



R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in Email: rjcollege@rjcollege.edu.in Tel No: +91 22 25151763 Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)

NOTICE

BIOTECHNOLOGY DEPARTMENT

GYAN VIGYAN

'LECTURES ON MICROSCOPY'

The Department of Biotechnology is organising lectures on 'Microscopy' by Dr. B.B. Nath for Biotechnology Students as part of 'Gyan Vigyan'-an online popular lecture series on November 17th and 25th 2021 from 3:00 pm to 4:00 pm.

Platform: ZOOM

Meeting ID: 860 7805 9326

Passcode: scope

Dr. Sucheta Golwalkar
Department of Biotechnology

Dr. Himanshu Dāwda
Principal

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RAMNIRANJAN JHUNJHUNWALA COLLEGE
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)
Ghatkopar (W), Mumbai-400 086, Maharashtra, INDIA



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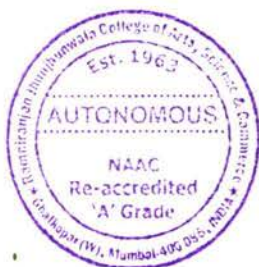
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FLYER

HINDI VIDYA PRACHAR SAMITI'S
RAMNIRANJAN JHUNJHUNWALA COLLEGE (AUTONOMOUS)
Department of Biotechnology
Presents
DBT Star College Activity
'Gyan-Vigyan'
Online Popular Lecture Series (2021-22)
MICROSCOPY
Dr. B. B. NATH
Emeritus Professor, Dept. of Zoology, Savitribai Phule Pune University
17th & 25th November 2021 3.00 pm
On Meeting ID: 860 7805 9326
Passcode: scope
zoom

FLYER of the lectures on 'Microscopy' by Dr. B.B. Nath organised by Department of Biotechnology under the aegis of DBT star college Activity 'Gyan Vigyan'-an online popular lecture series on November 17th and 25th 2021.




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**AWARENESS OF TRENDS IN TECHNOLOGY
BIOTECHNOLOGY DEPARTMENT
DBT STAR ACTIVITY
GYAN VIGYAN**

“LECTURES ON MICROSCOPY”

Date: Wednesday, 17th November & Thursday, 25th November 2021

Time: 3:00PM to 4: 00 PM

Resource Person:

Dr. B. B. Nath

Emeritus Professor, Dept. of Zoology, Savitribai Phule Pune University.

Contact: +91-9822422883, +974 66894527

E. Mail ID: bbnath@gmail.com, director@miesppu.edu.ga

Students Benefited: TYBT, MSc I

Number of students Benefited: 30

Number of Teachers Involved: 06 - Dr. Sucheta Golwalkar, Dr. Rachana Acharya, Dr. Tania Karipel, Saleha Khan, Smita Jadhav, Jasvinder Kaur

REPORT:

Department of Biotechnology organized lectures on 'Microscopy' as part of DBT star college Activity 'Gyan Vigyan', an online popular lecture series on November 17th and 25th 2021. The speaker was Dr. B. B. Nath, Emeritus Professor, Dept. of Zoology; Savitribai Phule, Pune University. Dr. Nath explained the basics of microscopy, significance of parts of a microscope, types of aberrations. Sessions helped students understand current developments & trends in microscopy and how various microscopic techniques can be used as imaging and research tools.

Date: 12th November 2021

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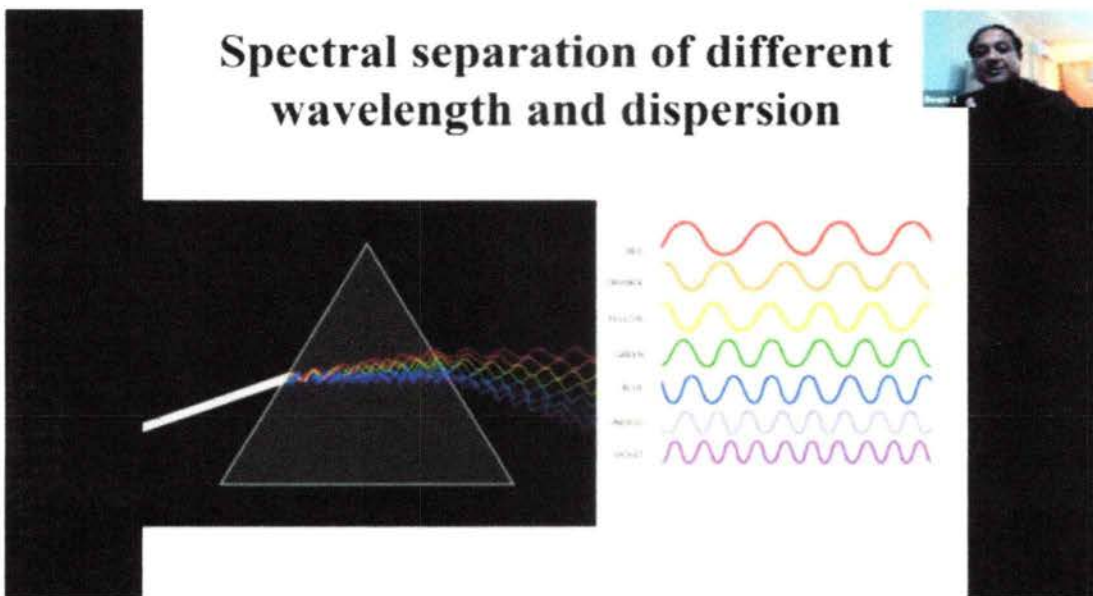
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PHOTOS

Spectral separation of different wavelength and dispersion



Screenshot of lecture on 'Microscopy' by Dr. B.B. Nath organised by Department of Biotechnology under the aegis of DBT star college Activity 'Gyan Vigyan'-an online popular lecture series on November 17th and 25th 2021.

There are two closely related values for the diffraction limit, the Abbe and Rayleigh criterions. The difference between the two is based on the definition that both Abbe and Rayleigh used in their derivation for what is meant by two objects being resolvable from each other. In practical applications, this difference is small.

The Abbe criterion is defined as:

$$r = \frac{0.5 \lambda}{NA} = \frac{0.5 \lambda}{n \sin(\theta)}$$

while the Rayleigh criterion defines the resolution mathematically as:

$$r = \frac{0.61 \lambda}{NA} = \frac{0.61 \lambda}{n \sin(\theta)}$$

where r is the distance the two objects are from each other, λ is the wavelength of light, n is the index of refraction of the medium between the objective and the sample, and NA is the numerical aperture of the objective lens that collects light.

Screenshot of lecture on 'Microscopy' by Dr. B.B. Nath organised by Department of Biotechnology under the aegis of DBT star college Activity 'Gyan Vigyan'-an online popular lecture series on November 17th and 25th 2021.





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List of Students attended online lectures on 'Microscopy' on 17th and 25th Nov 2021

Sr. No.	Roll No.	Class	Name of the Student
1	2	TYBT	Bhattarai Neelam Niraj
2	6	TYBT	Dhumal Tejal Ananda
3	14	TYBT	Kadam Shrutika Pradeep
4	5	TYBT	Moksha Jitendra Dhoka
5	13	TYBT	Jaiswar Neha Bindukumar
6	49	TYBT	Prajapati Nandini Surendra
7	9	TYBT	Gosavi Vaishnavi Rajesh
8	23	TYBT	Pal Poonam Subhashchandra
9	27	TYBT	Patil Vinayak Sanjay
10	33	TYBT	Shah Kulsum Bano Ramzan Ali
11	35	TYBT	Sharma Mahi Anand
12	37	TYBT	Singh Aditi Jitendra
13	51	TYBT	Koyande Shravani Lawoo
14	56	TYBT	Bharadwaj Preeti Subhashchand
15	52	TYBT	Verma Priya Rammurti
16	42	TYBT	Vyas Nikita Mahendra
17	2	MSc Part 1	Sujata Vishwakarma
18	3	MSc Part 1	Shriya Yadav
19	4	MSc Part 1	Divya Pingale
20	5	MSc Part 1	Jyoti Sahani
21	6	MSc Part 1	Abhishek Randive
22	9	MSc Part 1	Vaishnavi Menon
23	11	MSc Part 1	Priya Tripathi
24	12	MSc Part 1	Shreya Dubey
25	13	MSc Part 1	Sahil Nalawade
26	14	MSc Part 1	Shahin Khan
27	15	MSc Part 1	Aakanksha Singh
28	16	MSc Part 1	Riddhi Vishwakarma
29	18	MSc Part 1	Ankita Biswas
30	19	MSc Part 1	Dhanya Poojary




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CERTIFICATES

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(AUTONOMOUS)
DEPARTMENT OF BIOTECHNOLOGY
CERTIFICATE

This is to certify that Miss **KOYANDE SHRAVANILAWOO** of TYBT has attended lectures on 'Microscopy' by Dr. B.B. Nath organised by Department of Biotechnology under the aegis of DBT star college Activity 'Gyan Vigyan'-an online popular lecture series on November 17th and 25th 2021.

Dr. Sucheta Golwalkar
Head, Department of Biotechnology

Dr. Himanshu Dawda
Principal

Participation Certificate awarded to student on attending lectures on 'Microscopy' by Dr. B.B. Nath organised by Department of Biotechnology under the aegis of DBT star college Activity 'Gyan Vigyan'-an online popular lecture series on November 17th and 25th 2021.

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CERTIFICATE

This is to certify that Miss **BHARADWAJ PREETI SUBHASHCHAND** of TYBT has attended lectures on 'Microscopy' by Dr. B.B. Nath organised by Department of Biotechnology under the aegis of DBT star college Activity 'Gyan Vigyan'-an online popular lecture series on November 17th and 25th 2021.

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