

NATIONAL WORKSHOP ON
**ADVANCES IN X-RAY POWDER DIFFRACTOMETRY
& SCANNING ELECTRON MICROSCOPY**

July 15-17, 2013

Organized by

Department of Metallurgical and Materials Engineering
Rajiv Gandhi University of Knowledge Technologies
Ground Floor, Vindhya C4 Building, IIIT Hyderabad Campus, Hyderabad– 500032



Scope of the Workshop

This workshop deals with the theoretical aspects and applications of the X-Ray powder diffractometry and Scanning Electron Microscopy (SEM). Topics covered are the basics of X-Ray powder diffraction, Phase identification, Qualitative and quantitative phase analysis, Rietveld refinement, Sub-ambient and high temperature powder diffractometry, Glancing Incidence Diffractometry, Small Angle X-ray Scattering, High Resolution X-ray Reflectometry, Residual stress analysis, Texture studies, Energy Dispersive Spectroscopy, Wavelength Dispersive Spectroscopy, Electron Back Scatter Diffraction, Environmental SEM, Phase identification, Study of precipitates, thin films, and Nano-Materials.

Rajiv Gandhi University of Knowledge Technologies (RGUKT)

RGUKT was established in the year 2008 by an act of A P State Legislature to address the educational needs of rural youth of A P. Padmabhushan Dr. Raj Reddy, played pivotal role in creation of RGUKT and he is nurturing it as its Chancellor. Prof RV Raj Kumar, Vice-Chancellor, has a brilliant career whose academic contributions span several areas like Digital Signal Processing, Wireless Communications and VLSI systems. They have laid a solid foundation for RGUKT during the last 5 years. 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.

Its three campuses bristle with about 25,000 engineering students in multiple disciplines: Chemical, Civil, Computer Science, Electronics and Communications, Mechanical, Metallurgical and Materials Engineering. Each campus of RGUKT has over hundred e-class rooms which are fully networked. Sophisticated laboratories are being built.

Department of Metallurgical and Materials Engineering

Its focus is on Structure-Property Correlations, Materials Characterization, Mechanical Behavior of Materials and Corrosion.

Among the major facilities being built are:

- ◆ **X-Ray Diffractometers** for Residual Stress-Texture studies, Thin Film studies, High Temperature and non-ambient studies
- ◆ **FESEMs** for Fractography, Thin Film and Nano-Material Characterization
- ◆ **Servo-hydraulic Testing Systems** for LCF and Fracture Mechanics studies
- ◆ **Electromechanical UTMs** for evaluating mechanical properties up to 1000 °C
- ◆ **Impact Testing Machines**
- ◆ **Battery of Creep Rupture Testing Machines**
- ◆ **Multi-channel Electrochemical Workstations**
- ◆ **High Temperature Microwave Sintering Furnaces**
- ◆ **Powerful Optical Microscopy facilities**

Distinguished Speakers

- Mr Girish Deep Dronamraju, Carl Zeiss India
- Dr. Arup Dasgupta, IGCAR, Kalpakkam
- Dr. Balamuralikrishnan R, DMRL, Hyderabad
- Dr. Keshava Reddy, Bruker AXS
- Dr. Koteswar Rao RV, University of Hyderabad
- Dr. Narasimha Rao GV, ARCI, Hyderabad (Retd)
- Dr. Partha Goshal, DMRL, Hyderabad
- Dr. Shashank K, DMRL, Hyderabad
- Dr. Srikanth VVSS, University of Hyderabad
- Dr. Sundararaman M, University of Hyderabad
- Prof. Bhanu Sankar Rao K, MGIT Hyderabad
- Prof. Indradev Samajdar, IIT Bombay
- Prof. Kuppusami P, Sathyabama University, Chennai

Chief Patron

Prof. Raja Kumar RV, Vice-Chancellor, RGUKT

Patrons

Prof. Somaiah K, Registrar, RGUKT
Prof. Ibrahim Khan, Director, RGUKT Nuzvid
Prof. Rajendra Sahu, Director, RGUKT Basar
Prof. Krishna Reddy Y, Director, RGUKT
RK Valley

Chairman

Prof. Bhanu Sankar Rao K, “Ministry of Steel Chair Professor”, MGIT Hyderabad

Convener

Prof. Rajagopalachary T, Head, Department of MME, RGUKT

Co-Convener

Dr. Ajoy Kumar Pandey, Faculty, Department of MME, RGUKT Basar.

Organizing Committee

Mr. Ajit Kumar, Faculty, RGUKT RK Valley
Mr. Ashok Kumar A, Faculty, RGUKT Basar
Mr. Keshave Swarnakar, Faculty, RGUKT Basar
Mr. Rajendra Prasad G, Faculty, RGUKT Basar
Mr. Sree Rama Linga Prasad, Faculty,
RGUKT RK Valley
Mr. Veera Sreenu A, Faculty, RGUKT Nuzvid
Ms. Dilkush, Faculty, RGUKT Nuzvid
Dr. Eswara Prasad N, Director, Regional Centre for
Military Airworthiness (Materials), Hyderabad
Dr. Raja Annamalai, Faculty, RGUKT Nuzvid
Prof. Viplava Kumar J, Dean R & D,
MGIT Hyderabad

Venue

Rajiv Gandhi University of Knowledge Technologies
Ground Floor, Vindhya C4 Building,
IIIT Hyderabad Campus,
Gachibowli, Hyderabad-500032

Accommodation

Subject to availability, outstation participants will be provided free accommodation. Special accommodation can be arranged against prior request for which the daily tariff is between ₹ 750-2000 /-

Registration Form

Name: _____
(In block letters)
Designation: _____ Male/Female
Date of Birth: _____ Nationality _____
Name of the Institute/Organization: _____

Address for correspondence: _____

E-Mail: _____
Tel./Mobile No. _____
Highest Academic Qualification: _____
Accommodation required: Yes/No: _____
Type of registration want (please strike one):
Undergraduate Student/ Postgraduate or Research Scholar/
Academic and R&D Professional/ Industry Professionals
Details of Draft as registration fee.
Amount: ₹ _____ Issuing Bank: _____
DD No.: _____ Dated _____

Signature of applicant with date

How to Register

Send your registration form in prescribed pro-forma along with registration fee (demand draft in the name of “CONVENER, AXPDS, RGUKT”, payable at Hyderabad or cash) on or before 14th July 2013.

Registration Fee

Undergraduate Students: ₹ 1000 /-
Postgraduate/Research Scholars: ₹ 2500/-
Academic and R & D Professionals: ₹ 4000/-
Industry Professionals: ₹ 7000/-

For Further Information, Please Contact

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