## Report On

# Advanced Refresher Course (Biology)

### at Challakere, IISc Bengaluru



Submitted by: Dr Aman Verma (Participant)

**Designation:** Assistant Professor, Department of Zoology

Institution: Govt. P. G. College Berinag, Pithoragarh

(Uttarakhand)

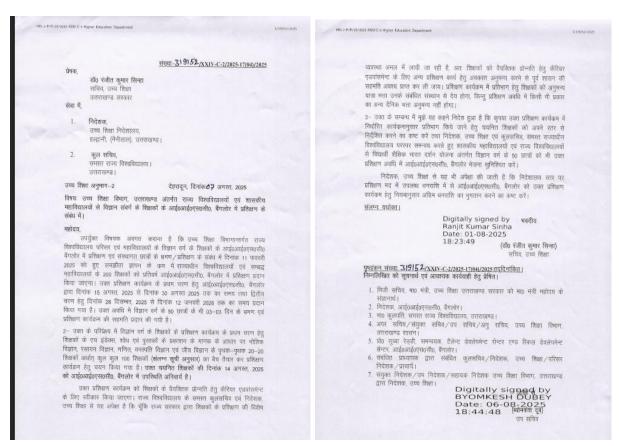
**Duration of Course:** 15 August 2025 - 30 August 2025

Venue: Talent Development Centre, IISc Challakere Campus

at Khudapura, Chitradurga, Karnataka



Group photo of all faculties selected from different colleges and universities of Uttarakhand for refresher course at the IISc, Bengaluru



#### G.O. regarding the Advanced Refresher Course at the IISc Bengaluru

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pak Kumar Arya r. Anchala Nautiyal Hemant Joshi Iam Chandra Maurya f Dr Madhu Thapliyal	professor Assistant Professor Assistant Professor Assistant Professor Assistant Professor Assistant Assistant Assistant Assistant Assistant Assistant	Zoology Zoology Zoology	Pithoragarh  Kumaun University, Nainital  Sri Dev Suman Uttarakhand University Sridev suman university, Bashahithaul, New tehri  Soban Singh Jeena	D. S. B. Campus, Nainital Rajkeeya Mahavidyalaya Thatyur, Tehri Garhwal Govt. Degree college chaubattakhal	9557658603	8476970520	pithoragarh@gmail.com dee.in@rediffmail.com Anchala.nautiyal@gmail.	academic level 11) Grade Pay Rs. 8,000/-)					
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Maurya f Dr Madhu fhapliyal aman Verma	Professor Professor Assistant			0.1 01 1.7		7500664737	dr.haimantjosshi@gmail. com	57700-182400 (UGC Level-10)	14/12/1976	2/1/2017	7	52	
Thapliyal Aman Verma	Assistant	Zoolom		Soban Singh Jeena University Campus Almora	7376332769	7376332769	mauryarc@gmail.com	12	10/07/1979	02/05/2013	7	22	
aman Verma		Louingy	Sridev Suman Uttarakhand University	RCU Government PG college Uttarkashi	7579045745	7579045745	madhuthapliyal@gmail. com	144200 to 218200 (level 14)	19/11/1974	16/07/2005	6	49	7
Ionn Role	Professor	Zoology	Soban Singh Jeena university	GPGC Berinag	9557016715	9719223913	amannaini92@gmail.com	57,700 - Level 10	12/2/1992	31/01/2025	6	16	
Tout Data	Assistant Professor	Zoology	S.S.J University Almora	S.S.J.P.G.College Syalde Almora.	8810368236	8191826385		91000	26/08/1982	02/07/2020	6	11	3
of. Mahabir ngh Rawat	Professor & Campus Director	Zoology	Sri Dev Suman University, Badshahithaul Tehri	Pt. LMS Campus, Rishikesh	9412916792	9412916792	drmsrawat2@yahoo.co.in	144200-218200 (14)	3/11/1967	5/6/1997	5	28	
ndra pal singh	Professor	Zoology	Sri Dev Suman Uttarakhand University	Govt Degree college churiyala Haridwar	9557498950	9557498950	cpsingh26 feb@gmail.com	144200-218200 (UGC LEVEL 14)	26/02/1973	22/07/2005	5	15	2
Prithvi Raj gh Koranga	Assistant Professor	Zoology	Sri Dev Suman Uttarakhand University	Ssstsr Government Degree College Nainidanda	9999796469	9999796469	prskeranga@gmail.com	57700-182400 (UGC Level-10)	06/07/1981	27/02/2025	5	6	Munk
r. Sandeep Kumar	Associate Professor	Zoology	SSJU, Almora	SSJU Campus, Almora	9411358630	9411358630	drsandeepssjc@gmail. com	13A	7/8/1980	4/12/2010	4	35	2
Tribhuwan Chandra	Assistant Professor	Zoology	SDSU Badshahithaul, New Tehri	Shaheed Durga Mall Govt Pg College Doiwala	7895321400	7895321400	tribhuwan. chandra@gmail.com	68900-205600 (Level 11)	18/10/1981	19/09/2014	4	19	1
Dalip Kumar Bhatiya	Assistant Professor	Zoology	Sridevsuman University, Tehri Gharwal	Government P.G. College Dakpathar Dehradun	9412047259	9412047259	dkbhatiaddn@gmail.com	Level - 11	30/05/1970	23/07/2016	981	12	1
kash Chandra Mishra	Assistant Professor	Zoology	Kumaun University, Nainital	Radhey Hari Government Post Graduate College, Kashipur	8355030949	8355030949	akszo_mis@rediffmail. com	68900-205600 (UGC LEVEL- 11)	1/5/1979	13/11/2014	3	10	6
Rajni Mehra	Assistant professor	Zoology	Soban singh jeena University,Almora	Govt.Model Degree College Devidhura , Champawat	9412306599	9412306599	mehrarajani970@gmail. com	89800 ( Level- 12)	8/9/1970	18/03/2013	3	10	1
Neelam Saini	Assistant Professor	Zoology	Sri Dev Suman University Badsahithaul Tehri Garhwal	PSB Govt Degree College Lambgaon Tehri Garhwal Uttarakhand (249165)	8650647633	8650647633	neelamsarveshsaini999@g mail.com	57700-182400	30/01/1986	03/06/2025		6	4
/ishal Kumar	Assistant Professor	Zoology	SSJ University Almora	GPGC Berinag	9997538362	9997538362	Vishalangel27@gmail.com	57700-182400	27/07/1988	1/2/2025	2	8	1
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Selection list of participants for the Advanced Refresher Course (Biology) at the IISc Bengaluru

#### HIGHLIGHTS OF THE COURSE

#### Introduction

This report provides a comprehensive account of my participation in the Advanced Refresher Course conducted at the Indian Institute of Science (IISc), Challakere Campus, Bengaluru from August 15 – August 30, 2025. The programme spanned sixteen days and was designed to strengthen pedagogical skills, enhance conceptual understanding in the life sciences, introduce faculty research-based and to teaching methodologies. The training was designed to enhance teaching skills, research orientation, and subject knowledge, while also fostering collaboration among educators. This report outlines my journey, key activities, and outcomes of the program.

#### **Chronology of Events**

#### 1. Preliminary Meeting - 13 August 2025

- Attended a meeting at Dehradun with the Higher Education Secretary and other officials.
- The session focused on the general discussion of aims and objectives of the training program.
- Emphasis was placed on improving teaching methodologies, integrating research-based learning and encouraging the integration of modern scientific approaches at the undergraduate level.

Participants were apprised of their roles, expected conduct, and anticipated outcomes of the programme.

#### 2. Arrival at Challakere – 14 August 2025

- Reached the Challakere Talent Development Centre on the night of 14 August 2025, following a flight to Bengaluru and subsequent travel by bus to the campus.
- Accommodation arrangements and essential information regarding campus facilities were provided upon arrival.
- The campus provided a serene and academic environment conducive to learning.

#### 3. Independence Day Celebration - 15 August 2025

- The program formally commenced on 15 August 2025 with the Independence Day flag hoisting ceremony on campus.
- The ceremony instilled a sense of national pride and unity among the participants.
- Following the ceremony, the Director of IISc Challakere presented slides and delivered an insightful orientation, highlighting the history, establishment, achievements, and vision of IISc Bengaluru.
- An overview of the fifteen-day training module was also presented.

#### 4. Commencement of Training

- Training started with a pre-test on Life Sciences to assess baseline knowledge of participants.
- Trainers introduced the activities planned, including:

- Mini research projects
- Laboratory practical sessions
- Regular theoretical classes and attendance
- Participation in daily assignments, academic and extracurricular activities
- It was announced that a Best Performer Award would be given to the most outstanding participant.

#### 5. Training Activities and Academic Engagement

• Over the following days, several lectures, workshops, and practical sessions were conducted by distinguished professors and scientists from IISc Bengaluru.

#### The training encompassed:

- Hands-on laboratory experiments in molecular biology, ecology, and biochemistry
- Demonstrations involving modern scientific instruments and techniques
- Lectures on innovative teaching methodologies aligned with NEP 2020
- Group discussions, assignments, and collaborative academic tasks
- Continuous assessments to track learning progress

These sessions significantly enriched my academic insight and research aptitude as well as interaction with faculty members enriched my understanding of advanced concepts in Life Sciences and pedagogy.

#### 6. Final Assessment and Award Ceremony - 30 August 2025

- The final day of the programme, 30 August 2025, concluded with a comprehensive assessment to evaluate knowledge gained throughout the training.
- I am honored to state that I achieved the highest score in the final evaluation.

During the award and certificate distribution ceremony, I was conferred with the "Best Performer Award," an achievement that provided immense motivation and professional encouragement.

#### 7. Return Journey

• After the successful completion of the program, we flew back to Delhi from Bangalore.

#### **Outcomes and Reflections**

- Enhanced subject knowledge in Life Sciences.
- Gained exposure to research-oriented teaching methods.
- Developed skills in conducting mini projects and lab practicals.
- Recognition as Best Performer boosted my confidence and motivation.
- The program provided valuable networking opportunities with fellow educators and IISc faculty.

#### 8. Conclusion

The Advanced Refresher Course (Biology) at IISc Challakere proved to be highly enriching, both academically and professionally. It provided valuable exposure to advanced research practices, laboratory techniques, and effective pedagogical strategies. It not only strengthened my academic foundation but also inspired me to adopt innovative teaching practices in my professional career. I am confident that the knowledge and experience gained will greatly benefit my teaching practices and contribute positively to my institution.

I extend my sincere gratitude to the Higher Education Department, IISc Bengaluru, and my college administration for granting me this opportunity for professional advancement.



Group photo of all faculties selected from different colleges and universities of Uttarakhand for refresher course at the TDC, IISc



Address and orientation by the Director of the TDC, IISc



Flag hoisting by the Director of the TDC, IISc on 15 August 2025



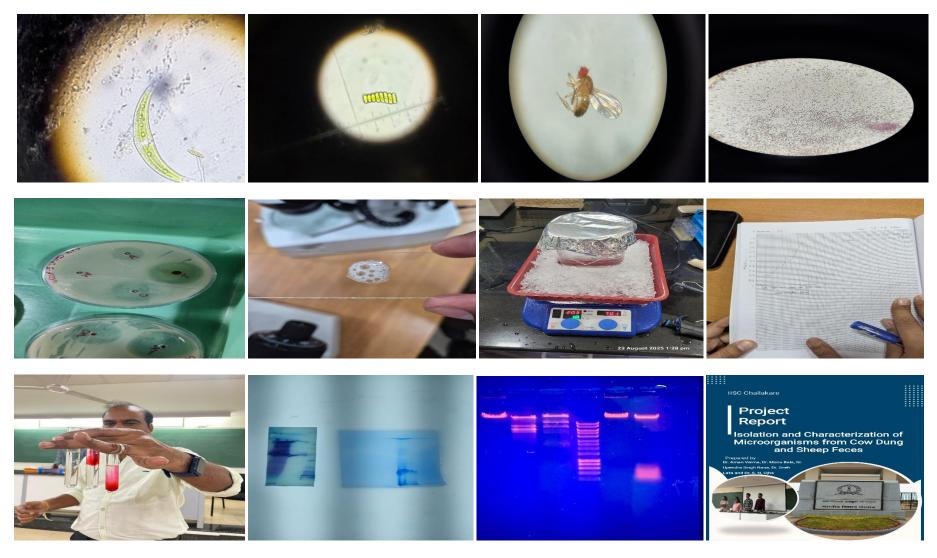








Award and certificates received at the Advanced Refresher Course (Biology) conducted at the Indian Institute of Science, Challakere Campus at Khudapura, Chitradurga District, Karnataka



Laboratory practical, experiments and research project completed during the Advanced Refresher Course (Biology) conducted at the Indian Institute of Science, Challakere Campus at Khudapura, Chitradurga District, Karnataka

#### **OUTCOMES OF THE COURSE**

#### 1. Enhanced Pedagogical Skills

Participants gained improved teaching methodologies aligned with modern educational standards and NEP-2020, enabling more effective classroom delivery.

#### 2. Strengthened Subject Knowledge

The advanced lectures and interactions with IISc professors deepened conceptual understanding in Life Sciences, allowing participants to teach with greater clarity and confidence.

#### 3. Hands-on Research Experience

Exposure to laboratory techniques, scientific instruments, and mini-research projects strengthened research aptitude and encouraged inquiry-based teaching.

#### 4. Improved Ability to Design Experiments

Participants learned to plan, conduct, and interpret laboratory experiments, which can be directly applied to undergraduate practical classes.

#### 5. Integration of Research with Teaching

The training highlighted the importance of connecting theoretical knowledge with real scientific research, helping teachers make courses more application-oriented.

#### 6. Development of Critical Thinking

Continuous assessments, group discussions, and academic tasks fostered critical analysis, scientific reasoning, and problem-solving skills.

#### 7. Increased Professional Competence

Receiving structured training from a premier institution like IISc enhanced participants' academic profile and boosted professional confidence.

#### 8. Motivation for Continuous Learning

Interaction with leading scientists inspired lifelong learning, academic curiosity, and a commitment to staying updated with scientific advancements.

#### 9. Networking and Collaboration

The programme facilitated meaningful collaborations with faculty from different institutions, creating opportunities for joint research and academic initiatives.

#### 10. Improved Academic Output

The skills gained are expected to reflect in:

Better classroom teaching

Higher-quality practical sessions

Student mentoring for projects

Improved academic results and departmental performance

#### 11. Leadership and Recognition

Achievements such as securing high scores and receiving the Best Performer Award enhance leadership qualities and set a positive example for peers and students.

#### **NEWS REPORT**



https://www.newshomelive.co.in/four-professors-of-the-college-by-participating-in-the-training-program-of-iisc-bengaluru-and-received-the-best-performer-award/

#### **Participant**

Dr. Aman Verma

Assistant Professor (Zoology)

Govt. Post Graduate College Berinag