# WORKSHOP ON MECHANICAL TESTING & CHARACTERIZATION OF MATERIALS, (WMTC – 2016)



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Organized by Dept. of Metallurgical & Materials Engineering, Rajiv Gandhi University of Knowledge Technologies Basar, Adilabad dist., Telangana State -504101

# About WMTC -2016

Workshop audience shall consist of faculty, research scholars and postgraduate students from Metallurgical Engineering & Mechanical Engineering disciplines and those who want to have grounding in Mechanical Testing Methods and Characterization of Materials. A strong emphasis on hands on Materials Testing and Characterization Methods are planned.

# **Workshop Topics**

- Creep studies
- High Temperature Tensile/flexure/compression testing
- Studies of deformation patterns in Friction Stir Processing & Welding
- Characterization of materials by X-ray Powder Diffraction (Qualitative & Quantitative analysis)
- Residual stress measurement by X-ray Diffractometry
- Texture analysis in polycrystalline materials using X-ray Diffractometry
- Fractography studies using FESEM
- Corrosion failure analysis of materials

Convenor: Prof. T Rajagopala Chari, Visiting Professor, RGUKT – Basar

Co-convenor: Mr. Kiran Kumar. A, Lecturer, RGUKT – Basar

Co-convenor: Mr. Ajay Kumar. V, Lecturer, RGUKT – Basar

### **Coordinating committee:**

Mr. A. Ashok Kumar, Lecturer & HoD of MME department, RGUKT - Basar

- Ms. J. Nagalakshmi, Lecturer in MME dept., RGUKT Basar
- Mr. K. Mahesh, Assistant Professor in Mechanical Engineering dept., RGUKT Basar

Dr. Sastry Indrakanti, Guest faculty in MME dept., RGUKT - Basar

Dr. K Pavani, Lecturer in Chemistry dept., RGUKT-Basar

Mrs. A V V Anupama Sridevi, Assistant Professor in Mechanical Engineering dept., RGUKT – Basar

#### **Student committee:**

- M. Shiva (B101865), IV year B.Tech MME, RGUKT Basar
- R. Tirupathi (B101113), IV year B.Tech MME, RGUKT Basar
- N. Sanjeev (B111121), III year B.Tech MME, RGUKT Basar
- T. NagaRaju (B121191), II year B.Tech MME, RGUKT Basar

#### **Registration details:**

Registration fee: 750/- (For All)

Mode of Payment: Cash / DD - in favour of 'The Director, Rajiv Gandhi University of Knowledge Technologies – Basar', Payable at – SBI, IIIT campus, Basar. Number of seats available: 50 (Limited)

#### **Important Dates:**

Starting date of registration: $25^{th}$  Feb 2016Closing date of registration: $10^{th}$  March 2016Workshop event dates: $14^{th}$  &  $15^{th}$  March 2016

#### Major facilities available:

- ✓ Bruker's D8 DISCOVER *X-ray Diffractometry* for Powder Diffractometry, Residual Stress & Texture analysis.
- ✓ Zeiss Merlin compact *Field Emission Scanning Electron Microscopy* (FESEM) for Fractography, Thin Film and Nano-Material Characterization.

- ✓ Instron *Servohydraulic Testing System* (100 kN) for LCF and Fracture Mechanics analysis
- ✓ Zwick *Electromechanical UTM* (100 kN) for evaluating mechanical properties
- ✓ BISS High cyclic *Fatigue Testing Machine*
- ✓ Star testing systems LiverArm time *Creep Rupture Testing Machine*
- ✓ BISS *Friction Stir Welding Machine*
- ✓ IVIUM Potentiostat Multi-channel *Electrochemical Workstation*
- ✓ Energy *Microwave Sintering Furnace*

# About RGUKT Basar:

RGUKT was established in the year 2008 by an act of A P State Legislature to address the educational needs of rural youth of state. Dr Raj Reddy, played pivotal role in creation of RGUKT and in nurturing it as its Chancellor. After state bifurcation, The Vice-Chancellor, Dr. Satyanarana garu whose academic contributions to the university have laid

a solid foundation. RGUKT admits SSC passed meritorious students to its six year integrated program comprising of two years of Intermediate education followed by four years of Bachelors degree in Engineering. The campus bristle with about 6000 students in total and 4000 students in engineering in multiple disciplines: Chemical, Civil, Computer Science, Electronics and Communications, Mechanical, Metallurgical and Materials Engineering. The campus of RGUKT has over hundred e-class rooms which are fully networked along with sophisticated laboratory facilities.

### About Department:

Metallurgical and Materials Engineering is one of the rare yet challenging engineering disciplines, with an intake of 250 students per batch was indeed a challenging step taken by the university in the initial stages of its establishment and proved fruitful with the achievements/projects of the students in both Internships and Academics. Courses offered cover multi-disciplines with all fundamental subjects. Its focus is on Structure-Property Correlations, Extraction & Manufacturing processes Materials Characterization, Mechanical Behaviour of Materials and Corrosion.

# About Basar:

India, "The Land of Temples" has its own unique legend telling a fascinating story about its existence. Each legend is powerful enough to revive faith even in a non-believer. Amongst such numerous legendary temples in India, the temple of Gnana Saraswathi at Basar (Telangana) holds a prominent place.



Basar is a village with wonderful gardens surrounded by the temple premises of Telangana state, located 35-km from Nizamabad. This is an ancient temple of Goddess Saraswathi. Basar is situated on the bank of river Godavari. 

### How to reach Basar?

Basar is well connected with road & train transportation. It's about 35kms away from Nizambad; from Basar railway station, the campus is another 2kms on the same road that goes to Bhainsa.

'Mechanical Testing & Characterization of Materials' (WMTC- 2016, 14<sup>th</sup> & 15<sup>th</sup> March 2016)

#### **REGISTRATION FORM:**

Title:Name: _			
Institution/Organization	·		
Designation			
Gender: Male	Female		
Mailing Address:			,
City:	, State:		, Pin:,
Country:	, Mobile No:		
Email:			
Registration Fee details:			
Mode of Payment:	Demand Draft	Cast	
Amount: <u>750/-</u> (in word	ds) <u>Seven hundred</u>	and fifty rupees only	
DD / Cash receipt No: Dated://	Bank details: _		
Towards: 2 Days Workshop Registration, Organized by Department of MME, RGUKT – Basar.			
			Signature of the candidate
Signature of the spons	oring authority		

Interested may contact through: wmtc\_mar2016@rgukt.ac.in Feel free to make additional copies of this form if necessary.