**VOLUME XIV** 

NOV 2020

HINDUSTHAN COLLEGE OF ENGINEERNG AND TECHNOLOGY, COIMBATORE-32

# **DEPARTMENT OF MECHATRONICS ENGINEERING**





**ACADEMIC YEAR 2020 - 2021** 

# FROM THE EDITOR'S DESK



Welcome and best wishes to all who receive this Newsletter. It gives me great opportunity to present the 14<sup>TH</sup> Issue of Optimus Prime. This internal newsletter is one of the ways in which we can disseminate information on the life of the Department. The past semester was full of various activities by the students and faculty in academic, co-curricular, extra-curricular. As you read through the pages you will realize, that the Department had a particularly successful semester. I would like to thank all my colleagues for their tireless efforts to help the department progress at a very steady pace. Our intention is to put out two issues per year, one in the month of May and the other in the month of November. The success of this newsletter depends on your response. We would appreciate your feedback.

> Dr.S.J.Narmadha Professor & Head Department of Mechatronics Engineering.

Associate Editors	:	M. Karthikeyan, M.E., Assistant Professor/MCT Department
		K.Kesavaraj, M.E., Assistant Professor/MCT Department
Student In charges	:	Deva Praseeth, IV MCT A Section
		S.RathinaKameesh, IV MCT B Section

### RESEARCH GRANTS, PROJECTS COMPLETED / ONGOING FROM NATIONAL FUNDING AGENCIES ONLY (LIKE AICTE, UGC, CSIR, DST, DBT, & OTHERS ETC.,)

S.No	Name of the principal Investigator & Co-Investigator	Title of the project	Funding Agency, Duration & Date of Sanction	Amount (in Lakh)	Completed/ On-going
1.	Pradeep Johnson &Veeramanikandan.R, Kesavaraj.K	Versatile Drone For Firefighting/Riot Control/3d Mapping/Sanitizing Applications	Research Seed Money From Hindusthan Management	0.40	On-going
2.	Kumaresan.m Sindhu.ss.s	Cryptic Ovoid With Aerosol	Indian Space Research Organization (ISRO)	6.42	Applied
3.	Sindhu.ss.s Kumaresan.m	Ai Based Cryptic Ovoid With Aerosol Autonomous Robot	Cognitive Science Research Initiative (CSRI)	3.69	Applied

# SEMINARS / SELF SPONSORED WORKSHOPS ORGANIZED BY THE FACULTY MEMBERS

S. No	Name of Seminars / Workshops	Date	No. of beneficiaries
1	Webinar on "untapped opportunities in manufacturing"	2/6/2020	100
2	One day webinar on " engineer to entrepreneur"	8/6/2020	100
3	One day webinar program titled" Introduction to online circuit builder & simulator"	9/6/2020	100
4	International Webinar on "Basics of automotive embedded systems and overview on automotive protocols"	12/6/2020	100
5	One day webinar titled" Requirement of Mechatronics engineering in contemporary industry"	13/6/2020	100
6	Three Days Webinar Program" Career oppurtunities in architecture, engineering and construction industry, how automotive r&d works and industry expectations from engineers from freshers"	12/6/2020 - 2/6/2020	100
7	Webinar on "Enjoying the ride and pride as Technopreneur"	14/6/2020	100

8	Webinar on "Industrial automation-Pneumatic application"	21/6/2020	100
9	International Webinar on "Basics of System Analysis using Multibody Dynamics"	26/6/2020	100
10	Webinar on "Robotics and Automation"	28/6/2020	100
11	Exclusive webinar on "COVID 19 and its impact on study abroad"	16/7/2020	100
12	Virtual conference on "Green Mechatronics Systems-2020"	30/7/2020 – 31/7/2021	60
13	One day webinar on "Additive manufacturing and its impact on industry 4.0"	5/8/2020	100
14	International Webinar Series on "Demand Shift for Skilled Engineersin Electric Vehicle Industry" & "Indian Automotive Industry-Job & Tech"	7/9/2020 & 8/9/2020	100
15	One day webinar on "Application of Material Science in Industries"	8/11/2020	100

## FACULTY MEMBERS PARTICIPATED IN FDP/SEMINAR/WORKSHOP/STTP/ TRAINING PROGRAM

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/S TTP/ Training program	Name of Organizing Institute	Place		
Seminars/Webinar							
1		04.07.2020	Webinar on Education 4.0 - quality Accreditation and Ranking	Swami Keshvanand Institute of Technology, Managemant	Gramothan , Jaipur		
2		05.07.2020	Webinar on How to Become a Data Scientist	BHAIDI	BHAIDI		
3	Dr.S.J.Narmadha	14.07.2020	Webinar on Techno- Operational Expertise Through Agile Methodology for Budding Engineers	Franics Xavier Engineering College	Triunelveli		
4		15.07.2020	Webinar on Fault Diagnosis & Vibration Control of Rotating Machine	Government College of Engineering,	Triunelveli		
5		20.07.2020	Six Days National Webinar Series on "A Vision Towards	KPRIET	KPRIET		

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/S TTP/ Training program	Name of Organizing Institute	Place
			Materials & Manufacturing "		
6		16.07.2020	Exclusive Webinar on COVID-19 & its impact on Study Abroad	Coimbatore	Coimbatore
8	Mrs.S.SS.Sindhu	20.07.2020	Six Days National Webinar Series on "A Vision Towards Materials & Manufacturing "	KPRIET	KPRIET
9	Mr.K.Kesavaraj	02.07.2020	Webinar on "Where Will You Fit Into A Real Time Project?"	Sri Eshwar College of Engineering,	Coimbatore
10		05.07.2020	Webinar on How to Become a Data Scientist	BHAIDI	BHAIDI
11	- Mr.K.Kesavaraj	07.07.2020	Webinar on "Investigation of the effect of cracks on vibration parameters of cantilever beam"	Franics Xavier Engineering College	Triunelveli
12		08.07.2020	Webinar on "Application of PCM Nano fluids in Thermal Power Plants"	Franics Xavier Engineering College	Triunelveli
13		14.07.2020	Webinar on "Additive Manufacturing Fundamentals & Applications"	Franics Xavier Engineering College	Triunelveli
14		15.07.2020	Webinar on "Fault Diagnosis & Vibration Control of Rotating Machine "	Government College of Engineering	Triunelveli
15		05.07.2020	Attended Webinar How to Become a Data Scientist	BHAIDI	BHAIDI
16	Ms S.Sowmya	13.07.2020	Webinar on "Industry 4.0 & Robot Application"	Franics Xavier Engineering College	Triunelveli
17		15.07.2020	Attended Webinar Fault Diagnosis & Vibration Control of Rotating Machine	Government College of Engineering	Triunelveli
18		14.07.2020	Webinar on "Additive Manufacturing Fundamentals & Applications"	Franics Xavier Engineering College	Triunelveli

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/S TTP/ Training program	Name of Organizing Institute	Place	
19	· · · · · · · · · · · · · · · · · · ·	25.07.2020	Attended webinar "Deep Space Dreams"	Franics Xavier Engineering College	Triunelveli	
20		24.07.2020	Attended International Webinar on"Buildings a Successful career path "	HICET	HICET	
21	Ms S.Sowmya	30.07.2020	Attended International Webinar on"Linking molecular &continum mechanics with application to biometric nanomaterials & advanced materials "	Mandsaur University	Mandsaur	
22	-	16.07.2020	Exclusive Webinar on COVID-19 & its impact on Study Abroad	Coimbatore	Coimbatore	
23	-	04.07.2020	Attended Webinar on "Ultrafine grained materials with futuristic properties"	IIT Bhilai	IIT Bhilai	
24		20.07.2020	Attended Webinar on" A research perspective on Aluminium Alloy Based Hybrid Composites "	BIT	Sathyamanglam Coimbatore	
25	Mr.P.Karthik	09.07.2020	Attended International Webinar on "Engineering Project Management Scope,Cost,Risk,& Teams	Franics Xavier Engineering College	Triunelveli	
26		13.07.2020	Webinar on "Industry 4.0 & Robot Application"	Franics Xavier Engineering College	Triunelveli	
27		08.07.2020	Webinar on "Application of PCM Nano fluids in Thermal Power Plants "	Franics Xavier Engineering College	Triunelveli	
28	Mr.R.Vinoth	14.07.2020	Attended webinar on "Techno-Operational Expertise Through Agile Methodology Devops For Budding Engineers "	Franics Xavier Engineering College	Triunelveli	
29	Mr.Premanand	04.07.2020	Attended Webinar on "Ultrafine grained materials	IIT Bhilai	IIT Bhilai	

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/S TTP/ Training program	Name of Organizing Institute	Place
			with futuristic properties"		
30		04.07.2020	Attended Webinar Education 4.0 - quality Accreditation and Ranking	Swami Keshvanand Institute of Technology, Managemant	Gramothan , Jaipur
31		08.07.2020	Webinar on "Application of PCM Nano fluids in Thermal Power Plants "	Franics Xavier Engineering College	Triunelveli
32	Mr.M.Kumaresan	20.07.2020	Six Days National Webinar Series on "A Vision Towards Materials & Manufacturing "	KPRIET	KPRIET
			FDPs/SDPs/STTPs		
1		27.07.2020	Attended six days FDP on Integrated planning for NIRF ranking and best practices in Engineering colleges	HICET	HICET
2	– Dr.S.J.Narmadha	06.07.2020	Attended FDP Research Proposal Writing & Opportunities in the Field of Science, Engg, Management	BIT	Bangalore
3		14.07.2020	Four Days online International Faculty Development Programme (FDP) on "Solar Energy Applications "	HICET	Coimbatore
4	Mr.G.Thilak	22.07.2020	Five Days National Level Faculty Development Programme on "RESEARCH OPPORTUNITIES IN ADVANCED WELDING PROCESSES"	HICET	Coimbatore
5		27.07.2020	Attended six days FDP on Integrated planning for NIRF ranking and best practices in Engineering colleges	HICET	Coimbatore
6	Mr.K.Kesavaraj	01.07.2020	Five Days Virtual Faculty Development Programme on "MECHATRONICS IN SMART MANUFACTURING FOR	BIT	Sathyamanglam, coimbatore

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/S TTP/ Training program	Name of Organizing Institute	Place
			THE FUTURE"		
7	Mr.K.Kesavaraj	12.07.2020	"Online Awareness Pledge on COVID-19"	KPRIET	KPRIET
8	Ma C Samura	11.07.2020	Attended India's First Leadership Talk with Shri shashishekhar (CEO -prasar Bharti)	MHRD's Innovation Cell	MHRD's Innovation Cell
9	Ms S.Sowmya	27.07.2020	Attended six days FDP on Integrated planning for NIRF ranking and best practices in Engineering colleges	HICET	Coimbatore
10	Mr.Premanand	27.07.2020	Attended six days FDP on Integrated planning for NIRF ranking and best practices in Engineering colleges	HICET	Coimbatore
11		06.07.2020	Attended one week "Faculty Development Programme On Reasearch Proposal Writing And Opportunities In The Field Of Science ,Engineering& Management"	BIT	BIT
12		20.07.2020	Attended online FDP on "TRENDS IN ELECTRIC VECHICLES"	St.Joseph's Institute of Technology	Chennai
13	Mr.P.Karthik	15.10.2020	Attended National IP Literacy Week Organized under Kalam Program for IP Literacy & Awareness	MHRD,AICTE,I IC Cell	Delhi, Govt of India
16	Mr.M.M.Jegan	15.10.2020	Attended National IP Literacy Week Organized under Kalam Program for IP Literacy & Awareness	MHRD,AICTE,I IC Cell	Delhi, Govt of India
17		25.11.2020	Attended Two days FDP on " RESEARCH SCHOLARS EMPOWERMENT PROGRAMME-V (RSEP-V) in online Mode	(Dept of Higher Education ,MHRD)	(Dept of Higher Education ,MHRD)
18	Dr.S.J.Narmadha	16.11.2020 To 21.11.2020	ONE WEEK AICTE sponsored (AQIS)STTP on outcome based education for Technical Institutions -phase	Rajagiri school of Engineering & technology	Kochi

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/S TTP/ Training program	Name of Organizing Institute	Place
			2		
25		02.11.2020 To 07.11.2020	Six days AICTE Sponsored online STTP (Series-II) on "OUTCOME BASED CURRICULUM,PLANNING ,MAPPIN &MEASUREMENTS"	Sri Krishna College of Technology	Coimbatore
26	Mr.G.Thilak	16.11.2020 To 21.11.2020	Six days AICTE Sponsored online STTP (Series-II) on "MANUFACTURING APPLICATIONS OF MICROMACHINING WITH EMPHASIS ON MAKE IN INDIA "	R.M.K.College of Engineering & Technology	Tiruvallur
28	Mr.P.Karthik	02.11.2020 to 07.11.2020	Six days AICTE Sponsored online STTP on" "RAPID PROTOTYPING AND DIGITAL MANUFACTURING"	Nss College Of Engineering,	Palakkad, Kerala
31	Dr.S.J.Narmadha	14.10.2020 To 20.10.2020	ONE WEEK AICTE sponsored (AQIS)STTP on out come based education for Technical Institutions -phase 1	by Rajagiri school of Engineering & technology	Kochi
32		07.07.2020 To 11.07.2020	Attended STTP course " INSIGHTS INTO ELECTRICAL ENERGY MANAGEMENT"	КСТ	Coimbatore
33	Mr.Premanand	07.07.2020 To 11.07.2020	Attended STTP course " INSIGHTS INTO ELECTRICAL ENERGY MANAGEMENT"	КСТ	Coimbatore
			Conference		
1	Dr.S.J.Narmadha	30.07.2020	Virtual conference on "Green Mechatronics systems 2020	Hicet	Coimbatore
2	Mrs.S.SS.Sindhu	01.07.2020	TEQIP III Sponsored 1st online National conference on Recent Trends in Thermal Sciences & Alternate Energy Resources presented paper tiitle"RADIO FERQUENCY ANALYSIS ON STEALTH	Gct, Coimbatore & NIT,AP	Coimbatore

S.No	Name of Staff	Date	Title of the FDP/Seminar/Workshop/S TTP/ Training program	Name of Organizing Institute	Place
			F-35 USING HYBRID FIBER REINFORVEC COMPOSITE MATERIALS "		
3	Mrs.D.Dhanalakshm i	01.07.2020	TEQIP III Sponsored 1st online National conference on Recent Trends in Thermal Sciences & Alternate Energy Resources presented paper tiitle"RADIO FERQUENCY ANALYSIS ON STEALTH F-35 USING HYBRID FIBER REINFORVEC COMPOSITE MATERIALS "	Gct, Coimbatore & NIT,AP	Coimbatore
4	Mr.M.Kumaresan	01.07.2020	TEQIP III Sponsored 1st online National conference on Recent Trends in Thermal Sciences & Alternate Energy Resources presented paper tiitle" RADIO FERQUENCY ANALYSIS ON STEALTH F-35 USING HYBRID FIBER REINFORVEC COMPOSITE MATERIALS	Gct,Coimbatore & NIT,AP	Coimbatore





