

Annual Reports of the ASC to General Body on 20th September 2019 (October 2018 to September 2019)

1. The Annual General Body meeting of the Academy of Sciences, Chennai held on 6th October 2018 at 3.30 pm at Prof. V. Devanathan Hall, Dept. of Nuclear Physics, University of Madras, Guindy Campus, Chennai-25.
2. To commemorate the Nobel Prize in physics a Special Lecture on 'Fascinating tools made of light beams - Ultrafast and Ultrasmall' by Dr. Sivarama Krishnana, Department of Physics, IIT Madras, was arranged on 19th November 2018; 3.00 pm. at Dept. of Nuclear Physics by Dr. J. Kumar, Director Seminars Programs. The students and faculty from city colleges and educational institutions participated in the program.
3. *Young Scientist Award 2018 & Olympiad Ceremony:*
Six young researchers from the streams of Mathematical Sciences, Physical Sciences, Chemical Sciences, Biological Sciences and Engineering & Technology were awarded the Young Scientist Award for the year 2018. The award ceremony was held at Chemical Sciences Auditorium, University of Madras, Guindy Campus on 15th Mar 2019, at 4.15 pm. Padma Shri Prof. M. Anandakrishnan, former president, Academy of Sciences, Chennai, presided over the Function. Padma Bhushan Prof. T. Ramasami, Former Secretary, Dept. of Science & Technology, Govt. of India, was the Chief Guest of the function, Prof. V. Devanathan, former president, Academy of Sciences, Special Invitee for the function.

The recipients of the Young Scientist Award 2018

Mathematical Sciences (Saraswathy Srinivasan Prizes)

Dr. Santanu Sarkar, Dept. of Mathematics, IIT M, Chennai

Physical Sciences (Saraswathy Srinivasan Prizes)

Dr. R. Sivakumar, Dept. of Physics, Alagappa University, Karaikudi

Dr. M. Arivanandhan, Centre for Nanoscience and Technology, Anna University

The awards are made jointly and will be shared equally.

Chemical Sciences (Saraswathy Srinivasan Prizes)

Dr. Srinivasan Sampath, Dept. of Material Science, Central University of Tamilnadu

Biological Sciences (Saraswathy Srinivasan Prizes)

Dr. M. S. Kiran, Biological Materials Laboratory, CLRI, Chennai.

Engineering and Technology (Dr. M. Anandakrishnan Prize)

Dr. S. Mathava Kumar, Dept. Civil Engineering, IITM, Chennai

The awardees in each stream were presented with a cash prize of Rs. 20,000/- along with a certificate and a shield. The award was sponsored by Saraswathy Srinivasan Trust for Basic Sciences and Prof. M. Anandakrishnan Prize for Engineering & Technology for the first time from the endowment funds.

The awardees presented their work at the congress of eminent academicians before the Award ceremony. Dr. K. Sethupathi, Head, Dept. of Physics, IITM & Dr. C. Venkateswaran, Chaired the Mathematical & Physics sciences section. Dr. S. Sriman Narayan and Dr. V. Subramanian, Executive members Chaired the Chemistry sciences and Engineering & Technology Section. The Executive council members and Fellows of the Academy and Students from different colleges were participated and interacted with the Awardees.

The newly elected fellows were honoured with the Fellowship certificates by Prof. Maruthamuthu, President, Academy of Sciences in the presence of Dr. R. Asokamani, Vice-president, Dr. J. Kumar, Vice-president, Dr. A. Stephen, Secretary, Dr. G. Anbalagan, Treasurer, Dr. N. Vasudevan, Joint - Secretary & executive members. The young scientists and newly elected fellows motivated the students & research scholars to uphold the tradition and scientific culture of Tamilnadu.

4. *The Summer Training Program (STP- 2019)*

The Summer Training Program (STP- 2019) for Physics, Chemistry and Biology was conducted during the period 28th May to 17th June, 2019 at University of Madras with the resource persons drawn from the neighbouring institutions. The participants from different colleges of Tamilnadu have registered for the programme. They were provided with training kits. Prof. P. Maruthamuthu President presided over the function and Dr. J. Kumar, Vice-President introduced the chief guest, Dr. Mylswamy Annadurai Vice-President, TANSC and he delivered the inaugural address. Prof. V. Devenathan, former president, along with the respective Directors of Mathematics, Physics, Chemistry and Biology participated the function.

The selected out-station participants were accommodated in the Anna University Hostels. The boarding and lodging charges were met by the STP-2019, supported by the Science City. The outstation participants were provided with travel expenses from their place of residence and back. The local candidates have been provided with lunch on all the days during the training period. The participants were encouraged to give seminar talks. Visits to IGCAR, Kalpakkam, IIT Madras, were arranged as a part of the program.

Valedictory function of STP-2019 was organized on 17th June 2019, at Chemical science Auditorium, University of Madras. Mr. U. Sagayam, I.A.S, Vice-Chairman, Science City was the Chief Guest for the function. Office-bearers of the Academy, Executive council members and Fellows of the Academy, Faculty members, from University of Madras & Anna University were present in the function along with the participants.

The feed-back received from the participants expressed the welcoming attitude and the awareness & benefits they imbibed from the program. They stated that it gave them good inputs in shaping their future career.

5. The Academy of Sciences, Chennai (ASC), The Alladi Centenary Foundation (ACF) and The M.S. Swaminathan Research Foundation (MSSRF), jointly organized the Alladi Diary - Memoirs of Alladi Ramakrishnan, release function; Editor: Krishnaswami Alladi; Publisher: World Scientific Publishing Company). It was released by Prof. M.S. Swaminathan, Chairman, MSSRF on 8 May 2019: 10 A.M, M.S. Swaminathan Research Foundation Speakers: Prof. Krishnaswami Alladi (University of Florida), Mr. Gopalakrishna Gandhi (Former Governor of West Bengal) Prof. M. Anandakrishnan (Former Vice Chancellor, Anna University). The Academy honoured the speakers.

6. Special Lectures:

A guest lecture on 'Waste to wealth Innovative Solution: Microbial Approach' by Dr. Shaon Raychaudhuri, Tripura University was arranged on 15th April 2019, 2.30 pm at Centre for Environmental Studies, Anna University. The students and research scholars attended the lecture.

To commemorate the 'Chandrayan-II mission a Popular Lecture on "*Space*" by Dr. Mylswamy Annadurai Vice-President, Tamilnadu Science and Technology center (TANSC) was arranged on 12th June 2019; 11.00 am. at Raman Auditorium, Anna University by Dr. J. Kumar, Director Seminars, Academy of Science. The students and faculty from city colleges and educational institutions participated in the program. A very good response from the students and teaching community and the talk was more than two hours. Executive council members and Fellows of the Academy were also attended the lecture.

A guest lecture on 'Recirculation of Leachate in Landfill and remediation of Polluted Soils' by Prof. Fulvia Chiampo, Torino, Italy was organized on 18th July 2019, 2.30 pm at Centre for Environmental Studies, Anna University. The students attended the lecture.

A talk on 'Can we transform semiconductors to topological insulator' by Dr. G. Vaitheeswaran, School of Physics, University of Hyderabad, on 29th August 2019, 3.00 pm at Crystal Growth Centre, Anna University, Chennai. Prof. J. Kumar, Programme coordinator welcomed the gatherings. The students, research scholars and faculty from colleges and research institutions attended the lecture. Executive council members and Fellows of the Academy were also attended the lecture.

7. EC meetings:

Four Executive Council meetings were held during the year 2018-19 on the following dates: (i) 18/12/2018 (ii) 25/02/2019 (iii) 25/07/2019 (iv) 20/09/2019 at the Department of Nuclear Physics to discuss the administrative matters of the Academy and also to plan the Academy activities. Dr. P. Maruthamuthu, President of the Academy presided over these meetings.

This Report is placed before the General Body for approval.

Dr. A. Stephen
Secretary