



Kalinga Institute of Medical sciences

KIIT (Kalinga Institute of Industrial Technology) Deemed to be University



1st Winter Course on Diagnostic Methods in Clinical Bacteriology: “MICROSCOPY TO MALDI-TOF”

Date: 22 December 2025 to 24 December 2025



Organised By: Department of Microbiology,
KIMS, KIIT DU, Bhubaneswar, Odisha

Course Coordinator: Dr. Basanti Kumari Pathi

Dr. Kumudini Panigrahi

Advisors



Prof. (Dr.) Dipti Pattnaik,
HOD, Microbiology



Prof. (Dr.) Nirmala Poddar,
Microbiology

Greetings from KIMS!

We are delighted to announce that the **Department of Microbiology, Kalinga Institute of Medical Sciences (KIMS)** will be conducting a **Winter Course on Diagnostic Methods in Clinical Bacteriology: “MICROSCOPY to MALDI-TOF”** from **22nd to 24th December 2025** at **KIMS, Bhubaneswar, Odisha**.

The course is designed to provide comprehensive hands-on training and conceptual understanding of various diagnostic approaches used in clinical bacteriology — from conventional microscopic techniques to advanced molecular and mass spectrometry-based identification methods (MALDI-TOF).

The target participants include **postgraduate students, senior residents and faculty members** from clinical/medical Microbiology speciality across India. Only **40 participants** will be enrolled for this three days intensive workshop.

In an era where accurate and timely diagnosis forms the cornerstone of effective patient management the present course aims to bridge the gap between traditional methods and emerging diagnostic technologies. Participants will gain practical insights into specimen processing, culture techniques, antimicrobial susceptibility testing, molecular diagnostics, and the application of MALDI-TOF in routine clinical microbiology.

Resource Person:			
Dr. Apurba Sankar Sastry MD,DNB,MNAMS,PDCR Infection Control Officer, Officer In-charge HICC, Antimicrobial Stewardship Lead Additional Professor Microbiology, JIPMER, Pondicherry (India)		Dr. Bandita Panda, PhD Research Scientist-Clinical Proteomics and Genomics, Scientific Officer, R & D Dept. KIMS, Bhubaneswar	
Dr. Ketan Priyadarshi MD DNB, PDCC-ID PDF-HIC Associate Professor, Microbiology AIIMS, Deogarh		Dr. Basanti Ku. Pathi, MD Professor, Dept. of Microbiology, KIMS, Bhubaneswar	
Dr. Suneeta Sahu, MD Senior Consultant, Apollo Hospital, Bhubaneswar		Dr. Kumudini Panigrahi MD Professor, Dept. of Microbiology, KIMS, Bhubaneswar	

Date: 22/12/2025 to 24/12/2025

	<u>TOPICS</u>	<u>SPEAKERS</u>
Day-1: 22/12/2025		
8:30 to 8:45 am	Introduction, Aims & Objectives of the Workshop	Dr. Basanti Ku. Pathi Dr. Kumudini Panigrahi
8:45 to 9:30 am	Microscopy: Different types of staining, Interpretation of direct Gram stain of clinical specimens	Dr. Kumudini Panigrahi
09:30 to 10:00 am	Processing & reporting of Urine culture	Dr. Ketan Priyadarshi
10:00 to 10:15 am	Tea Break	
10:15 to 10:45 am	Processing & reporting of Respiratory specimen culture	Dr. Ketan Priyadarshi
10:45 to 11:15 am	Processing & reporting of Exudate specimen culture	Dr. Ketan Priyadarshi
11:15 to 12:00pm	Principles of Blood culture	Dr. Apurba Sastry
12:00 to 12:30pm	Automated Blood Culture Systems (BacT Alert & Bactec)	Dr. Apurba Sastry
12:30 to 01:15pm	Conventional methods of Identification of bacteria	Dr. Basanti Ku. Pathi
01:15 to 01:45pm	Lunch	
01:45 to 02:15pm	Automated identification methods: MALDI TOF	Dr. Ketan Priyadarshi
02.15 to 03:00 pm	Automated identification and AST system: Vitek-2	Dr. Ketan Priyadarshi
03: 00 to 03:45 pm	Culture and Identification of Anaerobic bacteria	Dr. Suneeta Sahu
03:45 to 04:00 pm	Tea Break	
04:00- 04:45 pm	Molecular diagnosis of bacterial infection	Dr. Bandita Panda
04:45 to 05:30 pm	Interactive Q&A / recap	Dr. Apurba, Dr. Ketan, DR. Sunita, Dr Bandita, Dr. Basanti, Dr. Kumudini

Day-2: 23/12/2025			
08:30 to 09:00 am	Recap and group distribution		
Participants are divided into three groups, Two moderators for each group. Each group provides four sets of clinical questions.			
	Conventional culture & ID method Supervisor: Dr. Basanti Ku Pathi, Dr. Swaranika Mandal Anaerobic method Supervisor: Dr. Suneeta Sahu, Dr. Kumudini Panigrahi Dr. Kunal Jagatdeo	Molecular identification method Supervisor: Dr. Bandita Panda Dr. Ankita Roy	Automated ID & AST method (MALDI-TOF + VITEK) Supervisor: Dr. Ketan Priyadarshi, Dr. Nupur, Dr. Gargee, Dr. Sonali, Dr. Amresh
9:00 to 10:30 am	Group A	Group B	Group C
10:30 to 12:00 pm	Group B	Group C	Group A
12:00 to 01:30pm	Group C	Group A	Group B
1:30 to 2:00 pm	Lunch		
	TOPICS		SPEAKERS
2:00 to 3:00 pm	Basics of CLSI and AST reporting		Dr. Ketan Priyadarshi
3:00 to 4:30 pm	Interpretation of Vitek-2 results		Dr. Ketan Priyadarshi
4:30 to 5:15 pm	Detection of specific resistance mechanisms		Dr. Ketan Priyadarshi

<u>Day-3 : 24/12/2025</u>		
08:30 to 09:00 am	Recap	
09:00 to 10:00 am	Basics of Antimicrobial susceptibility testing- Disk diffusion method	Dr. Ketan Priyadarshi
10:00 to 11:00 am	Basics of Antimicrobial susceptibility testing- Dilution based methods	Dr. Ketan Priyadarshi
11:00 to 11:15 am	Tea Break	
11:15 to 12:15 pm	Quality control of AST methods	Dr. Ketan Priyadarshi
12:15 to 12:45pm	Direct susceptibility testing from blood culture	Dr. Ketan Priyadarshi
12:45 to 01:15pm	Cascade & selective reporting + BMQ	Dr. Ketan Priyadarshi
01:15 to 01:45pm	Lunch	
01:45 to 04:15pm	Final presentation of culture findings by respective groups : 20-minute for each group	Dr. Apurba, Dr. Ketan, DR. Sunita, Dr Bandita, Dr. Basanti, Dr. Kumudini
04:15 to 05:30pm	Valedictory ceremony, conclusion, certificate distribution, feedback	

Course Dates	22nd–24th December 2025	
Venue	Department of Microbiology, KIMS, KIIT DU, Bhubaneswar	
Eligibility / Target Participants	Postgraduate students, Senior residents and Faculty members	
Course Fees	5000 rupees only	
Application Mode	Google Form link : https://docs.google.com/forms/d/e/1FAIpQLSceESQDI-s3mBaPuYklfb9c2nLVOOtAkl7o-Ic6L0NnGvPJcw/viewform?pli=1	
Last Date for Application	30/11/2025 (till 40 participants enrolled)	
Selection Criteria	First-come-first-serve basis	
Payment Mode	Bank transfer Account No: 918010011431623 IFSC CODE: UTIB0002953 AXIS BANK	

Facilitator:

Dr. Rumita Dey,
Assistant Professor,
Dept. of Microbiology
Mob:9766221024
Mail Id: rumita.dey@kims.ac.in



Mr. Nishikanta Thatoi
Section Incharge
Dept. of Microbiology
Mob: 9776999166
Email Id:
nishikanta.thatoi@kims.ac.in



Dr. Smrutisree Mohapatra
Senior Resident,
Dept. of Microbiology
Mob:7873922709
Mail Id:smrutisree.mohapatra
@kims.ac.in



Mr. Rajesh Kumar Dash,
PhD Scholar,
Dept. of Microbiology
Mob: 9853577721
Mail id:
kumarrajeshdash88@gmail.com



Mr. Omm Pati,
Research Scholar
Dept. of Microbiology
Mob:9438220844
Mail Id:
ommpati135@gmail.com

