



**Archana Sharma Foundation of Calcutta
(ASFC)
Department of Botany
University of Calcutta**

Newsletter 2022

FROM THE PRESIDENT'S DESK

After two consecutive worrisome years, we are almost getting back to our normal routine duties organizing either offline meetings or holding the meetings in the hybrid mode. Nevertheless, last year (2021) was by all means a difficult year, undoubtedly it would be appropriate to mention here that all the activities undertaken by the Archana Sharma Foundation of Calcutta (ASFC) during the last calendar year were made possible only because of the proactive support and coordination of the members. And during such a difficult time, I would like to thank all the members of ASFC, especially the members of the Governing Body and all the Editorial Board members of '*The Nucleus*' for staying beside the Foundation and actively participating in all the academic and social activities during the new normal situation, simultaneously complying with their own respective academic responsibilities. We wish to maintain the similar momentum of the ASFC by fulfilling its mandates and targets in upcoming financial year.

Over the year we, the Editorial Board (EB) Members, of '*The Nucleus*' have been working for the journal '*The Nucleus*' and we are also trying to improve the quality of the journal to fulfill the objective of ASFC. We appreciate the time and energy EB members are spending for the journal '*The Nucleus*', despite their own academic commitments. The print versions of three issues of volume 64 were published within the stipulated time, which includes a special theme issue (number 4 in the Series) on "Epigenetics and Chromatin Dynamics: Role in Health and Disease", Edited by Dr. Somnath Paul.

Executing the objectives of the Foundation was extremely challenging for us. ASFC is working with other scientific communities - West Bengal Academy of Science & Technology, All India Congress of Genetics and Genomics with the common public having scientific outlook for the dissemination, amalgamation and enhancement of knowledge in science and technology.

It was a pleasure to serve the Foundation till date. Last year we have launched the Foundation's website, <<http://archanasharmafoundation.com>> a major window to the academic world. We are striving to make the website more informative and more attractive.

At the same time we have also digitized old volumes of the journal 'The Nucleus' from the starting year 1958 to 2009 comprising of Volumes 1 to 52.

Keeping our focus on the objectives of the society, since the inception of the ASFC we are helping financially the less privileged, needy girl students of Sri Sarada Math, Dakhineswar, in their academic activities.

To offer our respectful tributes to our mentors the '4th Professors Archana Sharma and A K Sharma Memorial Oration' was organized on 7th June, 2021, in the form of a National online Seminar by Dr. Rajeev Varshney, FNA, FASc, FNASc, FNAAS and J.C. Bose National Fellow. The lecture was on "Genomic Interventions on Crop Improvement". The lecture was highly appreciated by the participants.

We have sincerely tried our best to project the foundation's activities on the Website.

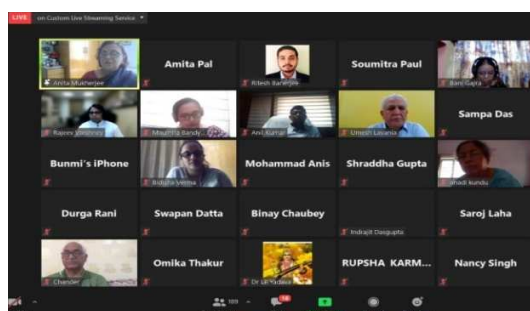
I am indeed honoured and privileged to serve the foundation for the last 4 years accomplishing the vision of my mentors and missions of the foundation.



Amita Pal

ACTIVITIES OF THE FOUNDATION

The '4th Professor Archana Sharma and Professor A K Sharma Memorial Oration' was organized on 7th June, 2021, in the form of a National Seminar (on-line) by Dr. Rajeev Varshney, FNA, FASc, FNASc, FNAAS and J.C. Bose National Fellow.



Professor Varshney delivered talk on the Genomic interventions for crop improvement with reference to food security. In the context of ever-growing population and adverse impacts of climate change on agriculture he mentioned about the fundamental changes that are needed in the conventional breeding framework in order to respond adequately to the growing food demands. The lecture included the advances in genomics that have provided new concepts and tools to make plant breeding procedures more precise and efficient. In his presentation, he highlighted the key breakthroughs in plant genome sequencing and explained how the presence of these genome resources in combination with phenotyping and informatics has revolutionized the procedures of trait discovery and manipulation. He mentioned how the benefits of the genomics-assisted breeding approaches including marker-assisted backcrossing, haplotype-based breeding and genomic prediction have accelerated the development of high-yielding, climate resilient and nutrition-dense varieties with broader genetic base. He also emphasized that besides genomic interventions, strengthening varietal release and seed distribution systems are also required in delivering genetic gains at farmer's field. The lecture was attended by a high number of participants from India and abroad through Zoom meet with interesting on- line interaction with the participants.

(The Newsletter was prepared with the assistance of Anita Mukherjee & Maumita Bandyopadhyay)