

#### **Goa University**

### Discipline of Marine Microbiology, School of Earth, Ocean and Atmospheric Sciences

## Report on Celebrating Pioneers in Innovation and Science Har Gobind Khorana: the Chemist who Unravelled the Genetic Code

1. Title of the Event/Activity/program	Celebrating Pioneers in Innovation and Science Har Gobind Khorana: the Chemist who Unravelled the Genetic Code	
2. Date and Time	9 <sup>th</sup> January 2025, 4 pm	
3. Mode of conduct (Physical/Online)	Physical	
4. School/ Directorate/ Section	Discipline of Marine Microbiology, School of Earth, Ocean and Atmospheric Sciences	
5. Collaborating Agency/School/Directorate	-	
6. Detail of the Resource Person (Brief biodata)	Dr. Rakhee Sinai Khandeparker (Brief biodata attached as Annexure A)	
7. Number of Faculty attended/participated	05	
8. Number of Student attended / participated	M.Sc. Marine Micro students: 22	
9. No. of external students/faculty/other participants	M.Sc. Botany student: 01 Research scholars: 02 External faculty: 01	

	34 32
10. The objectives of the Program/activity/event	The objective of the Programme was to inculcate in the students an awareness and appreciation of the Indian scientists from the mid-1900s who overcame many obstacles in their path, forged ahead and contributed to science. This was the third activity in this series 'Celebrating Pioneers in Innovation and Science' and celebrated the life and achievements of Har Gobind Khorana, also known as the 'Chemist who Unravelled the Genetic Code'.
11. Description of the Program/activity/event	The programme was organized by the Discipline of Marine Microbiology, SEOAS. It consisted of 2 parts. First, a quiz about the life and times of Har Gobind Khorana and Nobel laureates linked to India, for the M.Sc. Marine Microbiology Part I students, conducted by Dr. Priya M. D'Costa, the Programme Co-ordinator, on 7 <sup>th</sup> January 2025. Second, an invited talk on the topic "Xylanases from Marine Bacteria: Bridging Marine Biology and Molecular Biology to Unlock Their Potential", by Dr. Rakhee Sinai Khandeparkar, Principal Scientist at the CSIR-National Institute of Oceanography, was held on 9 <sup>th</sup> January 2025, the birth anniversary of Har Gobind Khorana. After the talk, Dr. Rakhee Khandeparker distributed prizes to the first, second and third place winners of the quiz.
12. Benefit/Key outcomes of the Program/activity/event	The students gained awareness about the conditions in which Indian scientists conducted their research and progressed in their scientific careers, in the mid-1900s. They also learned about the contributions of Indian Nobel laureates to science. The life and legacy of Dr. Har Gobind Khorana served as a source of inspiration to our students.
13. Enclosures with report	Brochure, Notice, Geo-tag photos, Attendance of students/faculty/external participants, Bio Data of resource person (if applicable), Any other information.

Signature:

Name of coordinator: Dr. Priya M. D'Costa
Designation: Assistant Professor, Marine Microbiology

Signature Dean Senior Prof. S. C. Ghadi Seal of the School



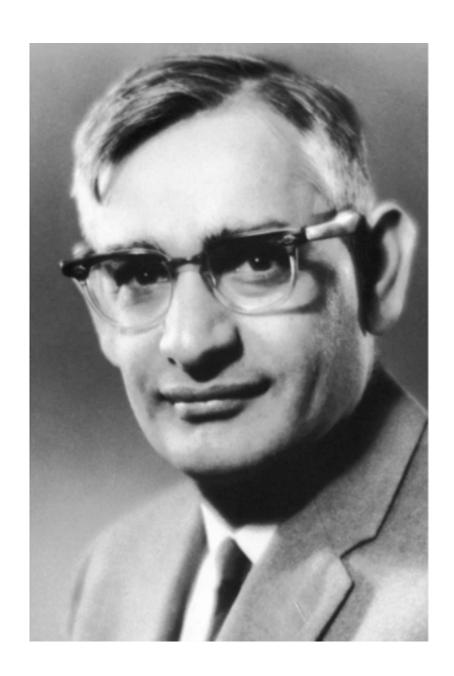


## Discipline of Marine Microbiology School of Earth, Ocean and Atmospheric Sciences Goa University

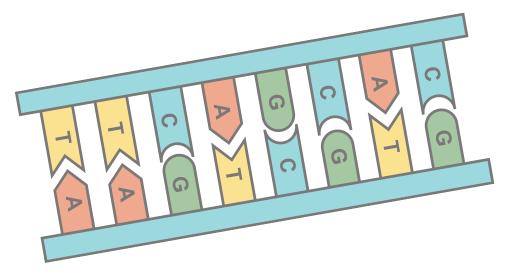
as part of the **Series** 

## CELEBRATING PIONEERS IN INNOVATION AND SCIENCE

is commemorating the life and achievements of



# HAR GOBIND KHORANA: THE CHEMIST WHO UNRAVELLED THE GENETIC CODE



with a Quiz



and an Invited Talk

Xylanases from Marine Bacteria: Bridging Marine Biology and Molecular Biology to Unlock Their Potential

Eminent Speaker: Dr. Rakhee Sinai Khandeparker, Principal Scientist, CSIR-NIO

9th January 2025, 4 pm. Venue: VRPP Hall, Block D.

Programme Co-ordinator: Dr. Priya M. D'Costa



Fig. 1. Dr. Priya D'Costa conducting the Quiz competition.



Fig. 2. Dr. Rakhee Khandeparker delivering her talk.



Fig. 3. Dr. Rakhee Khandparker distributing the prizes to the 1<sup>st</sup> place winners of the quiz competition (Shivam Kadam and Vasant Govekar).



Fig. 4. Dr. Varada S. Damare, the Programme Director – Marine Microbiology, presenting a potted plant to the resource person.



Fig. 5. Group photograph at the end of the talk.

#### **Attendance Sheet**

#### Invited talk

Xylanases from Marine Bacteria: Bridging Marine Biology and Molecular Biology to Unlock Their Potential (Resource person: Dr. Rakhee Sinai Khandeparker)

as part of the Series

Celebrating Pioneers in Innovation and Science
Har Gobind Khorana: the Chemist who Unravelled the Genetic Code

Organized by the Discipline of Marine Microbiology, School of Earth, Ocean and Atmospheric Sciences, Goa University.

9th January 2025 , 4 p.m. onwards

Venue: VRPP Hall, Block D

Sr. No.	Name of the Faculty/ Research Scholar/ Students	Programme	Signature
1	Yatiksha .Y. Gaude	MSC. Marine Micre	Bude
2.	Ravine . R. Jadhar	11	Pfeedher
3;	shauti . s. Korgoznkor	и	Bard-
4,	Samruddhi Haik	1 (	Len
5.	lakshada Naik	. 11	Lherik
6.	Tejal Bandekar	11	BANGOM
4.	Sanisha V. Satarkar	Marine Microbiology	<b>Salarkar</b>
8.	Susanna Sampayo	Msc. Narine Microbiology	& Jain
9.	Vallance Fernandes	Botany Part II	v
10.	Dikeha · I · Sharma	MSc. Marvie Mirrobiology	ghros
11/	Sana k. khan	/)	Sthan.
n	Aditya kaj Shoùvaltan	п	Odity
13	Dwela R. Kanelson	· .	B
14.	Lesha R. Lotlikau	1.1	Sha
15	Ashitash Sawant		Ad

#### **Attendance Sheet**

#### Invited talk

Xylanases from Marine Bacteria: Bridging Marine Biology and Molecular Biology to Unlock Their Potential (Resource person: Dr. Rakhee Sinai Khandeparker)

as part of the Series

**Celebrating Pioneers in Innovation and Science** 

Har Gobind Khorana: the Chemist who Unravelled the Genetic Code

Organized by the Discipline of Marine Microbiology, School of Earth, Ocean and Atmospheric Sciences, Goa University.

9th January 2025, 4 p.m. onwards

Venue: VRPP Hall, Block D

Sr. No.	Name of the Faculty/ Research Scholar/ Students	Programme	Signature
16	Shiwam Kaclam	Mac Marin Micro Part I	*
(7	Vasant Govekar	MSC Marine Miraro	Contract of the contract of th
18.	John Fernandes	11	Comment.
19.	Cheton . D. Tulaskan	MSC maninhacov Part I	That
20.	RUKSAR ALAM	M-Sc Marine Micro	(Alleman
21.	Agnelo Silveira.	MSL Marine Micro Paul-2	As
22 .	Franzil Fernander	11	
23		13	Kendel.
24.	Varilmeni teli	Ġ.	Gold.
25.	Sugat Mandrelcor	11	
26	Inrana Sheith.	Marine Micro Ph.D	americ
27	Varada S. Damare	Marine Michbiol	. Des-
28	PRIYA M. D'COSTA	n	P14
29	Nikità Lotrikan	manne minstriduz	Politica
30	Chanda Berde	- N 11	chanda

#### **Attendance Sheet**

#### Invited talk

Xylanases from Marine Bacteria: Bridging Marine Biology and Molecular Biology to Unlock Their Potential (Resource person: Dr. Rakhee Sinai Khandeparker)

as part of the Series

Celebrating Pioneers in Innovation and Science

Har Gobind Khorana: the Chemist who Unravelled the Genetic Code

Organized by the Discipline of Marine Microbiology, School of Earth, Ocean and Atmospheric Sciences, Goa University.

9th January 2025, 4 p.m. onwards

Venue : VRPP Hall, Block D

Sr. No.	Name of the Faculty/ Research Scholar/ Students	Programme	Signature
31	Diviya Vaigankan	M.Sc. MAR MICRO	Deagankar
			,
	-		
			.5

#### Appendix A: Brief Biodata of Dr. Rakhee Khandeparker (the resource person)

Dr. Rakhee Khandeparker is a Principal Scientist in the Biological Oceanography Division at the National Institute of Oceanography (NIO), Goa, India. She completed her PhD in Microbiology from Goa University in 2005 and joined CSIR-National Institute of Oceanography (NIO) as a scientist in June 2008. Her research focuses on marine biology and oceanography, with significant contributions to marine microbiology and biotechnology. She has made significant advancements in utilizing marine bacteria to develop environmentally friendly solutions in various sectors. In the pulp and paper industry, her work has contributed to more sustainable processes by employing enzymes from extremophilic microbes to improve efficiency and reduce chemical usage. Additionally, her research has played a crucial role in the development of bioplastics, leveraging unique properties of marine bacteria to create biodegradable alternatives to conventional plastics. She holds three patents, each highlighting the innovative applications of marine bacteria in these industries.