गुरू घासीदास विश्वविद्यालय (केन्नीय विस्तरीयालय अधिनियम 2008 क्र. 25 के अंतर्गत स्वारित केन्नीय विश्ववीयालय) कोनी, बिलासपुर - 495009 (छ.ग.)



Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

Report on Material Characterization Techniques

Coordinator: Dr. Subhash Banerjee

Date of Event : February 16-17, 2017

Venue

: Dept of Pure & Applied Chemistry, GGV

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SKILL DEVELOPMENT TRAINING		Organizing Committee
		CHEF PATRON
011		Prof. Anjila Gupla, Honoruble, Vice Chancellor.
Material Characterization Lechniques	Gava	Shashdas Vishwavleyalaya (A Central University), Bilaspur.
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February 16-17, 2017	Dent	HOL H. N. USBOIL USBOILCONDI OLIMITISCO LICENSE Consider Violence de Carden License M. License
Interface Occurrent and Inc.	~	COURSE CO-ORDINATOR
joniny Organized by	School of Physical Sc	r, okontasi ulaherjee, wentiker oksi ulevelopment ulei, sessen, Gusu Chrindan Vinhwawaljatinya (A Central Linweinsty), Ililangu
School of Physical Sciences & Skill Development Cell		
GURU GHASIDAS VISHWAVIDYALAYA,	Desistanti a fas	2001 Anno and confident
Bilaspur (Chhattisgarh), India.	Targot group: Number of participants	UG/PG stations, Research Scholars, young researchers a: 150
Kecknowni		
Proper analysis of materials is essential to identify the unknown/synthesized pure	Program schedule	9
materials and their phases in the field of material science and technology. The control problems of materially problems internated material material not only the material		
synthetic techniques but also the proper characterization tools. The workshop will cover	16/02/2017	T
technical and practical aspects of analytical techniques that are used for the	09.30 11.00	Registration of participants
preparation of samples, selection of method of analysis, application of proper method of	11:30 AM-11:55	inauguration session
analysis, integretation of analytical data etc. The candidates will be exposed to hands on	12:00 AM401:00 FM	Teo Dreok
powder XED, SEM, and other whited technique etc.	01.00 PM-02.00 PM	Technical vession I
This is an impastive two day program strategically designed to provide participants with a	02:00 FM-02:00 FM	Lanch Dreck
industries.	03.00 PM-05.30 PM	Practical Neuroscitution
Objectives of the Workshop	17/02/2017	
1. The main purpose of the workshop is to provide hands on experience on several	09-30 -10-00 AM	Les .
commonly used separations in the held of sciences especially in	10.00 HM-02.00 HM	Instruction and the
2. These include separation and analytical techniques e.g. IIPLC, UV-Vis, CV,	INTERNET AND A DECK	I with lines?
provider XRD and SRM	IN THE PARTY OF TH	L'entre literes states
instrumental details through lockness by the expert and hands on experience for	AL AND LAS AN TH	11171 A
measurement and data interpretation through actual demonstration instruments	VI.WEN GOLDERN	vacabury contany
4 Demonstration of complementation and plotting of the relevant parameter that		

Event Brochure

Details of Event Proceedings

Date (DD-MM-YYYY)	Details of the Session	Details of Resource Person	Number of Participants
16-02-2017	Overview of Characterization Techniques	Prof. P. K. Bajpai	201
16-02-2017	SEM: Basic instrumentation and its Applications	Dr. G. Reddy	201
16-02-2017	HPLC: Basic instrumentation and its Applications	Dr. K. V. S. Ranganath	201
16-02-2017	HPLC: Basic instrumentation and its Applications	Dr. K. V. S. Ranganath	201
17-02-2017	Measurement of dc electrical resistivity with temperature	Dr. A. K. Gupta	201

Report of Workshop / Seminar Conducted on Research Methodoloav /

Criteria – III (3.3.2)

गुरू घासीदास 1 (केन्नीय किसीवालय अधिनियम 2009 ज्ञ. 28 कोनी, बिलासपुर - 4	गुरू घासीदास विश्वविद्यालय (केन्नीय विश्वविद्यालय कोनी, बिलासपुर - 495009 (छ.ग.) जोनी, बिलासपुर - 495009 (छ.ग.)					
17-02-2017	Powder XRD: Basic instrumentation and its Applications	Dr. P. Das	201			
17-02-2017	UV-Vis: Basic instrumentation and its Applications	Dr. K. K. Shrivas	201			
17-02-2017	Structural Information through Electronic UV-Vis Spectra of Transition Metal Complexes	Dr. S. S. Thakur	201			
17-02-2017	CV: Basic instrumentation & Applications	Prof. G. K. Patra	201			

<u>A Brief Abstract of the Event (Maximum 500 Words):</u>

Proper analysis of materials is essential to identify the unknown/synthesized pure materials and their phases in the field of material science and technology. The control synthesis of specifically synthesized targeted material required not only the special synthetic techniques but also the proper characterization tools. The workshop will cover technical and practical aspects of analytical techniques that are used for the characterization/analysis of materials (organic and inorganic samples) which include preparation of samples, selection of method of analysis, application of proper method of analysis, interpretation of analytical data etc. The candidates will be exposed to hands on experience separation techniques *e.g.* HPLC and analytical techniques e.g. Polarimeter, UV-Vis, FT-IR, NMR Spectrophotometer, powder XRD, SEM, Raman, and other related technique etc.

This is an intensive two day program strategically designed to provide participants with a comprehensive overview of core start-up carrier issues related to the sciences and R&D industries.

Objectives of the Workshop

- 1. The main purpose of the workshop is to provide pro-hand experience on several commonly used sophisticated instrumentation in the field of science especially in chemistry and physics.
- 2. These include HPLC and analytical techniques e.g. Polarimeter, UV-Vis, FT-IR, NMR Spectrophotometer, powder XRD, SEM, Raman, and other related technique etc.

The workshop has provided information of instrument by lecture by the expert and hands on experience for the interpretation of data.

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Group Photo of Program

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Criteria – III (3.3.2)