

Valedictory Function of the XXXVII Training Programme on Science Communication and Media Practice of ISNA

The Indian Science News Association (ISNA) hosted its Certificate Award Ceremony for the XXXVII Training Programme: Certificate Course on Basic Training on Science Communication and Media Practice on the 30th September, 2024. This was a valedictory session for the 8-week-long online Certificate Course on Basic Science Communication and Media Practice. The ceremony was conducted in the evening through an online session and marked the launch of Volume 3, Issue 2 of the Bengali *e-*

Prasanta K. Bose, Chairman of the XXXVII Training Programme who warmly welcomed all participants and guests. He was succeeded by Professor Manas Chakrabarty, the Honorary Secretary of ISNA who made a few remarks mentioning the success of the participants and their training in furthering science communication. This was followed by the declaration of results of the online Basic Course by Dr. Amit Krishna De, Convener and Honorary Secretary of ISNA.

Finally, it was time for the official launch of the Bengali *e*-paper 'Bigyan Kahan', which continues to be a very effective medium for the dissemination of scientific knowledge and popularisation of science. Chief Guest Shri

Biswajit Matilal addressed the meeting soon after the release. He shared with the audience his valuable experience in corporate communication and journalism. He told them how effectively media practices can bridge gaps between scientific communities and the public. Mr. Matilal found the naming of the Bengali *e*-paper 'Bigyan Kahan' quite fascinating and befitting and appreciated such efforts on the part of



paper 'Bigyan Kahan', a publication for the dissemination of scientific knowledge amongst the public at large. The session was graced by the Chief Guest, Shri Biswajit Matilal, Vice-President of Corporate Communication at Birla Corporation Limited and a former senior journalist with The Statesman. His presence emphasized the importance of science communication and media practice in this information era. The session was anchored by ISNA alumni Urbi Rai and Tritisha Das and presided over by Dr. K. Muraleedharan, President of ISNA, and former Director of CSIR-CGCRI, Kolkata, India. Dr. Muraleedharan ensured online that both the scientific and communication aspects of the meeting were guided by able hands. The programme started at 3:30 p.m. with a Welcome Address by Shri

Editors and contributors. As a part of the ceremony, Dr. Muraleedharan also delivered a Presidential Address. He expressed his views on this vital branch of science communication along with its importance to modern society and encouraged the participants of this endeavor to its field-specific application with renewed vigor and commitment. The closing event took place with Prof. Prabir Kumar Saha, Honorary Treasurer of ISNA who delivered a Vote of Thanks. □

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Celebrating a Decade of Excellence: The 10th Professor Asima Chatterjee Foundation Oration



Professor Asima Chatterjee Foundation hosted its Tenth Oration Lecture at a function held on September 23, 2024 on the occasion of her 108th Birth Anniversary. The function took place in a hybrid mode at the Meghnad Saha Auditorium, Rashbehari Siksha Prangan, University of Calcutta, 92 Acharya Prafulla Chandra Road and held online through Google Meet platform. Each year, this function is attended by scientists, researchers and academicians from across India and beyond, fostering discussions on recent breakthroughs in Chemical Sciences and Medicinal Research. This Oration provides a platform to inspire future generations and celebrate achievements in the scientific community, reflecting Professor Chatterjee's dedication to innovation in the field of Chemical Sciences.

The function commenced at 2.00 P.M. with the offering of floral tributes to the portrait of Professor (Mrs.) Asima Chatterjee followed by the invocation song sung by Pratysa Adak, a research scholar of the Chemistry Department.

The Welcome Address was delivered by Dr. (Mrs.) Sumitra Chaudhuri, Secretary PACFK. Dr. Chaudhuri paid her tributes to Professor Chatterjee - a remarkable scientist, educator and an influential figure in shaping scientific policy in our country, and an icon for women scientists. She is globally recognized for her significant contributions to research and education in Organic Chemistry and related fields. Asima Mukherjee was born in Kolkata (then called Calcutta) on September 23, 1917 to Dr. Indranarayan Mukherjee and Sm. Kamala Devi. She obtained her M.Sc. degree in 1938 with Organic Special paper (Major in modern parlance) from University College of Science, University of Calcutta. She carried out research with Dr. Prafulla Kumar Bose, one of the pioneering researchers on Natural Products Chemistry in India.

She received the Nagarjuna Prize and Gold Medal in 1940, Premchand Roychand Studentship in 1942, Mouat

Medal in 1944. She was the first woman to be conferred a Doctorate of Science (DSc.) by an Indian University (University of Calcutta) in 1944 on the merit of her research contributions on Naturally Occurring Indole Alkaloids and Coumarins. In 1940, at the age of only 23 years, she joined Lady Brabourne College, Kolkata, as the Founder-Head of the Department of Chemistry. She was appointed Honorary Lecturer in the Department of Chemistry, University of Calcutta in 1944. In 1945 she married Dr. Baradananda Chatterjee, FNA, a well-known Physical Chemist who was an authority on Soil Science and Corrosion. He became Professor and Head of Department of Chemistry and Geology, Bengal Engineering College. In USA, she worked with Professor L. M. Parks, University of Wisconsin, on naturally occurring glycosides (1947-1948); then with Professor L. Zechmeister, California Institute of Technology, Pasadena, on carotenoids and provitamin-A (1948-1949), and was awarded the coveted Watamull Fellowship. She then worked with Professor Paul Karrer, NL, University of Zurich, Switzerland (1949-1950) on biologically active indole alkaloids which became her life-long interest. During her stay at the Californian Institute of Technology, she came into close contact with Professor Linus Pauling, NL. She maintained her life-long association with Professor Linus Pauling and Mrs. Ava Pauling.

In 1954 she was appointed Reader in the Department of Chemistry, University of Calcutta, then in 1962 Kumar Guruprasad Singh Khaira Professor of Chemistry, a Chair she held till her retirement in 1982.

She contributed to the development of drugs based on the practice of Indian Traditional Medicine. She was the inspiration for the development of two Ayurvedic combination drugs - Ayush-56, a highly successful rehabilitation drug in the treatment of epilepsy and behavioural epileptic disorders, and Ayush-64, a highly potent antimalarial drug which was later used as an adjunct to standard care in mild to moderate COVID-19 cases. These are landmarks in the use of herbal medicines without any side effects.

Professor Chatterjee made significant contributions on the Chemistry of diverse classes of Natural Products from Indian medicinal plants, particularly in the fields of indole, isoquinoline and steroidal alkaloids and also on polyphenolics and terpenoids. She made substantial contributions to Synthetic Organic Chemistry and study of Organic Reaction Mechanisms. She published 355 research papers, and 20 reviews and book chapters.

She established the UGC SAP Programme and ultimately the Centre of Advanced Studies in Natural



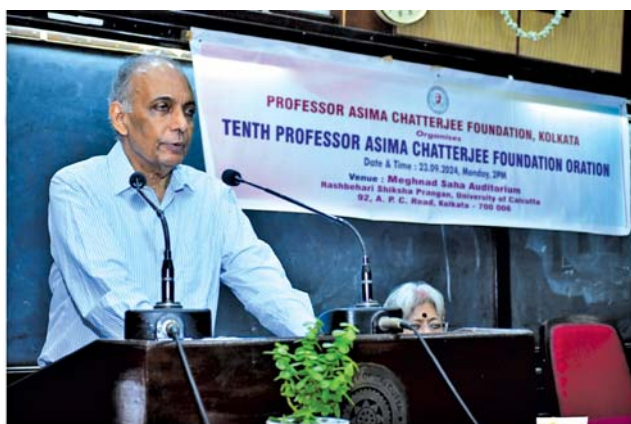
PACFK Secretary Dr. Sumitra Chaudhury

Products. She was the Founder of a multi-disciplinary Research Institute on Ayurvedic Sciences, which is now named the Central Ayurveda Research Institute, under the Ministry of Ayush, situated at Bidhannagar, Kolkata.

Professor Asima Chatterjee created a school of Research on Natural Products. She guided 59 PhD and three DSc students. Several of her students rose to positions of eminence in the scientific community, establishing their own research schools in different Universities and Institutes - in India, Europe and America - where the work inspired by Professor Chatterjee was continued.

She was the Chief Editor of the six-volume series, *The Treatise of Indian Medicinal Plants*, CSIR, India. She edited and revised the six-volume *Bharatiya Bonousudhi* published by University of Calcutta.

Among the many awards and recognitions she received, particular mention may be made of the following – Fellow of the Indian National Science Academy (FNA) in 1960; Shantiswarup Bhatnagar Award (1961); Asutosh Mookerjee Award (the highest ISCA Award, 1989); elected General President of Indian Science Congress Association



PACFK Working President Professor Avijit Banerji

(1975 Session) – the first woman scientist to receive this unique honour; honoured with the title ‘Padma Bhushan’ by the Government of India (1975). She was nominated by the President of India to be a Member of the Rajya Sabha (February 1982-April 1984; May 1984-May 1990) as a scientist-academician. She contributed significantly to science policy formulations during her tenure in Rajya Sabha.

She was deeply involved in the Popularisation of Science through Bangiya Bijnan Parishad. She was also actively involved with ISNA for 50 years since 1956, serving in various roles ultimately holding the position of Vice-President from 1985 to 2006.

Professor Dhrubajyoti Chattopadhyay, Vice-Chancellor of Sister Nivedita University, Kolkata graced the function as the Chief Guest. He delivered an eloquent lecture on the life and works of Professor Asima Chatterjee He mentioned his long association with Professor (Mrs.) Chatterjee at the University of Calcutta. She encouraged all women scientists in India to pursue and nurture deep love towards science. He pointed out that she has served as a source of inspiration for all her students. Professor Chattopadhyay mentioned how Professor Chatterjee stated in her last years “I wish to work as long as I live”.



Professor Dhrubajyoti Chattopadhyay, Chief Guest

Professor Avijit Banerji, Working President of PACFK, presented his Presidential Address. He concisely articulated the genesis and future plans of PACFK. After her sad demise in 2006, students and admirers of Professor (Mrs.) Asima Chatterjee established the Professor (Mrs.) Asima Chatterjee Foundation, Kolkata (PACFK) in 2015 to perpetuate her memory to inspire the future generations for further upliftment of the status of Chemical Education and Research in India. Scientific activities of PACFK include the organisation of International Conferences, National seminars and webinars. Since 2015, a major activity

of PACFK has been organising 'Oration Lectures' each year in September to mark her birth anniversary.

He mentioned a number of accolades given to Professor Chatterjee in the recent past - Google celebrated her 100th birthday on September 23rd, 2017 with a special Doodle tribute to her; a Chapter devoted to her in the book 'Indian Scientists: the Saga of Inspired Minds' of Vigyan Prasar; Plenary Session entitled 'Investigations of Indian Medicinal Plants - A Post-Centenary Tribute to Professor (Mrs.) Asima Chatterjee' at the 107th Session of the Indian Science Congress Association at Bangalore, 2020. The Asiatic Society, Lady Brabourne College and Scottish Church College organised Conferences on the life and works of Professor Chatterjee. The Indian Chemical Society had an online Session devoted to Professor Chatterjee at their Annual Convention in 2021. Two lectures were given by Professor Julie Banerji in Seminars organised by the IIT, Indore and WIEE. A Chemistry Building in IIT,



Professor Avijit Banerji presenting the memento to Professor Amitabha Das

Salt & Marine Chemicals Research Institute, Bhavnagar, Gujarat in 1993. He retired in December 2019 as Director of

this Institute and Distinguished Professor of AcSIR. In between, he served at the CSIR-National Chemical Laboratory in Pune as the Chief Scientist from 2013 to 2016. Since January 2020, he has been a Senior Professor in Chemical Sciences at the Indian Institute of Science Education and Research, Kolkata. He is an elected Fellow of three major Science Academies in India - Indian National Science Academy, National Academy of Science, Indian Academy of Science. He is the recipient of the



A part of the audience at the start of the Proceedings

Jodhpur has been named after Professor Chatterjee, as well as Seminar Halls at DST Headquarters and IISER, Kolkata.

Professor Banerji then introduced Professor Amitava Das. He completed his basic education at Jadavpur University in Kolkata and was awarded a PhD from the same University in 1989. Following his post-doctoral research with Professor Jon A. McCleverty (University of Birmingham, UK) and with Professor M. D. Ward (University of Bristol, UK), he initiated his independent professional career at CSIR-Central



Group photo at the end of function

SERB-J. C. Bose National Fellowship since 2017. He received Bronze (2009) and Silver (2017) medals from Chemical Research Society of India (CRSI) for his contributions to Chemical Sciences. His research interests focus on supramolecular chemistry, photoinduced processes, molecular recognition, biomarkers and bioimaging and functional nanostructures. Professor Amitava Das has been the Associate Editor for Science since 2022.

Professor Das delivered the Tenth Oration lecture entitled “NANOSTRUCTURED MOLECULAR ASSEMBLIES FOR THERANOSTIC APPLICATIONS”. He mentioned that his recent research focus has been on designing molecules, materials or molecular composites, which can deliver therapeutically active molecules, reactive species or molecular assemblies to the disease site. Challenges lie in maintaining the desired therapeutic efficacy, site specificity and minimal systemic cytotoxicity towards human physiology. He then went onto explain the attempts which have been made by his group recently to address this complex issue using purpose-built stimuli-responsive therapeutics. Professor Das also spoke about advances achieved in utilising the optoelectronic properties of the purpose-built molecular assemblies which have contributed significantly to designing various stimuli-responsive drug delivery systems for improving drug efficacies. In his Oration lecture he discussed some of the recent efforts made by his research group for illustrating the proof-of-concept of designing appropriate prodrug or molecular composites for treating cancer or certain bacterial stains. Professor Das demonstrated the phenomenon known as Stimuli-Responsive Supramolecular Adduct for the induction of Cell Apoptosis. He explained the use of Supramolecular Adduct as a Therapeutic option and N-Stapled short peptides as Bimodal Therapeutic Agent for Triple Negative Breast Carcinoma.

In concluding he paid his respectful homage to the memory of Professor (Mrs.) Chatterjee for her ground-breaking research on Natural Products. Professor Chatterjee

was a celebrated woman scientist who made notable contributions not only in the field of chemistry but also in the advancement of scientific temperament.

After the Oration lecture, Professor Avijit Banerji presented the memento to Professor Amitava Das on behalf of PACFK.

This prestigious event was very well attended. About 200 participants present at the venue included a large number of MSc students and PhD scholars of the Chemistry Department of the University of Calcutta. Present Faculty members and retired Faculty members who had studied and carried out research at the Chemistry Department attended in large numbers, both in the offline and online mode. Online attendees were about sixty, including scientists from all over West Bengal, from Uttarakhand, Gujarat, Kerala, Telengana, Rajasthan, Maharashtra, Uttar Pradesh and also from China, Saudi Arabia and USA.

Professor Dilip Maiti, Vice-chancellor, Biswabanga University and his team of research scholars from the Chemistry Department, University of Calcutta organised the function. Professor Amit Ray, Secretary of the University College of Science made the necessary arrangements. Shri Biplab Basu and his team made the technical arrangements. Krishna Chattopadhyay and Prakash Mandal acted as the anchors.

The two and half hour long programme concluded with the formal vote of thanks proposed by Professor Manas Chakrabarty, Assistant Secretary of PACFK.

Finally, I would like to express my sincere thanks and gratitude to Professor Avijit Banerji, Working President, PACFK for providing the photos of the programme and also for going through this write up. □

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