

MECH VAARTHA

VOLUME: XIV

A QUARTERLY NEWSLETTER OF APRIL-JUNE 2021



Editor in Chief
Dr. T.Nancharaiah

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Dr. B.I.Hussain

**DEPARTMENT OF
MECHANICAL ENGINEERING**

Bapatla Engineering College, Bapatla
522102, Andhra Pradesh, India.

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**Bapatla Engineering College::Bapatla
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DEPARTMENT OF MECHANICAL ENGINEERING

Vision of the Department

"To become a center of Excellence in producing the graduates as professional Mechanical Engineers with a high-quality education, innovative and entrepreneurial skills to secure the society and industry needs".

Mission of the Department

- *To impart high-quality education in curriculum and to build the students in their capacity and enhancing skills to make them globally competitive Mechanical Engineers.*
- *To prepare the students by providing exceptional academic environment, leadership, ethical guidelines and lifelong learning needed for a long professional career.*
- *To enhance the overall academic performance of the students gradually and thereby increasing their placement potential.*
- *To build the institute-industry interaction by providing the internship programs*

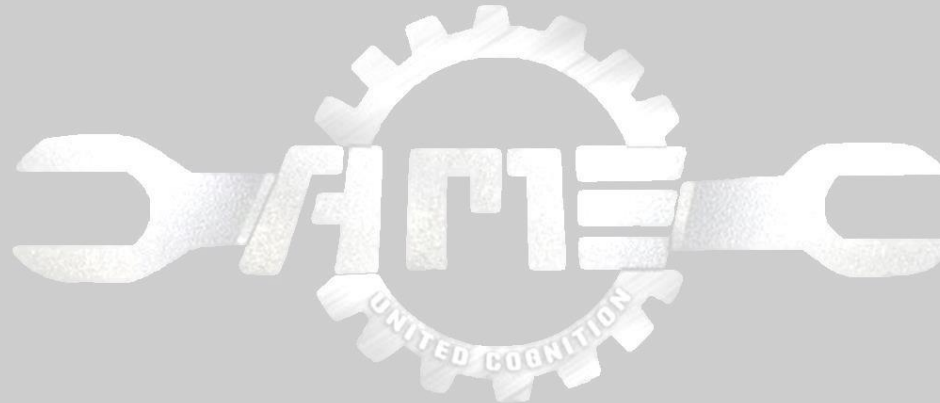
DEPARTMENT OF MECHANICAL ENGINEERING
BAPATLA ENGINEERING COLLEGE:: BAPATLA

APR TO JUN 2021

EVENTS ORGNANIZED BY THE DEPARTMENT

S.No	Title of the Event	Type	Duration	No of Sessions	Dates	Level	Speakers	Organizers	Stake holders	No of Participants
1	International Conference on Materials , Mechanical and Energy Engineering (ICMME 2021)	Confere nce	Two Days	2	7-8 TH May 2021	Internati onal	Paper presenters	Dr B Ratna Sunil Dr D Sameer Kumar Dr V V Kondaiah	Registered Participants	60
2	Transformation of ZnO and TiO2 nanoparticles in the soils environment - influence of soil microorganisms and plants	Keynote address	One day	1	8 th May 2021	Internati onal	Dr Martin Sebesta Comenius University in Bratislava Bratislava 4	Dr B Ratna Sunil Dr D Sameer Kumar Dr V V Kondaiah	Registered Participants	60
3	Metallurgical failure Investigations of Industrial Components	Keynote address	One day	1	7 th May 2021	Internati onal	Dr M Ananda Rao Principal Scientist CSIR – NML Chennai	Dr B Ratna Sunil Dr D Sameer Kumar Dr V V Kondaiah	Registered Participants	60

4	Skill enhancement opportunities in Tool Engineering and CAD / CAM / CAE Technologies	Webinar	One day	11.00 am to 1.00 pm	26.06.2021	National Level	Shri. K BABU RAO Asst. Director MSME Tool Room Hyderabad.	Dr. T. Nancharaiah Sri. M. Pardha Saradhi	Students, Faculty and Industry Persons (Registered Participants)	112
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Release of ICMMEE Poster by Sri M. Nageswara Rao , Secretary – BES



International Conference on Materials, Mechanical and Energy Engineering



(ICMMEE2021) 7th – 8th May 2021

[WWW.ICMMEE.COM](http://www.icmmee.com)

Important dates:

Abstract submission closing	30-03-2021
Acceptance of the abstracts	30-03-2021
Full paper submission ends	05-04-2021
Registration starts	20-03-2021
Camera ready full paper	20-04-2021
Conference dates	07th & 08th – 05-2021

Publishing Partner

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Materials Science and Engineering

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Structural materials
Materials for construction & building applications
Composite materials
Material testing and characterization
Smart materials
Computational methods in materials engineering
Materials for food processing and storage
Materials for agriculture

Minerals, metals and alloys
Mechanical behavior of materials
Additive manufacturing
Unconventional machining
Advanced manufacturing processes
Design and optimization
Welding, machining and forming of materials
Modeling and simulation in manufacturing
Materials for thermal applications
Materials for energy storage applications
Solar materials
Materials for electronics applications
Surface engineering

Conveners:

Dr. B. Ratna Sunil - +91 9677119819

Dr. D. Sameer Kumar, +91 9441651072

Co-Conveners:

Dr. V.V. Kondaiah, +91 89780 13595

icmmee@gmail.com, team@icmmee.com



4 Best paperr awards
among the presentedpapers
at ICMMEE 2021

DON'T
MISS
IT

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**Department of Mechanical Engineering,
BAPATLA ENGINEERING COLLEGE
(Autonomous)**

Bapatla 522101, Andhra Pradesh, India

www.becbapatla.ac.in

Poster of ICMMEE conference

Session Chair_ICMMEE 2021 - br... Meet - ugp-oeo-ydo

meet.google.com/ugp-oeo-ydo

PRABHAKAR GOPE is presenting

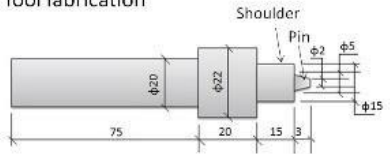
Tanala Vamsi and 5 more

23 11:16 You

Tool fabrication

Tool design

- Tool material: H13 tool steel
- Pin: tapered cylindrical
- Pin dimensions: 5/2 for 3mm





Machining

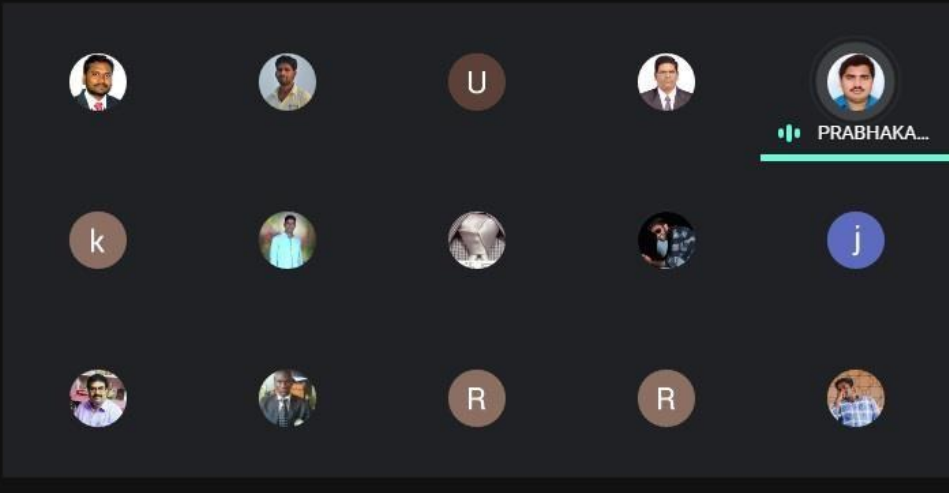
- Using CNC lathe machine
- Step turning, taper turning, facing and finishing

Heat treatment

- At 1010 °C for 1 h
- Air cooling (normalizing)

Photograph of tool used in the present study



Meeting details ^

PRABHAKAR GOPE is presenting

11:16 AM 5/8/2021

A screenshot during one of the sessions of the conference on a particular theme/track.

FACULTY ACHIEVEMENTS/PUBLICATIONS OF DEPARTMENT OF MECHANICAL ENGINEERING:

1. Dr.B. Iftexhar Hussain was appointed as session chair for International Conference on Materials, Mechanical and Energy Engineering (ICMMEE-2021) conducted during 7-8TH May 2021.
2. Umamaheswarrao Ponugoti, Ranga Raju Dantuluri, Naga Sai Suman Koka, Ravi Sankar Bhuvanagiri, “Experimental Investigations On The Influence Of Cutting And Tool Geometry Parameters Over The Machinability Of Aisi 52100 Steel In Hard Turning”, International Journal of Modern Manufacturing Technologies, Volume No:XII, Issue No.1, pp 144-156.
3. M.Sucharitha, B. Ravi Sankar, P.Umamaheswarrao, “A Review on Submerged Friction Stir Welding of Light Weight Alloys”, IOP Conf. Series: Materials Science and Engineering, Volume No: 954, , pp 1-8.
4. Hemendra Patle, B. Ratna Sunil, Ravikumar Dumpala, “Machining characteristics, wear and corrosion behavior of AZ91 magnesium alloy - fly ash composites produced by friction stir processing”, Material Science and Engineering Technology, Wiley.
5. B. Krishna Sarath Kumar, M. Jagannatham, B. Venkateswarlu, Ravikumar Dumpala, B. Ratna Sunil, “Synthesis, characterization and antimicrobial properties of strontium substituted hydroxyapatite”, Journal of the Australian Ceramic Society, Springer.
6. R. Supriyanka, V.V. Kondaiah, Lam Ratna Raju, Ravikumar Dumpala, B. Ratna Sunil, “Role of plunge depth on the joint formation and mechanical behavior of Al6063 AZ91 dissimilar lap joint produced by friction stir welding”, Material Science and Engineering Technology, Wiley.
7. P.Srikar, T.Sathish, P. Imran Khan, Y. Kalyan Reddy, V.V.Kondaiah, M. AnandaRao, Ravikumar Dumpala, B. RatnaSunil, “Zinc-calcium silicate composites produced by ball milling and sintering for degradable implant applications”, Materials Today: Proceedings, Elsevier.
8. P.V.S. Mahesh, S. Akhil, P. Chiranjeevi, Y. Sivaji, V.V. Kondaiah, M. Ananda Rao, Ravikumar Dumpala, B. Ratna Sunil, “Developing composites of zinc and hydroxyapatite for degradable orthopedic implant applications”, IOP Conf. Series: Materials Science and Engineering, IOP.
9. Hemendra Patle , B. Ratna Sunil , S. Anand Kumar , Ravikumar Dumpala, “Effect of inert gas environment on the sliding wear behavior of AZ91/B4C surface composite”, Journal of Engineering Tribology, SAGE.
10. Mohammad Irfan, Sk. Najma Sultana, B. Venkateswarlu, M. Jagannatham, Ravikumar Dumpala, B. Ratna Sunil, “Zinc substituted hydroxyapatite: Synthesis, structural analysis and antimicrobial behaviour”, Transactions of the Indian Institute of Metals, Springer.

WORKSHOPS/SEMINARS/CONFERENCES ATTENDED BY THE FACULTY OF MECHANICAL ENGINEERING DEPARTMENT:

Name of the Event	Title	Faculty Name	Organizers
Webinar	WEBINAR ON SMART MANUFACTURING AND DIGITAL TWIN	Dr. B. IFTEKHAR HUSSAIN	Vignan's Foundation for Science, Technology and Research (Deemed to be University), Guntur,A.P in association with MTAB TECHNOLOGY CENTER P LTD, Chennai.

Webinar	International Conference on Materials, Mechanical and Energy Engineering (ICMMEE-2021)	Dr. B. IFTEKHAR HUSSAIN	Bapatla Engineering College, Bapatla-522102, A.P, India
Webinar	Webinar on "Application of CAE in Mechanical and Automotive Engineering"	Dr. B. IFTEKHAR HUSSAIN	Arasu Engineering College, Kumbakonam - 612 501, Thanjavur District, Tamil Nadu.
Webinar	Webinar on "Automotive Product Manufacturing Process & It's QMS Requirements"	Dr. B. IFTEKHAR HUSSAIN	Arasu Engineering College, Kumbakonam - 612 501, Thanjavur District, Tamil Nadu.
FDP	Applications of soft computing techniques for electro-mechanical systems	Srinivasulu Vardhini	NIT Bhopal
Orientati on/Refre sher Program me	Engineering Applications of Optimization	P.Umamaheswarrao	Rajiv Gandhi Government Polytechnic College, Itanagar
FDP	NAAC Assessment and Accreditation: A Step by Step Process.	Guduri Moshe Babu	Chadalawada Ramanamma Engineering College(Autonomous), Tirupathi.
Confere nce	International Conference on Technological Advancements in Mechanical Engineering (ICTAME 2021)	P.Umamaheswarrao	Academy of Maritime Education and Training (AMET), Deemed to be University, Chennai.
Confere nce	2nd Indo-Korea Virtual Conference on Development of Advanced Material for Future Technologies	P.Umamaheswarrao	KAIST, DaeJeon, South Korea and Vellore Institute of Technology, Chennai.
Webinar	National Webinar on "Recent Advances in Aluminium Alloys	Dr. B. IFTEKHAR HUSSAIN	VFSTR (Deemed to be University), Vadlamudi, Guntur Andhra Pradesh - 522 213

	Technology and Failure Analysis of Industrial Components”		
Webinar	Expert Webinar titled “Vacuum Thermoform Mold Tool Design”	Dr. B. IFTEKHAR HUSSAIN	Sri Venkateswara College of Engineering, Sriperumbudur (TK), Tamil Nadu
Webinar	Webinar on “Skill enhancement opportunities in Tool Engineering and CAD/CAM/CAE technologies”	Dr. B. IFTEKHAR HUSSAIN	Bapatla Engineering College, Bapatla-522102, Guntur District, Andhra Pradesh, India.
Seminar	Two-day National level Seminar on “Quality Improvement via Accreditation and Ranking”	Dr. B. IFTEKHAR HUSSAIN	Bapatla Engineering College, Bapatla-522102, Guntur District, Andhra Pradesh, India.
FDP	One week FDP on “Open Source Software used in Drafting Modelling & Analysis”	Dr. B. IFTEKHAR HUSSAIN	N. B. N Sinhgad College of Engineering, Solapur, Maharashtra.

List of offers from companies to Mechanical Engineering students:

Full Name	Company Name	Date of placement
APPANA MURALIDHAR	CORPTEAM Solutions	15th. April.2021
CHERUKURI ASWIN KUMAR	CORPTEAM Solutions	15th. April.2021
KOPPOLU TEJESWAR	CORPTEAM Solutions	15th. April.2021
KOTTALI SURI NAIDU	CORPTEAM Solutions	15th. April.2021
NADAKURTHI ALEXANDAR	CORPTEAM Solutions	15th. April.2021
PEDDINA SAI VIKAS	CORPTEAM Solutions	15th. April.2021
RAJANA RAMESH	CORPTEAM Solutions	15th. April.2021
THIRRIVEDHI ANIRUDH	CORPTEAM Solutions	15th. April.2021
AINALA STEPHEN	KIML	19th. April.2021
ANNAVARPU SIVARAMMAKRISHNA	KIML	19th. April.2021
BANDLAMUDI PAVAN KUAMR	KIML	19th. April.2021

BATTULA BHARAT KUMAR	KIML	19th. April.2021
CHATHARAJUPALLI VENKATA SUBRAHMANYAM	KIML	19th. April.2021
GANTA NAIDU	KIML	19th. April.2021
GOKARAJU RAMAKRUSHNAM RAJU	KIML	19th. April.2021
GUDIPUDI SANGEETH KUMAR	KIML	19th. April.2021
CHAVALA ROOPCHAND	KIML	19th. April.2021
VENKATASIVA BANDARU	KIML	19th. April.2021
JUTTIGA YUGENDRA	KIML	19th. April.2021
KOKKIRALA VENKATA SAI KRISHNA	KIML	19th. April.2021
KOLLATI YASWANATH KUMAR	KIML	19th. April.2021
KOTA BHANU	KIML	19th. April.2021
KOTTE LOKESH	KIML	19th. April.2021
MODUKURU GOPICHAND	KIML	19th. April.2021
MUNNAGI PURNACHANDRA REDDY	KIML	19th. April.2021
NAGAMALLI SAI VENKATA TARUN	KIML	19th. April.2021
VENKATAGOPI MARAM	KIML	19th. April.2021
KANDIKUPPA SUBHASH	KIML	19th. April.2021
PALIKE SANDEEP	KIML	19th. April.2021
PANCHUMARTHI VAMSI KRISHNA	KIML	19th. April.2021
PEDDINA RANGA BABU	KIML	19th. April.2021
PETLA GANESH	KIML	19th. April.2021
PINISETTY RAMESH	KIML	19th. April.2021
RAJANA RAMESH	KIML	19th. April.2021
SHAIK MASTAN SHAREEF	KIML	19th. April.2021
SIRIPURAPU SAI SURENDRA	KIML	19th. April.2021
THURIMELLA PRAKASH	KIML	19th. April.2021
THURUMELLA UDAY KIRAN	KIML	19th. April.2021
TUMU SURYA NAGA CHAKRA GANESH	KIML	19th. April.2021
VANJULA SANJAY KUMAR	KIML	19th. April.2021
VUYYURU SAI GOPI	KIML	19th. April.2021
YATHAM RAJ GOPAL	KIML	19th. April.2021
ZAGABATHUNI SARATH KUMAR	KIML	19th. April.2021

NELATETI BHASKAR	KIML	19th. April.2021
AKINA SYAM SUNDAR	Magna Automotives	24th. May. 2021
ANNAVARPU SIVARAMMAKRISHNA	Magna Automotives	24th. May. 2021
APPANA MURALIDHAR	Magna Automotives	24th. May. 2021
BALIREDDY LEELA VAMSI PRASAD	Magna Automotives	24th. May. 2021
BAVIRSETTI VENKAT AVEERA SRI JAGANADHARAO	Magna Automotives	24th. May. 2021
BUDDI SIVA KUMAR	Magna Automotives	24th. May. 2021
BURRI UDAYAKIRAN	Magna Automotives	24th. May. 2021
D.DINESH	Magna Automotives	24th. May. 2021
DASARI ANTHONI BALA THAMBI	Magna Automotives	24th. May. 2021
DEVARAKONDA RAMAKRISHNA	Magna Automotives	24th. May. 2021
GANTA NAIDU	Magna Automotives	24th. May. 2021
GERA RUSHI	Magna Automotives	24th. May. 2021
GOKARAJU RAMAKRUSHNAM RAJU	Magna Automotives	24th. May. 2021
GUNTUR KOTEWARARAO	Magna Automotives	24th. May. 2021
IJJADA JAGANMOHANARAO	Magna Automotives	24th. May. 2021
GANTA KUMAR	Magna Automotives	24th. May. 2021
IKKURTHI MURALDHARA SAI	Magna Automotives	24th. May. 2021
ILLA SOMA SUNDAR DURGA PRASAD	Magna Automotives	24th. May. 2021
KAMISSETTY NAGADURGARAO	Magna Automotives	24th. May. 2021
KAPA SANDEEP	Magna Automotives	24th. May. 2021
KOKKIRALA VENKATA SAI KRISHNA	Magna Automotives	24th. May. 2021
KOLLATI YASWANTH KUMAR	Magna Automotives	24th. May. 2021
KOMMINENI SAI RAVINDRA	Magna Automotives	24th. May. 2021
KOPPOLU TEJESWAR	Magna Automotives	24th. May. 2021
KORRA SAIDA NAIK	Magna Automotives	24th. May. 2021
KOTA BHANU	Magna Automotives	24th. May. 2021
KOTTALI SURI NAIDU	Magna Automotives	24th. May. 2021
KOTTE LOKESH	Magna Automotives	24th. May. 2021
KURUVA MAHESH	Magna Automotives	24th. May. 2021
KUSUME MERCY KUMAR	Magna Automotives	24th. May. 2021

MACHERL RAMAKRISHNA	Magna Automotives	24th. May. 2021
MADDIBOYINA BALAJI	Magna Automotives	24th. May. 2021
MANDAGUDULA SAI	Magna Automotives	24th. May. 2021
MATTUPALLI SAI PAVAN KUMAR	Magna Automotives	24th. May. 2021
MODUKURU GOPICHAND	Magna Automotives	24th. May. 2021
MUNNAGI PURNACHANDRA REDDY	Magna Automotives	24th. May. 2021
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VENKATAGOPI MARAM	Magna Automotives	24th. May. 2021
KANDIKUPPA SUBHASH	Magna Automotives	24th. May. 2021
PADAL VENKATA SREE RAMA REDDY	Magna Automotives	24th. May. 2021
PALIKE SANDEEP	Magna Automotives	24th. May. 2021
PANCHUMARTHI VAMSI KRISHNA	Magna Automotives	24th. May. 2021
PANDI MAHESH	Magna Automotives	24th. May. 2021
PEDDINA RANGA BABU	Magna Automotives	24th. May. 2021
PEDDINA SAI VIKAS	Magna Automotives	24th. May. 2021
PENUMUCHU NAGENDRA PAVAN KUMAR	Magna Automotives	24th. May. 2021
PETLA GANESH	Magna Automotives	24th. May. 2021
RAJANA RAMESH	Magna Automotives	24th. May. 2021
SHAIK MOHAMMAD SHAKEER	Magna Automotives	24th. May. 2021
SIRIPURAPU SAI SURENDRA	Magna Automotives	24th. May. 2021
TALARI HARSHA VARDHAN	Magna Automotives	24th. May. 2021
THONTA RAMANJANEYULU	Magna Automotives	24th. May. 2021
THURIMELLA PRAKASH	Magna Automotives	24th. May. 2021
TUMU SURYA NAGA CHAKRA GANESH	Magna Automotives	24th. May. 2021
VANJULA SANJAY KUMAR	Magna Automotives	24th. May. 2021
VUYYURU SAI GOPI	Magna Automotives	24th. May. 2021
ZAGABATHUNI SARATH KUMAR	Magna Automotives	24th. May. 2021
NELATETI BHASKAR	Magna Automotives	24th. May. 2021
AINALA STEPHEN	GESTAMP Automotives	25th. May. 2021
AMARA VENKATA PRAVEEN	GESTAMP Automotives	25th. May. 2021
BATTULA BHARAT KUMAR	GESTAMP Automotives	25th. May. 2021

BONTHU CHARAN KUMAR	GESTAMP Automotives	25th. May. 2021
CHATHARAJUPALLI VENKATA SUBRAHMANYAM	GESTAMP Automotives	25th. May. 2021
GANGARAPU RAMANJANEYULU	GESTAMP Automotives	25th. May. 2021
GOPE TARUN KUMAR	GESTAMP Automotives	25th. May. 2021
GUNTUR PAVAN AYAYAPPA	GESTAMP Automotives	25th. May. 2021
CHAVALA ROOPCHAND	GESTAMP Automotives	25th. May. 2021
JUTTIGA YUGENDRA	GESTAMP Automotives	25th. May. 2021
KANNETI NAGA RAJU	GESTAMP Automotives	25th. May. 2021
KESANA VEERA SIVA	GESTAMP Automotives	25th. May. 2021
KOLLATI ANIL KUMAR	GESTAMP Automotives	25th. May. 2021
NALLURI GOPIBABU	GESTAMP Automotives	25th. May. 2021
LELLA NAGARJUNA	GESTAMP Automotives	25th. May. 2021
VENKANNA BABU NALLAPATI	GESTAMP Automotives	25th. May. 2021
KALYAN BABU NATTA	GESTAMP Automotives	25th. May. 2021
PANDI YASWANTH BABU	GESTAMP Automotives	25th. May. 2021
PINISETTY RAMESH	GESTAMP Automotives	25th. May. 2021
SARA NAGARAJU	GESTAMP Automotives	25th. May. 2021
TARRA SYAMSUNDAR	GESTAMP Automotives	25th. May. 2021
TATA SIVA NAGA RAJU	GESTAMP Automotives	25th. May. 2021
VARRI JAGADEESH	GESTAMP Automotives	25th. May. 2021
VEMULA SAI PRASAD	GESTAMP Automotives	25th. May. 2021
YARRAMSETTI PAVANKUMAR	GESTAMP Automotives	25th. May. 2021
YATHAM RAJ GOPAL	GESTAMP Automotives	25th. May. 2021
M SAI CHARAN	Infosys	5th. June. 2021
PONNAGANTI SRI KSUKESH	Infosys	5th. June. 2021