

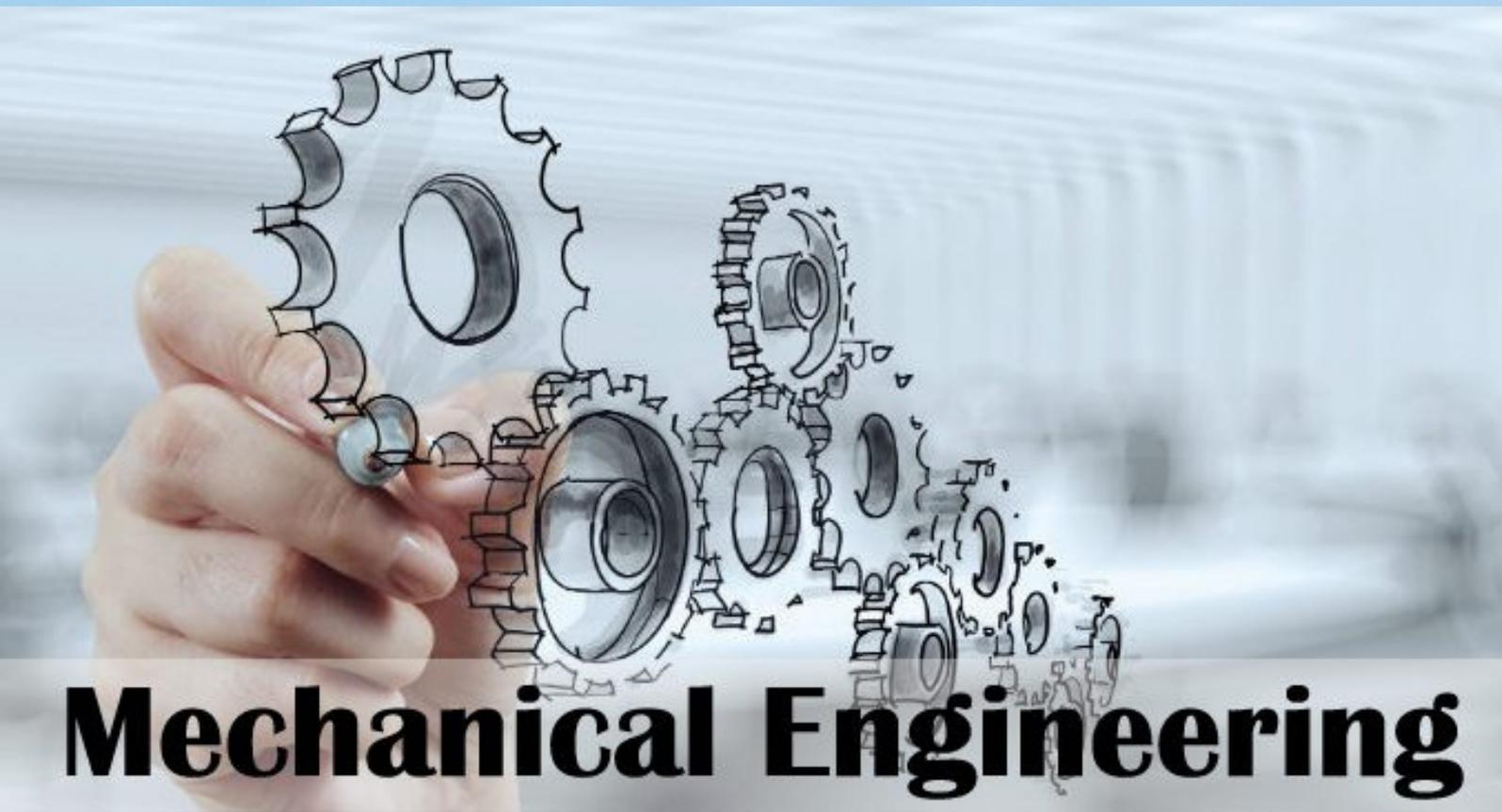


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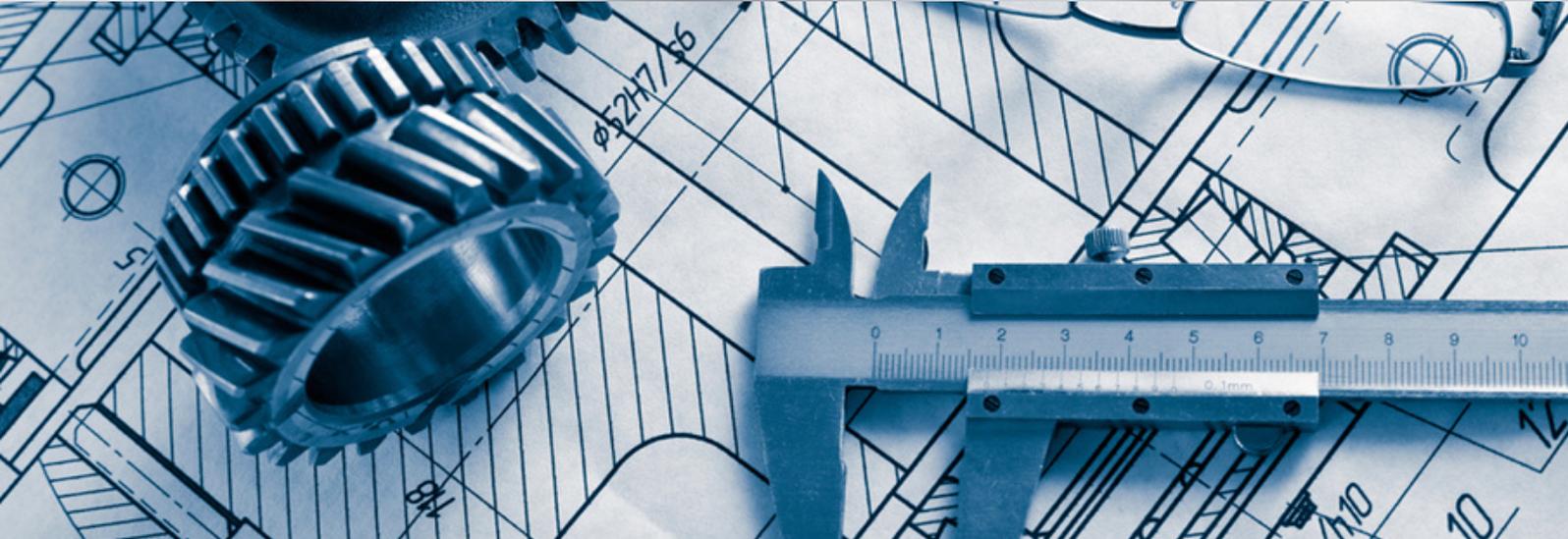
MECHAZINE

Technical Bulletin of ME Department

Issue-1, Session 2018-19



Mechanical Engineering



VISION

The Mechanical Engineering Department envisions to be recognised globally for its outstanding technical education and research capabilities to address ever-changing global issues.

MISSION

- 1.To develop state-of-the-art research facilities to provide opportunities to interpret, apply, disseminate and create knowledge.
- 2.To deliver outcome based research-led education to undergraduate and postgraduate students.
- 3.To be dynamic, innovative and flexible in devising programs, structures and mechanisms to cope with the changes.
- 4.To equip the students with academic, corporate and entrepreneurial leadership, communication skills and global awareness required by the engineering profession and society in general.
- 5.To establish an environment that encourages and builds an exemplary degree of citizenship, professional and personal integrity and ethical behavior.

EDITORIAL COMMITTEE.....



DR. CHANDAN KUMAR

Professor and Head - MED
Editor - in - Chief

PULKIT SRIVASTAVA

Assistant Professor - MED
Editor and Designer

ADITYA DEVOL

Assistant Professor - MED
Faculty Coordinator

SHIVAJI CHAUDHARY

Assistant Professor - MED
Faculty Coordinator

VED PRAKASH

Assistant Professor - MED
Faculty Coordinator

KUNDAN CHAUDHARY

Second Year - MED
Student Coordinator

MOHIT

Second Year - MED
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FROM THE DESK OF THE MANAGING DIRECTOR



"Work is Worship"

Dr. Om Prakash Agarwal (Managing Director)

Success is not a one-shot process. It is the result of a continuous improvement after each failure. The fear of failure needs to be captured in order for a person to learn from his failure too. It is an invaluable opportunity to rectify errors and move forward. Failure in working for a good cause is better than success in working for a wrong cause.

Over the years now, NIET has built quite a special position in the private higher education sector. With its distinctive culture, it provides a clear student-centered environment in which to explore existing technical knowledge, and gain new learning at the leading edges of technology development.

Our unique educational system ensures that you gain not just depth and breadth in your chosen area of specialization, but also a holistic set of skills that will equip you to face the real world. At every stage there will be opportunities to expand your boundaries, platforms for collaboration and learning, and recognitions for those who strive to excel. Thus, I would like each one of you to join NIET and aspire as global leaders and a successful human being.

MESSAGE FROM ADDITIONAL MANAGING DIRECTOR



"Education is the most powerful weapon which you can use to change the world" - Nelson Mandela

Dr. Neema Agarwal

In the course of last 20 years many technical & management institutes have sprung up all over the country. Graduates passing out every year are highly optimistic, that technical courses ensure a rewarding career.

The economic, corporate and social environments are undergoing radical changes. To survive, manage and excel in this dynamically changing atmosphere; it demands engagement of professionals who are well informed, competent, courageous and versatile.

Beyond the academics, the curriculum at NIET is strongly linked with several recent themes like latest technologies needed by organizations, soft skills, communication, among others. Our approach has resulted in programs of study relevant to the leadership trends and challenges of tomorrow. Classroom learning is made interesting by highly qualified and experienced faculty through interactions, presentations, role plays, case studies and out bound learning programs. This is further reinforced by practical learning through Industrial visits and summer training. Students regularly undergo personality development and grooming sessions that leads to both extrinsic and intrinsic confidence boosting and prepares them for the corporate world. We appreciate your interest and want you to know that we are here to bring you a leading edge technical education.

FROM THE DESK OF EXECUTIVE VICE PRESIDENT



Mr. Raman Batra

This new generation is an interesting one. Most of them were born into a world where technology has always been at the forefront. These students rely on Google, texting, social media and Wi-Fi, and they view email - not letter writing - as a formal form of communication.

NIET has been helping students write their own stories since its inception. Committed to providing the best jobs by creating life-changing educational opportunities and collaborative learning environments, we have stayed at the forefront of innovation in higher education, providing the tools our students need to make them industry ready from day one and make an impact in the world.

NIET has a Pyramid Finishing School, which provides training to the students according to the industry requirements giving the individual student a 360 degree in employability skills. The Institute has also made tie-ups with MNCs like Microsoft, Oracle, KPMG, ICICI Direct, Prometric and Pearson. These tie-ups not only promise to enhance student employability by manifold, but also take the lead in encouraging 'innovative' learning like never before. Taking the league forward, we have established various innovation labs to provide students hands-on experience in various modern-day technologies. We impart experiential learning and thereby progressively enhance the competencies of our teaching staff and our students.

I, thus, invite you to join our movement to create Corporate Citizens who become role models, wherever they go, for developing their professional career. I promise you a challenging academic experience, with an international flavor, which will truly transform your lives.

MESSAGE FROM THE DIRECTOR



Prof. (Dr.) Vinod M. Kapse

Welcome you to the Noida Institute of Engineering & Technology, Gr. Noida. Ever Since its inception in 2001 our endeavor at NIET has been to provide excellent quality of education and training to young minds aspiring to become engineers, managers, pharmacists and technocrats.

In order to achieve this goal we have established an infrastructure that composes with the bests in the world. Our faculty members are highly talented and qualified. Additionally, we invite the finest minds from the industry and academia as guest lecturers. With the help of a very supportive staff we ensure a healthy learning atmosphere for our students.

We motivate our students to dream big and guarantee that we include the right spirit and the necessary talent to realize their objective. We also continuously strive to instill ethical values in our wards so that they become responsible citizen of tomorrow.

NIET has always stood for quality and excellence and we make every effort to constantly reminiscent and improve ourselves. These efforts have been recognized, appreciated and awarded by prestigious educational bodies both in India and abroad.

I wish you the very best as you choose to become a part of this exciting and vibrant learning community.

From the pen of the Chief Editor



Prof. (Dr) Chandan Kumar, HOD, Mechanical Department

What is engineering? It is nothing but the application of mathematics and science to solve real-life problems. The scientists discover scientific theories and the engineers apply those theories to real-life applications. Doesn't it seem interesting? Engineering is enshrined in human civilization for many centuries. How do we know that? All over the world, there are many structures and remains that point out that engineering was an integral part of human life during ancient times also. Don't you think various ancient structures such as The Great Wall of China, Temple of Hera, GobekliTepe, Megalithic Temples, and The Pyramids are the perfect example of ancient engineering?

A few centuries back, for the sake of convenience, engineering was streamed into many different branches such as mechanical, electrical, civil, etc. Later, with the advancements of science and technology, some new branches also evolved. Some of them are computer science, information technology, aerospace engineering, etc. Although all of these are different branches of engineering, one thing is common in all of them. They apply scientific principles to create methods, equipment, devices, tools, etc. which are no doubt an integral part of human life.

Being a lifetime learner of mechanical engineering and a professor in the Department of Mechanical Engineering, I would like to express the beauty of mechanical engineering in a few words. Let's look into it.

Mechanical engineering is that discipline of engineering which applies engineering physics, engineering mathematics, material science, etc. to analyse, design, manufacture and maintain mechanical systems. Mechanical engineering is one of the oldest disciplines in engineering.

.....contd.....

Mechanical engineering is not an isolated subject. It is in close relationship to many other subjects. In order to understand mechanical engineering, we require many other subjects such as dynamics, mechanics, thermodynamics, structural analysis, material science, and electricity. Besides these subjects, mechanical engineers also require various tools such as computer-aided design (CAD), computer-aided manufacturing (CAM), and product life cycle management to design and analyse individual equipment, manufacturing plants, machinery, cooling & heating system, watercraft, aircraft, weapons, medical devices, and many other things.

Mechanical engineering involves design, production, and operation of machinery. Mechanical engineering exists in human history since ancient times. However, it was considered as a discipline during the industrial revolution in the 18th century. Major developments in physics took place in the 19th century. Development of physics led to the development of mechanical engineering.

Today, mechanical engineering can be found in many technological areas such as composites, mechatronics, and nanotechnology. Not only this, it also acts as a supportive discipline for other engineering disciplines. Some of these disciplines are metallurgical engineering, civil engineering, aerospace engineering, industrial engineering, electrical engineering, etc. Even in the field of biomedical engineering, the contribution to mechanical engineering is significant. In biomechanics, transport phenomena, bio nanotechnology, bio mechatronics, and modelling of the bio-mechanical system, the huge contribution of mechanical engineering can't be neglected.

No doubt, mechanical engineering has a huge contribution to the making of human history. Even today, we can't imagine a world without mechanical engineers. So, as the faculty members, it is our responsibility to nurture students in such a manner that they sustain real learning and become intellectually perfect mechanical engineers. If it happens, no doubt the contribution of mechanical engineers in the development of the nation will be more and more.

A Brief Introduction to Dark Matter and Dark Energy

This infinite universe has kept in itself plethora of mysteries. As we try to know it more, more and more new questions arise before us. Till now we used to think that the whole matter of the universe is only in the form of atoms, molecules, stars, galaxies, and other physical things which are fairly visible to us. But it is not so. As a matter of fact, the physical matter we see and know is only a small part of grand reality. In this article, we are going to discuss the remaining constituents of the whole universe. These constituents are dark matter and dark energy.



Mr. Vikash Chauhan
Astit. Professor, ME

Let's peep into the history

In the early 1990s, we were quite certain about the expansion of the universe. But we were not certain whether the expansion of the universe is accelerating, decelerating or constant. Also, we didn't know how much energy density this universe contains. If it has an abundance of energy density, it can stop the expansion of the universe. If it has too little energy density, it cannot stop the free expansion of the universe. We knew about gravity in terms of concepts developed by various physicists. As the visible matter is responsible for gravity, the expansion of the universe must slow down. But, what we observed later was quite unexpected.

In the year 1998, Hubble Space Telescope observed very distantly situated supernovae. This observation concluded that the universe is expanding actually faster today than in the past. It means that the universe has not been slowing due to gravity. As time is passing, it has been accelerating. Gravity is unable to make its expansion slower. This is unexpected. What is responsible for this expansion?

Theorists had to find the solution to this problem without having many visible data. They came up with three explanations:

- Maybe it was a result of a long-discarded version of Einstein's theory of gravity, one that provided "Cosmological Constant".
- Maybe there was some strange kind of energy-fluid that filled space.
- Maybe Einstein's theory of gravity is wrong and a new theory could include some kind of field that creates this cosmic acceleration.

Still, scientists don't know what the correct explanation should be. So the mysterious factor has been named as dark energy.

Dark Energy

We know very little about dark energy. We know how much dark energy is present in the universe because we know how it affects the expansion of the universe. This is all we know about dark energy. We know that approximately 68 percent of the universe is dark energy. Dark matter is another mysterious thing which consists of about 27 percent. Rest physical matter, also called normal matter is only 5 percent. It's a very small fraction of the whole universe. Think of this amazing fact!

Dark Matter

Associating theoretical model of the composition of the universe with the cosmological observation, we have reached the conclusion that this universe is made up of 68 percent dark energy and 5 percent normal matter. The remaining 27 percent is nothing but dark matter.

Similar to dark energy, we don't know much about the dark matter. We know more about what dark matter is not than what it is. The first thing we know is that it is dark. It is not in the form of normal matter. So it is invisible. Second, it is not in the form of the dark cloud of the normal matter. Normal matter is made up of particles called baryons. Baryonic particles have the ability to absorb radiation passing through them. But dark matter doesn't have this property.

The third important thing we know is that dark matter is not anti-matter. This is so because we do not see the unique gamma rays that are produced when anti-matter annihilates with the matter.

Also, large galaxy-sized black holes are not possible on the basis of how many gravitational lenses we see. High concentrations of matter bend light passing in the vicinity of them from objects further away, but we do not see enough lensing events to suggest that such objects to make up the required 27% dark matter available.

So this mystery yet remains a mystery. Much more is needed to be done to solve this riddle. Let's wait for the better luck when someday somehow we will be able to understand dark matter and dark energy with a full and accurate explanation.

LANGUAGE-TRANSLATING HOLOLENS HOLOGRAM

Microsoft's on-stage HoloLens demonstrations haven't invariably been spectacular, however a brand new one at the company's Inspire event (via The Verge) is nothing wanting superb. Employing a combination of body and voice capture technologies, Azure AI, and HoloLens, Microsoft created an almost photorealistic photo of government Julia White, then had the photo deliver a part of White's keynote in Japanese — a language the \$64000 person can't speak.



Mr. Shivaji Chaudhary
Astt. Professor, ME

The demonstration happened whereas White was sporting a HoloLens telephone receiver, walking and perceptive in 3D house round her clone. She began by conjuration up a "Mini Me" that would be mistily "held" in her hand. Once a bit sparkling inexperienced lighting tricks flourish, the doll-like copy remodeled into a full-sized clone that began speaking within the foreign language, mistreatment samples of White's voice to talk sentences that had been machine-translated into Japanese.

It solely takes a flash to know the tremendous potential of the new technology, forward it works in apply as seamlessly because it did within the demo. Equipped with the right 3D depth-scanning camera hardware and AI-assisted translation tools, any presenter might quickly produce presumptive, region-specific speeches — a keynote may be pre-recorded and shown at the same time in thirty languages. Of course, constant technology may be used for fewer positive functions, faking words or actions that wouldn't have come back from the body-scanned model.

For the present, really achieving this deed needs access to some professional-caliber hardware, starting from high-end, specialized cameras to pricy HoloLens headsets. However similar body-scanning technologies area unit expected to form their approach into next-generation smartphones over ensuing year around, that might set the stage for viewing photorealistic avatars on their screens or on client AR headsets. Whether or not Microsoft brings this idea to its own Mixed Reality Headsets initiative remains to be seen.



Figure: Julia White demonstrate this technique in Microsoft Inspire 2019 in Las Vegas, USA

Ever detected of a hardware wallet? It's a kind of block chain device that stores a user's personal keys in a very locked-down semiconductor unit, typically to stash crypto currencies like bit coin from exchanges. The wallets area unit plug-and-play, physically sturdy, and extremely reconfigurable, that is why researchers believe they may facilitate begin a safer digital future if adopted at scale. But they're not good.

That's why a team of scientists at MIT's applied science and computer science workplace (CSAIL) developed official, a hardware notecase design they claim eliminates common bugs touching security devices. The ASCII text file is offered on Git Hub, and also the team pegs the price of production hardware between \$50 and \$150.

"A pc is such a huge attack surface, with voluminous complexness and plenty of code ... you may pay most of your day operating usually on your pc, however once you ought to do one thing vital like sell stock or transfer cash, it may well be done comparatively swimmingly mistreatment this external device," explained lead analysis author AnishAthalye in a very statement. "Being ready to build a secure hardware notecase would cause higher security for thus many various forms of applications."

A new way to provide cooling without power

MIT researchers have devised a new way of providing cooling on a hot sunny day, using inexpensive materials and requiring no fossil fuel-generated power. The passive system, which could be used to supplement other cooling systems to preserve food and medications in hot, off-grid locations, is essentially a high-tech version of a parasol. The system allows emission of heat at mid-infrared range of light that can pass straight out through the atmosphere and radiate into the cold of outer space, punching right through the gases that act like a greenhouse. To prevent heating in the direct sunlight, a small strip of metal suspended above the device blocks the sun's direct rays.



Mr. Raman Kumar
Astt. Professor, ME



In theory, the system they designed could provide cooling of as much as 20 degrees Celsius (36 degrees Fahrenheit) below the ambient temperature in a location like Boston, the researchers say. So far, in their initial proof-of-concept testing, they have achieved a cooling of 6 C (about 11 F). For applications that require even more cooling, the remainder could be achieved through conventional refrigeration systems or thermoelectric cooling.

Other groups have attempted to design passive cooling systems that radiate heat in the form of mid-infrared wavelengths of light, but these systems have been based on complex engineered photonic devices that can be expensive to make and not readily available for widespread use, the researchers say. The devices are complex because they are designed to reflect all wavelengths of sunlight almost perfectly, and only to emit radiation in the mid-infrared range, for the most part. That combination of selective reflectivity and emissivity requires a multilayer material where the thicknesses of the layers are controlled to nanometer precision.

The Importance of Robotics in Education

Educators on all levels — teachers, principals, and superintendents — know the value of learning science, technology, engineering and math (STEM) and focusing on technology in education. Robotics takes education technology to a new level, creating the next evolution in teaching. That's because introducing robotics to schools means making STEM skills and knowledge hands-on and fun, to prepare students for the future in a way that feels more like creativity and less like homework. Robotics requires all of the subjects of STEM, so it's a well-rounded approach to educational technology and learning.



Mr. R.Sarvana Kumar
Aтт. Professor, ME

Why Robotics?

Robots have always been a captivating piece of technology, programmable to move, make noise, light up, and follow instructions as directed. There is nothing quite as fun — and educational — as building one's own robot and setting it through the paces of a race, an activity or a challenge. In the school setting, robots encourage problem-solving, creative thinking, and a healthy sense of competition that drives innovation from students.

Programming and other STEM concepts can seem very abstract, especially to younger students. Reading about technology or robotics in a book is perhaps the traditional way to learn, but putting that theory into practice by building or controlling a robot is hands-on learning that sticks around for the future. It also takes teamwork to make a robotics project run smoothly, and that's a skill everyone needs.

That doesn't mean that robotics is an easy part of STEM. In fact, this education technology can be a challenge for some learners — but a good challenge. As students improve with robotics and programming, they learn determination, perseverance, and how to plan and process with technology. These are all skills that will further their continuing education, and their future career prospects.

As another benefit, robotics is a widespread education technology that could lead to more community and educational opportunities. From robotics competitions to showcases for friends and family, robotics drives community involvement, giving students something of which they can be proud.

Encouraging Students with STEM

Robotics is a fun way to bring STEM to life, and that's important because STEM is the key to a successful future for students with the interest and motivation to pursue careers in this field.

Why encourage students to pursue STEM? For many, the potential money talks. Out of 100 STEM occupations, 93 percent of them had wages above the national average according to the Bureau of Labor Statistics. At the same time, according to the US Department of Labor's projections, US universities are expected to produce only 29 percent of the required number of graduates to fill 1.4 million computer specialist job openings. And before they can get to that point, the prospects are grim: just 36 percent of all high school graduates are prepared to take a college-level science course (National Math & Science Initiative). Clearly, there's a need to get students involved in STEM, and the earlier, the better.



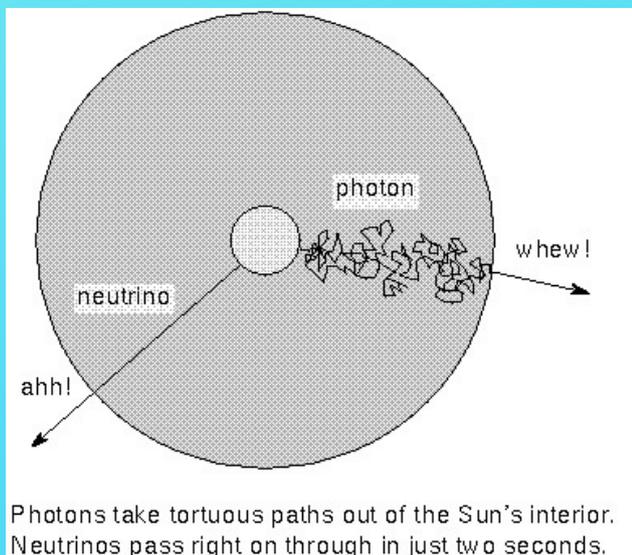
The Neutrino

The neutrino is most important part in physics and astronomy field. In this paper we provide a brief knowledge about neutrino like its origin, history, physical and chemical properties, etc. In last few decades the law of conservation of energy and the law of conservation of angular momentum are violet due to neutrino, because we are unable to find it. Neutrino is the fundamental particle which few peoples know. Fundamental particles are the smallest and basic unit to build any things in the universe. Even all the forces and phenomenon is happens behind these fundamental particles. A neutrino is in a category of fermions. It interacts only with the presence of weak subatomic force and gravity. It is much small than the other known elementary particles. It is also known as ghost particle



Mr. Kundan Chaudhary
 Third Year, ME

The first proposal was given by Wolfgang Pauli's about neutrino in 1930 to explain how beta decay could conserve the law of conservation of momentum, angular momentum, and energy. Pauli's proposal is contrast with the Neil's Bohr, who proposed the statistical version of the conservation laws to explain the observed, the changes in beta decay. Pauli's undiscovered and hypothetical particle that he named is "neutrino". He considered that the new particle is emitted from nucleus together with electron and beta decay particle in the process of beta decay process.



In 1932 James Chadwick discovered the neutral nuclear particle in the atom which is known as "neutron". Earlier in 1930 Pauli's used "neutron" for both the neutral particle that conserved in beta decay process. Enrico Fermi who used the name "neutrino" during a conference in Paris in July 1932 and at Solvay conference in oct 1933. In the introductory part we are only focused on its history and some fundamental properties. In the beta decay process we missed the particle which has energy, momentum, and angular momentum.

BIODIESEL

Biodiesel refers to a vegetable oil-or animal fat-based diesel fuel consisting of long – chain alkyl (methyl, ethyl) esters. Biodiesel can be used as a pure fuel or blended with petroleum in any percentage. Much of world uses a system known as the B factor to state the amount of Biodiesel in any fuel mix:

- a) 100% Biodiesel is referred to as B100.
- b) 20% Biodiesel,80% petro diesel is labeled B20.



Mr. Pranay Rudra Paul
Third Year, ME



BENEFITS OF BIODIESEL

- a) Produced from renewable resources.
- b) Can be used in existing Diesel engine.
- c) Grown,produced and distributed locally.
- d) Biodegradable and Non –Toxic.
- e) Better fuel economy.
- f) Reductions in greenhouse gas emissions deforestation.

CURRENT SECNARIO OF BIOFUEL PRODUCTION IN INDIA

- a) Currently India's position in Global Biofuel map is not very prominent and contributes only 1% of the global production.
- b) It will be estimated about 380 million liters of ethanol and 45 million liters of Biodiesel production in recent years.
- c) The Government of India has approved the "National Policy Of Biofuels", on December 24,2009.
- d) It has addressed the global concern about containment of carbon emission through use of environmentally friendly Biofuels.

Floating Power Plant

In today's era world is running towards energy production and also scratch their heads towards transfer of energy to a remote area. Now for this humans have a solution. Thinking is movable power plant. This is proved by Russian scientist by making a Floating Nuclear power plant. As per the name this power plant can be moved through water ways from 1 place to other to fulfill the requirements .



Mr. Mohit Barnwal
Third Year, ME

For this scientist calculated equation based on balancing the power plant , height width and length of the power plant i.e

Length=144.4meter

Weidth=30meter

Hight=10meter

It can handle by 69 crew member.

This power plant is able to produce 70MW of electricity or 300 of Heat Power Which is enough to fulfill the Electricity requirements of 200,000people.

And as we go for more advantage this plant can also be used for distillation of water and producing fresh water.

This plant could produce 240,000 cubic meter of water that means capable to fulfill the requirement of Delhi like City.

Having lots of Advantage it has some Disadvantage also. Like

>Security issue that means it can easily targeted by terrorist.

>If any mis happen happened to the and ship get sink into water it can radioactive whole the water.

>Because of nuclear fuel there is pollution in a particular area.

But after countering many of all this bad characteristics this one of the best option for power production.

Mercury as an Aviation Fuel

In present era of continuous researches for alternate fuel sources to attain sustainability we rather count on solar, wind or hydro powers etc. to petroleum. Among all these a very new but traditional idea of using Mercury as an aviation fuel also comes to light! Mercury has an abundance of 0.08gm/kg of earth's crust. It has a high vapour pressure and the highest volatility of any metal, it vaporises to become a colourless, odourless gas. It is a fair conductor of electricity, but a poor conductor of heat. As it is liquid at room temperature it expands on heating and also it is not flammable as petrol that is the reason at present we are not in the condition of using it as fuel but that's not a dead end, with some technological developments it can serve as a fuel. It is conductive and easy to ionise and its high weight gives good isp. It will be suitable for ion drive engines.



Mr. Sarthak
Third Year, ME

Apollo Fusion, a new company designing a propulsion system for rocket engines that would use mercury as a fuel. Mercury has promise in this field, sure. But launching any rocket using this system would entail the risk of spreading a toxic substance through the atmosphere. The idea of using mercury as a spacecraft fuel is not exactly new. NASA experimented with mercury in the '60s, during the SERT missions. The two spacecraft in this series, SERT-I and SERT-II, were designed to test the concept of ion propulsion. With an ion engine, powerful magnets in the spacecraft push away small charged particles at high speeds, generating thrust.

Today's ion engines commonly use krypton or xenon. For example, the recently deceased Dawn spacecraft used a xenon engine to zip from place to place in the asteroid belt. During the SERT test missions, however, the satellite engines used mercury. Mercury is much heavier than either xenon or krypton, so spacecraft carrying them would be able to generate more thrust. Of course, mercury is also a dangerous neurotoxin, so NASA stopped using it after SERT.

Apollo Fusion is planning to bring mercury back, if they're successful, they could provide low-cost, high-power ion engines for satellites and spacecraft. So will the space travels will become cheaper and with some technical advancement mercury will come up as a quite good fuel.

GOOD DRIVING, BAD DRIVING

Safety is one of the most essential factors that one should look at while driving a vehicle. When it comes to driving a vehicle, one could either be a good driver or someone who can't drive. There is no in-between status for a driver. Now-a-days it's becoming more and more common for road accidents to take up the headline space in a daily newspaper. Many people lose their lives in road accidents. There are all types of drivers on the road, from teenagers to the elderly. Despite the fact that everyone on the road is supposed to be licensed there are many drivers out there who don't have driving license and still playing with their own and others life on road.



Mr. Prashant Mehra
 Third Year, ME

HIGH RISK DRIVER	LOW RISK DRIVER
<p>The Bad (driving behaviour)</p> <ul style="list-style-type: none"> > Uses the mobile phone while driving > Eats while driving > Doesn't give way to other motorists 	<p>The Good (driving behaviour)</p> <ul style="list-style-type: none"> > Doesn't use the mobile phone while driving > Fully focused on the road when driving > Always gives way to other motorists 
<p>The Rule-Breakers (traffic violations)</p> <ul style="list-style-type: none"> > Doesn't fully obey traffic rules > Has a record of summons / traffic fines 	<p>The Obedient (traffic violations)</p> <ul style="list-style-type: none"> > Always abides by the rules when driving > Free from summons / traffic fines 
<p>The 'Tidak apa' (car maintenance)</p> <ul style="list-style-type: none"> > Doesn't service the car regularly > Remains ignorant to problems with the car, as long as it's working 	<p>The Organized (car maintenance)</p> <ul style="list-style-type: none"> > Sends the car for maintenance according to schedule > Always makes sure the car is in tip-top condition 
<p>The Convenient</p> <ul style="list-style-type: none"> > Simply parks the car anywhere 	<p>The Disciplined</p> <ul style="list-style-type: none"> > Parks the car in safe areas > Only parks the car in designated bays 
<p>The Take for Granted</p> <ul style="list-style-type: none"> > Doesn't have an alarm / anti-theft system > Forgets to lock the car 	<p>The Vigilant</p> <ul style="list-style-type: none"> > Equips the car with an alarm / anti-theft system > Always ensures the car is properly locked 

Year over year accidents increases even though infrastructure of nation is growing fast and providing better ways of driving on the roads especially highways. Road deaths in India increased to nearly 1.49 lakh in 2018 with Uttar Pradesh registering the maximum spike in fatalities.

Many drivers out there are complaining about increased fines but we should remember that fines are for those who doesn't respect road safety laws. As citizens of this great country it's our duty to think for the safety and welfare of everyone.

PTC - CENTRE OF EXCELLENCE



MERCEDES-BENZ ADAM



OUR PROUD ALUMNI



Mr. Ankit Tripathi, year of graduation 2019, is an entrepreneur. Currently he is the Founder of Uneako.



Mr. Durgesh Pandey has graduated in the 2016. During his graduation he made us proud by attaining All India Rank of 113 in GATE-2016 and got placed in IOCL



Mr. Vedprakash is a 2018 pass out. He was placed in VOLTAS. He is currently HVAC Engineer at Voltas Limited in Dubai.



Mr. Shantanu Mishra is a 2012 pass out. He got placed in TCS during campus recruitments. Now he is working on a Rolls Royce Project for TCS in Germany.

Star Achievers of 2018-19

Sr. No.	Name of Students	Date	Achievement	Event
1	Shubham Rathor	22 – 24 January 2019	First Prize(70,000)	ANVESHNA-19, National Level Project Competition held at Pragati Maidan, New Delhi
2	Shivam Chauhan	4 th April 2019	Second prize(15,000)	Make a Ton – A Technical Event held at GEC Greater Noida
3	Md. Shakir Khan	June'2018	10 th Rank in AKTU with 90.94% marks	AKTU End Semester Examinations
6	Syed Adil Kalam	26-27 January 2019	1st prize(30,000)	TECHNOVATION HACHATHON 2019 at Sharda University greater Noida
4	Yash pal	27 th February 2019	First Prize(1500)	TECHNOFEST 2019 at IIMT Greater Noida
5	Shubham Rathor	15 th February 2019	Second prize	TECHNOCALYPSE 2019 at MANGALMAY greater Noida
7	Mr. Vyom Ranjan Singh (3rd year)	19 th April 2019	1st prize	Student Development Program Activity (TECHNICAL PAPER PRESENTATION)