

KERALA ACADEMY OF SCIENCES

THIRUVANANTHAPURAM

(www.kas.org.in)



ANNUAL REPORT

(March 2019 - March 2020)

Honourable President, Vice Presidents, Joint Secretary, Treasurer, Executive Council Members, former office bearers, respected Fellows and Life Members of the Academy;

The AGB meeting of KAS, held on March 17th, 2018 at Thiruvananthapuram, elected the new office bearers with Prof. Dr. G. M. Nair as the President. The last AGB meeting of KAS was held on 22/06/2019, at Hotel Pankaj, Thiruvananthapuram, and due to the present COVID-19 pandemic, the present AGB meeting could not be held so far. The EC meeting held on 26/06/2020, online in Google Meet, approved the postponement of the AGB meeting in the present pandemic situation, and recommended to conduct the AGB meeting online on a later date. As there are some urgent mandatory items requiring approval of the GB, the present online meeting is arranged. As the term of the present committee was over by March 2020, and elections cannot be held online, the EC approved the extension of the present term of office bearers to another consecutive term in the wake of the COVID 19 pandemic and suggested to get this decision ratified and approved by the ensuing online AGB Meeting.

I have great pleasure to report the activities of the Academy for the second year for discussion and endorsement by the General Body of KAS

1. Membership

The Academy has 13 Hon. Fellows, 68 Fellows and 549 Life Members. During the reporting year 37 new life members joined the Academy and I am happy to welcome all the new Life Members to the Academy and urge their continuous support in the activities of KAS.

2. Science Popularization Activities

The previous year KAS has organised different programmes that include national seminars, important science and technology day observations and student outreach programmes.

- I. **Science Meet on Climate Change- Challenges and Impacts:** Kerala Academy of Sciences (KAS), in association with Sree Vidyadhiraja Swami Mahasamadhi Peedom, Panmana Asramam, Kollam and Association of British Scholars, Thiruvananthapuram Chapter, has organised a Science Meet on Climate Change- Challenges and Impacts at

Panmana Asramam, Kollam, on 5th May, 2019. Theme presentations were delivered by Dr. M. Shaneeth, Vice-President, KAS and Prof. Dr. A.K. Shareef, College of Agriculture, Vellayani. Prof. Dr. G.M. Nair, President, KAS, Prof. Dr. Jancy James, former VC, Mahatma Gandhi Uty, Kottayam, Dr. K. B. Rameshkumar, KAS, Dr.Sreejith, KAS and Sri. R.K. Pillai, Panmana Ashram participated in the programme.

II. **KAS Foundation Day Seminar:** A seminar on the topic ‘Challenges in Emerging Virus and Bacterial Diseases’ was organized at Mar Dioscorus College of Pharmacy, Sreekaryam, Thiruvananthapuram, on 16th November, 2019, as part of the KAS foundation day observation. The programme consisted of special address on challenges in health sciences by and also key note address and theme presentation on the seminar topic. Prof. Dr. P. R. Sudhakaran, Former President of KAS delivered special address and he gave an outlook on the scientific advancements in bacterial and virus research. Prof. Dr. G.M. Nair, President, KAS, delivered the key note address on the topic ‘Emerging Virus Diseases’. Dr. Sabu Thomas, Principal Scientist, RGCB, took the theme presentation on the topic ‘Antibiotic Drug Resistance Burden in Kerala’. Dr. Madhu C. Divakar, Principal, Mar Dioscorus College of Pharmacy, Mrs. Rachel Mathew, Vice Principal, Mar Dioscorus College of Pharmacy, Fr. Mathew Ninan, Administrator of Mar Dioscorus College of Pharmacy, Dr. V. George, Governing Body member of Mar Dioscorus College of Pharmacy, Dr. K. G. Ajithkumar, former general Secretary, KAS and Dr. K. B. Rameshkumar, Gen. Sec., KAS, and Prof. K. T. Augusti, Founder Secretary of KAS have also participated in the programme. Around 125 delegates including students, faculty and scientists participated in the programme.

III. **Outreach Programme for Higher Secondary Science Students:** KAS, in association with ‘Sree Chitra Tirunal Institute for Medical Sciences and Technology’ (SCTIMST) has organized ‘Outreach Programme for Higher Secondary Students of Science Stream’, at BMT Wing of SCTIMST, Poojapura, Thiruvananthapuram. The programme consisted of presentation on biology related subjects by SCTIMST scientists, introduction to the products and activities of SCTIMST, visit to the Applied Biology Laboratories, interaction with scientists and students feedback session. Apart from Scientists from SCTIMST, scientists representing KAS have also interacted with the students.

In each sessions, a brief introduction of the programme was given by Dr. P. V. Mohanan, while the products and services of SCTIMST were elaborated by Dr. Anoopkumar, and a short presentation on the activities of SCTIMST was made by Dr. Prabha D. Nair and Dr. Kamalesh Gulia. The students visited the laboratories of 3D-bioprinting, Scanning Electron Microscope, Thrombosis Research, Histopathology, Animal facility, Molecular

Medicine and had interactions with the scientists. Dr. Renjith P Nair and Dr. N. S.Remya, SCTIMST, Prof. Dr. G. M. Nair, President, KAS and Dr. K. B. Rameshkumar, Gen. Sec. KAS also interacted with the students. Dr. P. V. Mohanan presented certificates to the students. As per the feedback of the students and teachers, the programme was a great motivation for the students to take basic science as their future career option.

Three sessions of the programme were organized, with around 30-40 students from the following Higher Secondary Schools.

- Sarvodaya Central Vidyalaya, Nalanchira, Thiruvananthapuram, 17.1.2020
- Govt Girls HSS, Nedumangad, Thiruvananthapuram, 24.1.2020
- Govt. Vocational and HSS, Karakulam, Thiruvananthapuram, 31.1.2020

IV. **National Science Day-2020:** Kerala Academy of Sciences (KAS) has observed the National Science Day-2020, by organizing a Seminar on 'Women in Science' at Govt. Arts College, Thiruvananthapuram on 28th February 2020. Prof. Dr. P. R. Sudhakaran, Former President, KAS, inaugurated the programme. Dr. Kamalesh K Gulia, Scientist F & In-charge, Sleep Research Division, BMT Wing, SCTIMST, Poojappura, TVPM, delivered the theme presentation on 'Women in Science, Nurturing their Dreams'. Dr. Asha S Nair, Scientist F, Cancer Research Division, RGCB, TVPM, took the presentation on 'Culprits behind Cancer- Catch them early'. Dr. B. Unnikrishnan Nair, Principal, Govt. Arts College, TVPM, Dr. Sheela K. L., Vice Principal, Govt. Arts College, TVPM, Dr. S. Biju, Convener, Science Club, Govt. Arts College, TVPM, Dr. K. B. Rameshkumar, Prof. Kaleysa Raj, Prof. Augusti, Dr. Raveendran Pillai, Dr. Jayashree and Dr. Radha R. Das participated in the programme.

3. Other activities

I use this opportunity to mention that the President, Vice-Presidents, General Secretary and other office bearers and EC members and other respected members of KAS have actively participated in different science popularisation programmes throughout the State, in addition to the programmes mentioned above, during the reporting period. Special mention to the Mar Thoma Multidisciplinary Congress, conducted by Mar Thoma College, Tiruvalla, Pathanamthitta, and inaugurated by Prof. Dr. G. M. Nair, President KAS. Prof G M Nair was also invited as the Chief Guest of the 2019 Annual Convocation of Amrita Viswa Vidyapeedom and delivered the Convocation Address.

During the period, programmes were started to develop short Videos of contemporary science developments for the higher secondary students and to start a You-tube channel for KAS. Initially

about 50 videos will be made through the expert members available in KAS as well as expand by inviting experts from all over the country.

During the period, we have also conducted programmes on the World Environment Day, World Ozone Day and extended the expertise of the KAS members and office bearers in several activities in the State of Kerala.

4. Acknowledgements

The Academy is grateful to Dr. P. V. Mohanan, Sc. G, SCTIMST, Thiruvananthapuram for facilitating the Outreach Programme for Higher Secondary Science Students at BMT Wing of SCTIMST, Poojappura. The Academy owes much gratitude to the principals, teachers and students of Sarvodaya Central Vidyalaya, Nalanchira, Thiruvananthapuram, Govt Girls HSS, Nedumangad, Thiruvananthapuram, Govt. Vocational and HSS, Karakulam, Thiruvananthapuram for their active participation in the students outreach programme.

The Academy acknowledges gratefully the generous support and co-operation in organizing various programmes by Research/Academic Institutions such as SCTIMST, Poojappura, Govt. Arts College, Thiruvananthapuram, Mar Dioscorus College of Pharmacy, Sreekaryam, Sree Vidyadhiraja Swami Mahasamadhi Peedom, Panmana Asramam, Kollam, and Association of British Scholars, Thiruvananthapuram Chapter. The active support by Dr. P. Sreejith for the online activities of KAS is gratefully acknowledged here.

The Academy fondly acknowledges all the invitees in various programmes and thankful for their words of wisdom that enlightened the scientific community.

KAS is much indebted to the former Office bearers especially Prof. Dr. Oommen V. Oommen and Dr. K. G. Ajithkumar for their constant support and advice throughout.

I now express my deep gratitude to the President, Vice Presidents, Jt. Sec., Treasurer, EC members, Fellows and Life Members of the Academy for their invaluable support in conducting the activities of the Academy.

Let me conclude the report, with a humble request to all the fellows and members of KAS to actively participate in the activities of the academy, so that the programmes of KAS become meaningful, taking the academy to greater heights, visibility and fame.

I place this annual report for discussion and approval of the Annual General Body Meeting .

Sd/-

Dr. K. B. Rameshkumar
General Secretary, KAS