysing the hardness and wear properties of Sic and hBN reinforced aluminium hybrid nanocomposites." *Materials Today: Proceedings* (2022). **Scopus Impact factor:0.36.**

Arun Kumar, L., G. Kumanan, L. Poovazhagan, M. Appoothiadigal, and S. C. Amith. "A study on electrical discharge machining of Mg/B4C nanocomposite synthesized by stir ultrasonication technique for analysing the effect of tool wear rate." *Materials Today: Proceedings* (2022). **Scopus Impact factor:0.36.**

Lakshmanan, Poovazhagan, et al. "Examining the abrasive wear properties of LM22 aluminium alloy reinforced with SiC and B4C nanoparticles." *Materials Today: Proceedings* (2022). **Scopus Impact factor:0.36.**

Arun, A., Poovazhagan Lakshmanan, K. Parthiban, G. Kumanan, and L. Arun Kumar. "Experimental study on laser surface texturing and wear characterization of titanium alloy." *Materials Today: Proceedings* (2022). **Scopus Impact factor:0.36.**

Amith, S. C., Poovazhagan Lakshmanan, S. Cyril Joseph Daniel, and M. Prem Ananth. "Optimizing the process parameters of novel rotary ultrasonic hybrid casting process for synthesis of Al-Zn-Mg-Cu matrix nanocomposites." *Materials Today: Proceedings* (2022). **Scopus Impact factor:0.36.**

Lakshmanan, Poovazhagan, and E. Sakthivel. "Examining the superplastic behaviour of (Al-Si-Mg)/SiC metal matrix nanocomposites." *Materials Today: Proceedings* (2022). **Scopus Impact factor:0.36.**

FACULTY WRITE-UP

FAREWELL

A Farewell was bid to Dr. Vinoth (AP/Mech) and Dr. Dhamodharan (AP/Mech) by the Department of Mechanical Engineering, SSNCE. Faculty members of the department wished them luck in their future endeavors.



Memento to Dr. Vinoth



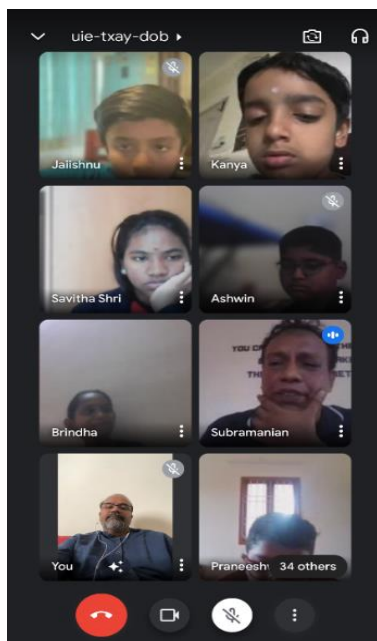
Memento to Dr. Dhamodharan

A memento was presented to Dr. Vinoth (AP/Mech) and Dr. Dhamodharan (AP/Mech) on behalf of the department by Dr. K.S. Vijay Sekar, Dr. S.R. Koteswara, Dr. M. Suresh, Dr. K. Babu, and Dr. L. Poovazhagan.

EXPERIENCE AS CHIEF GUEST

Dr. K. S. Vijay Sekar, Professor and Head of Department, shares his experience being Chief guest of an Online Chess tournament:

I was invited as a Chief Guest for the Valedictory function of Sadurangam Selection Tournament, an online chess event conducted on July 17th, 2022, where participants came from 4 continents. This also marked the completion of the 4th Anniversary of the academy run by Mr. Subramaniam, who has conducted 300 online tournament practice sessions. It was exciting to share some thoughts with kids and teenagers between 8-14, leave them some important life lessons and take aways.



My speech was on how winning everything is not, but it's the learning that is the key to sustained success. I also stressed the need to learn the history of chess and read books like Mind Masters by GM Anand, which will enhance their knowledge of the game and its nuances. And finally, how a sound body is necessary for creating a sound mind. It was a pleasure to

interact with the kids, who were all ears; it was a pleasant time away from the routines of everyday life and a throwback to memories of my own journey as a kid. I also interacted with Women International Master Ms. Savitha Shri, who was an invited speaker, is presently in Europe on a chess tour and shared her journey and answered several questions raised by the kids. Overall, it was a Sunday afternoon well spent with starry eyed kids!!!

WORKSHOP ON FINITE ELEMENT ANALYSIS



Development of novel engineering materials and the knowledge of their mechanical behaviour, allows the designer to choose a suitable material as a function of its design and application. It also enables the designer to overcome limitations and constraints in a design path especially since materials and transformation technologies have become variables of the creation process. While testing several prototypes requires huge financial investments, there has been a growing emphasis on modelling and simulation of our tests. Hence, there is a need

to delve into numerical simulation for both manufacturing engineers and design engineers. In an effort to disseminate knowledge on how a finite element analysis software can be used to understand the mechanical behaviour of material under different loading conditions, this workshop has been planned.

Keeping in mind, **Dr. M Nalla Mohammed**, and **Dr. M S Alphin** organized one Day Hands-on Workshop on “**Evaluating the mechanical behavior of Materials using Finite Element Tool-ABAQUS**” on 22nd of July 2022 (Friday). It had three sessions with in-person participants.

Session:1

In this session, **Dr. Paul Chandra Kumar**, Head, Mechanical Engineering Department, Jeppiar Engineering College, Chennai delivered his exposure on BASICS of FEA. He covered all the technical terms in FEA and the participants understood the concept very well. This made a pathway to do hands-on session very easier.

Session:2 & 3

Dr.M. Nalla Mohamed, Asso.Prof, Mechanical Eng. Department, SSNCE, delivered his exposure on Understanding the Mechanical behaviour of Materials and how to link the material behaviour in ABAQUS. Then hands-on training was given on simple beam model, Elastic-plastic analysis of tensile test sample and compressive tests samples in ABAQUS, Extracting Results in ABAQUS. The participants were very much impressed on the coincidence of numerical finding with experimental observations.



FACULTY OTHER ACTIVITIES

Dr. A S Ramana, ASP/MECH participated in a Technical Webinar by LG System - Air Conditioning Division on “Optimized Hybrid Air Conditioning Systems for high-rise and large-scale buildings ” on July 22, 2022 Organized by ISHRAE.

Dr. M Nalla Mohammed and **Dr. M S Alphin** Convened one day hand on work shop on “Evaluating the Mechanical Behavior of Materials using Finite Element Tool – ABAQUS” on 22 July 2022.

Dr. R Prakash, ASP/MECH, Participated a Professional Development Program on "Renewable Energy Sources" at National Institute of Technical Teachers' Training and Research (NITTTR), Chennai from 27-06-2022 to 01-07-2022.

Dr. R Vimal Samsingh, ASP/Mech delivered a guest lecture on “Fabrication and Characterization of Flexible Sensors” at the department of ECE, Vellore Institute of Technology, Chennai on 29.06.2022

Dr. S Rajkumar, ASP/Mech conducted the synopsis DC Meeting for his full-time research scholar, Mr. M. Gowthama Krishnan on 08.07.2022.

Dr. K Babu, ASP/MECH, Mechanical conducted the DC meeting for submission of synopsis of his full-time research scholar, **Mr. R Arularasan** on 30-06-2022.

Dr. K Jayakumar, ASP/MECH, conducted final viva for his 3rd PhD scholar **Mr. S Balamurugan** (Reg No: 1612299253- Full Time) on 13.07.2022.

Dr. M S Alphin Convened PhD Viva voce for **Mr. Paul Chandra Kumar** on 21. 07. 2022. **Dr. Ramkumar**, IITM and **Dr. Joseph Davidson**, NITW were the external examiners.

Dr. M S Alphin convened Confirmation meeting and first seminar for PhD Scholar **Mr. M Sunil Kumar**.

Dr. M Dhananchezian, ASP/MECH, conducted the 1st DC meeting for his Part-time Research Scholar, **Mr. D Kanmani** (22142997115), on 08.07.2022.

NON-TEACHING STAFF ACTIVITIES

Mr. Balasundaram P / Lab assistant / Mechanical / completed online Alison course of Certified social media (Network) Cyber security & Analysis: Level 1 on 11th July 2022 Monday

Mr. Balasundaram P / Lab assistant / Mechanical / Attended the Admission Duty on 07.07.2022 & 08.07.2022, Timed at 9 AM to 5 PM at Shiv Nadar University, Chennai

Mr. Balasundaram P / Lab assistant / Mechanical / participated one day webinar automation studio version 7.1 on 14th July 2022, Thursday, 11 am to 12 pm

Mr. Nagarajan S / Lab Instructor/ Department of Mechanical Engineering participated in the webinar on "Building the Public Health Emergency and Disaster Management Workforce" on 6th Jul 2022 organized by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India in collaboration with National Centre for Disease Control U.S. Centers for Disease Control and Prevention (CDC) Country Office India. Distinguished Speaker **Dr. J Radhakrishnan**, IAS, Principal Secretary of Co-operation, Food and Consumer welfare Department, Govt. of Tamil Nadu.

Mr. P Nandakumar /Turner Grade - II /Mechanical, conducted stock verification for MP -II Lab verified by **Dr. V Balasubramanian**, Associate Professor /CSE during 6th July 2022.

Mr. P Nandakumar /Turner Grade - II / Mechanical Dept. involved in Physical interview for the short-list candidate UG Admission for SNU Chennai. During July 07 & 08, 2022

STUDENT WRITE-UP

S.NO	DATE	ACTIVITY DONE DURING THE MONTH
1)	18/07/2022	<p>Sarath Sankar</p> <p><u>SECOND YEAR</u></p> <ul style="list-style-type: none">Industrial Visit- KCP limited, ThiruvottiyorKurukshetra Hit Road Event Overall Winner
2)	28/07/2022	<p>Rufus Derrick R</p> <p><u>THIRD YEAR</u></p> <ul style="list-style-type: none">YRC- School cleaning, free medical camp organization, school painting

Sarath Sankar, II-Year writes...

We participated in the "Hit the Road" event, which was an auto quiz and was a part of Kurukshetra '22 from the 7th to the 8th of April. The team included Raghav Prakash, Tanmay Pratti, and me.

Since this was our first time participating in an offline technical event at another college, we were brimming with excitement, because we are all ardent enthusiasts of anything with wheels and an engine. The competition was tense, and during the final stages of the event, there was no way of telling who would win. We enjoyed the opportunity to both use our present knowledge and to learn new things. And finally, winning the event was a delightful experience.

The event had three rounds conducted over the span of two days. The first round was a paper based MCQ type quiz, the second round was a buzzer round quiz for the shortlisted teams, and the event was concluded with a debate round.



The debate round was the most closely fought. The topics were nuanced and required a well-rounded knowledge of the subjects involved. The judge was experienced and provided very constructive and detailed feedback.

Srivatsan S, II-Year writes...

I'm Srivatsan S from Mech-B, II Year. I would like to share my experience of writing our first offline semester examinations after a gap of 1.5 years.

It was an enthralling month's journey, in which we initially had a few difficulties getting into the right mindset, as we had never given an exam like this before. Secondly, having not taken a 3-hour examination for the past couple of years, we lacked practice. Therefore, managing time during the exams and between the study holidays had become an important part of our preparation. Thirdly, and by far the most key factor, was a complete shift in the sleeping cycles as we had to go through and memorize a lot of concepts in between our study holidays.

But as they say, each journey has its own difficulties. To get through this semester, everyone took their preparation one step further. There were a lot of strategies being discussed, doubts being dealt with late at night, and occasionally there was laughter around. Although this whole preparation process was tiresome at times, there was fun too, which made the preparation a whole lot easier.

These exams were completely different from the board examinations since they not only tested our subject knowledge but, deep down, our practical knowledge was put to the test too. Exams had a fair share of fours, sixes, and wickets, but seeing the happiness on the faces of the students after the final exam was testimony to the fact that everyone emerged victorious in the end.

I thank SSN and all the faculty members in my department for helping with our doubts and ensuring the smooth conduct of the examination. Once again, thank you for giving me this wonderful opportunity, and I hope every student passes with excellence.

Thank You.

MECH MARVEL

AMAZING INNOVATION 219

3D Printed Bots!

Engineers from UCLA fabricated an autonomous robot just by 3d printing. At the size of a fingertip the robot can glide around at a velocity of 25 feet/sec.

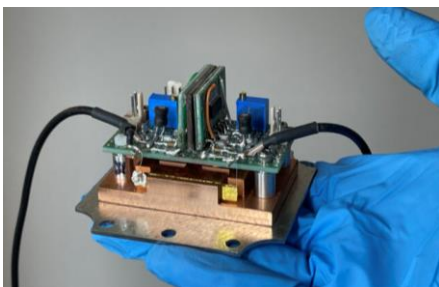
This robot consists of only a single material component that produces just twisting, flexing, and bending, unlike a regular robot, which has many components. The invention is a new feat in 3d printing technology as the printing of mobile, electrical circuits have never been achieved before and the brings forth a new method in the manufacturing of robots.



NEW SENSORS TO IMPROVE SAFTY IN AVIATION

AMAZING INNOVATION 220

Postdoctoral research associates and a team from University of Wisconsin, have developed a new sensor that can better measure small variations in acceleration without an increase in noise,



which allows the sensor to take extraordinarily precise measurements. The measurement relies on the mathematic peculiarity that occurs in the resonant spectrum of a special class of systems that incorporate balanced amplification and attenuation mechanisms. This can open doors of hypersensitive sensors that can detect tiny signatures of disturbances on a

system. This sensor has its applications in improving safety in telecommunications, environmental and climate monitoring, extraordinary platform stabilization and more accurate avionic systems. A tiny crack on a plane wing could alter it mechanical properties of its structure, hence this sensor would be able to detect that anomaly. This will help in detection of smaller cracks before gaining size that would lead to catastrophic failures.

ALUMNI WRITE-UP

YASHASWIN HARATHI (MECH' 19 BATCH) WRITES...



Hello, SSNites!! This is Yashaswin Harathi of the Mechanical Engineering Department (batch 2015-2019). I did my MS in Mechanical Engineering - Research at Carnegie Mellon University. In summer, I worked as a research fellow at J-Lab at CMU. Works revolves on swab materials to detect COVID on hospital surfaces using surface enhanced Raman spectroscopy (SERS).

Working in business development at IMG Energy Solutions, my primary focus is on developing commercial and utility-scale solar facilities in the PJM market. My responsibilities include land search, permitting and valuation, negotiations with landowners, financial modelling of Power Purchase Agreements and contributing to the overall development strategy. I also work with the asset management team to analyse natural gas industry trends. My other duties include preparing proposals and marketing materials for strategic opportunities.

The support I received from SSN has played a huge part in what I am today. I was awarded with merit scholarships for outstanding academic performance for three continuous years. Apart from excelling in academics, I think it's important to focus on extracurricular activities as well. I was appointed the President of the Mechanical Engineering department which gave me an avenue to express myself as a leader. It helped me learn about the value of planning, organizing and communication. This experience was a learning curve which enhanced my decision-making abilities while encouraging people to be innovative. Subsequently, I was also appointed as the treasurer of Instincts which was yet another great experience. Sports have been a major part of my life. SSN recognised my contribution to the football team by awarding me with a special sports scholarship. The support from HoD, professors, through academics and otherwise, their constant encouragement inspired me to achieve more. I will forever be indebted to them.

During my undergrad, I had completed an IFP in addition to the projects in the curriculum that laid the foundation for interest in research. With my current degree at CMU focusing more on research than coursework, my research background from SSN has enhanced my ability to approach and solve problems in the right manner. My advice to juniors looking to pursue higher studies would be to gain some research or industry experience, through internships or otherwise, as it adds tremendous value to your application and it becomes easier to land a job, either in industry or academia. All the best!

RESEARCH NEWS & FORTHCOMING EVENTS

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-MATRICES	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)

COMPETITION EDGE

“NO COMPETITION, NO PROGRESS”

Guess the Logo:

Link: [Logo Quiz](#)



SNU presents:

Link: [Quiz \(Business\)](#)



Atharav Debate Competition:

Link: [Debate Competition](#)



CORPORATE WISDOM

From the desk of Ramki — Aspire to Inspire

Happy Morning

When we talk about leaders it is tendency for all of us to look up to someone up. We are all primarily leaders because each one of us Lead our Life. Leadership is not a position or title, and we are all leaders in our positions in our life and career.



Leadership best practices are not only built around IQ but more on Emotional Intelligence. In harvesting a new crop of scientific findings on the brain and emotions, which had huge implications for everything from teaching kids to leadership.

There are many varieties of attention, technically speaking, each with their best application. Getting a job done well requires applying concentration, for instance, while creative insights flow best when we are in a loose, open awareness. Our focus matters immensely in everything we do, the better we can pay attention, the more excellent the results. – again, in everything from learning to leadership.

As Daniel Goleman says – “Inner”, “Other” and “Outer”

“Inner” focus refers to self-awareness and self-management; how well we can tune in to our guiding values, for instance, or know our strengths and limits- which in turn gives us a realistic sense of self-confidence- an also handle our distressing emotions so they don’t interfere with getting things done, marshal our positive emotions to stay motivated in working toward our goals, and bounce back from setbacks.

“Other” focus describes how well we attune to people; our empathy, which allows us to understand how people perceive things, how they feel, and what we can do to help them be at their best. A tuning into others this way provides the basis for skill in competencies like motivating employees, persuasion and influence, negotiation and conflict resolution- increasingly important- teamwork and collaboration.

“Outer” focus has to do with how well can sense the large forces that shape our world- whether organizational dynamics, like whose opinion matters most for a decision, or economic forces such as how a new technology will roil a market, or environmental trends like the new value placed

on lower-carbon processes. Outer awareness allows a leader, for example, to formulate a winning strategy that anticipates what is coming.

Taking the thread from the saying of Mr. Goleman, I thought, out of the above three achieving the “Inner” focus or we call this as “Inner Excellence “is very important since it is about self – awareness and self-management.

Excellence describes the furthest end of the quality spectrum. When we think of excellence, we think of an outstanding aspect, a model of its kind- the very best there is.

#WishingMostAndMore, Have a wonderful day & great week

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