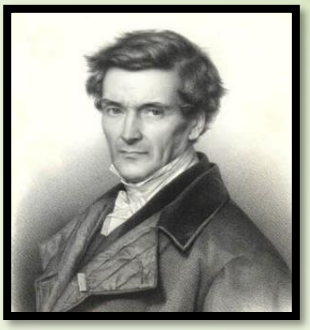
VIMAL JYOTHI ENGINEERING COLLEGE, CHEMPERI

MECHNOVA

JUNE 2020
VOL 8, ISSUE 3

KNOW A FAMOUS MECHANICAL ENGINEER-SERIES 12



Gaspard-Gustave de Coriolis

Gaspard-Gustave de Coriolis (21 May 1792 – 19 September 1843) was a French mathematician, mechanical engineer and scientist. He is best known for his work on the supplementary forces that are detected in a rotating frame of reference, leading to the Coriolis effect. In 1808 he sat the entrance exam and was placed second of all the students entering that year, and in 1816, he became a tutor at the École Polytechnique, where he did experiments on friction and hydraulics.

VISION

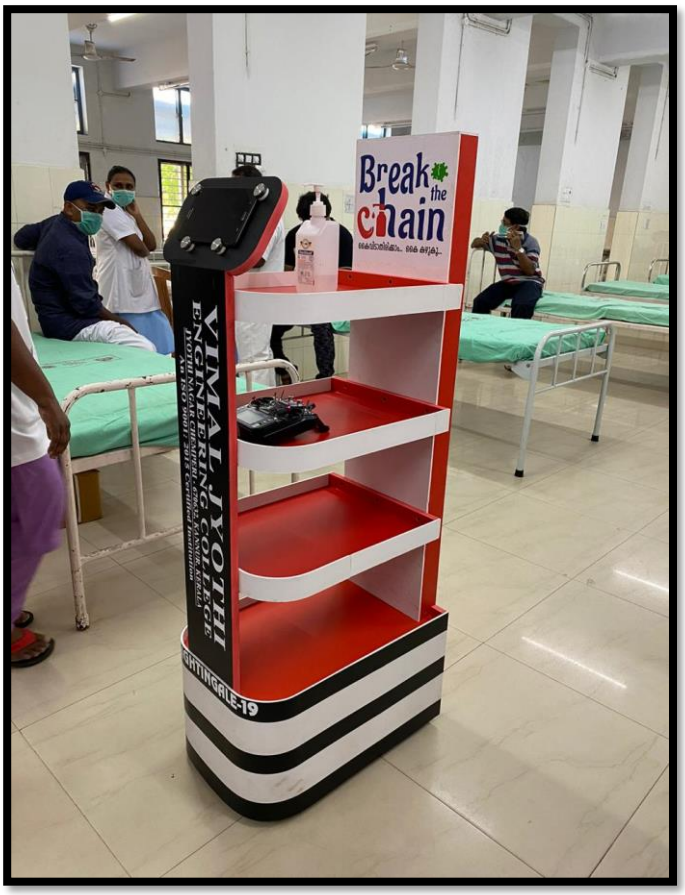
"To become a centre of excellence in Mechanical Engineering, producing innovative and creative mechanical engineers to meet the global challenges"

MISSION

- To provide a platform to the students towards attaining quality education in Mechanical Engineering.
- To educate students about professional & ethical responsibilities and train them to build leadership and entrepreneurship qualities for their career development.
- To create opportunities and guide students in acquiring career oriented jobs in the field of Mechanical Engineering

Inside this issue:

DEVELOPMENT OF 'NIGHTINGALE-19' ROBOT



Developed by the professors and students of the Vimal Jyothi Engineering College, Chemperi, the 'Nightingale-19 robot' has been providing the patients in the hospital with meals, water and even able to communicate face to face, virtually with the doctors who are treating them. The 'Nightingale-19 robot' is developed by a team of professors and students including Mr. Sunil Paul (Associate Professor, Department of Mechanical Engineering, VJEC) , Dr. T D John (Professor, Department of Mechanical Engineering and dean research, VJEC), Dr. Sampath Kumar (Professor, AEI) and Mr. Sarin C R (Asst Prof. EEE). ME students Noyal Jose, Amal Babu and Daniel Paul Lalat were team members. With a capacity to hold items up to 25 kg, it can serve meals and water bottles to 15 patients at a time and allows the patients to make calls to their doctor and even their relatives. Health Minister K. K. Shylaja launched the robot via video-conferencing from Thiruvananthapuram in the month of April 2020. This project is implemented at Anjarakkandy Medical College, Calicut Medical College and Thalasseri General Hospital for assisting doctors and medical workers in COVID-19 treatment.

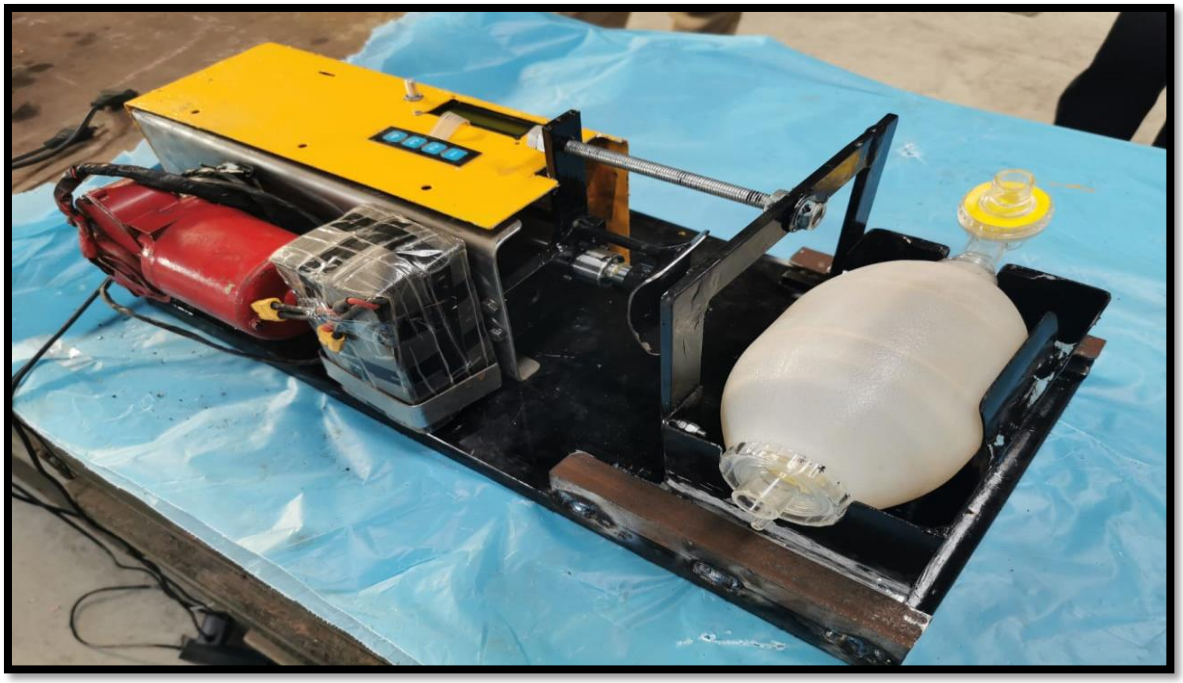
DEVELOPMENT OF MOBILE KIOSK

Mobile Kiosk for COVID Patients, "HERCULES-19" developed by Vimal Jyothi was inaugurated by Hon. Minister of Kerala, Sri. E.P Jayarajan. A team of professors and students including Mr. Sunil Paul (Associate Professor, Department of Mechanical Engineering, VJEC), Dr. T D John (Professor, Department of Mechanical Engineering and dean research, VJEC), Dr. Sampath Kumar (Professor, AEI) and Mr. Sarin C R (Asst. Professor, EEE) developed the Electric Mobile Kiosk. This could ensure the safety of doctors, nurses and health workers at hospitals and in public places such as airports, regarding COVID -19 testing. The inauguration was conducted on 8th May 2020.

DEVELOPMENT OF PEDAL-OPERATED HAND SANITIZER DISPENSER

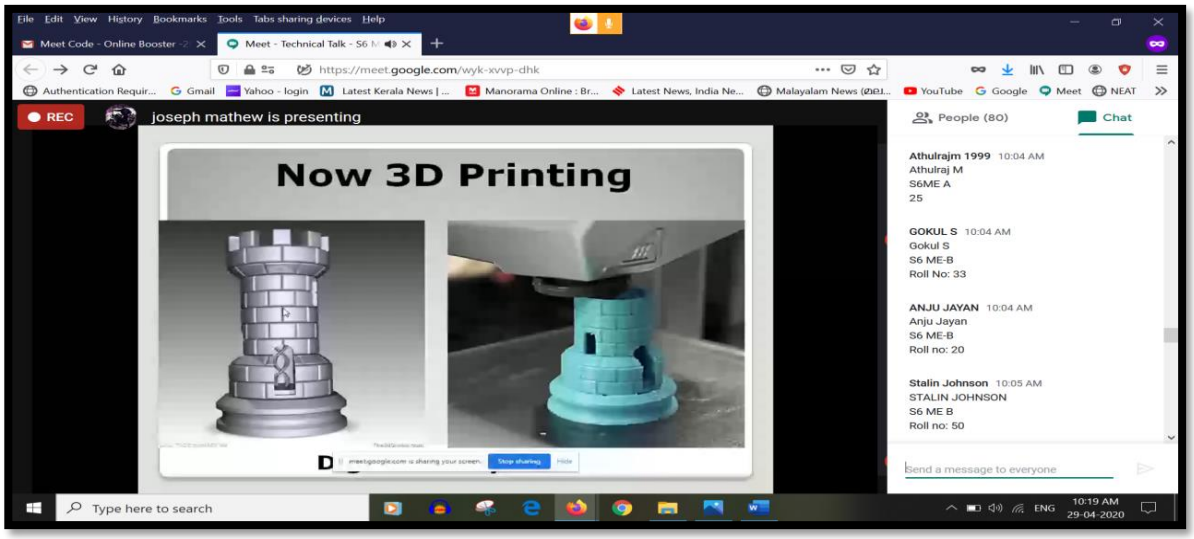
Pedal-operated hand sanitizer dispenser was developed by a team lead by Mr. Sunil Paul (Associate Professor, Department of Mechanical Engineering, VJEC). This could help hands free usage of sanitizer in the context of COVID-19. The dispensers are delivered to public places like Kannur International Airport and Taliparamba Police station.

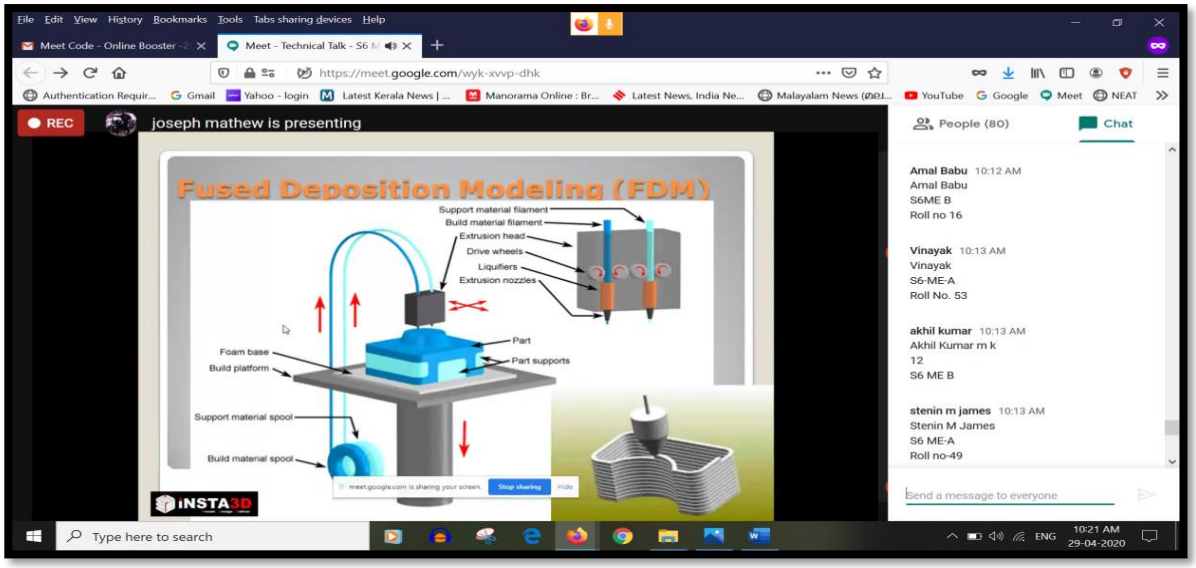
DEVELOPMENT OF A MINI VENTILATOR



The research team of Vimal Jyothi Engineering College, Chemperi developed a mini ventilator which could help in COVID-19 treatment. The team included Dr. T D John (Professor, Department of Mechanical Engineering and dean research, VJEC), Dr. Sampath Kumar(Professor, Department of AEI, VJEC), Mr. Sunil Paul (Associate Professor, Department of Mechanical Engineering, VJEC) and Mr. Sarin C R (Asst. Professor, Department of EEE,VJEC). Students from VJEC were also part of this team. This project had won cash award of Rs.20000/- from KTU, in the ventilator challenge competition. A ventilator is a machine that provides mechanical ventilation by moving breathable air into and out of the lungs, to deliver breaths to a patient who is physically unable to breathe, or breathing insufficiently. When it comes to the patients under home care, a portable ventilator (it can be moved anywhere easily) becomes the obvious and ideal choice. Even in hospitals, they can be moved from one place to another, one lab to another, along with the bed of the critically-ill patients.

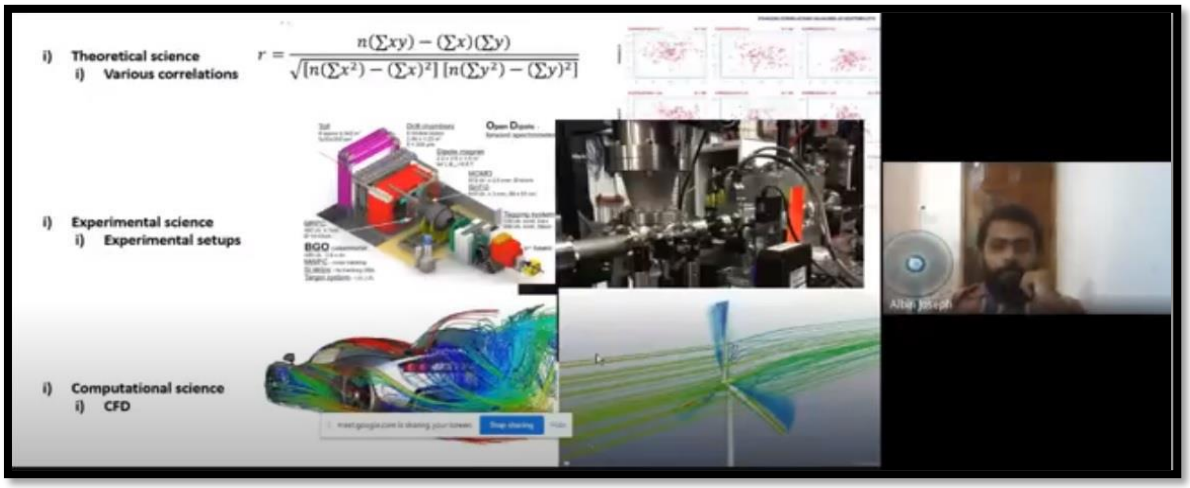
ONLINE TECHNICAL TALK ON "3D PRINTING TECHNOLOGY, ITS APPLICATIONS

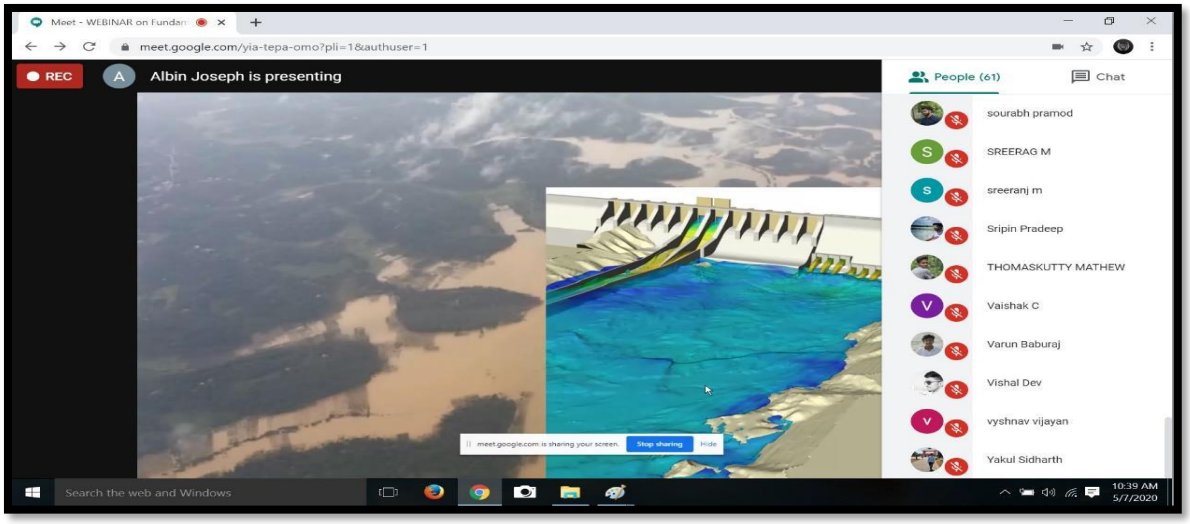




The Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur organized an online technical talk on "3D Printing Technology, Its Applications - FDM/FFF Parameters Explained" using Google Meet on 29th April 2020 from 10:00 AM to 11.15AM for third year Mechanical Engineering students. It was conducted as a curricular gap filling program. The convener of the program was Cdr. (Rtd.) Raju K. Kuriakose, HoD, Department of Mechanical Engineering and was coordinated by Dr. Sreekanth M P, Assistant Professor, Department of Mechanical Engineering, and Mr. Jerin Saji, Assistant Professor, Department of Mechanical Engineering. The resource person was Mr. Joseph Mathew T, Managing Partner, Insta3D, Coimbatore. This session proved to be a curricular gap filling activity for "Experience in Modern Manufacturing Tools & Technology". The seminar helped the students to clarify their doubts and queries about 3D Printing.

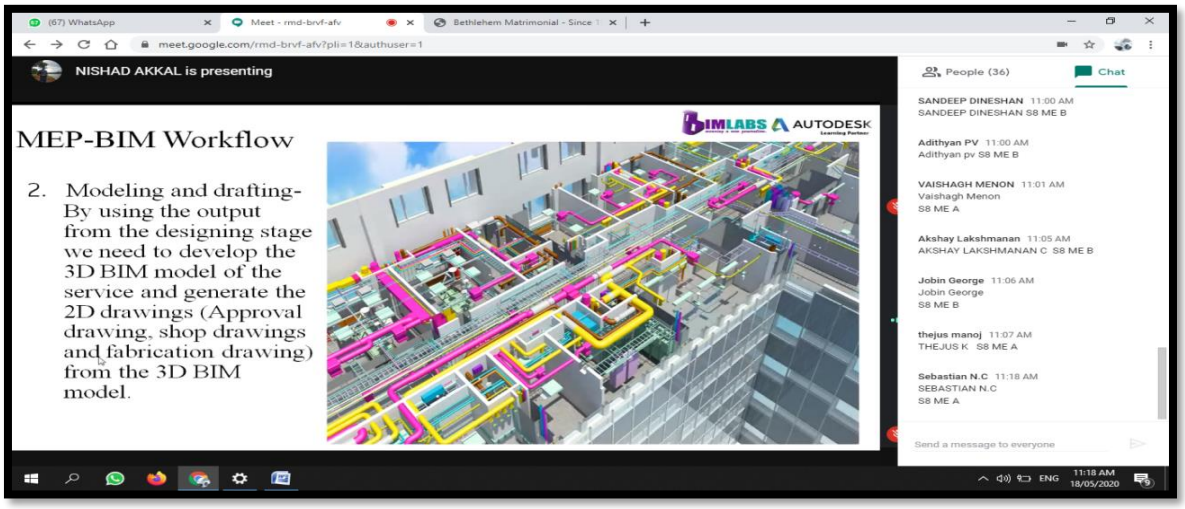
WEBINAR ON FUNDAMENTALS OF COMPUTATIONAL FLUID DYNAMICS

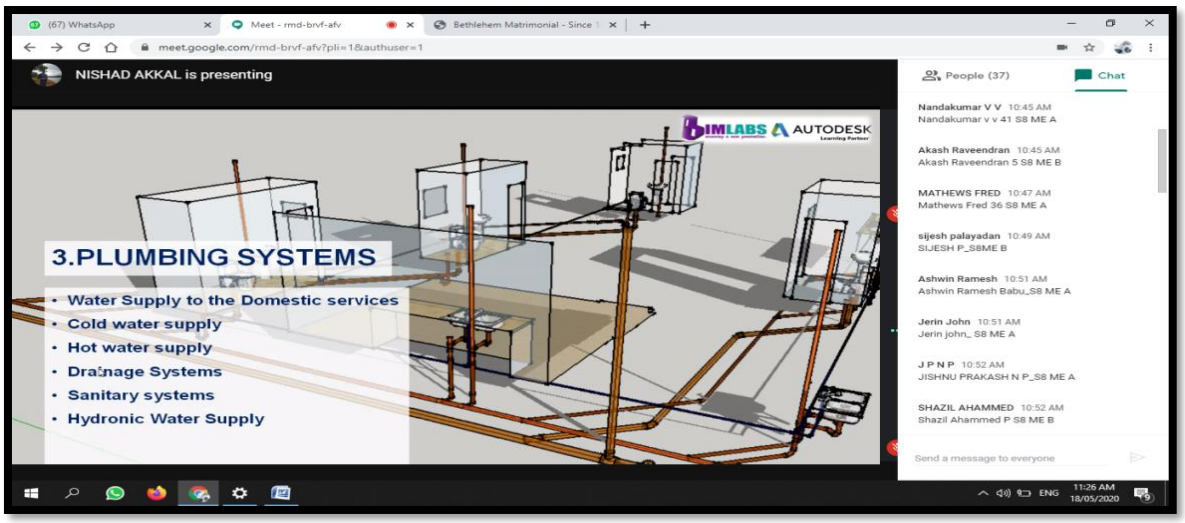




The webinar on 'Computational Fluid Dynamics' was held on 7th May 2020 from 10.30 am to 11.30 am, organized by Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur, using Google Meet online platform, for second year Mechanical Engineering students. The online webinar was conducted as a part of curricular gap filling program activities. The resource person for the session was Mr. Albin Joseph (PhD Scholar NIT Calicut). Cdr.Raju K K (Retd), Head of the Mechanical Engineering Department, was convener of the webinar. The program was coordinated by Mr. Mejo M Francis, Mr. Appu Kurian & Mr. Gokulnath R, Assistant Professors from Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi. This webinar session provide an insight on computational fluid dynamics software's, the coding behind the computational tools and its Design scope in the field of Fluid & heat transfer problems/projects. The session provided outline knowledge on computational fluid dynamics and the coding behind software packages. There were 60 participants from the department including faculty members.

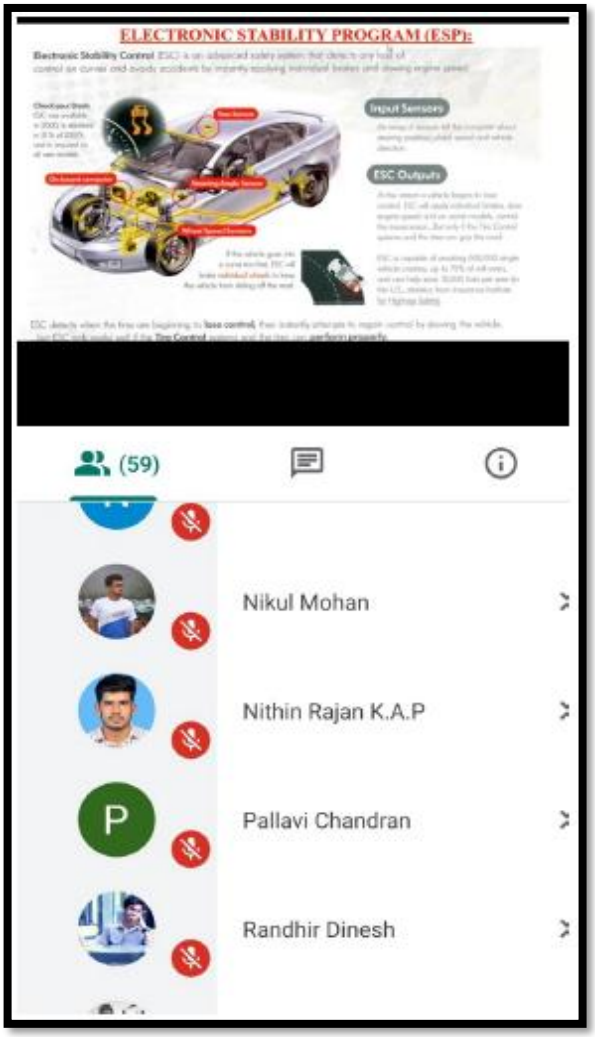
CAREER ORIENTED WEBINAR ON 'DESIGN OF BUILDING MECHANICAL SERVICES'

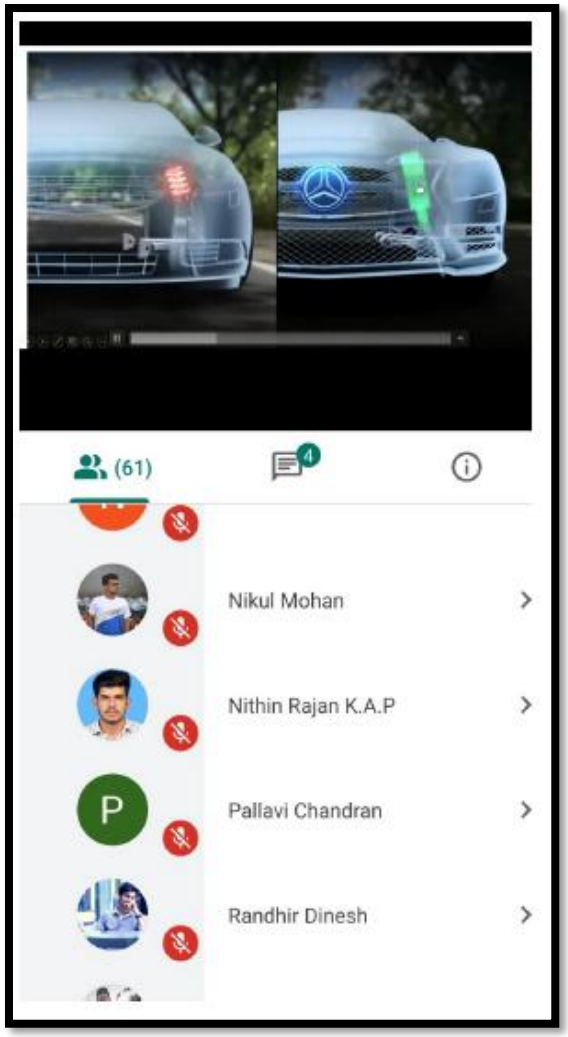




The Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur in association with BIMLABS Trivandrum, organized a Career oriented Webinar on 'Design of Building Mechanical Services' using Google Meet from 11:00 am to 12.00 noon on 18-05-2020. The session was conducted for fourth year students from the Department of Mechanical Engineering. Forty students participated in the webinar. The convener of the program was Cdr. (Rtd.) Raju K. Kuriakose, Head of the Mechanical Engineering Department, VJEC. The session was coordinated by Mr. Alex George (Assistant Professor, Department of Mechanical Engineering) and Mr. Gokulnath R (Assistant Professor, Department of Mechanical Engineering). The resource person was Mr. Nishad S, Coordinator and Technical officer, BIMLABS, Trivandrum. The session began with introduction to Building Information modeling (BIM). Then the relationship between Mechanical Electrical Plumbing (MEP) and BIM was explained followed by MEP-BIM workflow. Then a presentation on Building Mechanical systems was delivered. The demonstration of various software used in the field, was also done in the session. The session concluded with the explanation of the role of Mechanical Engineers in Architecture, Engineering, Construction, and Operations (AECO) industry.

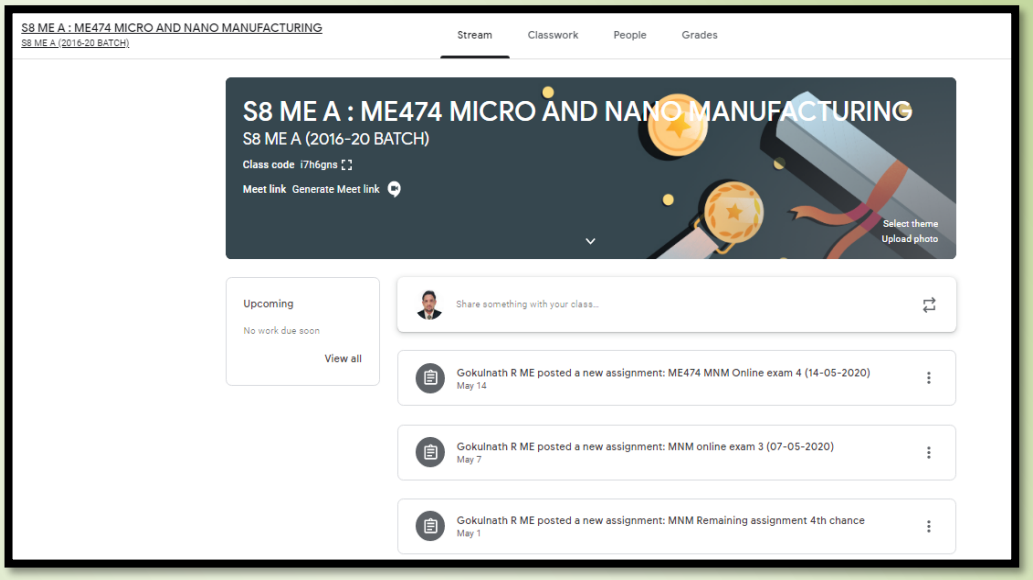
WEBINAR ON RECENT TRENDS IN AUTOMOBILE SCENARIOS

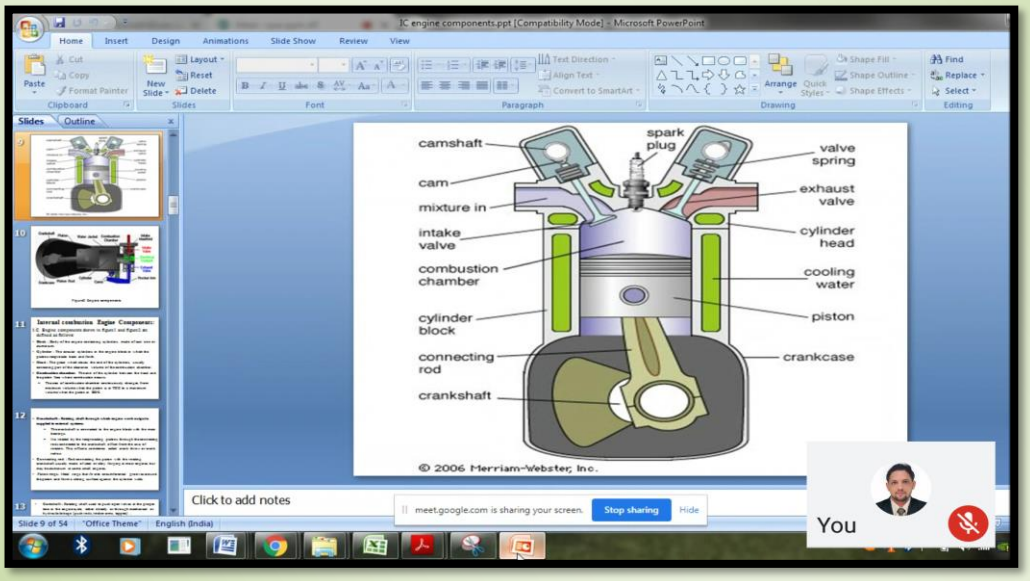




The webinar on "RECENT TRENDS IN AUTOMOBILE SCENARIOS" was held on 12th May 2020 at 10.00 am to 11.30 am, organized by Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur, using Google Meet online platform for third year Mechanical Engineering students. The online webinar was conducted as a part of curricular gap filling program activities. The resource person for the session was Mr. Jestin C Jose (AP, ME). Cdr. Raju K K (Retd), Head of Department Mechanical Engineering, was convener of the webinar. The program was coordinated by Mr. Alex George & Mr. Niyas KM (Assistant Professors, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi). This webinar session provided students to get fundamental knowledge in trends on automobile industry and they will be interested to take up design & interpret the problems in this field.

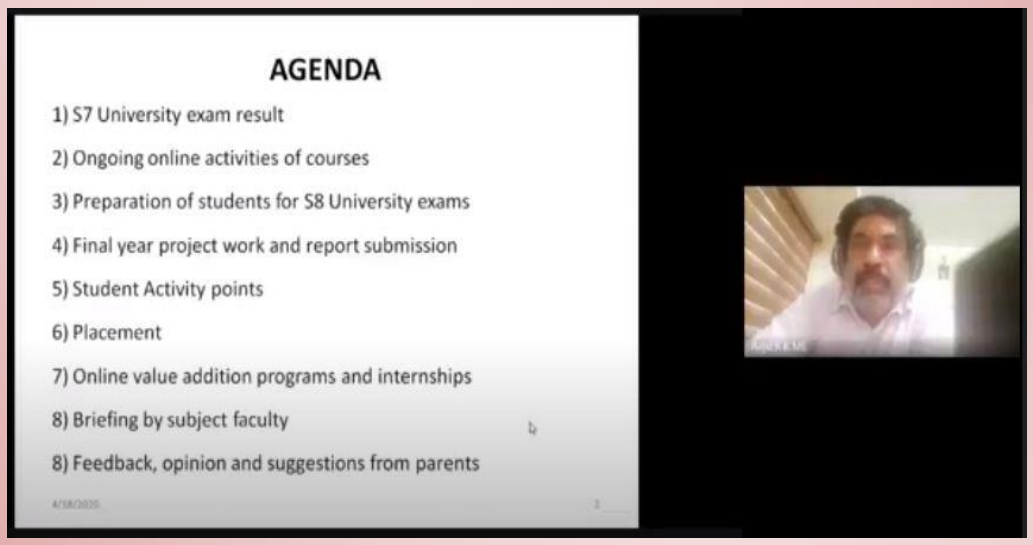
ONLINE CLASSES FOR STUDENTS





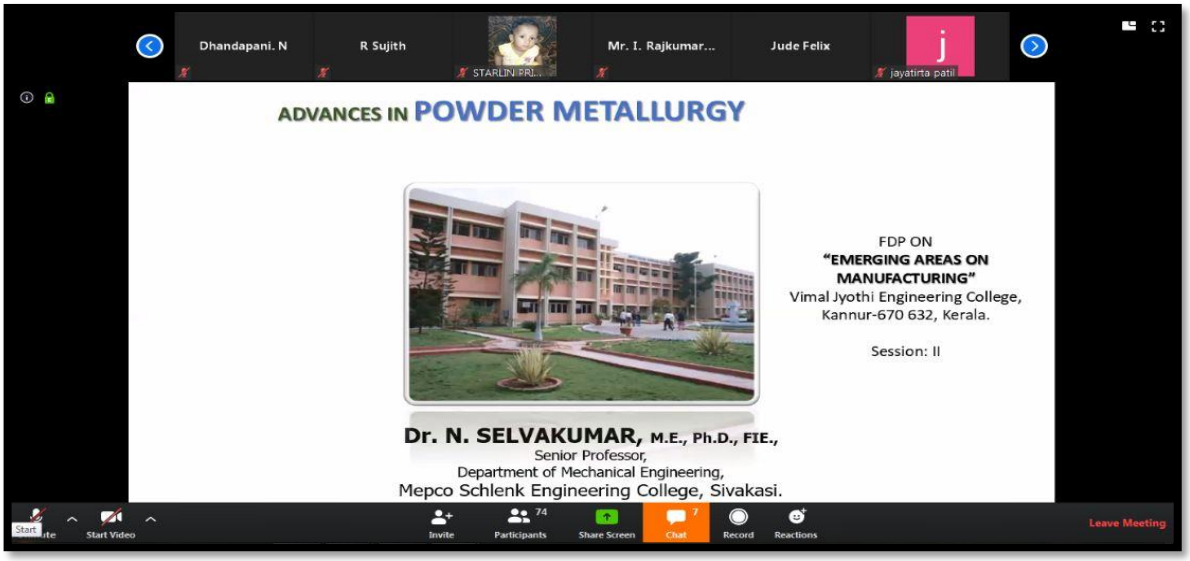
The department, with the intention of supporting students in their studies during lock down period, is conducting online live classes, issuing online assignments and conducting online exams from March 2020. Online class committee meetings were also conducted during this period. The online platform of Google meet is being used for the classes. In addition to live classes, the study materials are being uploaded in the Google classroom on a daily basis. Students are issued online assignments which they submit in through Google classroom. The valuation and grading of assignments are done in a regular basis. Time bound online examinations are conducted for all courses. Once the regular online classes for the courses are over, revision and remedial classes are being conducted. In addition to all these, students could clarify their doubts with the faculty personally through phone.

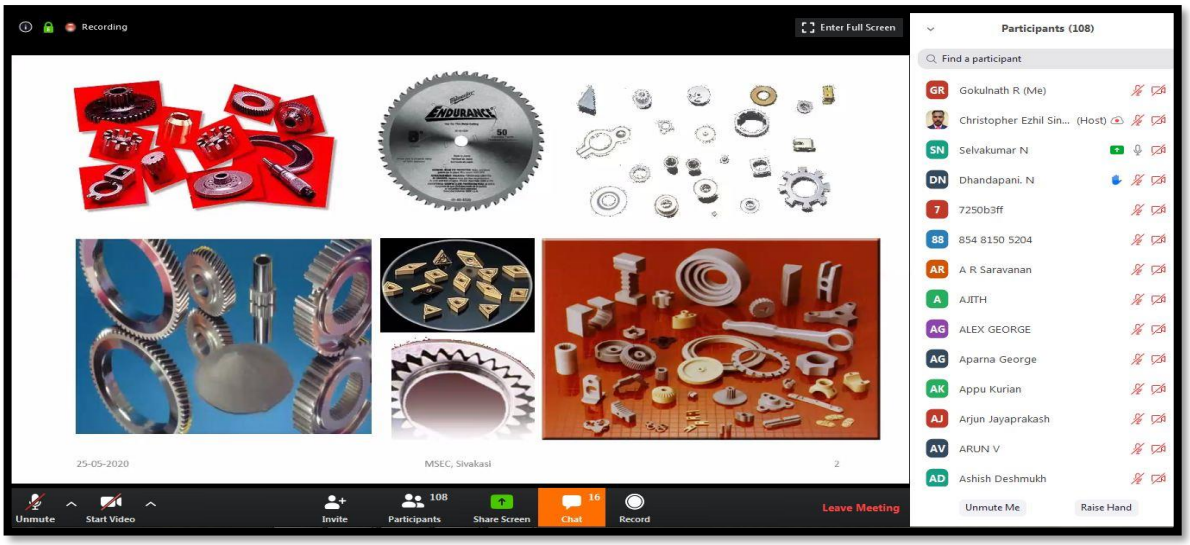
ONLINE PTA MEETING



Online PTA meeting was conducted for all the semesters on 16th, 17th and 18th April 2020. About eighty five percentage of parents, utilised this opportunity to interact with faculty. Cdr. (Retd.) Raju K. Kuriakose, Head of the Mechanical Engineering Department, welcomed the participants to the meeting. The main point of discussion was the status of online classes for students and their participation in the same. Discussion on the odd semester University exam results and the ways to perform better in the coming even semester examinations was also conducted. All the faculty handling respective courses in each semesters interacted with the parents. Parents, in the interactive session, informed us that they found this meeting very useful as they came to know more about the online activities conducted by the department for students. They informed that the main advantage of the session was that the parents from abroad also could take part in the meeting.

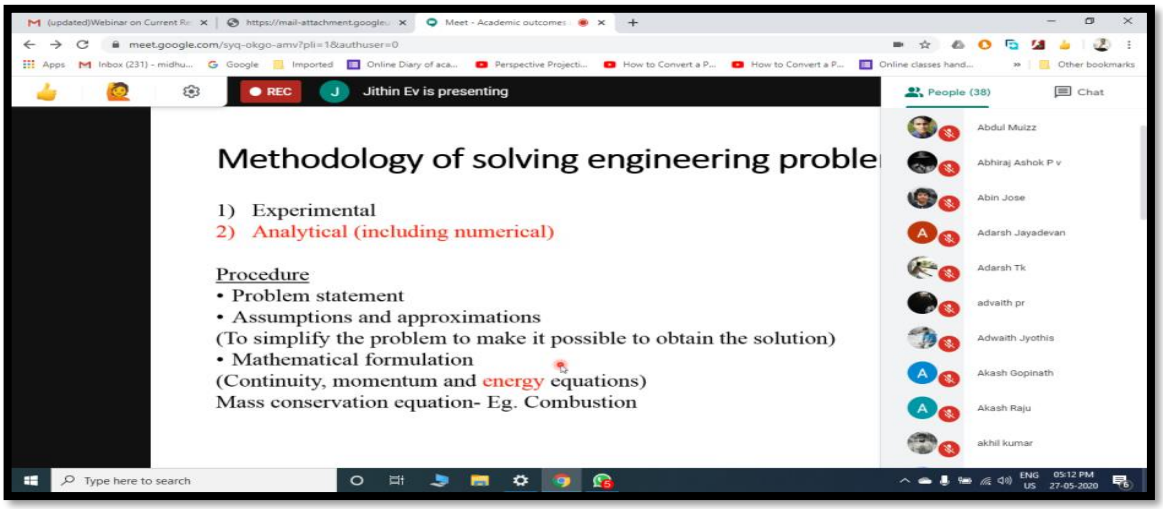
ONLINE ONE WEEK FDP ON 'EMERGING AREAS IN MANUFACTURING'

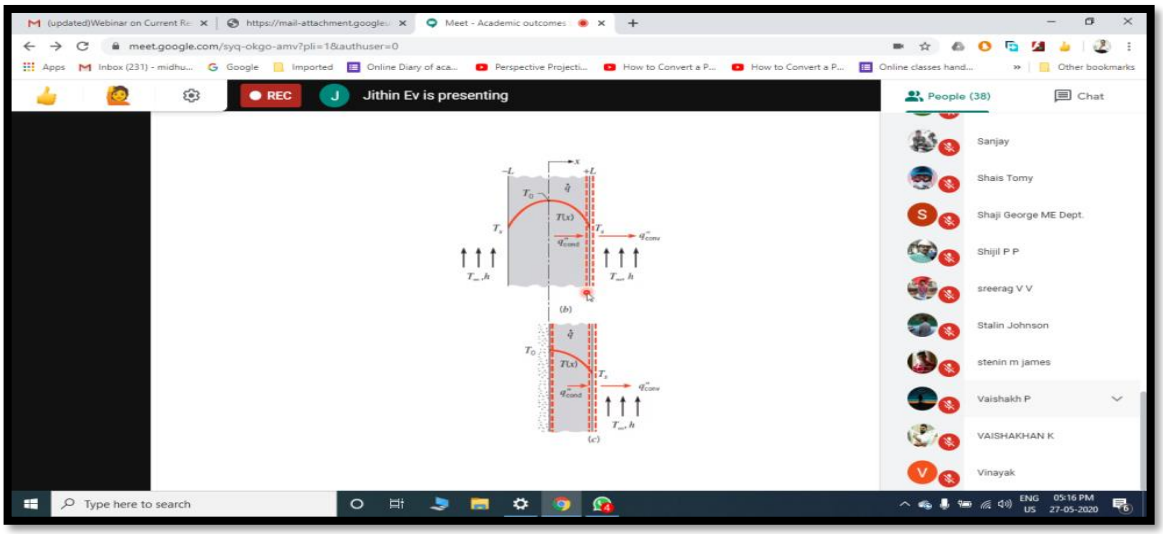




One Week Faculty Development Programme On 'Emerging areas in Manufacturing and its Industrial Application' was organized by Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur from 25.05.2020 to 30.05.2020. Dr. S.Christopher Ezhil Singh (Professor, Department of Mechanical Engineering, VJEC), was the convener of the program. Faculty of the department Dr. P.Sridharan, Dr. Sreekanth M P, Mr. Mejo Francis, Mr. Appu C Kurian, Mr. Jerin Saji and Mr. Arjun J P coordinated the FDP. Eminent faculties from IITs, NITs, Industries and Research Organizations were the resource persons for the sessions. About five hundred participants, in and out of state, were present for the sessions. The FDP emphasised on the developments of manufacturing. In the current era, manufacturing are the back-bone of the economy of a nation. There is a robust motivation for optimizing the design and manufacturing routes using experiments with high precision equipment's and computational techniques for modelling the processes.

WEBINAR ON 'CURRENT RESEARCH TRENDS AND ACADEMIC OUTCOMES OF LEARNING HEAT AND MASS TRANSFER'





The Department of Mechanical Engineering, VJEC conducted a webinar on Current Research Trends and Academic outcomes of learning Heat and Mass Transfer, for third year Mechanical Engineering students, under the guidance of Cdr.(retd.) Raju K Kuriakose, Head of Mechanical Engineering Department on 27-05-2020 at 5pm. The resource person was Dr. Jithin E V (Post-Doctoral Fellow at IIT Mumbai). The convener of the event was Cdr.(retd) Raju K K, HOD, ME. The coordinators of the webinar were Mr. Ryne P M, Assocciate Professor, ME Dept and Mr. Midhun Mukundan M K, Assistant Professor, Mechanical Engineering Dept. The program was conducted as a curriculum gap filling activity for the course 'ME302 Heat and Mass Transfer'. The webinar aimed at making the students to be aware of the latest research trends in the field of heat and mass transfer and to have an exposure on to the latest software tools being used in this area to study and analyse engineering problems.

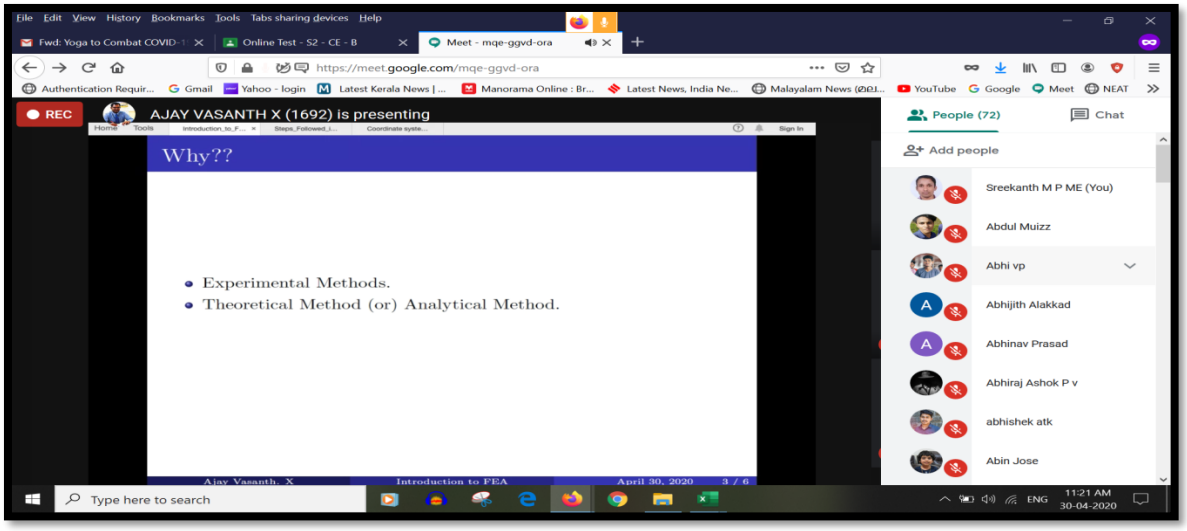
WEBINAR ON ADVANCED ROBOTICS AND ITS APPLICATIONS

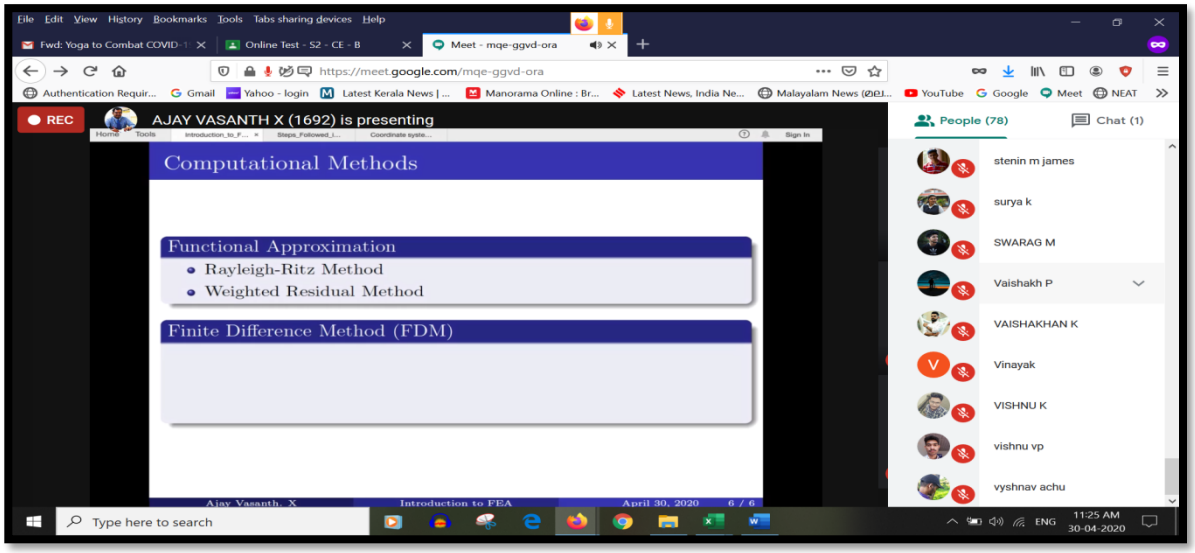
The Department of Mechanical Engineering, VJEC conducted a webinar on Advanced Robotics and its Applications, for third year Mechanical Engineering students and faculty of VJEC on 30-05-2020. Dr. Benny Joseph, The Principal, VJEC, inaugurated the session. The resource persons were Dr. Jaya Christiyan, & Dr. Sunith Babu who are Assistant Professors, Department of Mechanical Engineering, MS Ramaiha Institute of Technology, Banglore. The session was coordinated by Dr. Sridharan P (Associate Professor, Department of Mechanical engineering, VJEC), Dr. Christopher Ezhil Singh (Professor, Department of Mechanical engineering, VJEC), Mr. Appu Kurian (Assistant Professor, Department of Mechanical engineering, VJEC) and Mr. Niyas K M (Assistant Professor, Department of Mechanical engineering, VJEC). About hundred participants attended the session.

ONLINE TRAINING "BOSCH SKYPE TRAINING FOR AUTOMOTIVE SEGMENT"

The Department of Mechanical Engineering, VJEC conducted an online training for second and third year Mechanical engineering students from 21-05-2020 to 29-05-2020. Total forty seven students participated in the training. The session was coordinated by Mr. Jestin C Jose (Assistant Professor, Dept. of ME, VJEC). Mr. Kiran G Nair (Regional trainer, Bosch-south zone) and Mr. Bensy Lal (Local Trainer Kerala) conducted the session. The modules for training included Vehicle systems, Auto electricals and Exhaust gas treatment. The Online training session will imparted knowledge on vehicle systems and the working principles, sensors and actuators in automobiles. Likewise the students were able to understand the impact of automobile exhaust gas to the environment and the steps adopted to overcome it.

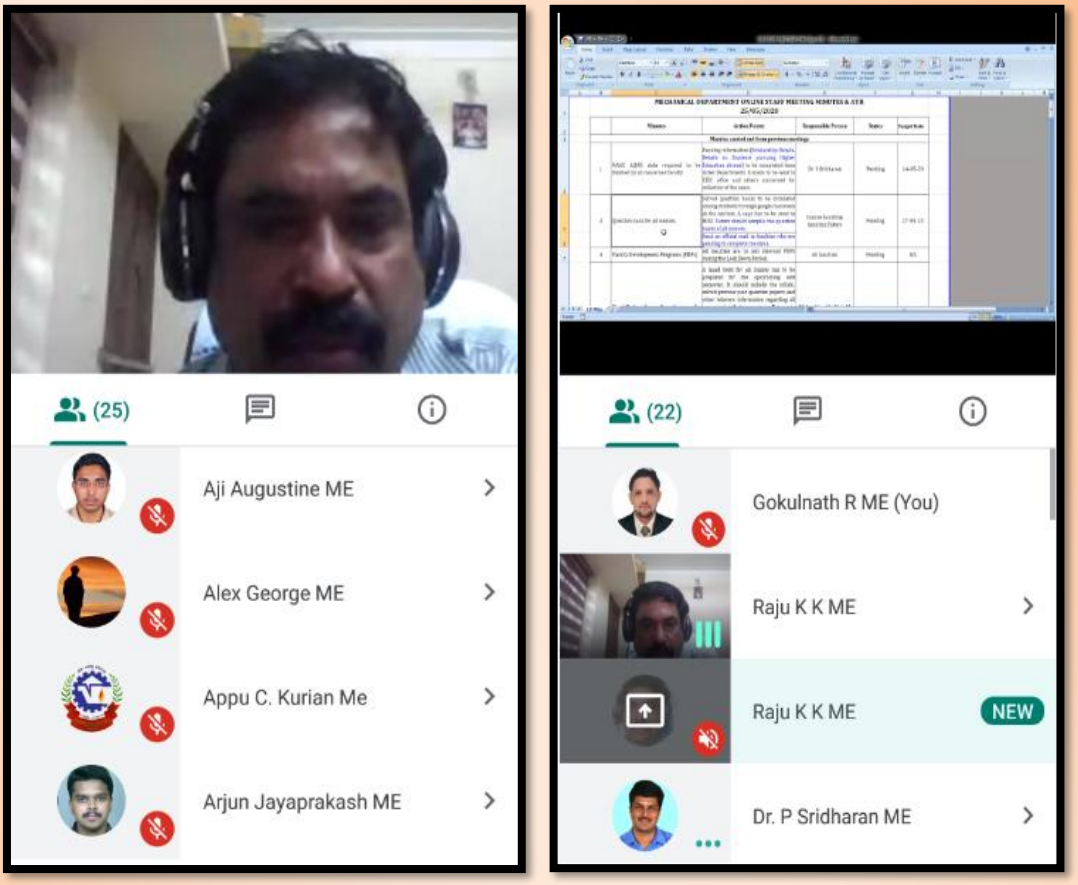
WEBINAR ON "FINITE ELEMENT ANALYSIS"





The webinar on "Finite Element Analysis" was held on 30thApril 2020 at 11.15 am to 12.15 pm, organized by Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur using Google Meet online platform for third year Mechanical Engineering students. The online webinar was conducted as a part of curricular gap filling program activities. The program was coordinated by Dr. S. Christopher Ezhil Singh, M.E., Ph.D., Professor, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur, Mr. Mejo Francis, Assistant Professor, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur and Dr. M.P.Sreekanth M, Assistant Professor, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur. The resource person was Mr. Ajay Vasanth X, M.E., (Ph.D), Assistant Professor, Department of Mechanical Engineering, Karunya University, Coimbatore.

ONLINE DEPARTMENT STAFF MEETINGS



The Department of Mechanical Engineering, VJEC conducts a one hour online staff meeting, twice in a week. It is conducted on all Mondays and Thursdays from 9 am to 10 am. Cdr.(retd.) Raju K Kuriakose, Head of Mechanical Engineering Department hosts the session. The sessions are coordinated by Mr. Jerin Saji, Assistant Professor, Department of Mechanical Engineering. All the teaching and non teaching staff of the department joins the meeting. The agenda of the meeting would be shared beforehand amongst the staff. The agenda points mainly covers the status of online classes, online assignments, online exams, online value addition activities, curricular gap filling activities, online programs attended and conducted by faculty and so on.

WEBINAR CONDUCTED

Dr. T D John (Professor, Department of Mechanical Engineering and dean research, VJEC) and Mr. Sunil Paul (Associate Professor, Department of Mechanical Engineering, VJEC) together with other faculty from various colleges, conducted a webinar on "DEVELOPMENT OF COVID-19 RELATED TECHNOLOGIES AND DISSEMINATION THROUGH ONLINE PLATFORM" on 16th May 2020. The program was launched through ASAP platform and meant for the faculty of Engineering Colleges, Polytechnic Colleges and Science Colleges in Kerala.

ONLINE PROGRAMMES ATTENDED BY FACULTY OF THE DEPARTMENT

Cdr. (Retd) Raju K Kuriakose (HOD, ME) attended the following programmes

a) FDP on "NOVEL MATERIALS AND ITS INDUSTRIAL APPLICATIONS" organised by Department of Mechanical Engineering & CoE for Composite Research Karpagam College of Engineering, Coimbatore Tamilnadu from 13-05-2020 to 18-05-2020.

b) Training on "Heat Treatment Steel" organised by Tata Steel Capability Development on 19-05-2020.

c) Webinar on "MATERIALS ENGINEERING" organised by AICTE – ANSYS on 04-05-2020.

d) Webinar on "DESIGN FOR ADDITIVE MANUFACTURING" organised by AICTE – ANSYS on 30-04-2020.

e) Webinar on "Innovate Socially and create a Sustainable Journey" organised by KTU-Industry Attachment Cell on 16-05-2020.

f) Webinar by Shri. Kris Gopalakrishnan, Co-Founder, Infosys organised by KTU-Industry Attachment Cell on 13-05-2020.

g) Webinar on "Entrepreneurship Development: Understanding Angel and Venture Capital Funding" organised by MHRD's Innovation Cell and AICTE initiatives on 08-05-2020.

h) Webinar on "Legal and Ethical Steps - Productive Entrepreneurship and Startup" organised by MHRD's Innovation Cell and AICTE initiatives on 12-05-2020.

Dr. Sridharan P (Associate Professor, ME) attended the following programmes

a) ATAL FDP on “Materials Engineering” organised by Ansys India on 04-05-2020.

b) ATAL FDP on “Computational fluid dynamics” organised by Ansys India on 05-05-2020.

c) Webinar on “Industry Projects” organised by Dessault Systems on 30-04-2020.

d) FDP on “Application development using Matlab” organised by CoreEl Technologies Banglore on 19-04-2020.

e) IEEE 2 days FDP on Smart Grid organised by KL University, Guntur from 07-05-2020 to 08-05-2020.

f) Webinar on “Enduring Trends in Mobile Robotics : Present and Future” organised by CIT Chennai on 19-05-2020.

g) Webinar on “Patent Searching, Drafting and Filing” organised by RVSCET on 17-05-2020.

h) Webinar on ‘Mild Hybrid Electric Vehicles for Indian roads” organised by RVSCET on 20-05-2020.

i) FDP on ‘Novel Materials And Its Industrial Applications: Introduction to High Entropy Alloys” organised by Karpagam Engineering college from 13-05-2020 to 19-05-2020.

j) Webinar on “NUMERICAL INTEGRATION IN FINITE ELEMENT ANALYSIS” organised by P.S.R. Engineering College on 18-05-2020.

k) AICTE Margadarsan FDP on “Outcome based Education” organised by GCE Karad from 11-05-2020 to 15-05-2020.

l) Quiz on “Strength of materials” organised by AISSMSCOE on 16-05-2020.

m) FDP on “Innovation Risk Diagnostic: Product Innovation Rubric (PIR)” organised by MHRD IIC on 15-05-2020.

n) FDP on “IPR and IP Management for Innovation and Start-ups” organised by R.M.K. Engineering College on 15-05-2020.

o) Webinar on “Connect SOLIDWORKS to the Cloud” organised by Solid works on 13-05-2020.

p) Auto CAD Quiz organised by TSSM'S BHIVARABAI SAWANT COLLEGE OF Engineering & research Narhe on 21-05-2020.

q) FDP on “Specific Design with Altera Quatrus-II” organised by NCT,Erode on 22-05-2020.

r) Webinar on “3DEXPERIENCE Platform and 3DEXPERIENCE Edu” organised by 3DS Academy on 22 -05-2020.

s) FDP in “Emerging Trends In Electricity Smart Grid Using ICT” organised by RVS College of Engineering and Technology, Coimbatore on 23-05-2020.

t) AICTE National Webinar on Data Science and Applications organisd by Government College of Engineering, Aurangabad and Karad on 23-05-2020.

Dr. S Christopher Ezhil Singh (Professor, ME) attended the following programmes

a) Webinar on “future of scope of electric vehicle” organised by AMZ automotive on 29-05-2020.

b) Webinar on “Heat Treatment on Weldments” organised by R.M.K COLLEGE OF ENGINEERING AND TECHNOLOGY on 12-05-2020.

c) Webinar on “EV Technology” organised by Mahendra College of Engineering on 15-05-2020.

d) Webinar on “Intellectual Property Rights and basics of Patent practice in India” organised by St.Peter's College of Engineering and Technology on 16-05-2020.

e) Webinar on “Writing a Winning Project Proposal” organised by Mar Athanasius College on 11-05-2020.

f) Webinar on “Trends in Software testing” organised by Mahendra College of Engineering on 10-05-2020.

g) Webinar on “Nanomaterials for Energy Conversion and Storage” organised by SNS College of Technology on 07-05-2020.

h) Webinar on “Accessing Research output & its Enchancement” organised by JK Business School on 02-05-2020.

i) Webinar on “webinar on leveraging Technology in Education” organised by Mc-Graw Hill on 23-04-2020.

j) FDP in “Novel materials and it's industrial application” organised by Karpagam College of Engineering from 13-05-2020 to 18-05-2020.

k) Lecture in “A Systematic Approach Towards molecular Docking And Drug Design” organised by SRM Institute of Science and Technology on 15-05-2020.

l) Workshop in “Additive Manufacturing” organised by S.A. Engineering College on 15-05-2020 and 16-05-2020

Mr. Jestin C Jose (Assistant Professor, ME) attended the following programmes

a) Webinar on "MATERIALS ENGINEERING" organised by AICTE – ANSYS on 04-05-2020.

b) Webinar on "DESIGN FOR ADDITIVE MANUFACTURING" organised by AICTE – ANSYS on 30-04-2020.

c) Webinar on "FINITE ELEMENT ANALYSIS" organised by AICTE – ANSYS on 07-05-2020.

d) Webinar on "HOW TO INNOVATE & GROW EXPONENTIALLY" organised by RAJALAKSHMI INSTITUTE OF TECHNOLOGY on 24-05-2020.

e) Training in "EXHAUST GAS TREATMENT" organised by BOSCH on 22-05-2020.

f) Training in "VEHICLE DIAGNOSTIC SYSTEM" organised by BOSCH on 23-05-2020.

g) Training in "TWO WHEELER ELECTRONICS" organised by BOSCH on 25-05-2020.

h) Training in "DIESEL INJECTION SYSTEMS" organised by BOSCH on 26-05-2020.

i) FDP in "Emerging Areas in Manufacturing" organised by Department of Mechanical Engineering, VJEC from 25-05-2020 to 30-05-2020.

j) FDP in "Future Automotive Industry and Challenges" organised by Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College from on 27-05-2020.

k) Webinar on "Race Engineering - the story of Mike Sinclairs career highlights" organised by Dept. of Automobile Engineering, Kumaraguru College of Technology on 28-05-2020.

l) Webinar on "PRODUCTION - ROBOTIC WELDING PROCESS" organised by TVS TS on 28-05-2020.

m) Webinar on "MAUFACTURING SYSTEMS - LEAN MANUFACTURING" organised by TVS TS on 29-05-2020.

n) Webinar on "SAE - ELECTRIC VEHICLE FOR INDIAN SCENARIO" organised by FORCE MOTORS -SAE ERODE DIVISION on 30-05-2020.

Mr. Mejo M Francis (Assistant Professor, ME) attended the following programmes

a) Webinar on "Computational Fluid Dynamics" organised by ATAL-FDP - AICTE on 05-05-2020.

b) Webinar on "Fundamentals of CFD" organised by ME Dept, VJEC on 07-05-2020.

c) Webinar on "Numerical Integration in Finite Element Analysis" organised by Dept of ME Engineering, PSR Engineering College, Sivkassi on 18-05-2020.

d) Webinar on "Airmeet on Innovate Socially and create a Sustainable Journey" organised by Industry Attachment Cell KTU on 16-05-2020.

e) Webinar on "Finite Element Analysis" organised by ME Dept, VJEC on 30-04-2020.

f) Quiz on "Strength of Materials" organised by Department of Civil Engineering, AISSMS College of Engineering, Pune on 16-05-2020.

g) Quiz on "AutoCAD" organised by Department of Civil Engineering, BHIVARABAI SAWANT COLLEGE OF ENGINEERING & RESEARCH NARHE, PUNE on 23-05-2020.

h) FDP in "Future Automotive Industry and Challenges" organised by Vel Tech High Tech Engineering College on 27-05-2020.

i) FDP in "Emerging Areas in Manufacturing" organised by Department of Mechanical Engineering, VJEC from 25-05-2020 to 30-05-2020.

j) Quiz on "Strength of materials" organised by AISSMS College of Engineering, Pune on 16-05-2020.

k)Webinar on Current Research trends and academic outcomes of learning Heat & Mass Transfer organised by ME Dept, VJEC on 27-05-2020.

l) Webinar on Advanced Robotics and its Applications organised by ME Dept, VJEC on 30-05-2020.

m) Online quiz QUADZ 2020 organised by Kottayam Institute of Technology and Science, Pallikkathodu, Kottayam on 30-05-2020.

n) 5 Day FDP in Biofuels and its Application in IC Engines organised by MEA Engineering College, Perinthalmanna from 1-6-2020.

Mr. Gokulnath R (Assistant Professor, ME) attended the following programmes

a) Training by NITTTR, SWAYAM organised by AICTE from 06-04-2020

b) Webinar on “DESIGN OF BUILDING MECHANICAL SERVICES” organised by ME Dept, VJEC with BIMLABS on 18-05-2020.

c) Webinar on “FUNDAMENTALS OF COMPUTATIONAL FLUID DYNAMICS” organised by ME Dept, VJEC on 07-05-2020.

d) Quiz on Outcome based education organised by ME Dept, VJEC on 24-05-2020.

e) FDP in “Emerging Areas in Manufacturing” organised by Department of Mechanical Engineering, VJEC from 25-05-2020 to 30-05-2020.

f) FDP in “Future Automotive Industry and Challenges” organised by Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College, from on 27-05-2020.

g) Webinar on “Race Engineering - the story of Mike Sinclairs career highlights” organised by Dept. of Automobile Engineering, Kumaraguru College of Technology on 28-05-2020.

h) Webinar on "Blockchain with Industry Application" organised by SMK Fomra Institute of Technology on 29-05-2020.

i) Webinar on “Advanced Robotics and its Applications” organised by Department of Mechanical Engineering, VJEC on 30-05-2020.

j) Online quiz programme-QUADZ 2020 organised by Department of Mechanical Engineering, Kottayam Institute of Technology and Science, Pallikkathodu, Kottayam, Kerala on 30-05-2020.

Mr. Alex George (Assistant Professor, ME) attended the following programmes

a) Training by NITTTR, SWAYAM organised by AICTE from 06-04-2020

b) Webinar on "DESIGN OF BUILDING MECHANICAL SERVICES" organised by ME Dept, VJEC with BIMLABS on 18-05-2020.

c) Webinar on "Ansys Advancements for Turbomachinery Simulations" organised by ANSYS on 20-05-2020.

d) Webinar on "Finite Element Analysis" organised by ME Dept, VJEC on 30-04-2020.

e) Webinar on "Latest trends in automobile senarios" organised by ME Dept, VJEC on 12-05-2020.

f) Quiz on Outcome based education organised by ME Dept, VJEC on 24-05-2020.

g) FDP in "Emerging Areas in Manufacturing" organised by Department of Mechanical Engineering, VJEC from 25-05-2020 to 30-05-2020.

Dr. Sreekanth M P (Assistant Professor, ME) attended the following programmes

a) Webinar on "Finite Element Analysis" organised by ME Dept, VJEC on 30-04-2020.

b) Webinar on "Assessing research output and its enhancements" organised by JK Business School, Gurgaon on 02-05-2020.

c) Webinar on "Fourth industrial revolution and the paradigm shift in manufacturing" organised by Department of Mechanical Engineering, Kalaignar Karunanidhi Institute of Technology (KIT), Coimbatore on 08-05-2020.

d) Webinar on "Intellectual Property Rights" organised by Department of Mechanical Engineering, SNS College of Technology (KIT), Coimbatore on 14-05-2020.

e) Webinar on "Overview and Trends in ANSYS Structures" organised by ANSYS on 21-05-2020.

f) FDP in "Emerging Areas in Manufacturing" organised by Department of Mechanical Engineering, VJEC from 25-05-2020 to 30-05-2020.

Mr. Jerin Saji (Assistant Professor, ME) attended the following programmes

a) Training by NITTTR, SWAYAM organised by AICTE from 06-04-2020.

b) Webinar on "3D Printing Technology, its Applications - FDM/FFF parameters explained" organised by ME Dept, VJEC on 29-04-2020.

c) Webinar on "Computational Fluid Dynamics" organised by ATAL-FDP - AICTE on 05-05-2020.

d) Webinar on "Research Workflows, Research Metrics and Excellence" organised by AICTE and Elsevier on 14-05-2020.

e) FDP on "Novel Materials and its Industrial Applications" organised by Dept. of ME and CoE for Composite Reasearch, Karapagam College of Engineering from 13-05-2020 to 18-05-2020.

f) Webinar on "Introduction to 3D Experience Platform and 3DExperience Edu" organised by Dassault Systems on 22-05-2020.

g) FDP in "Emerging Areas in Manufacturing" organised by Department of Mechanical Engineering, VJEC from 25-05-2020 to 30-05-2020.

h) Quiz on Outcome based education organised by ME Dept, VJEC on 24-05-2020.

Mr. Aji Augustine (Assistant Professor, ME) attended the following programmes

a) Training by NITTTR, SWAYAM organised by AICTE from 06-04-2020

b) FDP in "Emerging Areas in Manufacturing" organised by Department of Mechanical Engineering, VJEC from 25-05-2020 to 30-05-2020.

c) Quiz on "AutoCAD" organised by TSSM'S BHIVARABAI SAWANT COLLEGE OF ENGINEERING & RESEARCH NARHE, PUNE on 23-05-2020.

d) Webinar on "Finite Element Analysis" organised by ME Dept, VJEC on 30-04-2020.

e) Webinar on "FINITE ELEMENT ANALYSIS" organised by ANSYS on 07-05-2020.

f) Webinar on "Robotic Welding" organised by TVS TS on 29-05-2020.

g) Quiz on Outcome based education organised by ME Dept, VJEC on 24-05-2020.

Mr. Arjun Jayaprakash (Assistant Professor, ME) attended the following programmes

a) FDP in "Emerging Areas in Manufacturing" organised by Department of Mechanical Engineering, VJEC from 25-05-2020 to 30-05-2020.

b) FDP in "Future Automotive Industry and Challenges" organised by Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College, from on 27-05-2020.

c) Webinar on "Current Research trends and academic outcomes of learning" organised by ME Dept, VJEC on 27-05-2020.

d) Webinar on "Advanced Robotics and its Applications" organised by Department of Mechanical Engineering, VJEC on 30-05-2020.

e) Webinar on "Enabling Innovation and Entrepreneurship for social impact" organised by KTU-Industry Attachment Cell on 30-05-2020.

Mr. Appu Kurian (Assistant Professor, ME) attended the following programmes

a) Webinar on "FUNDAMENTALS OF COMPUTATIONAL FLUID DYNAMICS" organised by ME Dept, VJEC on 07-05-2020.

b) FDP on "Emerging Areas of Manufacturing" organised by ME Dept, VJEC on 25th-30th May 202**0**

c) Webinar on " Advanced Robotics and its applications " organised by ME Dept, VJEC on 30/05/2020

d) Webinar on " Webinar on Finite Element Analysis " organised by ME Dept, VJEC on 30-04-2020

e) Quiz on E Quiz- QUADZ 2020 organised by ME Dept,KITS on 30-05-2020

Mr. Melbin Benny (Assistant Professor, ME) attended the following programmes

a) FDP in "Emerging Areas in Manufacturing" organised by Department of Mechanical Engineering, VJEC from 25-05-2020 to 30-05-2020.

b) Online quiz programme-QUADZ 2020 organised by Department of Mechanical Engineering, Kottayam Institute of Technology and Science, Pallikkathodu, Kottayam, Kerala on 30-05-2020.

c) Webinar on "Advanced Robotics and its Applications" organised by Department of Mechanical Engineering, VJEC on 30-05-2020.

d) Webinar on "Current Research trends and academic outcomes of learning Heat & Mass Transfer" organised by ME Dept, VJEC on 27-05-2020.

e) Course on "Learn to design your Solar home system" organised by Energy Swaraj Foundation on 29-05-2020.

PLACEMENT

Congratulations...

Mr. Leo Vinoy

Mr. Leo Vinoy of S8 ME received a job offer from BYJU'S. He has been selected for the position of Business Development Trainee at BYJU'S – The Learning App

CONGRATULATIONS DEAR STUDENTS...

These students from Department of Mechanical Engineering got shortlisted for Idea Competition

1) Mr. Ben Johns Philip for the idea of 'Co-Eye: Facemask Detector'

2) Mr. Joel Mathew for the ideas of 'Device to ensure social distancing' and 'Automatic floor sanitizing'

3) Mr. Ben Johns and Mr. Joel for the idea of 'Automatic Hand Sanitizer'

FACULTY PUBLICATIONS/REVIEWS

1. Dr. S.Christopher Ezhil Singh (Professor, Dept of Mechanical Engineering, VJEC), D.Rajeev, C.Sankar, D. Dinakaran, S. Ajitha Priyadarsini (2020), '**Minimizing MRR During Turning of AISI 4140 Steel with the Selected Process Parameters by Optimization'**, *Journal of Mechanics of Continua and Mathematical Science*s, Vol.-15, No.-3, pp. 158-167.

2. S.Christopher Ezhil Singh (Professor, Dept of Mechanical Engineering, VJEC) D. Rajeev , D. Dinakaran, G. Glan Devadhas, S. Ajitha Priyadarsini, (2019) '**Optimization Tool Wear on Hard Turning of AISI4140 Steel with Coated Carbide Tool Cutting Conditions'**, *IJITEE*, Volume-9 Issue-5, pp. 2051-2054.

3. Dr. S. Christopher Ezhil Singh (Professor, Department of Mechanical Engineering, VJEC), Paramesh Chamble, M. R. Bharath, K. Lokesha published paper on '**Machine tool vibration on dimensional accuracy and surface roughness during milling operation of Al6082 with indexable carbide inserts**' in *Journal of Applied Research and Technology* 18 (2020) 69-76.

4. Dr. Sreekanth M P (Assistant Professor, Department of Mechanical Engineering, VJEC), conducted review of a paper for *Emerald Rapid Prototyping Journal* and the score submitted.

5. Dr. Sreekanth M P (Assistant Professor, Department of Mechanical Engineering, VJEC), conducted review of a paper for *Journal of Engineering Manufacture (SAGE)* and the score submitted.

Program Educational Objectives (PEO'S)

PEO1: Graduates will be able to pursue successful professional career in Mechanical Engineering with sound technical and managerial capabilities.

PEO2: Graduates will have skills and knowledge to formulate, analyze and solve problems in mechanical engineering to meet global challenges.

PEO3: Graduates will be capable of pursuing mechanical engineering profession with good communication skills, leadership qualities, team spirit and professional ethics to meet the needs of the society.

PEO4: Graduates will sustain an appetite for continuous learning by pursue higher education and research in the allied areas of science and technology.

Program Outcomes (POs)

PO1: Engineering knowledge
PO2: Problem analysis
PO3: Design/development of solutions
PO4: Conduct investigations of complex problems
PO5: Modern tool usage
PO6: The engineer and society
PO7: Environment and Sustainability
PO8: Ethics
PO9: Individual and team work
PO10: Communication
PO11: Project management and finance
PO12: Life-long learning

Program Specific Outcomes (PSOs)

PSO1: An ability to use computer aided modelling and simulation tools to provide solutions to mechanical engineering problems.
PSO2: An ability to develop and implement a process in a well-planned manner leading to a demonstrable product

Staff Editors: Mr. Gokulnath R, Mr. Melbin Benny

Student Editors: Ms. Aswathi Manoharan, Mr. Samrood Abdul Wahab