VIMAL JYOTHI ENGINEERING COLLEGE, CHEMPERI

MECHNOVA

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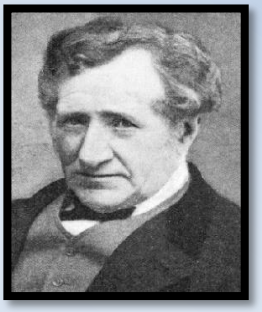
KNOW A FAMOUS MECHANICAL ENGINEER-SERIES 15



James Hall Nasmyth

James Hall Nasmyth (19 August 1808 – 7 May 1890) was a Scottish engineer and inventor famous for his development of the steam hammer. He was the co-founder of Nasmyth, Gaskell and Company manufacturers of machine tools. In memory of his renowned contribution to the discipline of mechanical engineering, the Department of Mechanical Engineering building at Heriot-Watt University, in his birthplace of Edinburgh, is called the James Nasmyth Building.

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:

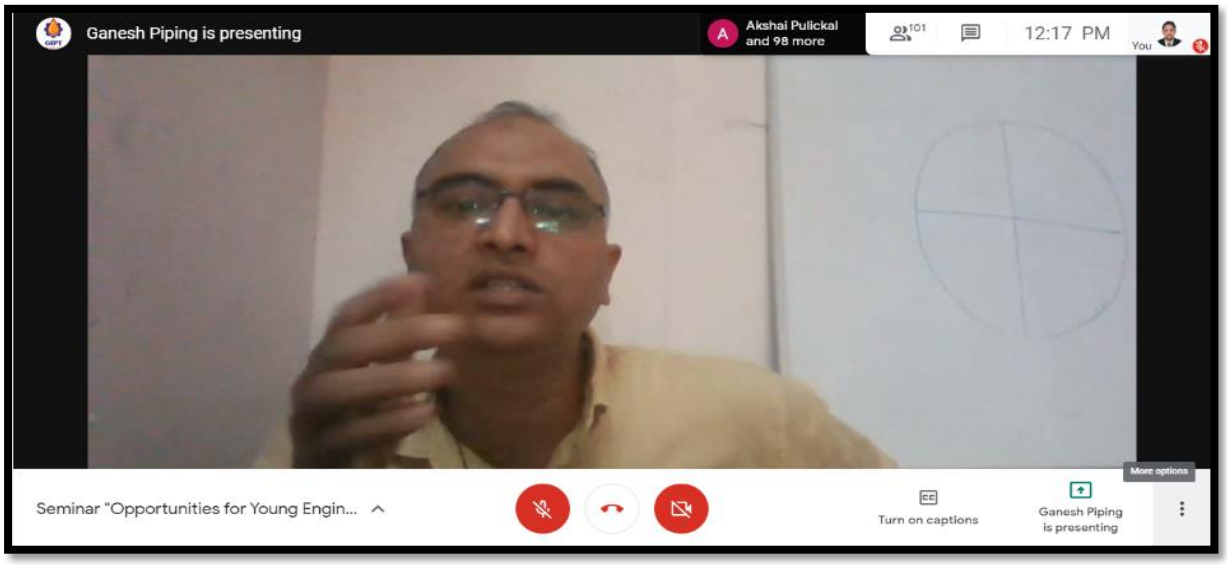
JYOTHIRGAMAYA 2020-21

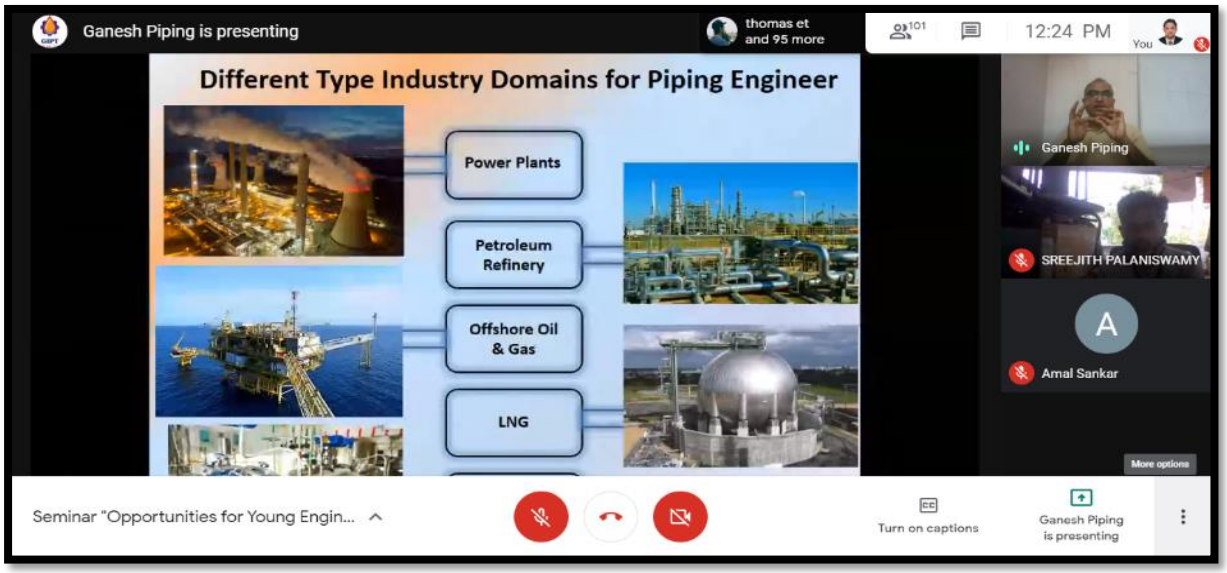
Vimal Jyothi Engineering College, Chemperi welcomed our first year students of 2020-24 batch with an online celebration of glory and pride on 30-11-2020. Patron Archbishop Mar. George Njaralakatt, inaugurated the function. Rev Fr James Chellamkottu, Manager, VJEC welcomed the gathering. Dr. Benny Joseph, Principal, VJEC, presided the event. The management representatives, HODs, staff, students and parents participated in the online event. Students were given an insight on the Engineering education, about the college and also on how to excel in the academics and personal life so as for overall development.

BOOT CAMP AND INAUGURATION 05-10-2020

Boot camp was conducted from 05-10-2020 to 06-11-2020 for the new admission students of 2020-24 batch through online platform. In the inauguration function conducted on 05-06-2020, the Rev. Fr. Thomas Valiplackal, the management representative, gave the benediction. Cdr.(retd.) Raju K Kuriakose, Head of Mechanical Engineering Department, VJEC, introduced the department to the students and parents present for the inauguration function. The camp consisted of various orientation classes handled online by faculty from and out of the department. The sessions were coordinated by the faculty of the department Mr. Shaminmuth, Mr. Arunlal, Dr. Sridharan P, Mr. Appu C Kurian and Mr. Gokulnath R. Various sessions on topics such as Career opportunities, Space science, Nano technology, Advanced Manufacturing, Military Engineering, Quantitative aptitude and also sessions on introduction to various first year courses, were conducted as part of boot camp.

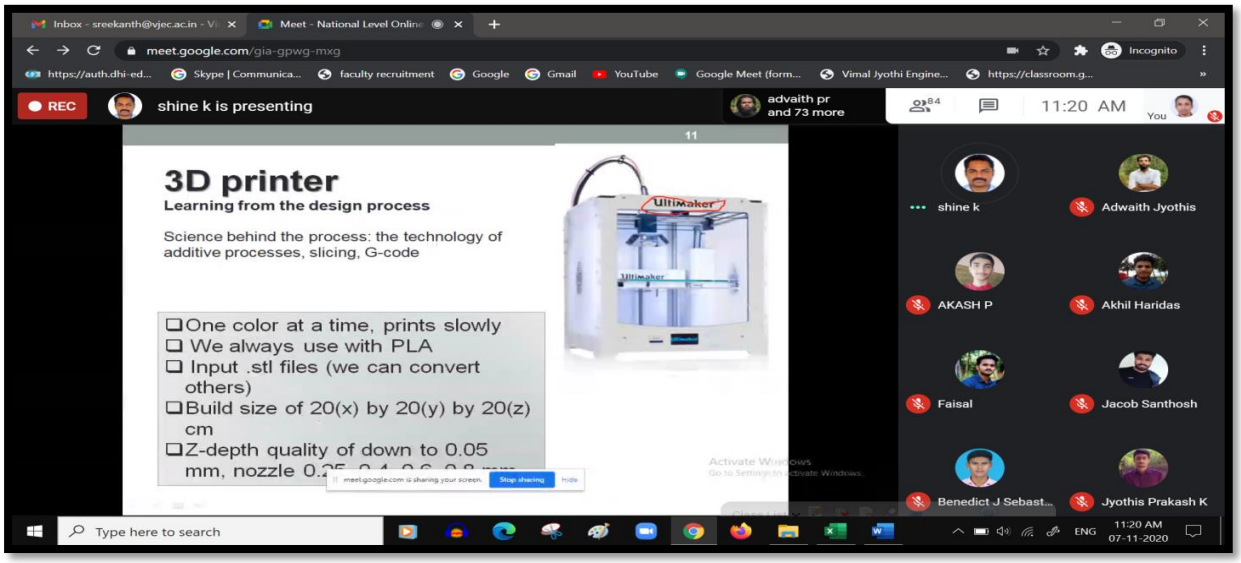
WEBINAR ON "OPPORTUNITIES FOR YOUNG ENGINEERS IN OIL & GAS SECTOR"

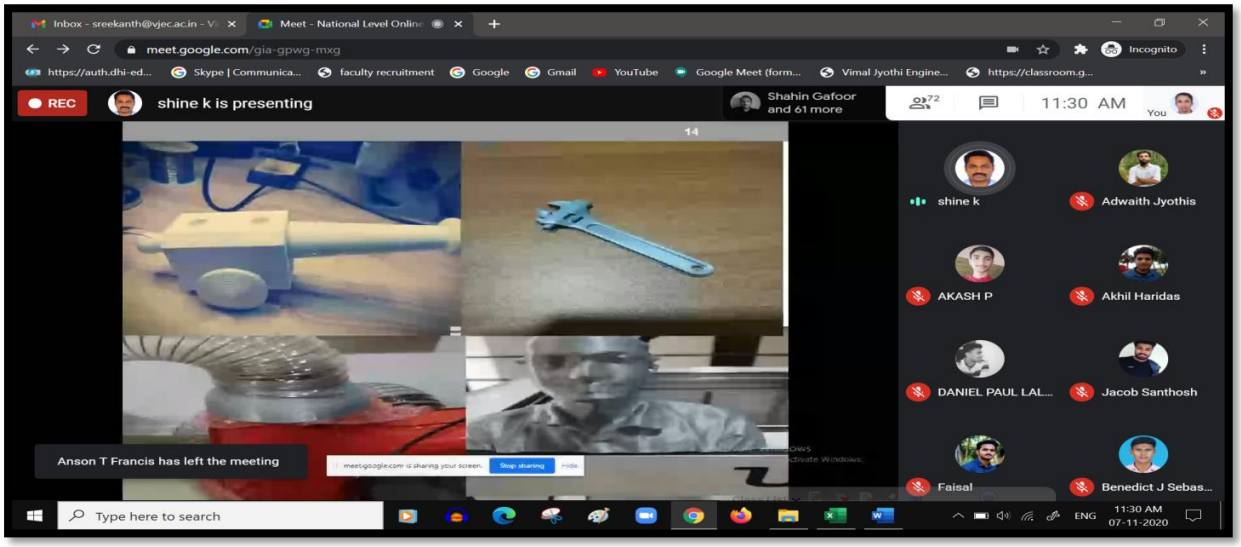




The Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur in association with Ganesh Piping, Mumbai, organized a Webinar on 'Opportunities for Young Engineers in Oil & Gas Sector' using Google Meet from 12:00 pm to 01.00 pm on 17-10-2020. The session was conducted for fourth year students from the department of Mechanical Engineering. Thirty four students participated in the webinar. The resource person was Mr. Samir Dalvi is the founder & Director of Ganesh Piping Technology (GPT). The convener of the program was Cdr. (Rtd.) Raju K. Kuriakose, Head of the Mechanical Engineering Department, VJEC. The session was coordinated by Mr. Mejo M Francis (Assistant Professor, Department of Mechanical Engineering), Mr. Alex George (Assistant Professor, Department of Mechanical Engineering), Mr. Arunlal M P (Assistant Professor, Department of Mechanical Engineering) and Mr. Gokulnath R (Assistant Professor, Department of Mechanical Engineering).

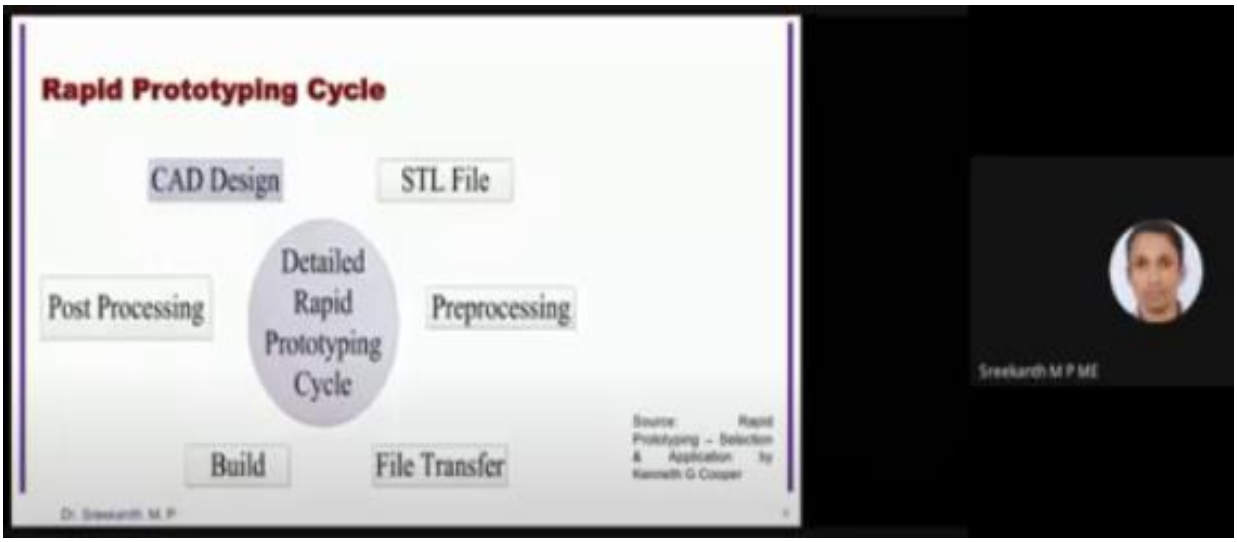
NATIONAL LEVEL ONLINE SEMINAR ON "3D PRINTING MATERIALS AND SOFTWARE"





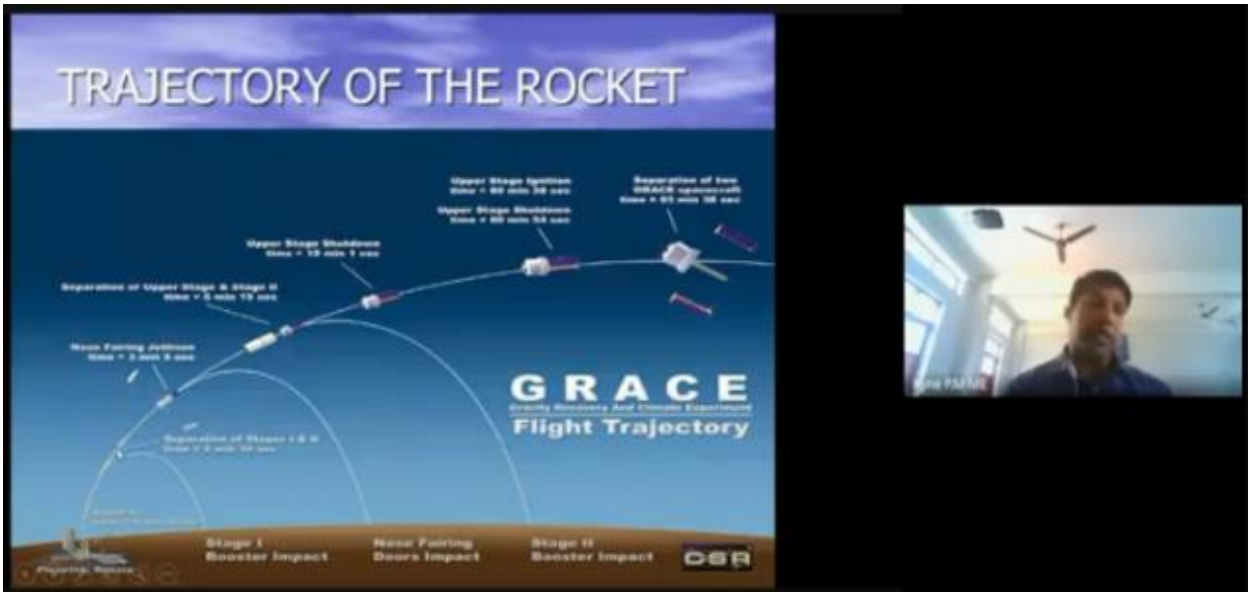
On 07th of November 2020, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur organized a national level webinar on "3D Printing Materials and Software" using Google Meet at 11:00 AM to 12.30 PM for final year Mechanical Engineering students. It was conducted as a 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, Dr. Christopher Ezhil Singh, Professor, Department of Mechanical Engineering, and Mr. Mejo M Francis, Assistant Professor, Department of Mechanical Engineering. The resource person was Mr. Shine K, Assistant Professor & FABLAB Manager, Department of Mechanical Engineering, MES College of Engineering, Kuttippuram. This session proved to be a curricular gap filling activity for "Research based knowledge & familiarization of research tools". The seminar helped the students to clarify their doubts and queries about various 3D Printing Materials and particular software used to connect with the machine.

WEBINAR ON "ADDITIVE MANUFACTURING - 3D PRINTING - INNOVATIVE MANUFACTURING TECHNIQUES FOR ENGINEERS"



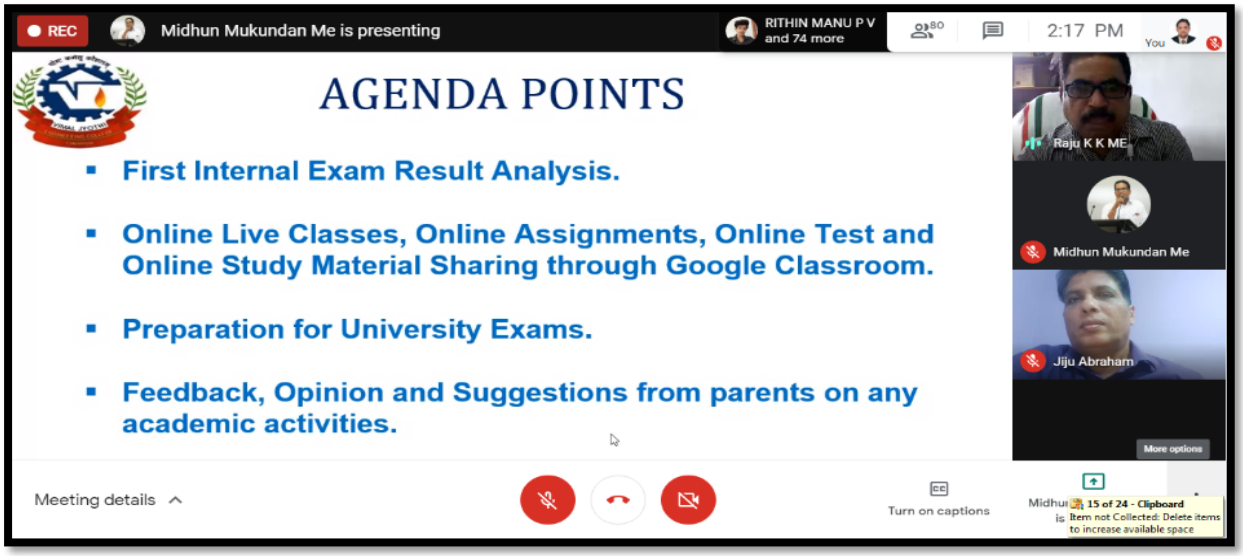
On 17th of October 2020, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur organized a webinar on "Additive Manufacturing (3D Printing) – Innovative Manufacturing Technique for Engineers" using Google Meet at 12:30 PM to 01.30 PM for pre-final year Mechanical Engineering students. It was conducted as a curricular gap filling program The convener of the program was Cdr. (Rtd.) Raju K. Kuriakose, Head of Mechanical Engineering Department and was coordinated by the faculty of the department Mr. Niyas K M, Mr. Aji Augustine and Mr. Jerin Saji. The resource person was Dr. Sreekanth M P, Assistant Professor, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur. This session proved to be a curricular gap filling activity for "Research based knowledge & familiarization of research tools". The webinar helped the students to clarify their doubts and queries about various 3D Printing Techniques for Engineers.

WEBINAR ON "MILITARY WAR MACHINES AND INDIAN SPACE PROGRAMMES"



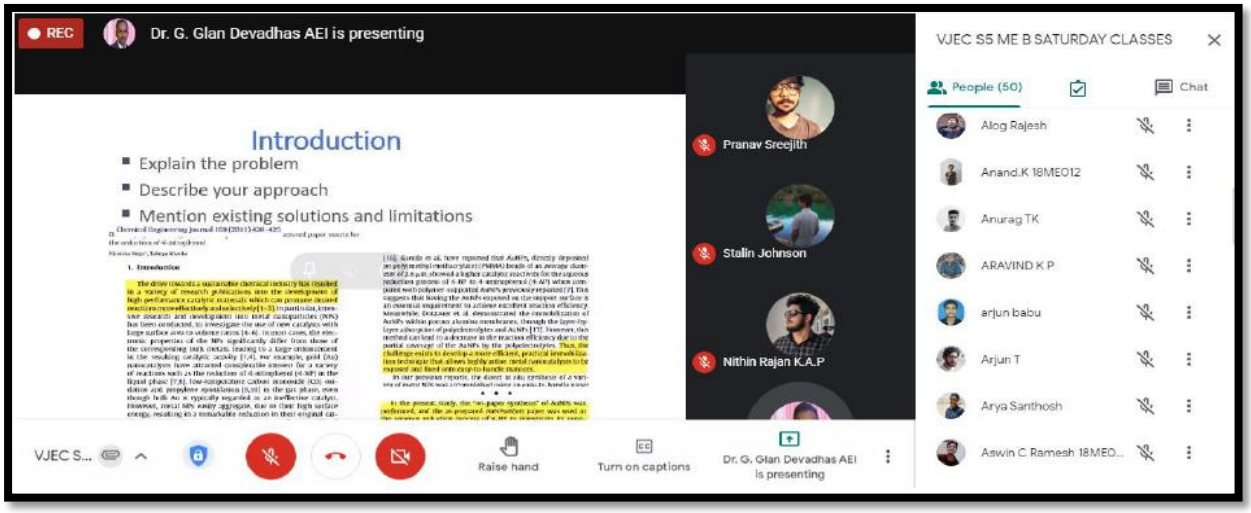
On 17th of October 2020, Department of Mechanical Engineering, VimalJyothi Engineering College, Chemperi, Kannur organized a webinar on "Military War Machines and Indian Space Programmes" using Google Meet at 11:00PM to 12.30 PM for second and pre-final year Mechanical Engineering students. It was conducted as a curricular gap filling program. The convener of the program was Cdr. (Rtd.) Raju K. Kuriakose, Head of Mechanical Engineering Department and was coordinated by the faculty of the department Mr. Niyas K M, Mr. Aji Augustine and Mr. Jerin Saji. The resource person was Mr. Ryne P M, Associate Professor, Department of Mechanical Engineering, VimalJyothi Engineering College, Chemperi, Kannur. The objective of the webinar was to develop an insight on Military War Machines and Indian Space Programmes. It would help the students to get fundamental knowledge on Missiles, Rocket designs and will be interested to take up Design and Simulation projects in the field of Propulsion Engineering and also some areas related to Cryogenic Engineering.

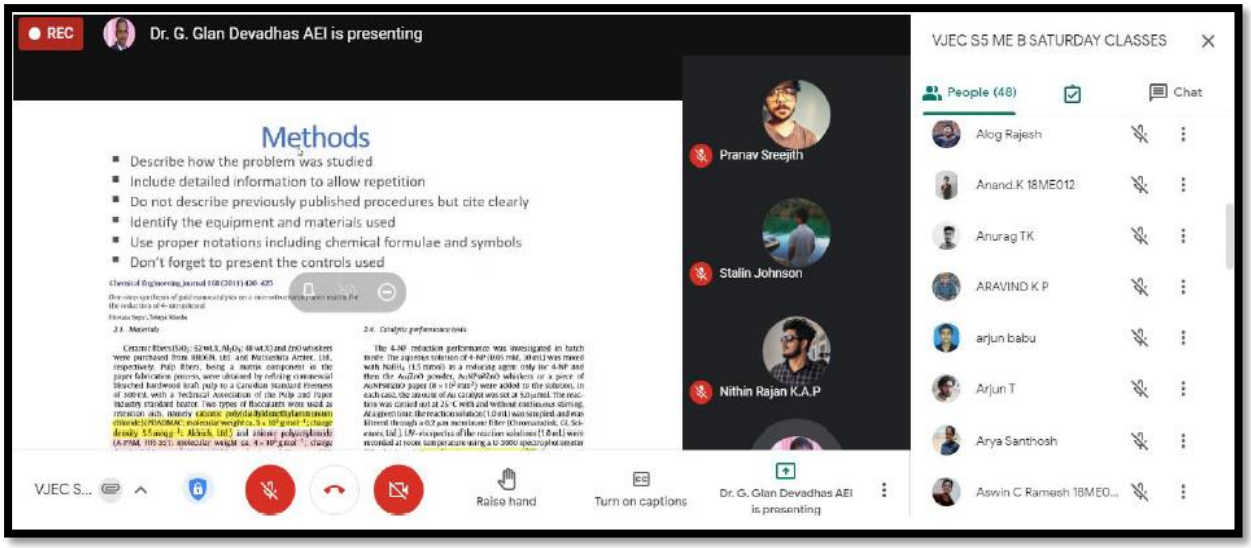
PTA MEETING - ONLINE



The PTA Meetings of all semesters were conducted online. The meeting for S3 ME A & B (2019-23 batch) was conducted on 21-10-2020 with participation of 57 parents. The meeting of S5 ME A & B (2018-22 batch) were conducted on 22-10-2020 and 61 parents participated in the same. The PTA meeting for S7 ME A and B (2017-21 batch) was conducted on 23-10-2020 and about 90 parents attended the same. The participation on parents side was quiet impressive. The Head of the Dept. Cdr. (Retd.) Raju K. Kuriakose was the convenor of the session. Dr. Benny Joseph, the Principal, Mr. K J Sebastian Puthenpura, the management representative (VJEC), Mr. Justin Augustine, Training & Placement Officer, VJEC and faculty handling both theory as well as lab courses in attended the meeting. The main agenda of the meeting was to discuss the first internal exam result of odd semester of academic year 2020-21. Initially HOD of ME department welcomed all to the meeting and informed the parents that student's performance in first internal is promising and also stressed that it is significant to keep the same momentum for rest of the semester. Dr. Benny Joseph, the Principal, addressed the gathering to explain the importance of additional online courses and activity points. Adding to it, he demanded for a full-fledged support and co-operation from parents and students for successful implementation of the smooth conduction of Saturdays' special placement training sessions and departmental activities. He also pointed out the importance of qualifying for GATE, and other competitive examinations.

WEBINAR ON "HOW TO WRITE A TECHNICAL PAPER"





On 21-11-2020, Department of Mechanical Engineering, Vimal Jyothi Engineering College, Chemperi, Kannur organized a webinar through Google Meet (ved-sdyy-qfr) at 11:00 AM for pre-final and final year Mechanical Engineering students on "How to Write a Technical Paper". It was conducted as a curricular gap bridging event related to the Vth and VIIth Semester KTU Courses "Design Project" & "Seminar and Project Preliminary" for pre-final year and final year students. The convener of the program was Cdr. (Retd.) Raju K. Kuriakose, HOD, Department of Mechanical Engineering and was coordinated by Mr. Aji Augustine, , Mr. Jerin Saji, Mr. Mejo M. Francis and Mr. Gokulnath R (all Assistant Professors, Department of Mechanical Engineering). The resource persons was Dr. G. Glan Devadhas, Professor, Department of Applied Electronics and Instrumentation Engineering and Vice Principal, Vimal Jyothi Engineering College, Chemperi, Kannur. He is also a reviewer of the Elsevier Journal. The objective of the webinar was to develop an insight on - How to Write a Technical Paper such as Journals, Review Papers, Conference Papers, etc.? It would help the students to get fundamental knowledge on the rules to be followed in order to publish a technical scripts in a most ethical manner after completion of their Final Year Project Work. The webinar was mainly based on the rules of publishing Technical papers in Elsevier Journal but could be also used for others with minor changes pertaining to the Paper Type. Also the students who have a passion towards doing Research Works or Higher Education in Future can use the ideas will publishing their works.

PROGRAMMES ATTENDED BY FACULTY OF ME (OCTOBER & NOVEMBER 2020)

Dr. T D John (Professor, ME and Dean Research, VJEC) attended the following programme:

3 day training program on “Latex Products Manufacture and Testing" during 5-7 October 2020.

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

Webinar on " webinar on "RUDIMENTS OF OIL AND GAS INDUSTRY", sponsored by TEQIP – 2, organized by the Department of Chemical Engineering, TKM College of Engineering Kollam, on October 29, 2020

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

1. Webinar on "Train the trainer - Additive Manufacturing" organized by Suprajiv Technical and Management Studies, Bangalore on 01, November 2020.

2. Webinar on "Insights from VBN Components: Redefining wear resistance through 3D printing of hard metals with high carbide content" organized by GE Additive on 04, November 2020.

DEPARTMENT ACHIEVEMENTS

1) The Department under the guidance of Dr. T D John (Professor, ME and Dean Research, VJEC) plan to fabricate necessary machinery for manufacturing rubber gloves, using the UBA fund of 1 lakh and we look for additional support from Panchayath or Kudumbasree units. The machinery after completion will be donated to Eruvessi village and this manufacturing unit can bring some employment opportunities for women in the Eruvessi village. Certificate on training attended No: RTI/E-TRG/1087

2) Dr. Sreekanth M P (Assistant Professor, ME) reviewed a paper for Journal of Engineering Manufacture (SAGE) and submitted the score on 23 November 2020.

3) FDP Proposal by Dr. Sridharan P (Associate Profesor, ME) “Emergence of Cognitive Manufacturing and Industry 4.0 ”, is selected in KTU for Funding.

STUDENTS ACHIEVEMENTS

It is not about ideas, it is about making ideas happen. The journey started around 5 months ago when a bunch of college students started aspiring of establishing a Clothing Brand of their own. This aspiration and months of planning led to the making of the brand URBANPLOY. Urbanploy crafts with passion and wants to tell the world that young minds must be at work all the time and would always love to guide people who want to start any company of such kind. Their business is mainly done through their website , always updated with latest trends and designs. They deal currently with T-shirts, Tanktops, Croptops and Hoodies. Shirts, Pants etc will be added soon. Raed Abdul Majeed. (S7 ME-B), Nikul Mohan (S7 ME-A), Sanjay C P (S7 ME-A), Avinash Sudheer (S7 ME-A) are the students, from the Department, included in the team. The start-up was inaugurated online by Mr. C Jayachandran, The managing partner of MASCOT industries on 16-11-2020.

PAPER PUBLICATIONS

1) Dr. S.Christopher Ezhil Singh (Professor, ME,VJEC) published paper on, "Tensile and compression behaviour, microstructural characterization on Mg-3Zn-3Sn-0.7Mn alloy reinforced with SiCp prepared through powder metallurgy method", Materials Research Express – IOP Science, Vol.7 (10), pp.1-9, I.F:1.929. (2020)

2) Dr. S.Christopher Ezhil Singh (Professor, ME,VJEC) published paper on "Taguchi Design for Wear Behaviour of Al-Si-B4C Composites Prepared by Powder Metallurgy", International Journal of Innovative Technology and Exploring Engineering, Vol. 9, No.12, pp.1-4. (2020)

3) Dr. S.Christopher Ezhil Singh (Professor, ME,VJEC) published paper on "Dry Sliding Friction of Al-Si-B4C Composites Prepared Through Powder Metallurgy using Taguchi Design", International Journal of Innovative Technology and Exploring Engineering, Vol. 9, No.12, pp.5-8. (2020)

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 Editor: Mr. Gokulnath R (Asst. Prof, ME), Mr. Alex George (Asst. Prof, ME)

Student Editors: Mr. Abhiraj Ashok P V (S7 ME), Ms. Pallavi Chandran (S7 ME)