

# MECHAZINE

VOL: XXII

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## SPECIAL POINTS OF INTEREST:

- Winners at All-Terrain Vehicle
- Annual Day @VIT
- Changes in learning style due to Corona

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## Internship



S. Rami Reddy, N. Naga Venkata Sai and P. Suresh got an opportunity to do internship from a well-known company SCHWING Stetter from Feb 7 2020 to March 7 2020. It is leading manufacturer and supplier of construction equipment like Batching Plant, Concrete Pump, Concrete Mixer, Self-Loading Mixer, Excavator, Weigh Bridge, Chilling Plant, Plastering Machine, Tower Crane, Motor Grader, Horizontal Drilling Machine, Rotary Piling Rig, Aerial Working Platform, Cold Milling Machine, Slip form Paver, Light Mast, Sludge Pump, Wheel Loader and all types of Cranes.



## Editor's Talk

I am pleased to make out Volume XXII of 'MECHAZINE' which showcases the student's spirit to utilize their capability for achieving that compatibility to convert their ideas in reality. In this volume, the reader will get the taste of the All-Terrain Vehicle. Being a Mechanical Engineer, each reader must be connected with the different Innovative ideas they may excel their motivation to do something during their engineering journey.



## MAINTENANCE AND TROUBLESHOOTING OF REFRIGERATION AND AIR CONDITIONING SYSTEMS

Department of Mechanical Engineering, Vishnu Institute of Technology, Bhimavaram, organized a Two Day Workshop on "HANDS ON EXPERIENCE IN MAINTENANCE AND TROUBLESHOOTING OF REFRIGERATION AND AIR CONDITIONING SYSTEMS" in association with NATIONAL ENGINEERING, Visakhapatnam from 24th & 25th February 2020. The target audience for the workshop were third year Mechanical Engineering students. The main objective of the workshop is to impart working knowledge in Refrigeration & Air-Conditioning (R&AC) systems and give hands-on training on the repair, maintenance, system diagnostics, troubleshooting and fine-tuning to gain maximum efficiency of Refrigerators and air conditioning equipment. The workshop was very much helpful to the student participants and also provided hands on experience on R&AC systems. They also have Refrigeration & Air-Conditioning (R&AC)



The first residential air conditioning system was installed in 1914.  
It was 7 ft. high, 6 ft. wide, and 20 ft. long (TECH-Fact)

### **Patent**

*Dr. Mangam Venu, Professor & Head, Department of Mechanical Engineering, Vishnu institute of Technology, Bhimavaram, has received patent on SOLID STATE DEPOSITION PROCESS OF SURFACE ALLOY COATING.*

## All-Terrain Vehicle(ATV) competition titled CHAMPION OF CHAMPIONS 2.0 - 2020

It was organized by APSSDC and Imperial Society of Innovative Engineers (ISIE) at K L University, Vijayawada during 27th February to 1st March 2020. Team KRONOS from Vishnu Institute of Technology, Bhimavaram participated in this event and were the winners in ACCELERATION, SUSPENSION, TRACTION, SLEDGE PULL TEST and were overall FIRST RUNNER-UP and won a cash prize of Rs 40,000/-. The team also won FUTURE AWARD for the best innovative design of the ATV vehicle. The management, faculty and students of VISHNU congratulate the team for their efforts and achievement and wish them all success.



### Core Companies



### Software Companies



## VISHNU INSTITUTE OF TECHNOLOGY ASSOCIATION OF MECHANICAL ENGINEERS



## Annual Day Celebrations @ VISHNU

On March 14, 2020 the Annual day was celebrated grandly at Vishnu Institute of Technology, Bhimavaram. Vice Chairman Sri R. Ravi Chandran, Principal Dr. D. Suryanarayana and Vice Principal were present. The program began with Principal Dr. D. Suryanarayana presenting the annual report. Vice Chairman Sri Ravi Chandran Raja Gopal addressed the gathering. In his speech he advised the students to improve their soft as well as core skills in order to reach the top most position in their career. He commended the students for securing 94% placements this year. He also congratulated the students who secured internships in different companies. Some of the senior students shared their academic experiences with the gathering. The faculty who completed 10 years of experience in the institution were felicitated and this was followed by prize distribution for the toppers in academics and sports. The cultural activities and D J night raised the spirits of the students to the maximum extent. The students enthusiastically participated in this event.





Joel Likithapudi  
IV B.TECH,  
Mechanical  
Engineering

**Hello!!!** As we are all aware that the world is shut due to COVID-19, so were the colleges. I am a quite outgoing person and I do miss attending classes with my friends. At first I thought online sessions would be boring, so I wasn't much keen on it. After a couple of online classes, I have changed my thought. Online sessions actually helped me to interact with my friends and faculty during this lock-down from my own comfort zone. Though, there were some issues with the network for a couple of days, later on it went on well. Our faculty made efforts to make sessions interesting and informative by sharing videos and animations related to the subject. Even our project discussions and reviews happened through online platforms. As I was left with enough time, I started investing some time in learning new skills as suggested by our faculty. Instead of being idle, I also started working on my physique and I am doing meditation which helped me to be more focused and committed. I sincerely thank our faculty, HOD Sir and the entire management for their immense support extended during this pandemic. Hope to see you all soon once this lock-down gets over.

*\*stay home-stay safe\** Dangerous COVID-19, we are all facing a lot of difficulties in our daily life. All Colleges, Schools, Shopping malls etc. are closed and also the transportation too. But in this condition also, our college is providing many facilities to us, like online classes, pursuing online courses and many events. We are all extremely happy with our faculty who are teaching us in the online classes. Our faculty are using power point presentations, videos and animations. They are teaching us very well and we are able to understand it very easily. And we are also advised to do online courses by our Faculty. We had followed their suggestions and completed the courses on water technology and other courses offered by Coursera. As a Mechanical Engineering student, I am getting a lot of support from our department. There are many events like Go-karting, E-bike and SAE BAJA. College provides German language training. To end with, our college and our faculty encourage us and give us support to achieve our goals and to make us successful engineers.



Monika  
I B.TECH,  
Mechanical  
Engineering

*We feel comfortable with our academics*



V Mahimadasu  
II B.TECH,  
Mechanical  
Engineering

Now-a- days we've been undergoing a lot of inconvenience in each and every sector regarding the Corona pandemic. Yet we, the students of VISHNU, feel very proud by the innovative steps taken by our college in view of our academics. The online classes made us feel comfortable with our academics during these tough times. Every day, our faculty members have been spending quality time with us in the online classes. We are benefitting a lot from these online classes because we are able to get our doubts clarified directly right at that moment. We are enthusiastic in learning the subject through online. In fact, we are able to spend time with our teachers and friends everyday by these online classes. We are having the class room environment everyday at our homes. Not only ourselves, but also all our parents are very happy to see their beloved children learning even during these kind of difficult days. My sincere thanks to our beloved Principal Sir, all the HODs and the faculty members.



**Mr. M. PRAVEEN**

*Faculty, Mechanical Engineering*

## 100% E-learning at VISHNU

Online teaching is not my favourite way to teach because along with learning, social skills and emotional connect plays a major role in the learning process. However, in the present situation, online learning is inevitable for teachers as well as for students. Due to COVID-19 pandemic, we are implementing 100% E-learning at VIT, Bhimavaram. We are fortunate that our Management has initiated VEDIC (Vishnu Educational Development and Innovation Center), which is an exclusive teaching-learning center, established for the benefit of Students and Faculty. Through VEDIC, our entire faculty are provided training on various modern pedagogy tools. Thanks to VEDIC for providing such a platform for faculty to implement blended learning in our teaching.

COVID-19 opens up a whole new world of opportunities. Entire world is looking at India as an alternate manufacturing hub (published in Business today article on April 22, 2020). This opens up huge opportunities for core engineers. Due to lockdown, the student placements and trainings are severely affected. However, we are overcoming this difficulty by collaborating with online training partners like Conduira, Talentsprint, DassaultSystemes, ARC and Cocubes. Day to day assessments are done through our Vishnuplacements portal which helps our students to strengthen in weak areas. Apart from academics and placement training, Students are also doing online certification courses through Coursera, NPTEL and a lot more to strengthen their Curriculum-Vitae.

In this scenario, the education sector in India has forwarded to 3 to 5 years. I feel E-learning is going to be an asset to educational institutions. However, start-up opportunities are numerous after COVID. My sincere suggestion to all the students is to make effective use of the online resources and be prepared for campus recruitments. This is the right time to take action! An inch of movement



**Mr. M. RAGHURAMAN**  
*Faculty, Mechanical Engineering*

## Needs proper care and attention

Social distancing and online teaching are something very new to me. Online classes made me to re-think about the scope beyond the traditional classroom teaching. Even though I had flipped the classroom earlier for bringing out more doubt clarification sessions with students, the kind of ordeal by this pandemic has taught everyone to learn and discover new ideas in exploring the methods of online teaching. Usually, I love direct interactions with students in the classroom.

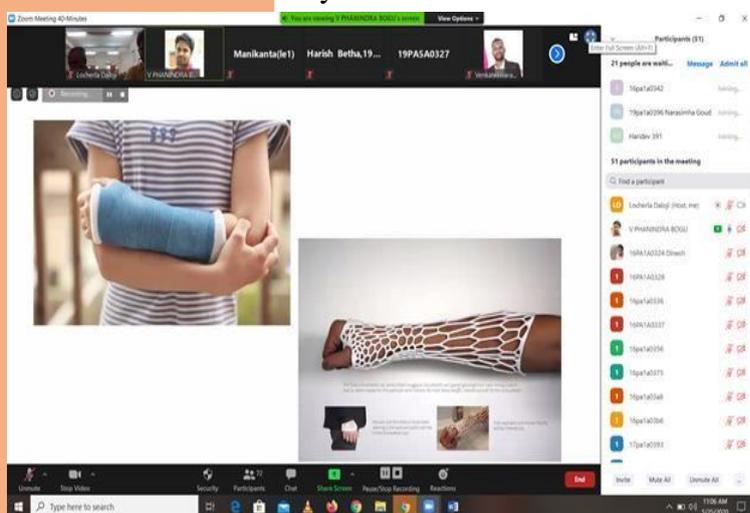
Online classes with Zoom seemed confusing in the beginning like, Are the students really interested and engaged in my class? This question prompted me to explore the ways to make the class more interactive and making students engage in the lecture. One such idea is that the students are asked questions to answer while the class is going on and I also ask them to showcase their ideas through the screen sharing option or a whiteboard.

Moreover, every student in the class needs proper care and attention. By understanding the strengths and weaknesses of each student, the level of questions was asked and discussed. Thus, student shows their interest in the class and eventually I love to deliver online classes for my students.

## SIGNIFICANCE OF 3D PRINTING IN MANUFACTURING SECTOR



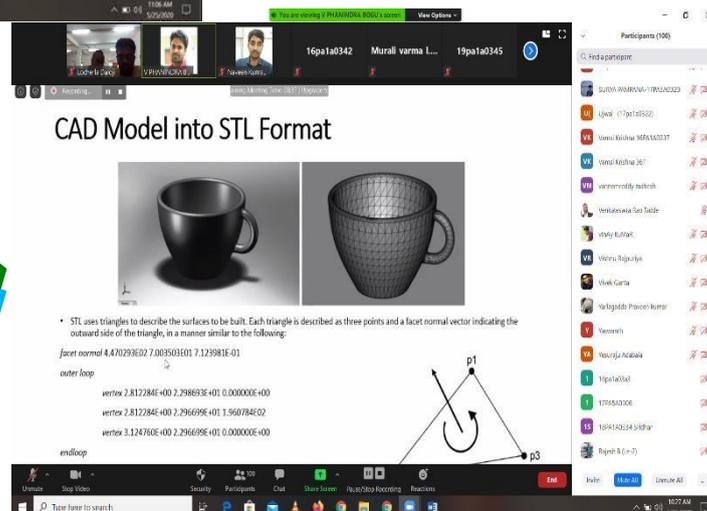
Department of Mechanical Engineering, Vishnu Institute of Technology, Bhimavaram on 25th May 2020 from 10:00 AM to 12:00 PM, organised a Webinar on "SIGNIFICANCE OF 3D PRINTING IN MANUFACTURING SECTOR". The resource person was Dr. B. Venkata Phanindra and the beneficiaries of the webinar were II, III and IV B.Tech students and Faculty of Department of Mechanical Engineering. Dr. Venkata Phanindra received his Doctoral Degree from NIT Warangal in 2018 and he has done research in "Customized cranial implants with Additive Manufacturing (AM)" and has published research papers in reputed international and national journals. Currently, he is working as Associate Professor in the Department of Mechanical Engineering at Vidya Jyothi Institute of Technology, Hyderabad.



The main objective of the Webinar was to impart our Students with the knowledge and applications of 3D printing in various industries. This webinar covered the following topics

- \* Introduction to 3D Printing,
- \* Classification of AM Processes and
- \* Applications of 3D Printing.

*Share your smile  
with the world,  
it's a symbol of  
friendship and  
peace.*



# RANDOM CLICKS



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TAKE A GOOD BOOK TO BED WITH YOU  
-  
BOOKS DO NOT SNORE

