International Relations and Research Collaborations
in association with
School of Applied Sciences

Organized Guest talk on

"Microbes for the food-water-energy nexus"

Program Report

International Relations and Research Collaborations in association with **School of Applied Sciences REVA University,** organized a Guest Lecture on "Microbes for the food-water-energy nexus" on 04-02-2025**.** The event featured Dr. Mohamed Firdaus Abdul Wahab, PhD,Department of Biosciences, Universiti Technologi, and Malaysia. This expert talk was is benefitted to undergraduate, postgraduate and scholars.

1. About the speaker and their institute

   Dr. Mohamed Firdaus Abdul Wahab, PhD: obtained his PhD in Chemical Biology from Imperial College London. He is currently the Faculty's Assistant Dean (External and Global Engagement). He chairs several committees at the Faculty, such as the Internationalization, Community Relations, Corporate Affairs, Alumni, and Industry Relations Committees. He is a registered chemist (ChM) of the Malaysian Institute of Chemistry (IKM), a member (MRSC) of the Royal Society of Chemistry (RSC, UK) and a chartered chemist (CChem) of RSC. His current research interests include environmental biochemistry and microbiomes, particularly related to the biological degradation of pollutants and biological energy generation.

2. Flow of program
   a. Welcome to the guest
   b. Introduction of Guest speaker
   c. Speaker's Talk
   d. Vote of thanks
3. About the talk and other discussions:

   A key component of the program involves studying life through both top-down and bottom-up approaches. The top-down approach focuses on examining ancient

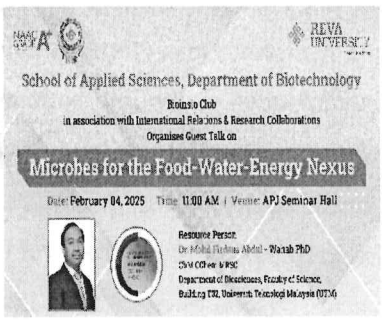
microorganisms, particularly prokaryotes such as methanogens, to gain insights into the biochemical processes that may have been involved in early life forms. In contrast, the bottom-up approach investigates the formation of small molecules essential for life, such as amino acids and nucleobases. He discussed on environmental microbiology and biochemistry, particularly related to waste conversion into value added products (e.g. bioenergy) and he also revealed in the microbial ecology and microbiomes underlying these environmental and industrial processes.

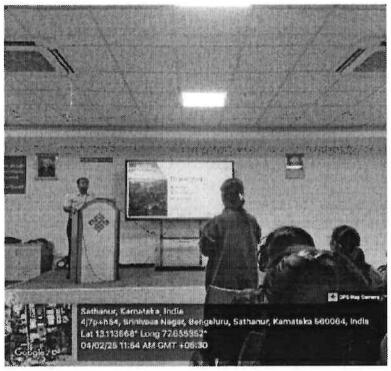
The program also highlights the study of extreme terrestrial ecosystems and the survival strategies of extremophiles, organisms that thrive in the most inhospitable environments on Earth. By understanding the limits of life in these extreme conditions, this methano microgranims provides valuable insights into the potential for life to exist elsewhere in the universe.

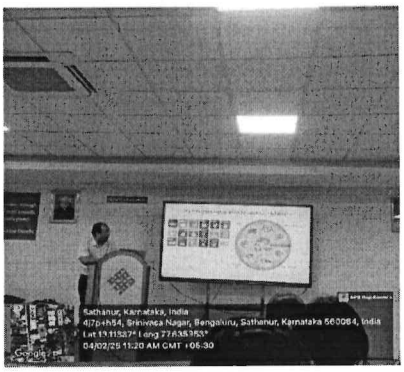
4. Total no. of attendees: 60
5. Outcome of program :

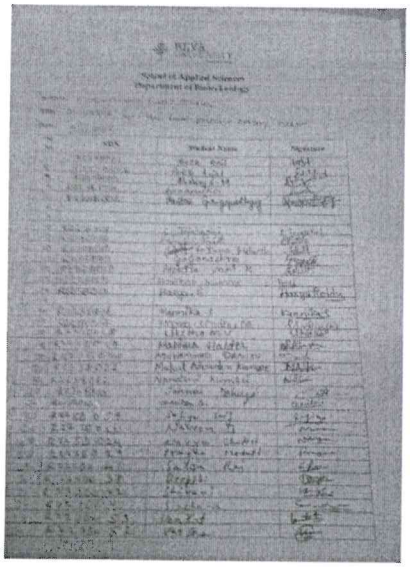
   The program equips students with a deep understanding of life's origins, survival in extreme environments, and the potential for extraterrestrial life, fostering critical thinking and interdisciplinary scientific inquiry.

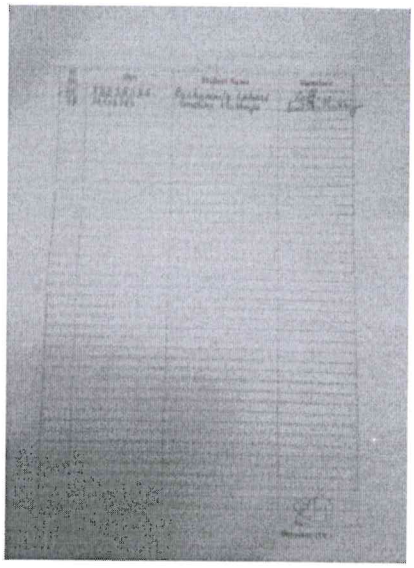
6. Photos from the program:











IRRC School Coordinator

Director
School of Applied Sciences

Director IRRC

REVA UNIVERSITY
Bengaluru, India

School of Applied Sciences
Department of Biotechnology

Activity: International Guest Speaker

Title: "Microbes for the food water - energy nexus"

Date: 4/2/2025

Sl. No.	SRN	Student Name	Signature
1.	R22SB001	Aesa Anil	
2.	R22SB002	Aditi Sejal	
3	R22SB003	Akshaya. M	
4	R22SB004	Anaanika	
5	R22SB005	Anitra Gangopadhyay	
6			
7.			
8	R22SB008	C. Tejaswini	
9	R22SB009	Eshajas. Reddi	
10	R22SB010	Fathima Mehwish	
11	R22SB011	Gaganashree	
12	R22SB012	Gokila vani. K	
13	R22SB013	Harihar Kumar	
14	R22SB014	Hasya. S	
15			
16	R22SB016	Kannika. S.	
17	R22SB017	Kama. Sindhuja	
18	R22SB018	Liketha M.V	
19	R22SB019	Mahima Halder	
20	R22SB020	MUHAMMAD DANISH	
21	R22SB021	Mukul Nandan kumar	
22	R22SB022	Nandini Kumari	
23.	R22SB015	Jahnvi Dahiya	
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25	R22SB039	Safiya Saif	
26	R22SB023	Naveen B	
27	R22SB024	Navya Chettri	
28	R22SB029	Pragna Modath	
29	R22SB041	Salon Rai	
30	R22SB038	Deepthi	
31	R22SB042	Shivani	
32	R22SB043	Sinchana	
33	R22SB053	Venkat	
34	R22SB052	Varsha	

Sl. No.	SRN	Student Name	Signature
35	R22SB034	Rachumalla Lahari	Lah.
36	R22SB063	Swastika Mukherjee	Swastika Mukherjee

Director (I/C)