

# GRIET/6C/G/21/-21/

# **EVENT SUMMARY REPORT**

Griet/Other institutes/Organization Address:	Gokaraju Rangaraju Institute of Engineering and Technology, Bachupally, Hyderabad in association with NITTTR Chandigarh				
Department	Mechanical Engineerin	Professional Body Institution Body			
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	12th International Conference on Materials Processing and Characterization				
Details of the Coordinator& Designation	Dr. Swadesh Kumar Singh, Professor, Department of Mechanical Engineering, Hyderabad.				
-	From	То	No. of Da	ays	
Event Dates/Days	06/10/2020	09/10/202	<b>Ø</b> 4		
Details of the Speaker / Guest Organization Address:	Details of the speaker has been attached separately				
Participants (Teaching Faculty / Non-	No.of Faculty	No. of UG students	No.of PG Students	No.of outside participants	Total Participants
Teaching Faculty / Students)	15	Nil	5	230	250
Faculty Names & Designation	List of the participants has been attached separately				

Summary of the Event	12 <sup>th</sup> International Conference on Materials Processing and Characterization (ICMPC) has been conducted in association with GRIET and GLA University Mathura from 06 <sup>th</sup> to 09 <sup>th</sup> Oct, 2021, at NITTTR Chandigarh. This program has been conducted for three (4) days in which a total of Eleven (11) Keynote Address and Twenty (20) parallel sessions has been conducted.		
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>Seven (7) POs has been attained with this event</li> <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>		
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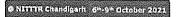
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## 12TH INTERNATIONAL CONFERENCE ON

Materials Processing and Characterization





## Program Schedule

Chief Guest: Prof. R.P. Dahiya, former Professor Indian Institute of Technology Delhi former Director of Malaviya National Institute of Technology Jaipur former Vice chancellor of Deenbandhu Chhotu Ram University of Science and Technology, Murthal (Sonepat)

Meeting link for Inauguration, Keynotes and Valedictory

https://us02web.zoom.us/j/89770286615?pwd=dGUvbCt6N3oyU0NhRktnVzNvOFp3dz09

Meeting ID: 897 7028 6615

Pwd: 123456

Meeting ID for Help Desk

Meeting ID: 503 772 9973

Pwd: radha

Timings for Help Desk

06 Oct, 2021 08:00 a.m to 01:00 p.m

07 Oct, 2021 01:00 p.m to 05:00 p.m

08 Oct, 2021 01:00 p.m to 04:00 p.m

09 Oct, 2021 01:00 p.m to 03:00 p.m

October 06, 2021

Day 1

Programme	Time
Inaugural function	09:30a.m - 10:15a.m
KeyNote Address-1	
Speaker: Prof. K. Narasimhan	
Professor, IIT Bombay.	10:15a.m – 11:05a.m
Topic: Development of FE based model for ring rolling simulation.	
Host: Dr. Eswar, IIT Indore	
KeyNoteAddress-2	
Speaker: J Ramkumar	
Professor, IIT Kanpur.	11:00a.m – 12:00p.m
Topic: Wire ECM for Micro Nano Application.	
Host: Dr. Eswar, IIT Indore	
KeyNoteAddress-3	
Speaker: Prof. Janaki Ram G. D	
Professor, IIT Hyderabad.	12:00p.m – 01:00 p.m
Topic: Alloy development for Additive manufacturing	F
Host: Dr. Eswar, IIT Indore	
Lunch Break	01:00p.m – 02:00p.m
SESSIONS	02:00p.m – 05:00p.m

# October 07, 2021 Day 2

Programme	Time	
SESSIONS	09:00a.m – 12:00p.m	
Lunch Break	12:00p.m - 01:00p.m	
KeyNote Address-4 Speaker: Dr. Fernando Fraternali Professor, Department of Civil Engg, University of Salerno, 84084 Fisciano (SA), Italy. Topic: Host: Dr. Rupender, NITTTR Chandigarh	01:00p.m – 02:15p.m	
KeyNote Address-5 Speaker: Dr. Sujan Debnath Associate Professor, Department of Mechanical Engg, Curtain University, Malaysia. Topic: Natural Fiber Polymer Composites in Research. Host: Dr. Rupender, NITTTR Chandigarh	02:30p.m – 03:45p.m	
TeaBreak	03:45p.m - 04:00p.m	
KeyNoteAddress-6 Speaker:Dr. Muhammad P. Jahan Associate Professor and Graduate Program Director, Department of Mechanical and Manufacturing Engineering, Miami University, USA. Topic: Sustainable post-processing of 3D printed parts - A case study for CFRP composites and future prospects Host: Dr. Rupender, NITTTR Chandigarh	04:00p.m – 05:00p.m	

# October 08, 2021 Day 3

Programme	Time	
SESSIONS	09:00a.m. – 12:00p.m	
Lunch Break	12:00p.m - 01:00p.m	
KeyNote Address-7		
Speaker: Prof. Khalid Moinuddin		
Professor, Fire Modelling, Victoria University	01:00p.m – 02:00p.m	
Topic: Fire Properties of Combustible Materials for Simulation.		
Host: Dr. Diptikanta Das, KIIT, Bhubaneswar, Odisha.		
KeyNote Address-8		
Speaker: Dr. Sikiru O. Isaiml		
Senior Lecturer, Manufacturing Engineering and Materials,		
School of Physics, University of Hertfordshire, England, United Kingdom.	02:00p.m – 03:00p.m	
Topic: Conventional and Ultrasonically-Assisted Machinability of Biocomposite	<b>F</b> 35.00 <b>F</b>	
Laminates: A Comparative Investigation		
Host: Dr. Ravi Shankar, HT Tirupati.		

KeyNote Address-9	
Speaker: Prof. Chetan Nikhare	
Associate Professor, Pennsylvania State University.  Topic: Springback analysis in sheet material discontinuity and influence of tool rollers	03:00p.m - 04:00p.m
Host: Dr. Diptikanta Das, KIIT, Bhubaneswar, Odisha.	

# October 09, 2021 Day 4

Programme	Time	
SESSIONS	09:00a.m. – 12:00p.m	
Lunch Break	12:00p.m - 01:00p.m	
KeyNote Address-10 Speaker: Dr. Deshdeep Sahdev Former Professor of Physics IIT Kanpur, India. Topic: Indigenous Instrumentation and Computational Packages for Cutting-Edge Research in Materials Science. Host: Prof Purohit, NIT Bhopal	01:00p.m – 02:00p.m	
KeyNote Address-11 Speaker: Dr. AlokeKanjilal Professor, Department of Physics, School of Natural Sciences, Shiv Nadar University, India Topic: Challenges and Opportunities of Nano-materials in Futuristic Devices. Host: Prof Purohit, NIT Bhopal	02:00p.m – 03:00p.m	
TeaBreak	03:00p.m - 03:15p.m	
Valedictory function	03.15p.m – 04.30p.m	

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Dr. Balu Nalk, UNTO, Hyderabad

#### AROUN GRANIDICARIS

Changigarh is berdered by the state of Purilab to the north, the west and the south, and by the state of Kuryana to the east. It is considered to be a part of the Chandigarh Capital Region or Greate. Chandigarh, which includes Chandi-garh, and the city of Panchkula (in Heryana) and cries of North, Kurel, Hohalt, Zinakour (in Punjab). It is located 200 ion (152 make) both of New Delhi and 239 km (143 miles) southeast of America.









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Hotels/ Guest Houses in Chandigart provide a range of services that add numerable experience for visitors. Perspectually services and the services of the ser

#### NESVAVIOLE

#### ABOUT ORGANIZING INSTITUTE

In realization of the need for training better quality technicians to meet the large scale industrialization of the country, the ministry of Human Resource Development (the then Hinistry of Education), Government end finds extensions of the Regional Technical Teachers' Training Institutes (now National Institute of Technical ing a recentry, INT RE Bridge, Channing III, which is the control of these four NITTER, started in collaboration with Royal Netherlands Government (upto 1974). It was designed to meet the requirements of developing polytechnic education in the northern region covering the states of Jammu and Kabhnic Hanachal Pradesh, Punjab, Hayrana, Rajasthan, Uttar Pradesh, Uttrakhand, Dehl and Utton Territory of Chandigath. The Institute is registered under the Societies Registration Act, 1860 and is managed by a

The institute started with long term teachers' training programmes for polytechnic teachers in 1967 and was also the statute stated was said test leading during controlled development work for the steller in the region. To improve the competence of teachers for implementing new curricula designed by this institute, short term courses have been offered since 1967. The institute extablished a Media Centre in 1981 for preparing print & non-print in-

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PADES SUBMISSION AND TECHNICAL ISSUES

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Dr. Swadesh Kumar Singh Professor Dean R&D, SRIET Hyderabad

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## 12th INTERNATIONAL CONFERENCE ON MATERIALS PROCESSING AND CHARACTERIZATION

@ NITTTR CHANDIGARH

6th - 9th October, 2021

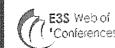
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Dr. Mohammed S. J. Hashmi, Emeritus Professor, Dublin City University, Ireland.

Dr. Dr. Sukhdeep Singh Dhami, Professor, NITTTR Chandigarh, India.

Dr. Swadesh Kumar Singh, Professor, GRIET Hyderabad, India.







### ABOUT CONFERENCE

Functional materials, smart materials, intelligent materials – whatever you call them, they 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 important because of their remarkable properties and permanently growing areas for practical 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 progress in this field, mechanical properties of nano materials and composites are still remaining terra incognita in materials science. In the field of massive and complex manufacturing we are now in need of materials, with properties, that can be manipulated according to our needs.

Large spaceplanes like the Space Shuttle would have proven extremely difficult, if not impossible, 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 Russian Sukhoi S-27 Berkut would not have been possible without the development of composite materials to keep their wings from bending out of shape. Nature is full of magic materials, which are to be discovered in forms suitable to our needs. Such magical materials, also known as intelligent or smart materials, can sense, process, stimulate and extuate a response.

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

### SCOPE OF CONFERENCE

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

The conference is structured as follows: plenary lectures followed by parallel sessions. The plenary lectures will be delivered by eminent personalities of international repute to introduce the theme of the conference. Each perallel session starts with an invited talk on specific topic followed by contributed papers. Papers are invited from the prospective authors from industries, academic institutions and R&D organizations and from professional engineers.

### CONFERENCE TOPICS

Material Characterization (Room and at Elevated Temperatures)

High strain rate deformation of Materials

Blometonas

Advanced machining processes

Advanced metal forming, bending, welding & casting techniques

Alternate materials /material substitution

Applications FEA

Composite and Polymer Manufacturing

Composites, Intermetal iss

Fabrication Process of Nano materials and Nano devices

Functionally Graded Haterials

Future generation materials

Heat Treatment

High-Energy Beam Processing

High-speed and Hydrid Machining

Laser Bases Manufacturing

Material Testing

MEHS Integration

Meta materials

Metallography

Multi-Physics Coupling Simulation and Optimization

Nano materials

Non-destructive Examination

Numerical Modelling and Simulation

Optimization Techniques

Powder Metallurgy and Ceramic Forming

Recycling and re-manufacturing of Materials and Components

SMART materials

Super Alloys

Thermally-Enhanced Processes and Materials

### 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.

	Advanced Materials and Processing Technologies (Taylor and Francis)		E3S		Lecture Notes in Mechanical (Springer)	
Indexing	SCOPUS, ES	PUS, ESCI SCOPUS, WEI SCIENCE		EB of	f SCOPUS	
Registration fee	Rs. 15000 Indian Delegates	\$250 Foreign Delegates	Rs. 8500 Indian Delegates	\$150 Foreign Delegates	Rs. 8500 Indian Delegates	\$150 Foreign Delegates
Lost date for submission	31-05-2021		25-08-2021		25-09-2021	
Last Date of Registration	01-10-2021 (once the Acceptance mail received from the corresponding publisher)					

Your registration includes Concurrent/Sessions of technical program, Welcome Breakfast, Mcming 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 "NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH - ICMPC" or by way of electronic money transfer to 127-128, Sector 17 C, Chandigarh Branch, Account No. 659105601055 (Swift code: ICICINBBNRI, IFSC code: ICICI006591)

For any gueries keep in touch with www.lcmpc.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.