Shri Ramdeobaba College of Engineering and Management, Nagpur

Department of Mechanical Engineering

Online Webinar on

Recent Advances and Applications in IoT/IIoT

Department of Mechanical Engineering organized a number of webinars on variety of topics, to keep the knowledge exchange going on even during the lock down period. In this series one webinar on the topic "Recent Advances and Applications in IoT/IIoT" was organized on **5th May 2020**.

The expert speaker for the webinar was **Mr. Nilesh Sahare**, who is Director of ANV Info Tech, Nagpur. He is Results-driven Information Systems executive with proven record of success in domestic initiatives. Experience in building support functions as well as delivering complex technology and systems integration projects. Recognized as a leader with strong planning, organization, and implementation skills.A versatile IT engineer with 18+ years of core experience with thorough knowledge of system development. He has worked on over 1500 projects. Consultant at:Mahindra & Mahindra-Nagpur, Eicher Tractor-Bhopal,MCGM-Mumbai,Coaltech Automation-Nagpur,See-Tech Solutions-Nagpur. He was Adjunct Faculty at:S.B. Jain College of Engg., Palloti College of Engineering. He is a Corporate Trainer:Dot net Technologies, Embedded and IoT Domain, Network Programming and securities, Ethical Hacking. He is a Founder ofIomaTic IoT Development Platform

He is MCP (Microsoft Certified Professional) in VB.Net and CEH certified(Certified Ethical Hacker)

In his talk, **Mr. Nilesh** covered a variety of topics on IoT and its applications, from basics to advanced. After briefly explaining M2M, WoT, he presented Internet principles and various protocols, followed by prototyping and Python programming. He elaborated on Integrated IoT Sensors – Description & Characteristics– Polytronics Systems – Description & Characteristics. He then demonstrated case studies in the fields of Health care Technology, Agriculture, mobility and Home Automation etc. In the end there was Q&A session in which the queries of the participants were answered.

Nearly 273registered participants including, students, academicians, research scholars, businessmen and entrepreneurs attended the webinar through google meet. Dr. Vishal Shukla was coordinator and organizer of the webinar.

RCOEM

Shri Ramdeobaba College of
Engineering and Management, Nagpur

Department of Mechanical Engineering

In association with

TATA TECHNOLOGIES
RCOEM - TATA CIIIT
Center for Invention, Innovation, Incubation and training

&

ANV Infotech Pvt. Ltd., Nagpur

presents

A FREE WEBINAR ON

"Recent Advances and Applications in IoT/IIoT"

5th May 2020, 12:30 pm - 2:00 pm on Google meet

CONTENT:

1. Internet of Things (& Industrial IoT)
2. Applications
3. Some case studies

REGISTER OPEN FOR

Academician, Industry personals, Research scholars, PG and UG students.

Resource Person

Mr. Nilesh Sahare Director,
ANV Infotech Pvt. Ltd., Nagpur

REGISTRATION LINK

Copy Url: https://bit.ly/2z4k3IZ

Digital certification will be provided for attending the session.

For Details Contact: Dr. V. V. Shukla(+91-9822277318)

Online International Webinar on

Recent trends in material research

Department of Mechanical Engineering organized a number of webinars on variety of topics, to keep the knowledge exchange going on even during the lock down period. In this regards an international webinar series on the topic "**Recent trends in material research'** was organized on **26thMay to 29th May 2020**.

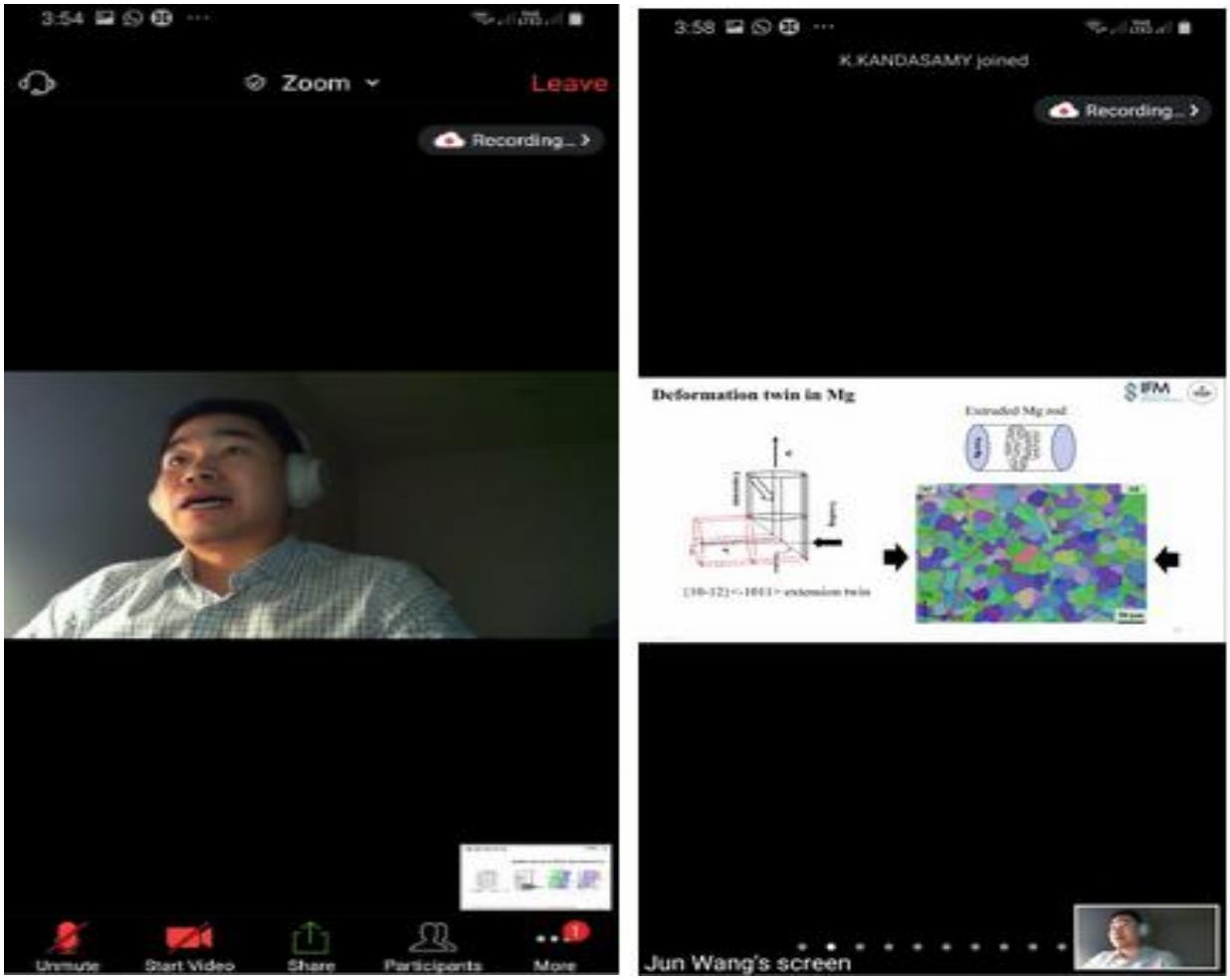
1.The first webinar was on **Using in-situ Synchrotron X-ray diffraction to study deformation mechanisms in Magnesium alloys''**

The expert speaker for the webinar was **Dr. Jun Wang who is a Associate Research Fellow at the Institute for Frontier Materials, Deakin University, Pigdons Rd, Geelong, Australia**.

Dr. Jun Wang is an **Associate Research Fellow** currently working with Prof. Matthew Barnett and A/Prof. Peter Lynch at Institute for Frontier Materials of Deakin University, Australia. He obtained his Ph.D. in materials science and engineering in 2019 under the supervision of Prof. Matthew Barnett. He has been doing research aiming at solving some fundamental scientific problems and creating innovations in lightweight alloys. The ultimate goal is to promote their application in aerospace, transport and mining sector, and to replace their heavier counterparts, which in turn enable energy and emission reductions. By now, He has published many papers and has total citations of 266 and an H-index of 11

In his talk, Dr. Jun Wang covered in detail the application of magnesium alloy,fabrication of magnesium alloy and how the plastic deformation take place .He also explained slip andf twin of Mg.He also emphasised upon the twinning dominated anaelasticity and apply compressive cycling with the intent to acertain the influence of precipitation hardeneing. The participants had a very good interactive session and all their queries were answered.

Nearly 222 registered participants including, UG and PG students, academicians, research scholars, attended the webinar through google meet. Dr. Pranjali S Deole and Prof. TusharSathe successfully organized this webinar



The Second webinar was on **Development of filter media for air filtration applied in air masks**

The expert speaker for the webinar was **Dr. Ana Claudia Canalli Bortolassi, who is a Post doctoral Fellow at Universidade Federal de Santa Catarina (UFSC) Brazil**

Dr. Jun Wang is an **Associate Research Fellow** currently working with Prof. Matthew Barnett and A/Prof. Peter Lynch at Institute for Frontier Materials of Deakin University, Australia.

Her specialization is in Environmental control with emphasis in engineering fibrous filter media using electrospinning process for airborne contaminant capture.She received her B.Sc. of Chemical Engineering from UniversidadeEstadual do Oeste do Paraná (UNIOSTE - Brazil), State University of Western Paraná then M.Sc and Ph.D. from Universidade Federal de São Carlos i.e.Federal University of São Carlos (UFSCar - Brazil) where worked with membranes for air filtration. She developed highly efficient electrospun membranes during her internship at the Institute Européen des Membranes (IEM – **University of Montpellier – France**) to remove nanoparticles and bacteria from the air which can be used in air masks and air purifier system. She was a visiting researcher at

Institute for Frontier Materials (IFM) at Deakin University (Waurn Ponds – Australia) in 2019. Her research was focused to engineer electrospunnanofibers due to the challenge to capture low molecular weight toxic compounds from indoor and outdoor environment. Currently, she is postdoctoral student at Universidade Federal de Santa Catarina (UFSC - Brazil) i.e. working to improve air masks to remove bioaerosols

In her talk, Dr.Anna Claudia covered development of filter media for air filtration applied in air masks..He also the nanoparticles deposition on nanofibresmembranes.She emphasised on remedial solutions and challenges in conventional air filters. The participants had a very good interactive session and all their queries were answered.

Nearly 222 registered participants including, UG and PG students, academicians, research scholars, attended the webinar through google meet. Dr. Pranjali S Deole and Prof. TusharSathe successfully organized this webinar

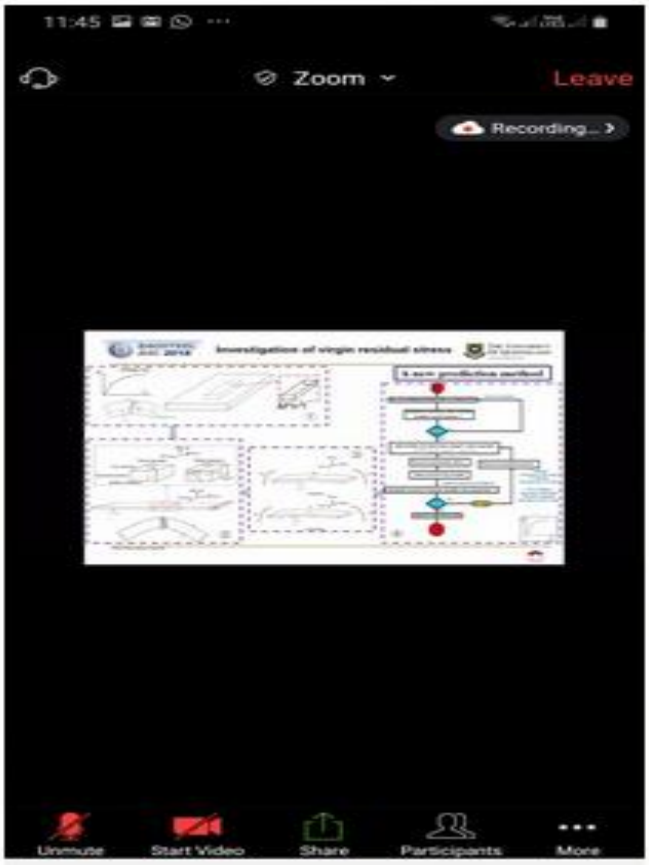
3.Thethird webinar wason **Overview of roll forming of high strength steels**

The expert speaker for the webinar was **Dr. Yong sung who is an Honorary research fellow at School of Mechanical and Mining Engineering of the University of Queensland and Associate research fellow at Deakin University, Australia.**

Dr Yong Sun is an honorary research fellow at the School of Mechanical and Mining Engineering of the University of Queensland and also an Associate research fellow at Deakin University. Dr Yong Sun officially obtained his PhD degree in 2017, and his PhD supervisors were Dr Scott Ding and Dr Bill Daniel. His research focuses on the investigation of Chain-die forming & roll forming of lightweight steel components, and the development of the understanding of residual stresses in lightweight steel structural products, structural mechanical performance analysis and optimization of cold-formed components. Chain-die forming is originated from the optimization of the transitional surface during traditional roll forming. His research involves a significant amount of work regarding the analytical, finite element modeling of sheet metal forming process and the corresponding experimental verification, experimental and numerical optimization of structural steel components

In his talk, Dr. Yon Sung covered Overview of roll forming of high strength steels. He Alsoemphasised on investigation of virgin residual stress. The participants had a very good interactive session and all their queries were answered.

Nearly 222 registered participants including, UG and PG students, academicians, research scholars, attended the webinar through google meet. Dr. Pranjali S Deole and Prof. TusharSathe successfully organized this webinar



4.The fourth webinar was on **Formability of sheet metals in roll forming.**

The expert speaker for the webinar was **Dr. AdityaDeole, who is a Post doctoral fellow at the**

Institute for Frontier Materials Deakin University, Pigdons Rd, Geelong, Australia &FormFlowpty.LTd., Australia.

DrAditya is an associate research fellow working at Institute of frontier materials, Deakinuniversity, Australia. He completed his PhD in sheet metal forming in 2019 under the supervision of Prof. Matthew Barnett and Dr. Matthias Weiss. His research focuses on understanding formability of the sheet metals in advanced forming processes. His research involves analytical, experimental and finite element modelling of the forming processes. Dr. Aditya model on instability in sheet bending is notable contribution in understanding in the forming limits of sheet metals in bending dominated forming processes. Also, he has worked on the material modelling and formability analysis of the anisotropic sheet metals (Ti 6Al 4V alloy) Titanium alloy**.**

In his talk, Dr.Aditya covered Overview formability of sheet metals in roll forming.. The participants had a very good interactive session and all their queries were answered.

Nearly 222 registered participants including, UG and PG students, academicians, research scholars, attended the webinar through google meet. Dr. Pranjali S Deole and Prof. TusharSathe successfully organized this webinar

Online Webinar on

Basics of Automotive Reliability

Department of Mechanical Engineering organized a number of webinars on variety of topics, to keep the knowledge exchange going on even during the lock down period. In this series one webinar on the topic "Basics of Automotive Reliability" was organized on **6th May 2020**.

The expert speaker for the webinar was **Mr. SanketModak**, who is A versatile Automotive engineer with 10+ years of core design engineering experience with thorough research and development expertise in the analyses of rolling element bearings as well as functional safety primarily for Automotive Powertrain. Proven ability to estimate rolling element bearing life for commercial vehicle transmissions using relevant statutory regulations and standards, ability to setup and interpret bearing design methodology using commercially available softwares, hands-on testing experience experience including roller profile measurement, impact analyses with variance in preload, bogie testing, accelerated testing and provide recommendations to bearing suppliers based on design requirements. Thrives in a fast-paced, dynamic environment with the ability to manage multiple projects simultaneously. Demonstrates the ability to develop P-diagrams, FMEAs to analyze various design failure modes. Software skills include: RomaxDesigner, KissSoft, Ansys Workbench, RAM Commander, MS Office Suite, MS Visio.

In his talk, **Mr. Sanket** covered a variety of topics in Automotive Reliability, from basics to advanced. He elaborated on some simple concepts like bath tub curves in reliability and then he exemplified some concepts like:Historic and Philosophic Background, Reliability Engineering, Foundation/Basis of Reliability, Reliability and Safety, Architecture Development, Stakeholder of Architectures, Views of Architecture. He also discussed the Horizontal Level of Abstraction, Requirements and Architecture, Development. Towards the end he discussed about Requirements and Design Specification, after which the Q&A session was there in which the queries of the participants were answered.

Nearly 255registered participants including, students, academicians, research scholars, businessmen and entrepreneurs attended the webinar through google meet. Dr. Vishal Shukla was coordinator and organizer of the webinar.

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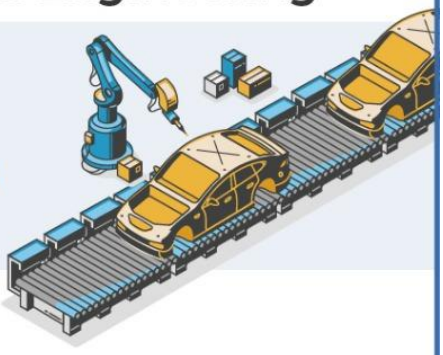

presents

WEBINAR ON

"Basics of Automotive Reliability"

6th May 2020, 11:00 am - 12:30 pm

CONTENT:

1. Automotive Reliability
2. Need for Reliability
3. Failure and Data Handling
4. Reliability Methods

REGISTER TODAY

Faculties, Research Scholars, & Students

Resource Person

Mr. Sanket Modak
Safety Manager, EPB Systems,
ZF India Pvt. Ltd.

QR Code for Registration

REGISTRATION LINK

Copy Url: https://bit.ly/2KWussW

Digital certification will be provided for attending the session.

For Details Contact: Dr. V. V. Shukla(+91-9822277318)