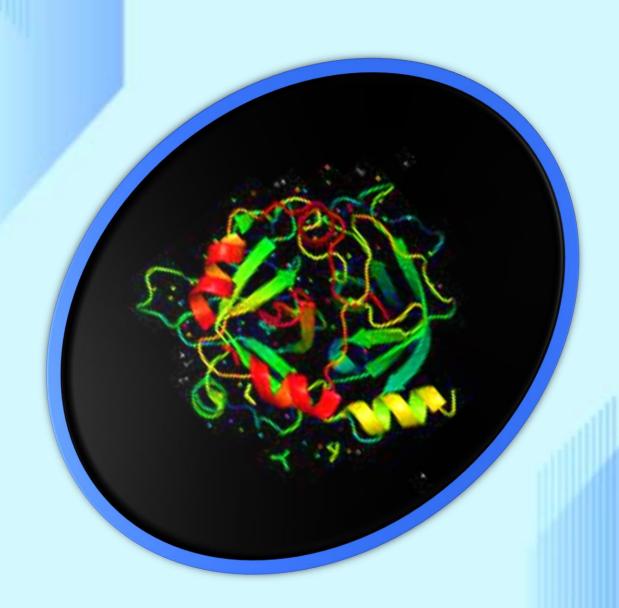
PROTEOMICS SOCIETY, INDIA (PSI)



EDITORS

Dr. Amol R. Suryawanshi, Dr. Niranjan Chakraborty, Dr. Alka Rao, Prof. Renu Deswal, & Dr. Manas Santra

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EDITOR'S MESSAGE

Dear PSI members,

It gives us immense pleasure to bring the PSI newsletter's first issue of the year 2024 for PSI members. PSI is always at the forefront to promote proteomics in India and conducts various activities throughout the year.

Like every year, our society celebrates proteomics day on March 18 at different institutions and universities aiming to engage more and more researchers in the mass spectrometry and proteomics field. This year, "One-day Symposium on "Proteomics in Biotechnology & Biomedical Sciences" was conducted at THSTI, Faridabad, Haryana with great enthusiasm. In addition, proteomics day celebration with Popular Lecture Series entitled, "Proteomics Day: Unravels Protein Dynamics" was conducted at Institute of Advanced Study in Science and Technology (IASST), Guwahati. The highlights of both the meetings are included in this issue.

Like earlier years, Advances in Proteomics Technologies (APT) 2024 workshops and International Conference took place at the Indian Institute of Technology, Bombay, Mumbai. This significant event have brought over 2000 participants from 11 different countries together. These parallel workshops were successful to engage our young researchers. The highlights of event are included in this issue.

In the upcoming events, "National Symposium and Workshop on Clinical Proteomics" (NSWCP-2024) will be conducted at BRIC-Institute of Life Sciences (ILS), Bhubaneswar from August 20-23, 2024 and 16th Annual meeting of PSI and International conference" will be conducted from November 21-23, 2024 at CSIR-NCL, Pune, the flyers of these events have been included for information of PSI members.

We hope you enjoy the collation.

Thank you,

Dr. Amol R. Suryawanshi

Dr. Niranjan Chakraborty

Dr. Alka Rao

Prof. Renu Deswal

Dr. Manas Santra

MESSAGE FROM PRESIDENT, PSI

Advancing Proteomics Together - A Mid-Year Update

Dear PSI Members,

It is with great pleasure and warmth that I extend my greetings to all members of the Proteomics Society India (PSI). As I embark on my role as President, starting January 1, 2024, I am both honored and excited to guide PSI into a new phase of growth and innovation alongside our newly elected Council members.

In the first half of 2024, the council members have worked diligently to optimize PSI's functions and enhance our role in promoting the field of proteomics and metabolomics. I am pleased to share our progress and key updates through this newsletter, a vital platform for our community.

Our Council has prioritized several critical areas that require immediate attention:

- 1. Proteomics for Clinical Applications and Agriculture: We are actively exploring the impact of proteomics in clinical settings and agriculture, striving to translate scientific advances into real-world applications.
- 2. Strengthening Industry Relations: Building robust connections with the industry is essential for fostering collaborations and securing support for our initiatives.
- 3. Global Presence: To expand PSI's influence, we are working to increase our international visibility and encourage global engagement.

To advance these priorities, we have established subcommittees comprising both senior and young PSI members. This approach not only strengthens our organizational structure but also fosters the development of young scientists, preparing them to take on leadership roles in the future. I am proud of the remarkable efforts of these committees in addressing and resolving various challenges facing our society.

Like in the previous years, this year also we celebrated Proteomics Day on March 18, 2024. This event was held simultaneously at THSTI, Faridabad, with a highly informative symposium on "Proteomics in Biotechnology and Biomedical Sciences" and at IASST, Guwahati, featuring a captivating lecture series titled "Unravels Protein Dynamics." This was followed by an online meeting of the Council.

Another significant achievement was the international conference and workshop, APT-2024 (Advances in Proteomics Technologies), held at IIT Bombay from February 17-20, 2024. This event focused on omics-based research and provided valuable opportunities for academic engagement with the international proteomics community.

The current edition of our newsletter includes detailed reports on these and other academically enriching events.

We are also excited about the upcoming events in the second half of this year. Recognizing the potential of Mass Spectrometry in clinical diagnostics, a National Symposium and Workshop on Clinical Proteomics is planned to be held on August 20-23, 2024, at the Institute of Life Sciences, Bhubaneswar. Apart from this, a metabolomics workshop is being planned at Yenepoya University, Mangalore, in the first week of September.

MESSAGE FROM PRESIDENT, PSI

This year CSIR-National Chemical Laboratory, Pune is celebrating their 75 years and we are excited to announce that the 16th Annual Meeting of PSI and the international conference on "Integrated Omics Approaches for Decoding Biological Research," will be held at CSIR-NCL, Pune in November. This event aims to bring together leading scientists to explore practical challenges and strategies in proteomics, fostering collaboration and information sharing.

In addition to our scientific pursuits, PSI is working to expand its community and inclusivity, particularly by reaching out to scientists across Asia. We are also updating our website and revitalizing our social media presence. I encourage you all to engage actively with our social media platforms.

I am also delighted to announce that the Journal of Proteins and Proteomics (JPP), a Journal of PSI, will soon welcome esteemed national and international scientists to its Editorial Board. This expansion will enhance the editorial process and reduce the time from submission to publication. I encourage you to submit your best research for consideration in JPP.

Finally, I extend my heartfelt gratitude to our sponsors, past and present Council members, subcommittee volunteers, and PSI staff for their unwavering support. Your commitment has been instrumental in achieving our milestones and creating a valuable resource for proteomics enthusiasts worldwide.

Reflecting on a dynamic and fruitful year, I look forward to our collective efforts in driving PSI and the proteomics community toward even greater accomplishments.

Wishing you all a successful and prosperous year ahead.

Best regards,

Dr. Shantanu Sengupta President, PSI

Proteomics Day Symposium

held at

Translational Health Science & Technology Institute (THSTI), Faridabad, Haryana

The Proteomics Day was celebrated at THSTI, Faridabad, Haryana on March 18th, 2024 as a **One-day Symposium on "Proteomics in Biotechnology & Biomedical Sciences"**, where eminent proteomics researchers shared their work that is demonstrate the advancements in understanding biological processes, biomarker and therapeutics discovery. This event was supported by THSTI and The Proteomics Society, India (PSI). Industry partners including ThermoFisher, Sciex and Olink also supported the event. The symposium was a huge success, being attended by all the Ph.D. scholars and researchers at THSTI as well as attendees from various institutes across Delhi-NCR. The agenda of the symposium included lectures from eminent scientists working in the field, demonstrating how proteomics/metabolomics can be used for biological understanding, and advancing biotechnology and biomedical research.





Dr. Ganesan Karthikeyan, Executive Director, THSTI, delivered the welcome address and emphasized the need for clinical proteomics and developing more robust false discovery rate control in proteomics. He touched upon the importance of understanding the workings of the proteome and applying that knowledge to develop diagnostic and therapeutic tools and techniques in order to combat diseases. He also emphasized on the importance of working on newer and better methods for limiting false discovery rates during proteomics data analysis. Next, **Dr. Shantanu Sengupta, PSI President and Senior Principal Scientist at IGIB**, reminisced on the early days of PSI and elaborated on its role in advancing proteomics in India. This was followed by an introductory speech by **Dr. Amit Kumar Yadav, Principal Scientist-II at THSTI**, thanking the guests and participants for gracing the occasion with their presence.







Dr. Subhra Chakraborty, Director NIPGR, started the symposium by her lecture on the role of various organelles in providing resistance to host plant species during a fungal infection. She emphasized the role of chitosan, a fungus-associated molecular pattern in dynamically changing the proteome and the metabolome of the host species. Dr. Chakraborty brilliantly highlighted the role of proteomics and metabolomics in identifying these changes within host cells upon infection. Her lecture was wrapped up by a small Q/A session, where Dr. Chakraborty answered the inquisitive question asked by the audience members. Dr. Chakraborty was felicitated by Dr Arvind Sahu, Executive Director, RCB.









This was followed by **Dr. Thirumurthy Velpandian, Professor, AllMS-Delhi**, with a lecture on pharmaco-omics in pharmaceutical innovations. Dr. Velpandian talked about the role of proteomics in ocular pharmacology. He presented information on a clinical trial carried out in his lab about the efficacy of drugs like natamycin, voriconazole, amphotericin-b on fungal keratitis. The highlight of his talk was to learn how to plan a clinical trial and integrate tools such as proteomics and metabolomics to enhance the success rates. Dr. Velpandian was felicitated by Dr. Renu Deswal.

Session 1 came to a close with a lecture by **Dr. Tushar Maiti, Professor at Regional Centre for Biotechnology.** He talked about the role of proteomics related to adverse pregnancy outcomes. Dr. Maiti was felicitated by Dr. T. Velpandian.

In the second session, Dr. Gururao Hariprasad from AllMS-Delhi, talked about the benefits of using proteomics as a tool to discover therapeutics that can help to tackle dementia-related diseases like Parkinson's and Schizophrenia. Dr. Hariprasad was felicitated by Dr. Tushar Maiti.





In the next talk, **Dr. Renu Deswal, Professor, Delhi University**, delivered a riveting talk on the role of proteomics in revealing the inner workings of nanoparticle-based bioengineering in plants. Dr. Deswal was felicitated by Dr. Ruchi Tandon.

To conclude the second session, **Dr. Pushkar Sharma, Professor at NII**, presented a lecture on signalling pathways in malarial parasite development. He talked about the role of proteomics and metabolomics in elucidating the significant role of proteins and metabolites involved in malarial growth. Dr. Sharma was felicitated by Dr. Amit Yadav. The lecture was followed by a lunch break.





The third and the final session of the day was kickstarted by **Dr. Pragyan Acharya**, **Additional Professor**, **AllMS-Delhi**, who talked about the importance of proteomics in understanding the role of acute kidney injury in the setting of liver cirrhosis. Dr. Acharya was felicitated by Dr. Amit Yadav.

Next lecture by **Dr. Ranjan Nanda**, **ICGEB**, was presented by his Ph.D. scholar **Ms. Shweta Chaudhary**. After a wonderful talk on the benefits of proteomics and metabolomics in the field of biotechnology, Ms. Shweta was felicitated by Dr. Renu Deswal.





Next lecture was delivered by Dr. Debasisa Mohanty, Director, NII. He talked about his findings on novel small ORFs and developing methods to predict the post-translational modifications associated with their protein genomes products. bacterial and human microbiome. Dr. Mohanty was felicitated by Dr. Amit Yadav.

The penultimate lecture of the day was presented by **Dr. Suruchi Aggarwal, Scientist C, ICMR**, who talked about the methods developed to identify and elucidate the landscape of post-translational modifications in proteomes and their role in determining the physiology of the cell. Dr. Aggarwal was felicitated by Dr. Mohanty.



The day was concluded by an enthralling lecture by **Dr. Anurag Raj, Ph.D., IGIB**, presenting a lecture on identifying the incorrectly identified variant peptides through proteogenomics tool PgxSAVy. Dr. Raj was felicitated by Dr. Pragyan Acharya.







Popular Lecture Series on Proteomics Day: Unravels Protein Dynamics
Conducted at

Institute of Advanced Study in Science and Technology (IASST), Guwahati March 18, 2024

On the occasion of Proteomics Day, the Institute of Advanced Study in Science and Technology (IASST) hosted a captivating "Popular Lecture Series on Proteomics Day: Unravels Protein Dynamics," shedding light on the fascinating realm of protein dynamic, distinguished speakers, Prof. Ashis Kr. Mukherjee, Director of IASST, and Prof. Timir Tripathi from the Department of Zoology at NEHU, Shillong, graced the event with their profound insights and expertise. Their engaging lectures captivated the audience, offering a deeper understanding of the structure-function properties of proteins and proteomics analysis.

The event provided a platform for enthusiasts, researchers, and academicians to engage in meaningful discussions and forge new connections within the vibrant proteomics community.



Understanding the dynamics of proteins, a "Popular Lecture Series on Proteomics Day: Unravels Protein Dynamics," was organized by IASST on March 18, 2024. The session, aimed at elucidating the intricacies of proteomics, featured two distinguished speakers: Prof. Ashis Kr. Mukherjee, Director of IASST, Guwahati and Prof. Timir Tripathi, Department of Zoology, NEHU, Shillong delivered insightful lectures at the event.







REPORTS ON APT-2024

Advances in Proteomics Technologies (APT) 2024 Indian Institute of Technology, Bombay February 17-20, 2024



The Advances in Proteomics Technologies (APT) 2024 workshop and International Conference took place at the prestigious Indian Institute of Technology, Bombay from February 17th to 20th, 2024. This significant event, held in Mumbai, India, brought together over 2000 participants from 11 different countries, showcasing its international appeal.

The program commenced with two days of intensive workshops from February 17th to 18th. Eight parallel sessions covered a wide range of topics, including Basic Proteomics, Targeted Proteomics, Single Cell Proteomics, Cell Surface Proteomics, Sample Preparation, Proteomics Informatics, and Biopharma Applications. These workshops provided an excellent opportunity for participants to learn specific areas of proteomics and gain hands-on experience.

On February 18th, the International Conference was officially inaugurated with a special session titled "MOOD-OMICS," focusing on cancer awareness and the application of Omics technologies for the general public. The MOOD-OMICS event provided a unique blend of scientific lectures and vibrant Indian cultural performances, including captivating dances and appearances by Bollywood celebrities.



Inaugural Event: MOOD-OMICS and Launch of APT-2024 Proceedings at IIT, Bombay

Prof. Sudarshan, Dean IR of IIT Bombay, accompanied by Prof. Matthias Mann & Dr. Alexander Makarov. Convener, Dr. Sanjeeva's speech, was followed by session moderation from a unique duo comprising a Computer Science UG of IITB, Vijay & civil service officer, Mrs. Sandhya



From February 19th to 20th, the conference featured two parallel tracks: one dedicated to Proteomics for biologists and clinicians, and the other to Proteomics for Biopharma. These sessions offered insights into the latest research and developments, highlighting the interdisciplinary nature and broad applications of proteomics. Attendees had the privilege of hearing from renowned experts such as Dr. Matthias Mann, Dr. Alexander Makarov, Dr. Parag Mallick, Dr. Bernd Wollscheid, Dr. Arun Wiita, and Mr. Brendan MacLean, among others. Additionally, the conference featured contributions from the Proteomics Society of India scientists and Early Career Researchers (ECR) from the region, fostering a collaborative and enriching environment for all participants.

Throughout the event, active participation was encouraged through quizzes, as well as oral and poster presentations by students, thereby enhancing knowledge exchange and academic discourse.

APT 2024 successfully showcased the latest advancements in proteomics and multi-omics research, providing a platform for knowledge exchange and networking among professionals, researchers, and students in this dynamic field.



Insightful popular talks from esteemed experts explaining role of genetics, led by Dr. Rajeev Sarin, genome alterations expertly discussed by Dr. Prashant, proteome dynamics elucidated by Dr. Sanjeeva, and the realm of precision medicine explained by Dr. Matthias Mann.

Some glimpses of APT-2024





Another scientific session featured insightful popular talks covering the landscape of cancer therapeutics, spanning from immunotherapy with Dr. Arun Wiita, to drug discovery with Dr. Mahesh Bhalgat. The prospective role of Al/ML was discussed by Prof. Ball, while Ramon Magsaysay Awardee Dr. Ravi Kannan shared insights on cancer patient care.



Scientific session on Indian proteomics at the Taj Palace, Mumbai

UPCOMING EVENTS



जीव विज्ञान संस्थान Institute of Life Sciences





National Symposium and Workshop on **Clinical Proteomics (NSWCP-2024)**

August 20-23, 2024

ONE DAY SYMPOSIUM: August 20, 2024

Clinical proteomics is a powerful method for understanding global proteomic dynamics in cells, tissues, or organisms. Advances in Quantitative Proteomics make it useful in clinical and biological research. This Symposium will feature invited speakers from various fields discussing their research work and experiences.

THEME

- Technical Advances in Clinical proteomics
- Applications of Clinical proteomics

INVITED SPEAKERS

- Dr. Shantanu Sengupta, CSIR-IGIB, New Delhi
- Dr. Srikanth Rapole, DBT-NCCS, Pune
- Dr. Sanjeeva Srivastava, IIT, Mumbai
- Dr. Mahesh J. Kulkarni, CSIR-NCL, Pune
- Dr. Debasis Dash, DBT-ILS, Bhubaneswar
- Dr. Amol R. Suryawanshi, DBT-ILS, Bhubaneswar

REGISTRATION

The online registration form available at ILS / NSWCP-2024 website may be filled along with payment details on or before July 21, 2024.

Symposium registration fees- Rs. 750/-

(The symposium fee covers registration kit, lunch and certificate of attendance. No accommodation will be provided).

*Limited seats available (On first come, first basis)

IMPORTANT DATES

- Last date for application: July 21, 2024 (For symposium/ Workshop & Symposium both)
- Notification of acceptance for workshop: July 23, 2024 (to be intimated by email)
- Last date of payment for workshop: July 31, 2024

THREE DAYS WORKSHOP: August 21 -23, 2024

The 3-day workshop at DBT-ILS in Bhubaneswar will provide a theoretical and practical understanding of Clinical proteomics and their applications in biomedical research, focusing on Advanced High-Resolution Mass Spectrometry-based discovery proteomics.

THEME AND CONTENT

- Basics of mass spectrometry and advances in technologies
- Introduction to mass spectrometry-based proteomics
- Strategies for protein identification and quantitative proteomics
- Workflows of a typical quantitative proteomics study
- Sample preparation practices and precautions
- Protein identification and quantification by High-Resolution Mass Spectrometer (HRMS)
- Thermo Orbitrap fusion & NeoNanoLC- A working model of high-resolution mass spectrometer
- Proteomics data analysis for relative quantification

WHO SHOULD ATTEND?

Research scholars, MD students, Post-docs and young faculties from Universities, Institutions and Medical colleges working in the field of biomedical research.

REGISTRATION

The registration request form available at ILS / NSWCP-2024 website may be filled out online (payment is not required) on or before July 21, 2024. The Committee will screen the request forms, and selected candidates will be notified through email to pay the workshop fee by July 31, 2024.

Workshop registration fees -

- Research Scholars/Students- Rs. 10,000/-
- Faculty and others Rs. 15,000/-

(The workshop registration fee covers workshop registration kit, food, workshop materials and certificate of attendance.)

*Seats available - 15

Registration & details

ORGANISERS

CONVENER

- > Dr. Amol R. Suryawanshi, Scientist-E Co-CONVENERS
- Dr. Soma Chattopadhyay, Scientist-F
- Dr. Gulam H. Syed, Scientist-E
- Dr. Soumen Chakraborty, Scientist-F

VENUE

BRIC-Institute of Life Sciences (ILS)

NALCO Square, Chandrasekharpur, Bhubaneswar, Odisha - 751023

Phone: 0674-2304329/256,8637260509,8327789772

Email: msfacility@ils.res.in; amol@ils.res.in

Web: www.ils.res.in/nswcp/

SUPPORTED BY





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UPCOMING EVENTS

16th Annual Meeting of Proteomics Society, India and

Interntional Conference on Integrated Omics Approaches for Decoding Biological Research

ABOUT THE CONFERENCE

- CSIR- NCL invites you to the Annual meeting of Proteomics Society, India and an International Conference as part of its Platinum jubilee celebrations.
- Opportunity to engage with eminent scientists and discuss integrated omics approaches to understand biology.
- A collective aim to disseminate knowledge, training and awareness among all interest groups in the broad area of proteomics and its applications.

THEMES

Biotherapeutics
Human disease biology
Omics in plant biology
Mass spectrometry applications
Molecular diagnostics
Metabolomics
One Health

INVITED SPEAKERS

- Prof. Ann Osbourn
 John Inns Institute, UK
- Dr. Arun Sreekumar
 Baylor College of Medicine,
 Houston
- Prof. Graham Roy Ball Anglia Rustin University, UK
- Dr. Manjunath Joshi

Manipal School of Life Sciences, Manipal

Dr. Nathan Basisty
 National Institute on Aging,
 Maryland

- Prof. P. Balaram NCBS, Bangalore
- Prof. Prabodh Trivedi CSIR- CIMAP, Lucknow
- Prof. Prasanna Venkataraman ACTREC, Navi Mumbai
- Dr. Radhika Venkatesan IISER, Kolkata
- Dr. Rakesh Mishra TIGS, Bangalore
- Dr. Sergey Maltisky
 Weizmann Institute of Science,

- Dr. Shibdas Banerjee
 IISER, Tirupati
- Dr Siddhesh Kamat IISER. Pune
- **Dr. Soumen Manna** SINP, Kolkata
- Dr. Sumit Kumar Singh IIT- BHU, Varanasi
- Dr. Vinay K. Nandicoori CCMB, Hyderabad
- Dr. Yashwant Kumar THSTI, New Delhi



November 21 to 23, 2024

VENUE

CSIR- National Chemical Laboratory, Pune

REGISTRATION DETAILS

- Delegates Rs. 6000
- PSI Delegates- Rs. 5500
- Students- Rs. 4000
- PSI Students- Rs. 3500
- Industry delegates- Rs. 8000

IN CASE OF ANY QUERIES,
PLEASE EMAIL US AT: psicon24@gmail.com

CONVENERS

- Dr. Ashok P. Giri
- Dr. Mahesh J. Kulkarni

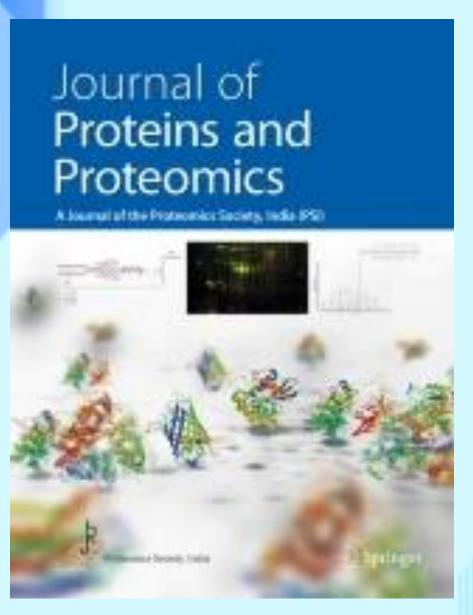
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https://psicon24.com

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JOURNAL OF PROTEIN AND PROTEOMICS (JPP)

A Journal of the Proteomics Society, India (PSI)



Publish your work in JPP

Journal of Proteins and Proteomics (JPP), administered by Proteomics Society of India (PSI), is a peer reviewed international journal envisaged to serve the world wide community of researchers and teachers dealing with the challenges of proteins and proteomics research resulting in an improved understanding of protein science in general. JPP publishes research articles, reviews, essays, commentaries, reports, letters, communications, teaching material, in memoriam, recollections, profiles of scientists, methodology, trends and tips, intellectual property related articles etc. with focus on Protein Science and Proteomics.

Visit Journal website at Springer Nature
https://www.springer.com/journal/42485



Proteomics Society, India

Registered under Andhra Pradesh Societies Registration Act. (35/2001) (Regd. No. 286/2009)

"Proteomics Society India", is formed to provide a forum to pursue an agenda that will meet this objective. The Society which is strongly dedicated to education for research in Proteomics.

Location

CSIR-Centre for Cellular & Molecular Biology (CCMB), Uppal Road, Habsiguda, Hyderabad - 500 007 Telangana - INDIA.

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Join Us

For Society Membership forms Click on

https://proteomicssociety.in/MemberShip.aspx

