

REPORT OF THE ACTIVITIES OF THE KERALA ACADEMY OF SCIENCES
FOR THE PERIOD JUN 2013-SEPT 2014

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

With great pleasure, may I now present a report of the activities of the Academy for the period Jun 2013-Sept 2014 for your consideration and approval?

Summary of activities –Details in the following paragraphs

The major activities during the period under reporting:

1. AGM and Election
2. Valedictory Function of Khorana Lecture Series
3. Inauguration of Silver Jubilee celebrations and the Honorary Fellowship and Fellowship Conferring Ceremony

Celebrations conducted

1. National Science Day with the focal theme of “Fostering Scientific Temper”
2. National Technology day with the focal theme of “Sustainable technologies for Kerala”

Seminars/Lectures

1. Foundation Day Lecture by Dr. K. Ramakrishnan, Dir., VSSC
2. Lecture by Dr Sarasan, KEW Gardens, UK.
3. Infosys Lecture at Calicut by Dr. A. Ajayaghosh
4. Prof. K. T. Augusti Endowment Lecture by Prof. Dr. C. A. Ninan
5. Seminar on Biotechnology at Sahrdaya College of Eng. & Tech., Kodakara, Thrissur.
6. Lecture by Prof. Dr. Pulickel M Ajayan, Rice University, USA
7. Condolence meeting at the demise of Dr. C. S. P. Iyer, former President, KAS and Dr S. S. Bhagawan, LM, KAS.

Other activities include:

1. Representation to EVP for office facility at Sasthra Bhavan

Detailed Report

Current Members of the Academy.

The roll of the Academy has now in its rolls as Honorary Fellows: Dr. P. K. Iyengar, Dr. K. Kasturirangan, Dr. M. S. Swaminathan, Prof. Dr. M. S. Valiathan, Dr. Varghese Kurien, Dr. G. Madhavan Nair, Dr. K. Radhakrishnan, Prof. Dr. M. Vijayan, Prof. Dr. V. N. Rajasekharan Pillai and Prof. Dr. A. Ajayaghosh, fifty nine fellows (FAS) and four hundred and five life members. On behalf of the Academy, Dr. Radha Das, Dr. J. Sudha of NIIST, Dr. Ruby John Anto of RGCB, , Dr. Jayaprakas of CTCRI, Dr. Pandurangan of JNTBGRI are thanked for their sincere efforts in attracting new membership.

Executive Council Meetings

The EC met eight times during the period under reporting. Most of the meetings were conducted at the premises of KSBB and a few, lately, at Sasthra Bhavan.

AGM and Election

The AGM and the election of the new office bearers were conducted on 22 Jun 2013 at 2.30 pm. The AGM was presided by the President Prof. Dr. Oommen V. Oommen who in his presidential address highlighted the activities and admitted that there had been several lacunae in the management and executive side during the period under review. The report was presented by the Gen. Secy., Dr. K. G. Ajit Kumar. In the following discussion, several members expressed much displeasure at the functioning of the management team. Certain modifications were suggested by senior members and former office bearers and the report was then approved after detailed discussion. The treasurer, Prof.

K. N. Rajasekharan presented the audited statements of accounts for the period under review and it was approved.

This was followed by the election of the new office bearers. Prof. Dr. V. Unnikrishnan Nair as the Returning Officer presented the details of the nominations received. The two vice presidents, Gen. Secretary, treasurer and ten executive council members were elected unanimously. As there were two nominations for the post of President, an appeal was made for either of the candidate to reconsider their candidature. Shri V. P. Balagangadharan very graciously, and with much courtsey, withdrew his candidature and subsequently Dr. Oommen V. Oommen was elected for another term. The new office bearers and EC members were: Vice Presidents: Dr. Radha Das and Dr. R. Prakashkumar; General Secretary, Dr. K. G. Ajit Kumar; Joint Secretary, Dr. J. D. Sudha; Treasurer, Prof. K. N. Rajasekharan and the Executive Council members: Dr. Fazil Marikar, Mr. N. Raveendran Pillai, Dr. Jayasree Nair, Dr. C. Gouri, Dr. K. P. Rajesh, Mr. M. Shaneeth, Dr. K. P. Laladas, Dr. A. Sabu, Dr. K. Vijayakumar and Dr. L. Divya.

Valedictory Function of Khorana Lecture Series

The valedictory Khorana Lecture Series was held befittingly at the venue where the programme was launched, namely at the conference hall of KSCSTE. The function was organized on 22 Jun 2013 at 10 a.m. The participants were welcomed by the Gen. Secy., KAS, Dr. K. G. Ajit Kumar. The President of KAS Dr. Oommen V. Oommen delivered the Presidential Address and Prof. K. N. Rajasekharan described the outline of the KLS program. Prof. Dr. V. N. Rajasekharan Pillai, Exec. Vice President, KSCSTE distributed Certificates to KLS Young Scientist participant students and delivered the keynote address. Subsequently the final Khorana Lecture Series [KLS-IX] lectures were delivered by the Bhatnagar and Infosys Prize winner Dr Ajayaghosh, NIIST; Bhatnagar Prize winner Dr, George Thomas, Director, IISER; Dr. P. G. Latha, VSSC scientist Dr. C. Gauri, Dr. K. K. Ramachandran Member Secretary KSCSTE and Dr. K. P. Laladhas, Member-Secretary, KSBB. The participants included the students from HSS in the city and its nearby areas along with those invited from each of the earlier seven outstation venues. The aim was to expose these students to the stalwarts and high achievers of those who have chosen a career path in science, thereby bringing glory to themselves and our state. Dr. K. K. Ramachandran, Mem. Secy. KSCSTE proposed a vote of thanks.

Inauguration of Silver Jubilee Celebrations, Fellowship Conferring Ceremony and Foundation Day Lecture

The programme commenced with an invocation followed by a welcome address by the General Secy., Dr. K. G. Ajit Kumar. The President Prof. Oommen V. Oommen delivered presidential address. He briefly mentioned the recent activities of KAS in the area of science popularization and mentioned the ardent support received from KSCSTE. The Hon'ble Chief Minister Shri. Oommen Chandy then inaugurated the Silver Jubilee celebrations, conferred the Honoray Fellowships and Fellowships of the Academy and delivered a brief speech in which he noted that the Academy is in the forefront to popularize Science and Science Education among school and college students in the state. He appreciated the Academy's efforts to honour distinguished scientists by bestowing on them Hon. Fellowships and Fellowships. With this brief address, he formally inaugurated the silver Jubilee celebrations of the Academy and the seminar on Science and Technology. Dr. K. N. Ninan, former Deputy Director of VSSC and Shri Arul Gerald Prakash, Director, Kerala Sci. and Tech. Museum then briefly spoke felicitating the fellowship awardees.

The next session of the Seminar programme commenced at 10.30 am with a brief lecture and fellowship acceptance speech by the scientists who had received the Honorary Fellowship of the Academy. Thus, Dr. K. Radhakrishnan, Chairman of ISRO, Prof. Dr. V. N. Rajasekharan Pillai, Exec. Vice President, Kerala State Council for Science, Technology and Environmemnt and Prof. Dr. A. Ajayaghosh, Outstanding Scientist NIIST spoke especially emphasizing the fact that science offers a rewarding career.

As part of the inauguration of the silver jubilee celebrations, fellowship conferring ceremony and the seminar on Science and Technology, the Foundation Day Lecture was delivered by Padmashri Dr. S. Ramakrishnan, Distinguished Scientist & Director Vikram Sarabhai Space Centre. He was introduced to the audience by Shri. Raveendran Pillai, Former Gen. Secretary, KAS and Scientist,

VSSC. Dr. S. Ramakrishnan's topic for the Foundation Day Lecture was "Mars Orbital Mission". Dr. Radha Das, Vice President, KAS proposed the vote of thanks.

The function was very well attended by scores of higher secondary school students, research scholars from colleges, university departments, and the major research organizations. In addition to students, the participants included Directors, senior scientists, technologists and engineers from VSSC, NIIST, JNTBGRI, CTCRI and other research institutions and the Fellows and members of the Academy. The Academy is indebted to VSSC, KSCSTE, KSBB and KSSTM for providing support for the function.

Infosys Lecture

Based upon an initiative by Dr. Ajayaghosh, the Infosys Foundation expressed willingness to hold the Infosys Foundation Lecture in association with KAS and consequently, the IFL was held at Kozhikode on Sept 5, 2013. The lecture was delivered by the Infosys Prize Laureate Dr. A. Ajayaghosh, a Hony. Fellow of the Academy. The Academy is indebted to Infosys Foundation for recognizing the Academy and partnering with it for the conduct of the function. The function received wide press coverage and so did the name of the Academy. It was attended by the President, Gen. Secy Jt. Secy. and EC member.

National Science Day 2014

The celebration of National Science Day 2014 in association with KSCSTE was conducted at the conference hall of the Kerala State Science and Technology Museum on Feb 28th, 2014 during 9.30am - 2.00pm. The function was expected to be inaugurated by the Shri Thirivanchoor Radhakrishnan, Hon'ble Minister of Environment. However, due to official duties, he could not attend and expressed his regret for the inability to reach the venue.

The technical session of the Seminar programme commenced at 11.00 am with the first National Science Day Lecture by Prof. Dr. V. Ramakrishnan, Director, IISER who spoke about the need to inculcate a scientific temper in all strata of our society. He pointed out that India is the only country where the significance of scientific temper has been enshrined in the duties of its citizen and paid tributes to Pandit Jawaharlal Nehru for his role in laying a strong basis for the science and technology development of India. This was followed by the second National Science Day Lecture by Dr. Anil Bhardwaj, Dir., Space Physics Lab, VSSC. These lectures were followed by the felicitation of Dr. Ravi Shankar L, Scientist, Agro-processing Div., NIIST; Dr. Mahesh Hariharan, IISER and Dr. Vineeth Nair, Space Physics Lab, VSSC who have been awarded the Young Scientist Award of KSCSTE. Accepting the felicitations, the three young investigators, briefly thanked the Academy and KSCSTE for this recognition and mentioned the various avenues available for science students and tried to impress upon the student participants, how attractive science is as a career. Subsequently, Prof. Rajasekharan summed up the proceedings and thanked all the scientists for their participation in the event which came to an end at 2.00 pm.

The function was very well attended by scores of higher secondary school students, research scholars from colleges, university departments, and the major research organizations. In addition to students, the participants included senior scientists, technologists and engineers from all the major research institutions in the vicinity and the Fellows and members of the Academy.

National Technology Day 2014

The celebration of National Technology Day 2014, jointly with KSCSTE, was conducted at the conference hall of the Kerala State Science and Technology Museum on May 14th, 2014 during 9.30 am-4.00 pm. The function was inaugurated by Shri Thirivanchoor Radhakrishnan, Hon'ble Minister of Environment. The function started with the first technical talk delivered by Prof. Dr. R. V. G. Menon, former Principal, Govt. Engineering College, Trivandrum who spoke on the need for sustainability and the relevance of technical education. This lecture was followed by a presentation by Dr. P. G. Latha, Director, JNTBGRI who mentioned the importance of herbal resources and their sustainable use. Subsequent to a tea break, the inaugural session took off with an invocation followed by a welcome address by Dr. K. K. Ramachandran, Member-Secretary, KSCSTE who welcomed the dignitaries. Subsequently, Prof. Dr. V. N. Rajasekharan Pillai, Exec. Vice President, KSCSTE gave the Presidential Address where in he stressed on the significance of sustainable technologies. This was followed by the inauguration by the Honorable Minister of Environment, Shri Thiruvanchoor

Radhakrishnan. In his speech, he stressed on fact that it is time for research organizations to initiate innovative programs for advancing science and technology in Kerala.

The inauguration was followed by a special address by Prof. Dr. Oommen V. Oommen. He briefly mentioned the recent activities of KAS in the area of science popularization and highlighted the sincere support received from KSCSTE for these activities. Dr. Radha Das, Vice President of KAS, Prof. Dr. George Varghese, Director, KSCSTE and Dr V. Ajit Prabhu, Joint Director, KSCSTE then offered their felicitations and Dr K. G. Ajit Kumar proposed a vote of thanks.

After the inaugural session, the technical session of the programme continued with a lecture by Dr Suresh Das, Director, NIIST, Prof. Dr. K. N. Ninan of IIST and Dr. M. Jayaraju, Director, ANERT. Dr. K. N. Rajasekharan thanked all the experts for their participation in the technical. In addition to a large number of school students, many research scholars, senior scientists, technologists and engineers from all the major research institutions, the Fellows and life members of the Academy attended.

Lecture by Dr. Sarasan, KEW Gardens, UK

The Academy organized a lecture by Dr. Sarasan, KEW Gardens, UK at the auditorium of University College on Sept 9, 2013 on biodiversity conservation. The function was attended by the PG students of the biological science departments of University College, research scholars and teachers.

Seminar on Biotechnology at Sahrdaya College of Eng. & Tech., Kodakara, Thrissur

The Academy was associated with a one-day seminar on Biotechnology at Sahrdaya College of Eng. & Tech., Kodakara, Thrissur on 29th March, 2014. Prof. Dr. Oommen V. Oommen and Prof. Dr. G. M. Nair delivered invited talks on biotechnology.

Prof. Dr. K. T. Augusti Endowment Lecture

Prof. K. T. Augusti Endowment Lecture on Saturday, 26th April 2014 at the Conference Hall, Sasthra Bhavan, Pattom, Thiruvananthapuram at 3.00 pm. The Endowment Lecture, on the topic "Science and Religion", was delivered by Prof. Dr. C. A. Ninan, Former Head, Dept. of Botany, Univ. of Kerala. It was attended by scientists from JNTBGRI, KSCSTE, teachers and students from city schools and 25 life members and Fellows of KAS that included past Presidents, General Secretaries and senior members. The audience was welcomed by the Gen. Secy., KAS, Dr. K. G. Ajitkumar. The President, Dr. Oommen V. Oommen delivered the Presidential address. Prof. Dr. G. M. Nair introduced the speaker to the audience and Dr. K. N. Rajasekharan expressed the vote of thanks.

Lecture by Prof. Dr. Pulickel M. Ajayan, Rice University, USA

The Academy jointly with the Society of Polymer Science of India Trivandrum Chapter, High Energy Materials Society of India Trivandrum Chapter and Materials Research Society of India Trivandrum Chapter, organized a seminar on 'Nano Engineering: Challenges and Opportunities' by Prof. Dr. Pulickel M Ajayan, Rice University, USA on 28th July 2014 at 6.30 pm at Hotel Capital. This was attended by about 45 participants that included a few life members and former office bearers of the Academy.

Condolence Meeting at the demise of Dr. C. S. P. Iyer and Dr S. S. Bhagawan

The Academy, jointly with the KSCSTE, conducted a meeting to condole the sad demise of its former President, Dr. C. S. P. Iyer and the life member Dr. S. S. Bhagawan at the conference hall of KSCSTE on 20th Sep. 2014. The Vice President, Dr Radha Das, former President, Prof. Dr. K. N. Ninan, Dr. K. K. Ramachandran, Member Secretatry, KSCSTE, Dr. Sivaramakrishnan, VSSC, and Dr. Kokkal, KSCSTE spoke briefly about their interactions with the departed souls. Subsequently, the President of the Academy, Dr. Oommen V. Oommen spoke about the contributions of Dr. Iyer and Dr. Bhagawan to KAS, KSCSTE and to science in Kerala as a whole. The participants then observed a minute of silence as a mark of respect as part of the solemn meeting .

Awards and Honors to members

1. The President Prof. Dr. O. V. Oommen has been nominated to the Executive Council of KSCSTE.

New Brochure and Membership Form

The Academy has brought out a new brochure highlighting the history, objectives, recent activities, details of its membership and other details. The Membership Form has been updated and is now downloadable from the website.

Website and Contact Address

The website is maintained fairly regularly by Shri Anish of CDIT and the previous annual reports, the available contact details of the Fellows and life members are now available there.

Upon a request by the representatives of the Academy, the EVP of KSCSTE, Prof. Dr. V. N. Rajasekharan Pillai has graciously given consent to the Academy to use “Sathra Bhavan, Pattom PO” as the contact postal address for the Academy.

Scientia – Academy’s News Letter

The Academy has brought out the second volume of its news letter Scientia in an impressive manner and much thanks are due to the article authors and the editorial team. The third issue is under preparation and will focus on Mangalyaan.

Other activities

The President personally conveyed to Dr. K. Radhakrishnan the pride and happiness felt by the members of the Academy on the landmark success of Mangalyaan. Dr. Radhakrishnan appreciated the gesture and offered continued interaction of ISRO with the Academy.

The Infosys Science Foundation again requested the help of the Academy in the conduct of the Infosys Science Foundation Lecture-2014 with Academy’s Honorary Fellow Dr. Ajayaghosh, Infosys Prize Laureate as the speaker. The Academy has made arrangements for the conduct of the same at Kannur on 7th Oct. 2014.

The Academy has received two requests for setting up endowments: the first from Prof. Dr. K. T. Augusti in the name of Prof. Dr. A. Abraham, and the second from Smt. Alfa Hisham in the name of Prof. Dr. Hisham.

Steps are being taken to make the registration of the Academy current.

Acknowledgements

The Academy is deeply thankful to KSCSTE for the conduct of joint programmes, for making available the facilities at the Sathra Bhavan for holding events and EC meetings, for financial support and for the permission to use the postal address. The Academy is deeply indebted to the authorities of VSSC for generous financial support and also for the whole hearted participation and support of eminent personalities of VSSC in the activities of the Academy. The Academy acknowledges gratefully the support received from KSBB in the form of financial support, access to its facility to hold EC meetings and for hospitality. Infosys Science Foundation is thanked for identifying the Academy as a joint organizer for the Infosys Science Lecture in Kerala. SPSI Trivandrum Chapter, HEMSI, Trivandrum Chapter and MRSI, Trivandrum Chapter are thanked for joint event organization. I also wish to thank KSSTM for providing conference hall facilities.

May I now thank, on behalf of the Exec. Council and on my personal behalf, all the esteemed Fellows and Life Members of the Academy for their sincere support, participation and co-operation for the conduct of the affairs of the Academy. I am extremely grateful to the President, Vice Presidents, Jt. Secy, Treasurer, EC members, Fellows and Life Members for all the support received during the past year.

If there are drawbacks in my functioning as the Gen. Secy., I assume the full responsibility and humbly request the guidance and support of all of you for the future.