

# **EVENT SUMMARY REPORT**

Griet/Other institutes/Organization Address:	Gokaraju Rangaraju Institute of Engineering and Technology, Bachupally, Hyderabad in association with GLA University Mathura				
Department	Mechanical Engineering	<b>!</b>	ssional Bod	y Inst Bod	itutional y
Nature of the Event (Workshop / Seminar / Guest Lecture / Tech Talk/FDP/GD/ Training Program / Quiz / Presentation/Conference/ Industry Visit/Any Co & Extracurricular Activities	Conference				
Title / Theme of the Event	10 <sup>th</sup> International Conference on Materials Processing And Characterization				
Details of the Coordinator& Designation	Dr. Swadesh Kumar Singh, Professor, Department of Mechanical Engineering, Hyderabad.				
Event Dates/Days	From	То	No. of Days		
	21/02/2020	23/02/2020	03		
Details of the Speaker / Guest Organization Address:	Details of the speaker has been attached spearetly				
Participants (Teaching Faculty / Non- Teaching Faculty / Students)	No.of Faculty	No. of UG students Nil	No.of PG Students Nil	No.of outside participants 549	Total Participants
Faculty Names & Designation	List of the participants has been attached separately				

Summary of the Event	An online Faculty Development Programme on Recent Advances in Materials Characterization (RAMC) has been conducted in association with GRIET and NITTTR Chandigarh from 23 <sup>rd</sup> to 28 <sup>rd</sup> May, 2020, by using zoom application. This programme has been conducted for six (6) days in which a total of 15 sessions has been conducted. One poll question has been given to the participants at the end every session and the feedback also has been collected for every session.		
IRG (in rupees)  Deposited A/C no A/C name and date and other details  (enclose proof-A/C statement)	Nil		
Expenditure (in rupees) (Enclose proof-bills)	Nil		
 POs attained with this Event (number and description)	<ol> <li>Ability to analyze problem and interpret the data.</li> <li>Ability to design a system component, or process to meet desired needs in Mechanical Engineering within realistic constraints.</li> <li>Ability to identify, formulate, analyze and interpret data to solve Mechanical Engineering problems.</li> <li>Ability to understand the impact of engineering solutions in a global, economic and societal context.</li> <li>Ability to understand the effect of Mechanical Engineering solutions on environment and to demonstrate the need for sustainable development.</li> <li>Ability to understand professional and ethical responsibility.</li> <li>Ability to demonstrate the management principles in Mechanical Engineering projects.</li> </ol>		
Photographs of the event (Hard copy and Soft copy)			

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Proofs: 1.Certificates copies 2.Profile of Speaker 3.PPT/Material as applicable. etc.,	All the documents are attached separately.	
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Signature of Coordinator

Signature of HOD

#### CHIEF PATRON

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# ∌MATHURA-AGRA

Mathura and Vrindavan are the most important places of pilgrimage for devotees of Lord Krishna. Krishna was born in Mathura and spent His childhood in Vrindavan. The twin city of Mathura, Vrindavan is equally encharting and encaptivating, made farmous by the vorid renewed lendmarks like ISKCON, Akshya Patra, Prem mandir and BankayBinardi Temple. There is Goverdhan, the majestic place known for the imposing Coverdhan Mountain. A cultural amalgamation center, Mathura has always been strategic in the history on the virtue of being at the crossroad of various trade routes.





Agra, Just 55 KM from Mathura, is the home to one of the 7 wonders of the world, the TAJ Mahal, But that's not the only thing Agra has to boast of. Agra has three UNESCO world Heritage sizes, such as Agra Fort and Fatehpur Sikri; and hence makes for a most visit for anyone lying to providing their





#### ALCOHOL: TO A

fotels/ Guest Houses in Mathurs/Vrindavan provide a range of services that add memorable expenence for visitors. Participants are requested to make their own arrangement for travel, boarding and lodging. However, accomfacility could be arranged on request in advance in nearby hotels/ Guest houses.

#### TRAVEL

GLA University is situated on the Agra-Delhi National Highway-2 (HH-Z). It is well connected with raily road and by air

BY AIR. The rearest Airport is Indire Candin International Airport, New Dolln, It is 150 KM away to University From airport. Taxi can be used to reach University and will take hardly 2 and half hours.

BY RAIL/ROAD: Mathurs-Agra is structed on the Delhi-Mumbal and Delhi-Chennai route and is well connected to most close across India. The distance from Mathurs Junction to GIA University is 15 km (approx). From the station zine can there the TackAuto very easily for GIA University.

#### ABOUT ORGANIZING INSTITUTE

GLA University is one of the Premier Universities in India, situated in Northern India. The university was established by our present Chancellor, Shil Narayan Das Agrawal in 1998. The chancellor envisioned GLA as a quolity educational institution to serve the higher education needs of the youth of the region and beyond. The institute was accorded the status of university under the U.P. State Legislative Act of 2009 (UP Act 21 of 2010). Recently the University was accredited with 'A' grade by NAAC. It spread across 110 acres of land and is home to more than 12,030 students, enrolled in a variety of professional courses. It boasts of well designed and maintained buildings, contemporary faboratories, specious residential complexes and recreational facilities. The fecilities of such kind and grandour make the GLA compus one of the best in the region, providing its students an ideal environment to hone their skills in an increasingly competitive and demanding world.

Under the banner of GLA University, Department of Mechanical Engineering is constantly and consistently working to achieve core objectives of the University. Department facilitates, state of art laboratories where students can realize their ideas into tangible objects in terms of new technologies and engineering products. Department has Solar Energy Research Centre (SERC), Nano Micro Research Centre (NMRC), Automotive Research Centre and well

Department is consistently delivering high quality research. The Faculty of the department are highly qualified and extending their expertise in academic and research.

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PAPER SUBMISSION AND TECHNICAL ISSUES

ICMPC Hyderabaid, India Tel: +91-9959870257 Email: icmpc-byd@griet.ac.in

FOR ACCOMMODATION AND OTHER CONFERENCE ORGANIZATION RELATED ISSUES

Dr. Kuldeep Kumar Saxena, GLA University, Mathura Phone: 91-7355741069 Email: icmpc\_gla@gla.ac.in







#### in Association with



The Indian Institute of Metals Mathura Chapter

# 10TH INTERNATIONAL CONFERENCE ON MATERIALS PROCESSING AND CHARACTERIZATION

NEAS TAJ MAHAL

21st - 23rd February, 2020

# ICMPC-2020 CONVENERS

Prof. Piyush Singhal, GLA University, Mathura, India

Dr. Kuldeep Kumar Saxena, GLA University, Mathura, India

Dr. Swadesh Kumar Singh, GRIET, Hyderabad, India

Prof. Esther Akinlabi, University of Johannesburg, South Africa

Dr. Rajesh Purohit, MANIT, Bhopal, India





## *ABOUT CONFERENCE*

iunctional materials, smart materials, intelligent materials – whatever you call them, hey will be a key pillar of 21st century technology. Among the modern structural materials there has been a tremendous advancement in science and technology of materials. In recent years, nanostructure materials and nano composites have become increasingly mportant because of their remarkable properties and permanently growing areas for ractical applications. Various aspects of mechanical properties of nano materials including analytical and computational modelling in combination with comprehensive experimental analysis of mechanical behaviour is yet to be investigated. In spite of the rapid roggress in this field, mechanical behaviour is yet to be investigated. In spite of the rapid emaining terra incognita in materials science. In the field of massive and composites are still emaining terra incognita in materials science. In the field of massive and complex naturacturing we are now in need of materials, with properties, that can be manipusted according to our needs.

arge spaceplanes like the Space Shuttle would have proven extremely difficult, if not npossible, to build without heat-resistant ceramic tiles to protect them during re-entry, and high-speed forward-swept-wing airplanes like Grumman's experimental X-29 or the ussian Sukhoi S-27 Berkut would not have been possible without the development of omposite materials to keep their wings from bending out of shape. Nature is full of lagic materials, which are to be discovered in forms suitable to our needs. Such magical naterials, also known as intelligent or smart materials, can sense, process, stimulate nd actuate a response.

here is an increasing awareness of the benefits to be derived from the development and xploitation of advanced materials and structures in applications ranging from by rospace to aerospace. With the ability to respond autonomously to changes in their enironment, smart systems can offer a simplified approach to the control of various material and system characteristics. Mechanistic understanding from any discipline is the butes to the development of materials with capabilities beyond those currently available.

he conference is creating a cross disciplinary summit that transcends departmental, insitutional, industrial, public and private research organizations and global barriers and inds itself to the integration of research and education in the vital field of advanced marials. This conference is mainly aims in major sectors of advanced processing, material paracterization, modeling and simulation, properties, performance and device fabrica-

# *TOPE OF CONFERENCE*

he role of manufacturing in the country's economy and societal development has long sen established through their wealth creation activities. To deepen and broaden our lowledge of materials and to increase innovation and responsiveness to ever-creasing international needs, more in-depth studies of functionally graded materials/ilor-made materials are needed at present. The objective of this conference is to bring gether experts from academic institutions, industries and research organizations and ofessional engineers for sharing of knowledge, expertise and experience in the emerggized trends related to advanced materials processing, and characterization.

te conference is structured as follows: plenary lectures followed by parallel sessions, ie plenary lectures will be delivered by eminent personalities of international repute to troduce the theme of the conference. Each parallel session starts with an invited talk is specific topic followed by contributed papers.

tential topics to be addressed in this conference include, but are not limited to the folwing:

### Advanced machining processes Advanced metal forming, bending, welding& casting techniques Agile/ Intelligence Manufacturing Agile/ Lean manufacturing Alternate materials /material substitution Clean and Sustainable Manufacturing Processes Composite and Polymer Manufacturing Composites, Intermetallics Designation manufacturing Design of Experiments Fiexible Manufacturing Systems Functionally Graded Materials Future generation materials Green Manufacturing Heat Treatment High-Energy Beam Processing High-speed Machining Hydrometallurgy Innovative Design Methodology Intelligence Manufacturing Intelligent Maintenance Systems for Machines and Equipments Laser Based Manufacturing Manufacturing with Soft Materials Makehall Testing Meta materials Metallography Metrology and Surface Engineering Micro Machining Nano materials Non-destructive Examination Numerical Egitard, Technology Numerical Modelling and Simulation Optimization Techniques in engineering Powder Metallurgy and Ceramic Forming Recycling and re-manufacturing of Materials and Components Religiolity Design Reverse engineering Sensors and Condition monitoring Separation of the Metal Smart Macrining SMART materials Super Alloys Surface Integrity and Performance of Components by Multiscale Manufacturing Surface Treatment Surface, Subsurface, and Interface Phenomena Thermal Spray Thermally-Enhanced Processes and Materials Thin and Thick films Ultra-Precision Machining Virtual Manufacturing and Concurrent Engineering Webstases Manufacturing

# CALL FOR PAPERS

Original research papers from faculty, research scholars and scientists from academics, R&D organizations on the above mentioned themes and related topics are invited. The full paper should be send by e-mail to the provided mail Id before 30th Nov 2019. Papers will be selected after rigorous reviews for presentation.

ICMPC-2020 Proceedings will be published by Elsevier journal \*Material Today: Proceedings\* and will be available on www.sciencedirect.com all these papers will go to Scopus database for future indexing.

## IMPORTANT DATES

31st December, 2019	Submission of full papers (In Template)
Authors can register as soon as they get mail from EES or from conference that the article is accepted.	Early bird registration Starts
10th January, 2020	Early bird registration Ends
30th January, 2020	Late Registration Ends

## REGISTRATION

It is essential that at least one of the author of the accepted papers and register to participate in the conference, for including the papers in the special issue of the journal. Registration can be done by mailing the complete registration form along with the fee after receiving the acceptance of the paper.

Category	£00
Faculty/ Research Scholars	Rs 8500/-
Delegates from Industry	Rs 12000/-
Late Registration Fee	Rs 12000/-
Foreign delegates (Bank charges has to be paid by authors only)	USD 400

\* IIM Members will get 20% discount in respective registration fee.

Your registration includes Concurrent/Sessions of technical program, Welcome Breakfast, Morning and Afternoon Refreshment Breaks, and Lunch at the conference venue, Paper Presentation, Attendance to all sessions, Conference bag, Certificate of Presentation, Complimentary city tour.

The registration fee shall be paid through crossed demand draft, drawn in favour of Gokaraju Rangaraju Educational Society - ICMPC" payable at Hyderabad or by way of electronic money transfer to Axis Bank, Kukatpally, Hyderabad-500075, Account No. 9160100803658B5 (Bank Code: 003062, IFSC code: UTIB0003062)

For any queries keep in touch with www.icmpc.com

# **EXHIBITION CUM SPONSORSHIP**

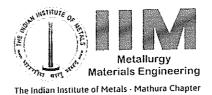
An exhibition will be organized concurrently with the conference. The industries who are interested in showcasing their products, equipment may contact the conference chairs. Two delegates sponsored by the exhibitors are allowed to participate in the conference without any extra fee.

Agencies are invited for being co-sponsors of the conference. Delegates will be allowed to attend the conference if any agency supports the conference financially. For future details visit our website.











# CERTIFICATE OF PARTICIPATION

This is to certify that Prof./Dr./Mr./Ms. <u>TANYA BUDDI</u>
for participating and presenting a paper titled <u>Comparative Study of Ass 316 L on Formability</u>
<u>AT Room Temperature And Super Plastic Region</u>
in 10<sup>th</sup> International Conference on Materials Processing and Characterization (ICMPC-2020)
organised by Department of Mechanical Engineering, GLA University, Mathura, in association with
Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyderabad and The Indian
Institute of Metals (IIM)- Mathura Chapter during 21-23 February 2020.

Prof. Piyush Singhal Chairman IIM- Mathura Chapter

Prof. Swadesh Kr. Singh

Managing Guest Editor

MATPR (Elsevier) & AMPT (T&F)

GR. J. Hyderabad

Prof. Esther Akinlabi
Convenor, 10th ICMPC
University of Johannesburg
South

Dr. Kuldeep Kr. Saxena Convenor, 10th ICMPC GLA University, Mathura











# CERTIFICATE OF PARTICIPATION

Inis is to certify that Prof./Dr./Mr./Ms. KAM. SUBBIAH	
for participating and presenting a paper titled A Review on influence of o	nitridina
on AISI 430 Fennitic Stainless Steel	
in 10th International Conference on Materials Processing and Characterization (IC organised by Department of Mechanical Engineering, GLA University, Mathura, in asso Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyderabad and Institute of Metals (IIM)- Mathura Chapter during 21-23 February 2020.	ociation with

Prof. Piyush Singhal Chairman IIM- Mathura Chapter

Prof. Swadesh Kr. Singh Managing Guest Editor MATPR (Elsevier) & AMPT (T&F) GRIET, Hyderabad

Prof. Esther Akinlabi
Convenor, 10th ICMPC
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