



## Innovation Centre, Bundelkhand University, Jhansi

### Winter Training Program on Advanced Agro-Pharma- Bio-Technology Research Equipments

**26 December 2019–04 January 2020**

Innovation Centre, Bundelkhand University, Jhansi is a Central Instrumentation Facility, incepted in 2014 for providing the analytical facilities in the area of Biological, Physical, Chemicals, Agricultural, Pharmaceutical, Geological, and Forensic Sciences. The Centre is established on University campus with the objectives of human resource training for the promotion of Research & Development (R&D) in the University campus and its affiliated colleges. Moreover, Centre with the advance research equipment like X-Ray Diffractometer, Gas Chromatography-Mass Spectrometer, Ultra Centrifuge, Digital Imaging System, Multi-Mode Microplate Reader, Real Time-PCR, PQMS, Two Dimensional Gel Electrophoresis, etc. is open for providing the analytical facilities to the researchers and industries throughout India.

The Winter Training Programme on Advanced Agro-Pharma-Bio-Technology Research Equipments for the Interdisciplinary Research is 10 days long training program offered by the Innovation Centre, Bundelkhand University, Jhansi. The Graduate and/or Undergraduate students of a scientific discipline including B. Sc., B. Tech, MBBS, BAMS, etc. may apply for this program. The participants of this program will gain training in a research-friendly unique academic ambiance for innovative scientific research in Biotechnology, Biomedical, Agricultural, Pharmacological, Physical, Chemical, Geological, and Forensic Sciences. It will train the participants for operating the high-end research equipment viz. X-Ray Diffractometer (X-RD), Gas Chromatography-Mass Spectrophotometer (GC-MS), Real Time-PCR, 2D Gel Electrophoresis, Ultrasonicator, PQMS, STM, etc. Along with application knowledge of the machine, it will lay a greater emphasis on the fundamental analytical & wet-lab tools and techniques relevant to Basic and Applied Sciences.

**Course Content:** Training on Basic & Advanced research techniques pertaining to Biotechnology, Biomedical, Microbiological, Physical, Chemical, Pharmaceutical, Agricultural, Geological and Forensic Sciences.

- **Training Schedule:**

*(Everyday training will start with a powerpoint based lecture on Principle, Mechanism of Action and Application of the equipment (s) by the Application Specialist (s) followed by training on that equipment).*

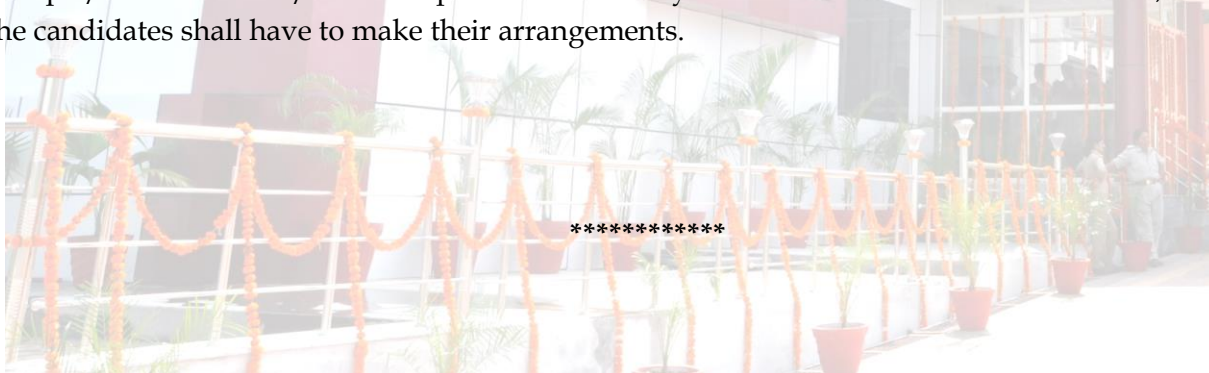
S. No	Date & Day	Training on	Application Area
1.	26 <sup>th</sup> Dec 2019; Thursday	<ul style="list-style-type: none"> <li>• Inauguration</li> <li>• Invited Lecture by the Eminent Scientist</li> </ul>	• Basic & Applied Sciences

		<ul style="list-style-type: none"> <li>• Introduction of the Innovation Centre facility.</li> <li>• Laboratory visit</li> <li>• Demonstration of the Basic Facility of the Centre viz. Ice Flakes Machines, Milli Q Water System, Micro Balancing, BOD Incubator, Deep Freezer, Fume Hood, etc.</li> </ul>	
2.	27 <sup>th</sup> Dec 2019; Friday	<ul style="list-style-type: none"> <li>• Biomedical Data Acquisition System (BDAS) for ECG, EEG, EMG, BP, Pulse Pressure, Pulmonary Capacities, Grip Force, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Biomedical Sciences</li> <li>• Biomedical Engineering</li> <li>• Medical Sciences</li> <li>• Paramedical Sciences</li> <li>• Human Physiology</li> <li>• Physiotherapy</li> <li>• Pharmacological</li> </ul>
3.	28 <sup>th</sup> Dec 2019; Saturday	<ul style="list-style-type: none"> <li>• Pulmonary Function Tests</li> <li>• Cardiac Efficiency Test</li> <li>• Estimation of Hemoglobin</li> <li>• Multimode Plate Reader</li> <li>• Ultra-centrifuge.</li> </ul>	<ul style="list-style-type: none"> <li>• Pharmaceutical Sciences</li> <li>• Biomedical Sciences</li> <li>• Life Sciences</li> <li>• Forensic Sciences</li> <li>• Biotech Engineering</li> <li>• Agricultural Sciences</li> </ul>
4.	29 <sup>th</sup> Dec 2019; Sunday	<ul style="list-style-type: none"> <li>• Soxhlet extraction</li> <li>• Phytochemical Screening Tests</li> <li>• Vacuum Rotaevaporation</li> </ul>	<ul style="list-style-type: none"> <li>• Pharmaceutical Sciences</li> <li>• Biomedical Sciences</li> <li>• Life Sciences</li> <li>• Agricultural Sciences</li> </ul>
5.	30 <sup>th</sup> Dec 2019 Monday	<ul style="list-style-type: none"> <li>• Drosophila Culture</li> <li>• Culture Facility including operational training on Inverted Microscope</li> </ul>	<ul style="list-style-type: none"> <li>• Cytogenetics</li> <li>• Drosophila Biology</li> <li>• Cell Culture Research</li> </ul>
6.	31 <sup>st</sup> Dec 2019 Tuesday	<ul style="list-style-type: none"> <li>• X-Ray Diffractometer</li> </ul>	<ul style="list-style-type: none"> <li>• Physical Sciences</li> <li>• Geological Sciences</li> <li>• Biological Sciences</li> </ul>
7.	1 <sup>st</sup> Jan 2020 Wednesday	<ul style="list-style-type: none"> <li>• Lyophilizer</li> <li>• Ultrasonicator</li> </ul>	<ul style="list-style-type: none"> <li>• Molecular Biology &amp; Biotechnology</li> <li>• Biotech Engineering</li> <li>• Life Sciences</li> </ul>
8.	2 <sup>nd</sup> Jan 2020 Thursday	<ul style="list-style-type: none"> <li>• Gas Chromatography-Mass Spectrometer (GC-MS).</li> </ul>	<ul style="list-style-type: none"> <li>• Pharmaceutical Sciences</li> <li>• Biomedical Sciences</li> <li>• Life Sciences</li> <li>• Forensic Sciences</li> <li>• Biotech Engineering</li> <li>• Agricultural Sciences</li> </ul>
9.	3 <sup>rd</sup> Jan 2020 Friday	<ul style="list-style-type: none"> <li>• Real Time-PCR</li> <li>• Gel Electrophoresis &amp; Digital Imaging System</li> </ul>	<ul style="list-style-type: none"> <li>• Molecular Research</li> <li>• Biotech Engineering</li> <li>• Pharmaceutical Sciences</li> <li>• Biomedical Sciences</li> </ul>

			<ul style="list-style-type: none"> <li>• Life Sciences</li> <li>• Forensic Sciences</li> <li>• Agricultural Sciences</li> </ul>
10.	4 <sup>th</sup> Jan 2020 Saturday	<ul style="list-style-type: none"> <li>• Physical Quantity Measurement System (PQMS) &amp; Scanning Tunneling Microscope (STM)</li> <li>• <b>Invited Lecture by the Eminent Scientist/Academician</b></li> </ul>	<ul style="list-style-type: none"> <li>• Physical Sciences</li> <li>• Geological Sciences</li> </ul>
Valedictory & Certificate Distribution in post Lunch session.			

*Note- University reserves the right of increasing or decreasing the number of seats and rearranging the order of equipment for training.*

- **Eligibility:** Graduation/Under Graduation with min. 50% marks in the previous examination.
- **Who can Apply?** The B. Sc., B. Tech, MBBS, BAMS, B. Pharma students who have been completed or pursuing their Graduation in Basic Sciences/Applied Sciences (Biomedical, Biotechnology, Microbiology, Biochemistry, Life Sciences)/Pharmaceutical Sciences/Agricultural Sciences/Forensic Sciences/Geo Sciences/Medical Sciences/Paramedical Sciences and Engineering (Biotech, Biomedical, Food Tech) may apply for this training program.
- **Intake:** Thirty. However, the University reserves the right of increasing/decreasing the number of seats subjected to the conditions of requiring so.
- **Application Procedure:** Interested candidates may apply on the prescribed format (given below, also available on the University website [www.bujhansi.ac.in](http://www.bujhansi.ac.in)) through e-mail at [innovationcentre@bujhansi.ac.in](mailto:innovationcentre@bujhansi.ac.in) by **20th December 2019**.
- **Selection:** It will be based on the academic credentials of the applicants. The selected candidates will be informed through e-mail by **21<sup>st</sup> December 2019** for the payment of the Registration Fee (latest by **25<sup>th</sup> December 2019**).
- **Fees:** The Non-Refundable Registration fee for the course is **Rs. 2500/= (Rs. Two Thousand Five Hundred Only)** payable to the Finance Officer, Bundelkhand University, Jhansi through Bankers' Cheque/Demand Draft/Direct Deposit on University Cash Counter. For accommodation, if required the candidates shall have to make their arrangements.







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**APPLICATION FORM**

1. Name (Write in Capital Letters):
2. Father's Name:
3. Date of Birth (DD/MM/YYYY):
4. Corresponding Address including Mobile no. & E-mail:

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Paste your  
recent  
photograph  
here

5. Educational/Professional Qualifications (*pl. enclose scanned copy of mark sheet & Degree certificate*).

S. No.	Degree/Exam.	Board/College/University	Year	Division	% age
1.	HSC (Xth)				
2.	HSSC (10+2)				
3.	B.Sc/B.Pharma/ B.Tech/MBBS/Other				

6. Details of Training taken, if any:
7. Any other relevant information:

I declare that the information given above is true and correct to the best of my knowledge and belief. The decision of organizers about the selection of my candidature for training shall be acceptable to me in every case.

Place: \_\_\_\_\_

Full Signature of Applicant

Date: \_\_\_\_\_

*Note: Kindly mail the completed form enclosed with a bonafide certificate at [innovationcentre@bujhansi.ac.in](mailto:innovationcentre@bujhansi.ac.in) latest by **20<sup>th</sup> December 2019**.*

**Further information/enquiries, please contact:**

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