



# VIMAL JYOTHI ENGINEERING COLLEGE CHEMPERI



## MECHNOVA

### MECHANICAL DEPARTMENT NEWS LETTER

FEBRUARY 2017  
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#### HOD DESK

Greetings to Dear students, Faculty and Friends!

"If everyone is moving forward together, then success takes care of itself." --Henry Ford.

Our SAE –BAJA team –"INVICTO" has made this famous quote true by working together with team spirit and enthusiasm. Behind the success of the team there is unflinching support of the college management especially our Chairman Fr (Dr) Thomas Melvettath and steadfast guidance of our principal Dr. Benny Joseph. We thank them for their support and guidance. Congratulation is due to SAE team and coordinators for their tireless and inspired effort in getting the ATV to participate in various national events. I hope their dream of participating in International ATV competition, to be held at Illinois, United States of America from 7th to 10th June 2017, comes true with the prayers and help of all well wishers

Cdr Raju K Kuriakose (retd)  
HOD

#### In this Nutshell

- HOD Desk
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### വിമൽജ്യോതി എൻജി. വിദ്യാർത്ഥികൾ അന്താരാഷ്ട്ര മത്സരത്തിന്

ചെന്നൈ: ഇന്ത്യയിലെ അമേരിക്കയിലെ ഇല്ലിനോയിസിൽ നടത്തുന്ന കോണ്ടു മത്സരത്തിൽ പങ്കെടുക്കുന്നതിനു ചെന്നൈ വിമൽജ്യോതി എൻജിനീയറിംഗിൽ കോളേജിലെ വിദ്യാർത്ഥികൾ യോഗ്യരാണ്. എൻഎഇ ക്ലബിന്റെ ആഭിമുഖ്യത്തിൽ 25 വിദ്യാർത്ഥികൾ ചേർന്നു മത്സരകലിപ്പന ചെയ്ത കോണ്ടു മത്സരത്തിൽ പങ്കെടുക്കുക. കഴിഞ്ഞുവന്ന സാഹചര്യത്തിൽ നടന്ന 'എൻഡുറോ സ്റ്റുഡന്റ്സ് ഇന്ത്യ-2017' കോണ്ടു മത്സരത്തിൽ മെക്കാനിക്കൽ ഡിപ്പാർട്ട്മെന്റിലെ അസിസ്റ്റന്റ് പ്രിൻസിപ്പൽ അഡ്വൈസ്. സി. ജോസഫ് ഓർഗനൈസേഷൻ പ്രകാരം അസിസ്റ്റന്റ് മെക്കാനിക്കൽ എൻജിനീയറിംഗ് വിദ്യാർത്ഥികൾക്ക് കോണ്ടു മത്സരത്തിൽ പങ്കെടുക്കാനുള്ള അവസരം ഉണ്ടാകും. ഇതിൽ പങ്കെടുക്കാനുള്ള വിദ്യാർത്ഥികൾക്ക് കോണ്ടു മത്സരത്തിൽ പങ്കെടുക്കാനുള്ള അവസരം ഉണ്ടാകും. ഇതിൽ പങ്കെടുക്കാനുള്ള വിദ്യാർത്ഥികൾക്ക് കോണ്ടു മത്സരത്തിൽ പങ്കെടുക്കാനുള്ള അവസരം ഉണ്ടാകും.



കോണ്ടു മത്സരത്തിൽ പങ്കെടുക്കാനുള്ള വിദ്യാർത്ഥികൾക്ക് കോണ്ടു മത്സരത്തിൽ പങ്കെടുക്കാനുള്ള അവസരം ഉണ്ടാകും. ഇതിൽ പങ്കെടുക്കാനുള്ള വിദ്യാർത്ഥികൾക്ക് കോണ്ടു മത്സരത്തിൽ പങ്കെടുക്കാനുള്ള അവസരം ഉണ്ടാകും. ഇതിൽ പങ്കെടുക്കാനുള്ള വിദ്യാർത്ഥികൾക്ക് കോണ്ടു മത്സരത്തിൽ പങ്കെടുക്കാനുള്ള അവസരം ഉണ്ടാകും.

VJEC Mechanical Department Collegiate club SAE's Team INVICTO (BAJA) is qualified for an International ATV competition and is the only team from Kerala and the one among 10 teams from India. The event will be conducted at Illinois, The United States of America from 7th to 10th June 2017. The event will be named as BAJA SAE Illinois, at Caterpillar Edwards Demonstration & Learning center, Peoria



# ENDURO STUDENT INDIA 2017

enduro.student.india  
05/01/17- 09/01/17  
Gedee Driving School  
Eachaneri, Coimbatore

## **ENDURO STUDENT INDIA 2017- “an unforgettable experience”**

**-by Josin Jacob S8ME-Captain ,SAE team INVICTO**

*(The SAE VJEC COLLEGIATE CLUB participated in the ENDURO STUDENT INDIA 2017 competition and was the only eligible competitors from Kerala to take part in the event. The event was scheduled from 05. Jan 2017 to 09. Jan 2017 at GEEDEE OFF-ROAD TRACK, Coimbatore. Team INVICTO Captain Josin Jacob shares team’s memorable experiences)*

### **PRE-INSPECTION & TECH INSPECTION (06 Jan 2017)**

*On this day, the tech inspectors carried out brief tech inspection of our ATV and suggested slight modifications based on which we carried out the modifications in the hot pit areas. Since there was a queue for the hot pit area, we could complete the modifications only by the afternoon 1500 hours. Once the modification was completed we got our TI completed successfully, followed by which we went for the Engine test and fuel filling.*



### **STATIC EVENTS: (07 Jan 2017)**

*The day began with static events like business event, design event and cost event along with technical inspection for the ATV who could not completed the modifications. Since our modifications were complete the team members divided among themselves to participate in the business event, design event, cost event and rest of the team members were prepping up the ATV for the next day’s event. By the end of the day out of 110 teams only 79 teams could clear the TI and we were positioned 62<sup>nd</sup>.*

### **DYNAMIC EVENTS: (08 Jan 2017)**

*The Dynamic events began by 0900 hours, as our ATV was ready; we first went on to compete in events like Acceleration and Crawling Event. The Crawling event being introduced first time, many teams who cleared the TI were facing difficulty in clearing it, moreover it was mandatory to get clearance in Crawling to participate in Endurance Race. Anyhow for us we were able to clear the event without any hiccups. Soon our position got further upgraded to 52<sup>nd</sup> position as many teams were not able to clear the crawling event*



***DYNAMIC EVENTS – ENDURANCE RACE (09 Jan 2017)***

*The Endurance event began by 1100 hours. Since our team had overcome all the hurdles within time, we were ready for the endurance, for which the team drivers were first given a track walk and briefing. Now among the other Dynamic events Endurance Event is the toughest one, in which the ATV's were driven through a tough terrain with obstacles of around 1.9 KM. Keeping in mind about the previous years' experience, the main challenge for us was to complete the 4 Hours race without any breakdowns*

***At the end of the race our ATV was able to complete 38 laps of the terrain without any issues of component failure and our ATV was among the 27 ATV's to clear the race thus improving our position to 39th Position***

*The day came to an end with a closing ceremony and the prize distribution to the winners. It was an enthralling and informative experience to us as we could learn a lot from other teams and technical inspectors regarding the current international standard being followed in the field of automotive and made sure to improvise on the faults and set sights to participate in SAE INTERNATIONAL, ILLINOIS to be held in June 2017.*



***VJEC SAE TEAM INVICTO got an invitation to participate Kannur Beach Fest, which will be conducted on 12<sup>th</sup> Feb 2017 at Payyambalam Beach Kannur***



SAE VJEC Club conducted Student Convention Tier -1 event (2016-17) on 2nd Feb 2017 comprising of Aero modeling competition and Two groups of student cleared the Tier – 1 event and went on to participate the Tier -2 event at Saint Gits Engineering &Technology, Kottayam

ONE DAY Workshop on Transition from ISO 9001:2008 to ISO 9001:2015



One day work shop on Transition from ISO 9001:2008 to ISO 9001:2015 was conducted at VJEC on 16<sup>th</sup> Dec 2016. Respected Chairman of VJEC, Rev Dr Thomas Melvettam, inaugurated the workshop. Resource person for the program was Mr. Shyam Kumar from Disha Consultancy Cochin. Faculty from various departments of VJEC institutions has participated in the event

STATUP trials: IR MOTOR SPORTS



Best Wishes for the startup trails from SAE Team  
Invicto: IR Motor Sports: An Initiative to Fabricate domestic ATV's

Forthcoming Events

**VIMAL JYOTHI ENGINEERING COLLEGE**  
 Campus - 670 006, Kottayam, Kerala  
 DEPARTMENT OF MECHANICAL ENGINEERING  
 Organize

**Three Days Training Workshop on "Programming & Operations of 3-Axis CNC Vertical Machining Centre"**  
 For Mechanical Engineering Students  
 13-15 FEBRUARY, 2017

**COURSE CONTENTS:**

- ✓ Introduction to CNC machines
- ✓ G-Codes & M-Codes
- ✓ Fanuc programming structure
- ✓ Absolute/Incremental method
- ✓ Creation of subprograms
- ✓ Canned cycles – Drilling & Tapping
- ✓ Cutter radius compensation
- ✓ Tool & Wear offset parameter setting

Venue: Msqr. Jacob Varikattu Hall  
 Convener(s): Prof. Raju K.K. HoD/ME, Prof. Dr.R.Umesh Sundar



Staff Editors: Mejo M Francis & Hari Prasad Student Editor: Josin Jacob