

International Society for Microbial Ecology in collaboration with Acharya Narendra Dev College Under the aegis of IQAC & DBT STAR College Scheme

Report

On

One-Day Workshop

"Scientific Writing & Communication"

(February 13, 2024)

Sponsored by International Society for Microbial Ecology (ISME) The one-day ISME sponsored Hands on Workshop on "Scientific Writing and Communication" was organized jointly by Acharya Narendra Dev College, University of Delhi and PhiXgen Pvt. Ltd., under the aegis of IQAC and DBT Star College Scheme on February 13, 2024. This workshop was organized with the motive to upskill young minds for students who are keen on learning scientific writing and how to publish in high impact journals.

The workshop touched on various elements of scientific paper like title, abstract, introduction, methods, results, tables and figures, discussion, references etc. The workshop provided a platform to researchers, postgraduate & undergraduate students and even school students to learn to present their findings and review their works in the form graphics. The workshop enlightens on how to become effective writers using research data and represent it in easy and best possible way. It also shed light on the format of a scientific manuscript, peer review, funding etc.

The workshop was conducted in offline mode and total of 97 student registrations were received along with around 20 faculty members from University of Dehi. Here is the detailed program for the workshop:

Time	Event/Topic	Speaker/Resource Person
Time	Livency ropic	speaker/ Resource r erson
11:00- 11:05	Introductory Remarks	
11:05-11:10	Welcome Address	<b>Prof. Ravi Toteja</b> Officiating Principal Acharya Narendra Dev Colleg University of Delhi
11:15-11:20	Introduction to ISME and Activities in India	<b>Prof. Rup Lal</b> ISME Ambassador, India Acharya Narendra Dev Colleg University of Delhi
11:20-11:50	ISME activities in Nepal and organisation of SASME (South Asian Symposium for Microbial Ecology)	<b>Dr. Dev Raj Joshi</b> Associate Professor Tribhuvan University Nepal
11:50-12:10	Introduction to ISME Journals	Dr. Utkarsh Sood Assistant Professor Kirori Mal College University of Delhi & Editor ISME Communication
12:10-13:00	Lunch Break	

13:00-13:30	Importance of Scientific Writing and	Prof. Rup Lal
	Communication: How to publish in ISME	ISME Ambassador, India
	journals	Acharya Narendra Dev Colle
	,	University of Delhi
13:30-14:00	"Scientific reading exercise"	Dr. Jasvinder Kaur
	Section A: How to read a paper	Assistant Professor
		Gargi College
		University of Delhi
14:00-14:30	"Scientific reading exercise"	Dr. Pushp Lata
	Section B: Peer-Review Process	Assistant Professor
		Department of Zoology
		University of Delhi
14:30-15:15	"Scientific Art"	Prof. Ravi Toteja
	Creating Graphical Abstracts	Dr. Rimpy Kaur Chowhan
		Acharya Narendra Dev Colle
		University of Delhi
15:15-15:30	"Test your knowledge"	Dr. Princy Hira
	A scientific Quiz	University of Delhi
15:30-15:45	Concluding Remarks	Prof. Sukanya Lal
		Phixgen Pvt. Ltd.
		Dr. Tista Prasai Joshi
		Nepal Academy of science ar
		technology
15:45-16:00	Prize Distribution and Closing	

The Workshop was conducted with a total number of 97 participants (school students, undergraduate, postgraduate and PhD students and faculty) to gain knowledge and hands on training on various aspects of scientific writing and communication. The workshop started with inauguration ceremony with *lamp lighting*, *Saraswati Vandana* and *Kulgeet* of University of Delhi in the presence of Prof. Rup Lal (Senior ISME Ambassador, India) and Dr. Dev Raj Joshi (Senior ISME Ambassador, Nepal), Dr. Tista Prasai Joshi (Senior Scientist, Nepal Academy of Science and Technology (NAST) and Prof. Ravi Toteja (Officiating Principal, Acharya Narendra Dev College, University of Delhi). Then all the guests and speakers were felicitated by Principal, Prof. Ravi Toteja.



Pic 1-2: Inauguration of the workshop with lamp lighting and felicitation of guests by Prof. Ravi Toteja, Principal, Acharya Narendra Dev College.

Inauguration ceremony was followed by welcome address by **Prof. Ravi Toteja**. He mentioned about the foundation of this workshop and he appreciated the efforts made by Prof. Rup Lal and ANDC's organizing team to organize this important workshop under the umbrella of ISME. He also introduced the participants to the workshop and college. He also emphasized on the importance of sciences in today's world.



Pic 3-4: Welcome Address by Prof. Ravi Toteja to the participants

Scientific program began with the introduction to International Society for Microbial Ecology (ISME) and efforts in India by Prof. Rup Lal, Senior ISME Ambassador, India. He introduced the mandate of the ISME to propagate the exciting field of Microbial Ecology in this era of extensive science & technology. He also mentioned about the multitude of activities he and his team have done over the past few years to popularize microbial ecology and promote microbial literacy in various schools, colleges and universities though workshops, seminars, conferences and outreach programs. It was followed by plenary talk by Dr. Dev Raj Joshi on ISME activities

in Nepal. He shed light on ISME network in South Asia and the SASME symposium hosted by Nepal in 2020 and 2023. The objective of these symposiums are to bring South Asian microbial ecologists and students together to share recent advances in the wider perspective of microbial ecology and promote the young students and researchers building their research capacity and celebrate the achievements of under-represented researchers, including women scientists in the field. He also emphasized the ambassador program of ISME and importance of conducting such workshops and networking.



Pic 5-6: Introduction to ISME and Ambassador Activities by Prof. Rup Lal and Dr. Dev Raj Joshi.

The session ended with a talk by Dr. Utkarsh Sood on ISME Journals where he explained about importance of targeting an appropriate journal for your scientific research. He also added about the aim and scope of the *ISME Journal* and *ISME Communications*. He also emphasized different types of research articles and the overall process of publication and review.



Pic 7-8: Talk on ISME Journals by Dr. Utkarsh Sood

The hands-on session began with the talk of Prof. Rup Lal, ISME Ambassador where he talked about "*Communication Skills in Science*" and different elements of research paper. How to design a suitable research article and write different sections in an article. He motivated students to start communicating with peers and teachers as it will become very important in the coming years to do good science. The session was followed by a talk on "*How to read a paper*" by Dr. Jasvinder Kaur, Gargi College, DU. Dr. Jasvinder Kaur discussed the art of reading a research paper from three distinct perspectives: that of the author, reviewer, and general reader. She emphasized the importance of a thorough and careful approach to reading, stressing the need for multiple readings and note-taking. She highlighted the critical aspects of a paper, such as the clarity of the aim, the reliability of the methodology, and the inclusiveness of the discussion. Dr. Kaur also underscored the significance of considering potential loopholes and simpler alternatives, as well as the broader applicability of the study findings. In her presentation, she used simple scientific examples to engage with the audience and illustrate her points.



Pic 9-10: Talks by Prof. Rup Lal and Dr. Jasvinder Kaur on Scientific Writing, Reading and Communication.

The next talk was by Dr. Pushp Lata (Department of Zoology, UoD) on "*Peer Review Process*". In this session, she discussed about purpose of peer review, components, types of peer review and the importance of peer review and how Peer review plays a vital role in maintaining the quality, integrity, and credibility of academic and scientific literature. For the hands-on exercise research article "Comparison of the plant growth promoting bacteria present in rhizosphere, rhizoplane and endorhizosphere of two cultivars of the Basmati rice indigenous to Jammu and Kashmir, India" was circulated to the participants of the session and the participants were asked to analyze the abstract and frame suitable titles. The last session of the workshop on "Scientist"

*Art*" by Dr. Rimpy Kaur Chauhan, ANDC. Scientific art has always been an essential aspect of scientific literature and publications to pictorially present one's data and message. History has evidenced multiple events whereby art has inspired scientists to comprehend out-of-the-box observations and make discoveries. All this information was disseminated among participants attending this dedicated session on graphics. Additionally, the significance of graphical abstracts was discussed, and a hands-on activity on how to read and sketch graphical abstracts was also done. Finally, a *"Scientific Quiz"* was conducted by Dr. Princy Hira to test the knowledge of participants towards scientific writing and communication.



Pic 11-14: Talk by Dr. Pushp Lata on 'Peer Review Process', Dr. Rimpy on 'Graphical Abstracts' and quiz conducted by Dr. Princy Hira

The workshop ended with the concluding remarks of Dr. Tista Prasai Joshi & vote of thanks by Dr. Pooja Bhagat, ANDC. At the end, prizes for best interjector and quiz were announced followed by a group photograph of the organizers and the participants. This report also includes the participants' list for the workshop (Annexure I) and list of winners (Annexure II).



Pic 15-17: Concluding Remarks by Dr. Tista Prasai Joshi, Vote of Thanks by Dr. Pooja Bhagat and group photograph of all the participants and organizers