

From the Vice Chancellor's Desk



World is currently witnessing tremendous changes in all spheres of life. COVID 19 pandemic, in particular, toppled over our entire systems of order and existence as never before. But mankind will survive any crisis; We have a resilience, unique and persistent, that would help us to tide over difficult situations. Moreover, the huge leaps in science and technology and information technology have improved the quality of life. At the same time, with paradigm shifts in the patterns of human habitation and attitudes, the planet faces serious threats of survival. Undoubtedly, the academic fraternity has a responsibility to sustain humanity as a whole and also cater to sustainable ways of existence. The aim of education is to give direction to form and practice a socially just and ecologically sensitive world for a sustainable future. University of Kerala, the mother University, also works towards that vision. Our visionary steps and collective action helped us to overcome the Covid-19 crisis and we were able to implement and practice curricular and co-curricular activities effectively. University of Kerala retained its first

place in the state with a national rank of 27 in the recently published National Institutional Ranking Framework (NIRF) which indicates that the University of Kerala is on par with higher education institutions in the country. The State Government Award is a testament to the excellence in the field of the National Social Service Scheme. Teachers and students of our University are gaining national and international recognition in many fields. Moreover, the University of Kerala attracts more students from abroad to study in India than any other University in Kerala.

Mass projects have been launched in the area of basic amenities expansion with regard to the changing educational concepts and possibilities. New establishment works like International hostel for foreign students, new building for the School of Information and Communication, new building for the School of English and Foreign Languages in the name of internationally acclaimed Malayalam poet Prof. Ayyappa Panicker are to name a few.

The state-of-the-art seminar hall complex built at CLIFF, the Central Laboratory on campus, is named after the scientific geniuses, C V Raman, Srinivasa Ramanujan and Janaki ammal. The various start-up projects of the University will help the laboratories to integrate with the industries. The university has estimated 43.5 lakh for this purpose. The nine novel departments established by the university belong to innovative fields of advanced learning. Departments of Communication Science and Electronics, Artificial

Intelligence and Robotics, Data Science, Functional Organic Materials, Oceanography and Blue Economy, Renewable Energy, Integrative Biology, Atmospheric Sciences, and Design will become new areas of knowledge and research. Moreover, in commemoration of the Malayali genius Dr. Thanu Padmanabhan, an Inter University Center for Astronomy and Astrophysics will be established.

The University has begun schemes to raise a carbon-free campus. New reservoirs have been commissioned to ensure water availability on campus. Old wells are being preserved as springs. Under the Harithalayam project, vegetable, paddy cultivation and aquaculture activities are being carried out. The state of the art digital systems implemented in the University library make the library accessible round the clock and even on holidays. Innovative aids have been devised for the visually impaired. Works are underway on the Student Lifecycle management system to streamline a flawless examination system and make results available in a timely manner. By discovering new plant, fish and life species in the field of scientific research, the University Researchers have definitely brought international reputation to our university. The University appreciates the teaching, learning, research and extension activities of teachers by granting awards. Theatre classrooms and seminar halls have already been prepared to make classroom learning and research activities according to international standards. The University of Kerala, awaiting NAAC re-accreditation, is thoroughly equipped to meet global demands of higher education.

Prof. (Dr.) V.P. Mahadevan Pillai
Vice-Chancellor

Soaring New Heights: UoK keeps National Ranking and becomes an International Destination for Scholars from Developing Countries

Accreditation and ranking are two exercises in the country that evaluate the quality of higher educational institutions. If accreditation is done by evaluating the achievements of a higher education institution in the previous five years, ranking assesses quality and merit every year. Currently, accreditation is done by the National Assessment and Accreditation Council (NAAC), whereas ranking comes under the prerogative of National Institutional Ranking Framework (NIRF).

National Institutional Ranking Framework (NIRF), which functions under the Ministry of Human Resource Development, Government of India, has ranked the University of Kerala as the top university in the state of Kerala for the last five consecutive years. The ranking exercise was started by the ministry in 2016 and the higher educational institutions from the state of Kerala started participating in it from 2017 onwards. In 2017, the University of Kerala bagged the 29th position in university level ranking in the country, which was the highest rank in Kerala. From among the institutions that participated in the ranking process, the position of the University of Kerala was 47. In 2018 and 2019, among the Universities in the country, the position of the University of Kerala was 30 and 22 respectively, maintaining the top position in the state. Among the total institutions that participated in the country in these years, the position of the University was 47 and 35 respectively.

In the 2019 ranking, the University of Kerala secured the 22nd position among the Universities in the country, which was the highest in the state of Kerala. During this year the position of the University rose to 35 among the total institutions that had participated. In the ranking exercise of 2020, the

University of Kerala was ranked 23rd among the Universities and 42nd among “overall” institutions. A total of 3771 institutions had participated in the ranking process in 2020. In the ranking of 2021, the number of institutions that participated rose to 6000. In this ranking, the University of Kerala secured the 27th position among universities and 43rd in the overall category, thus continuing the tradition of being the highest ranked institution in the state of Kerala. It was the well-knit system of academic and

PhDs, intake of students from outside the state and country, placements of students, recognitions in the fields of arts and sports, women representation in academic and administrative areas, student friendly environment in the campus and response from the stakeholders are evaluated.

The infrastructural facilities and academic reforms initiated by the governing bodies of the University were potent factors for the attainment of higher ranks in the ranking exercise. Many vacant teaching posts were filled up on a war footing. Innovative reforms were implemented in research areas. New schemes like the Harithalayam project, student palliative care units in affiliated colleges, student insurance schemes, beginning of new teaching departments and new courses, etc., were welcome steps in this field. The direction and guidance provided by



research domain of the University that made this tremendous achievement possible.

The major parameters of NIRF for evaluating the performance of the universities include (1) Teaching, Learning and Resources (2) Research and Professional Practice (3) Graduation Outcomes (4) Outreach and Inclusivity and (5) Peer Perception. Through these parameters the number and category of students, teacher-student ratio, number of teaching faculty members, academic and research potential of students and teachers, sources of income and expenditure, research publications and their quality, patents, research projects, timely conduct of examinations and publishing of results, research awards, production of

the decision-making bodies and the dedicated efforts of the teaching and the non-teaching community played a very crucial role in materialising these goals. Hon'ble Vice Chancellor, Professor V.P. Mahadevan Pillai, Pro-Vice Chancellor, Prof. P.P. Ajayakumar, Convener of the academic and research sub-committee of the Syndicate, Dr. S. Nazeeb, Member Syndicate Prof. Gop Chandran, Professor of History, Dr. Shaji A., Professor of Computer Science, Dr. Vinod Chandra, and the Head of the Department of Demography, Dr. Anil Chandran, have taken lead roles in the compilation and uploading of data pertaining to the NIRF. University of Kerala is presently engaged in the process of preparing the University for NAAC Re-Accreditation.

Attracting Global Students

The COVID-19 pandemic has done little to lessen the interest among foreign students for the courses offered by the University of Kerala. As many as 1042 students from 35 countries, including 555 from Afghanistan, have applied through the Indian Council for Cultural Relations (ICCR) for various undergraduate (UG), postgraduate (PG), MPhil and PhD programmes for the academic year 2021-2022. ICCR introduced a new online portal from 2021 onwards for submitting applications.

The university, which has been striving to position itself as a preferred destination for higher education among students from developing countries, hopes to enhance its global image by absorbing as many applicants as possible. Besides Afghanistan, there were applications from Bangladesh, Nepal, Syria, Iraq and various African countries, including Uganda, Botswana, and Kenya. The university has also received one application from the United States for a UG programme. There were 611 applications for various PG programmes, including 170 for MBA alone. Foreign students have also shown interest in pursuing masters in Computer Science, Political Science, Public Administration, Economics, English, Sociology, M.com, MCA, Mathematics and Environmental Science.

As many as 283 applications have been received for UG courses. There were also 148 applications submitted for

Ph.D. in 25 subjects such as Management Studies, Political Science, Computer Science, Chemistry, Sociology, English and Education. The university has recommended admitting 70 applicants among the Ph.D. aspirants.

The Centre for Global Academics (CGA) handles international student affairs and the number of applications is by far the highest in the university's history. Last year, the university had approved admissions for 105 students, of which 20 joined various courses. This year's applications were processed by the CGA committee chaired by the Hon'ble Vice Chancellor, and about 403 applications were recommended to the ICCR for the consideration of ICCR scholarship. So far this year, 49 candidates were awarded ICCR scholarship covering PhD (n= 13), PG (=26) and UG (=10), out of which 11 candidates already joined the university, others will be joining shortly. The University of Kerala's ranking in the National Institutional Ranking Framework (NIRF), variety of topics offered for research, and the pro-active research initiatives of the faculty have made the institution a preferred choice of foreign students. The ICCR portal is still open for PhD aspirants and the university is expecting more awardees this year. The foundation stone was recently laid for the proposed international hostel for foreign students.

Minister for Law and Industries Sri P. Rajeev Distributed Start-up Grants and Inaugurated the Cliff Seminar Hall at Karyavattom



The inauguration of the state-of-the-art seminar hall complex at the Cliff, which is also the central laboratory of the University of Kerala, Karyavattom campus was done by the Hon'ble Minister for Law and Industries Sri. P. Rajeev. The Minister also distributed the grants for Kerala University start-up projects. The session was chaired by Hon'ble Vice-Chancellor Prof. (Dr.) V P Mahadevan Pillai. The three halls in the seminar hall complex are named C V.

Raman Hall, Sreenivasa Ramanujan Conference Hall, and Janaki Ammal Seminar Hall respectively. The C V. Raman Hall which has modern facilities can accommodate 200 people. Sreenivasa Ramanujan Conference Hall, which also has video conference facilities, can accommodate 25 people at a time. Janaki Ammal Seminar hall has online facilities which can accommodate a minimum of 75 people at a time. The cost estimate of seminar hall with state-of-art modern facilities and related building complex construction was around 4.25 crores.

Financial assistance was given to existing 78 start-up projects. The University has allocated 43.5 lakh rupees for the start-up project. The function was attended by Members of the Syndicate, Adv. K H Babujan, Dr. S Naseeb, Adv. A. Ajikumar, Dr. Gopchandran K G., Dr. K B. Manoj, Prof. K. Lalitha, Srimathi Ranju Suresh, Sri J. Jayaraj, Sri. R Arunkumar, Sri. Riyas Wahab, University Registrar Dr. K S Anilkumar, Cliff Director Dr. G M. Nair, Cubic Director Dr. Manoj Changattu, Research Union General Secretary P. Krishnadas along with other dignitaries.

State NSS Award: University of Kerala on Top



University of Kerala received the Best NSS Award in the state for the year 2019-20 awarded by the Kerala State NSS Cell. This achievement was made through the concerted efforts at both the institutional and the community level. Since 2017, innovative initiatives have been taken by the National Service Scheme of the University. There are 165 units for National Service Scheme under the University of Kerala and it has a volunteer strength of 16,500 spread over the four southern districts of Kerala, namely Thiruvananthapuram, Kollam, Alappuzha and Pathanamthitta.

The major initiatives of the NSS Cell of the university include flood-related relief and rehabilitation activities in 2018 and 2019, river protection scheme entitled 'Yuvatha Nadiyodoppam', novel initiatives of 'Vimukthi'- an anti-drug & alcohol programme, Massive Voluntary Blood Donation programmes, implementation of palliative care by starting Student Palliative Care Units in Colleges, Harithalayam project, construction of 86 homes for poor people as part of the Home for Homeless Programmes, organisation of National Integration Camp in 2018, District and State Level Youth Parliament in 2019, National Level Workshop on Women Capacity Building in 2018 in association with Kerala Women's Commission, residential training programme on Disaster Management, First Aid and Basic Life Skills, setting up of Biodiversity Parks in colleges in association with the Social Forestry wing of the Kerala Forest Department, organic farming and cultivation in college campuses and community, planting of tree saplings in the houses of volunteers, college campuses and adopted villages.

As part of the institutional social responsibility of the University, various schemes were implemented in the colleges for giving financial and other assistance to the differently-abled and disadvantaged students, introduced Environment Enrichment Programmes in colleges, organised Anti-Ragging Campaigns in colleges, encouraged green protocol at University and college level, donated thousands of steel plates and glasses to

Thiruvananthapuram Corporation for use during the Attukal Pongkalam festival, training sessions were provided on paper manufacturing, jewellery making, sanitizer making and lotion making. For ensuring safe blood for patients in hospitals, Rare Blood Group Donors' Forum was created in colleges and several Voluntary Blood Donation Camps were organized in association with organisations working in the field like Kerala Blood Donor's Society and hospitals like Sree Chitra Institute of Medical Science and Technology (SCIMST), government medical colleges and other government hospitals.

National Service Scheme, University of Kerala has given prime importance for the planting of tree saplings in Colleges Campuses, adopted villages, public places and in the surroundings of the houses of volunteers. NSS volunteers were given directions to be part of novel initiatives of Social Forestry like Ente Maram (My Tree), Nammude Maram (Our Tree), Vazhiyathalam (A Shade on path ways), Veetil Oru Oushadhathottam (A Medicinal Garden at Home) and Bhoomikkoru Kuda (An Umbrella for the Earth). Several initiatives were taken up for the propagation of organic farming in college campuses as well as the community through the interventions of NSS volunteers. Most of the NSS units came out with various plans for the cultivation of barren lands left fallow in college campuses as well as adopted villages. Some of the colleges produced large number of cereals, pulses and other agricultural products and vegetables.

As part of observing World Environment Day on June 5th, NSS volunteers were advised to plant a minimum of ten plants in their homes every year and to protect and preserve them. The scheme was entitled Parithranam. During the period from 2017 to 2020, thousands of tree saplings were planted by the volunteers. This practice not only changed their mind set about environment and nature, but also made significant impact in the minds of their kith and kin. A mega project was sanctioned by the Department of Revenue, Government of Kerala for the protection of Vanmanapuram river in Thiruvananthapuram District and Kallada river in Kollam District. The services of NSS Volunteers from colleges located in these districts were employed for the creation of awareness among the public through river walks, shramdams near rivers and small order streams, and planting of tree saplings on river banks. The panchayats, villages, Kudumbasree units, Suchitva Mission and Harithakerala Mission are associated with the project. Another major project entitled Vimukthi was implemented in colleges in association with the Kerala Excise Department and the Department of Student Services, University of Kerala. Large-scale awareness programmes, competitions like essay writing, screenplay writing, skit making, dramatic plays, short film making and poster creations, flash mobs, public rallies and formation of a surveillance team are the principal components of the scheme.

Another notable initiative was flood relief and rehabilitation of the University and affiliated colleges under the

intervention of the National Service Scheme. Naavyam was a major initiative under the scheme through which 558 NSS volunteers participated in massive shramdams in the flood affected areas of Chengannur. In association with the Indian Railways, large-scale shramdams were undertaken in the flood affected schools as part of Swachh Vidyalaya programme. National Service Scheme, University of Kerala has effectively implemented palliative care by starting Student Palliative Units in colleges in association with

the Department of Student Services. Organising awareness campaigns to popularize palliative care among the student community, assisting in the rehabilitation of patients, enhancing the personality of volunteers and students through community services and encouraging community participation in palliative care activities are some of the major parameters of the scheme. Pallium India has offered intensive trainings to the volunteers.

CM @ Campus: Interaction with Students

The University of Kerala organized a program called “Navakeralam – Yuvakeralam” CM@Campus on 6th February 2021 at Senate Hall to interact with students and gather ideas on academic and research issues and sociocultural issues that are paving the way for change in the field of higher education. The objective of the programme was to elicit suggestions from students on the future of higher education in Kerala. Suggestions were sought from students of all affiliating institutions which were consolidated for onward transmission. 250 students were invited to the campus for direct interaction. In this programme, Hon’ble Chief Minister of Kerala, Sri. Pinarayi Vijayan interacted with the students. Grand Master Sri. Pradeep presented a program called Inspire Kerala at the event. Hon’ble Minister for Higher Education Dr. K. T. Jaleel delivered the introductory speech at the function. Kerala University Vice Chancellor Prof. (Dr.) V. P. Mahadevan Pillai welcomed the gathering. Pro Vice Chancellor, Prof. (Dr.) P. P. Ajay Kumar presented the memento to the



distinguished guests. Planning Board Vice Chairman Prof. V. K. Ramachandran was present at the event. Adv. K. H. Babujan, Member, Syndicate thanked them. The event was organized with the participation of selected students from all the educational institutions affiliated to the University. About 250 students participated in the event. 42 students had the opportunity to interact directly with the Chief Minister.

Inauguration of Innovative IT enabled services in the Library

Projects under the IT section such as ‘RFID enabled library management system, Digital knowledge repository of rare books, periodicals and gray literature in the University Library’, and ‘Centre for Visually Challenged users’, were inaugurated by Dr. R. Bindu, Hon’ble Minister for Higher Education, Government of Kerala on 29th October 2021 at the Kerala University Library in a function presided by Prof. (Dr.) V.P Mahadevan Pillai (Hon’ble Vice -Chancellor) in the presence of Prof. (Dr.) P. P. Ajayakumar (Hon’ble Pro-Vice Chancellor), Shri. B.P Murali, Adv. K H. Babujan, Adv.B.Balachandran, Dr.S Nazeeb, Adv. A. Ajikumar, Dr.

K.B Manoj, Adv. G. Muralidharan, Dr.M.Vijayanpillai, Shri. J. Jayaraj, Prof. K. Lalitha., Shri. Bijukumar, G, Dr. K.G Gopchandran, Shri. R. Arunkumar, Shri. Riyas Vahab., Smt. Renju Suresh (Members, Syndicate) Dr. K.S Anilkumar (Registrar) and Dr.B. Asha (University Librarian-in-charge). The details of the IT enabled innovative services are given below:

RFID (Radio-frequency identification detection) Technology Enabled Library Management System

RFID- enabled library services for the efficient circulation of



library documents to the members. All the bibliographical and circulation records were migrated to an open-source web-enabled Library Management System, Koha. Most of the books were tagged with RFID tags. Installed RFID Reader/Writer for activating the RFID tags and installed handheld reader for faster inventory to scan all books without taking from the shelves and it helps to locate misplaced books quickly without wasting time. Also, established Security Gate System; Touch Screen Information Kiosks for Online Public Access Catalogue (OPAC); Self Check-In/Out Stations (Book Drop Box) at the entrance of the Library.

Smart Cards

RFID chip-based Smart cards were issued to all Institutional members and Eminent Scholar members and will be issued to all Library members in future. It facilitates speedy and efficient charging (issuing) and discharging (returning) process and gets more comfort to the users to avail various library services. These cards can be used at self-check-in/ check-out stations to issue books independent of any

human intervention. It can also be used for access control and payments.

Kerala University knowledge Repository

The library has a digital archives of 20 lakh full text searchable digital pages of very rare and old books, periodicals and grey literature hosted in DSpace, an open source digital library platform and is made available in the Local Area Network (<http://10.20.20.83:8080/jspui/>).

Library and Information Services to the visually challenged users

Resource Centre for Visually challenged users is a fully air-conditioned Centre with all modern equipments and infrastructure such as modern desktop computers, smart phones, Kibo reprographic Scanner, digital Braille devices and multimedia with assistive technologies to access various electronic and print resources. The Centre has access to bookshare through which more than 10 lakhs audio books in different languages for the exclusive use of print disabled users.

Hi-tech Facilities for School of Communication and Information Sciences



The foundation for the new building for the School of Communication and Information Sciences was laid on 13th October 2021. The building will come up between the Environmental Sciences block and the ONV Mandiram. The three-storey building will cover an area of 17000 sq. ft. The building will have a high-tech media lab along with other improved facilities. The upcoming building will be the centre for all publications of the University in the future. The construction will be done by the Housing Board of Kerala.

Dr. Thanu Padmanabhan Interuniversity Centre for Astrophysics and Astronomy



University of Kerala has submitted a detailed proposal to the Government of Kerala on setting up an Interuniversity center of excellence in research and learning in space physics to address many of the activities of continuous

improvement in the field of astrophysics and space physics. Professor Thanu Padmanabhan ("Paddy") was an internationally acclaimed, Indian Theoretical Physicist and Cosmologist, who passed away recently. Paddy was personally planning to set up a centre in Kerala which would teach fundamental theoretical course in a rigorous manner starting from Bachelor's degree.

The proposed Inter university centre primarily envisages to recruit theoretical physicists with strong astronomy focus and simulation

experts who work on complex astrophysical simulations. With increasing utilisation of space by private and public users, this Centre would contribute immensely to the study of estimating/forecasting more realistic radiation

environment, inside and outside crew modules and towards efforts to address reliability of hardware systems in space. This centre will work in tandem with the just-initiated human-space exploration program of ISRO. This Center will give thrust to involving students in the design and development of small, compact and innovative space experiments that can be flown on sounding rockets or small satellites. The thrust would also be to use maximum COTS (Components Off The Shelf) technology to realise rapidly experimental designs for contemporary research needs and exposure students to the end-to-end experience of design to development cycle. This Centre will be unique and prepare the students for immediate inclusion in the exponentially growing industrial activities in advanced research areas. These activities will be managed through a collaborative

agreement with ISRO, to maximise existing resources but be agile to accommodate future research directions of ISRO and space science.

There is a shortage of serious research astronomers in the country. However, there are also a limited number of institutions that do research in astronomy. It is desirable for a student to acquire proficiency in physics and mathematics at the graduate level and then move to Astronomy & Astrophysics specialisation. The THANU PADMANABHAN Inter University Centre for Astronomy and Astrophysics is envisioned as a world class centre that will serve as a gateway for state-of-the-art research in Astronomy & Astrophysics for students from all over the globe.

KU Padasala: A Repository of Educational Videos



Formally launched by Shri Arif Mohammed Khan, Honourable Governor of Kerala and Chancellor of the University, on 13 October 2021, *KU Padasala* is a major e-learning initiative of the University of Kerala. A repository of academic videos, created by experts of diverse disciplines, it is open to the academic community as well as the general public. The platform is the culmination of several major workshops on academic video production and online learning initiated by the IQAC of the University and the School of Distance Education since 2017.

It features several talks by national and international experts including Nobel Laureates on an array of subjects, and edited sessions from conferences organised by various departments. KU Padasala videos help students to plan careers, prepare for interviews and conduct research. Videos benefiting the general public such as the content about admission procedures and issue of certificates have also been uploaded. Some videos are based on the research centres of the university such as the Oriental Research Institute and Manuscript Library. One of the rare achievements of KU Padasala is the 18 videos capturing the demonstrations of the lab equipment in the CLIF. With more than eight hundred quality videos, within a short span of

time, another gem of the KU Padasala is the collection of 60 talks on performing arts in Kerala.

The topics discussed in this platform vary from interpretations of Valmiki's Ramayana, artificial intelligence, microfabrication, Tibetan poetry, forensic linguistics and quantum mechanics. The frequently demanded topics such as curriculum development, Chartered Accountancy, basic English and French are also dealt with. The currency of issues is vividly displayed in the topics such as Human Rights, development of Covid vaccine and environmental literacy.

This unique venture provides opportunities for research scholars and senior students to demonstrate their knowledge in their respective fields and allows any academic enthusiast to view and use the videos. Hence, it adheres to the University's aim of democratic dissemination of knowledge and hails the principle of learner autonomy.

The videos are hosted in a YouTube channel so that they can be located through searches from any part of the globe. They are arranged category-wise on the University website as well.

<https://www.youtube.com/c/KUPadasala>

<https://www.keralauniversity.ac.in/ku-padasala/home>

Research Awards 2019-20

KU fosters innovation and supports the development of the academic community. Infact, this progressive vision on innovation-based research has kept KU as a leading innovator in the field of Indian higher education. KU invites proposals in the following categories of awards: Best Project, Highest Research Grant (Individual), Highest Research Grant (Department). The Best Project award will include prize money and citations. The winners of the year 2019-20 are:

1. Best Project: Dr. Subodh G. (Faculty of Physical Sciences), Dr. Manju S. Nair (Other Faculties)
2. Highest Grant (Department): Dr. Shaji E., Dr. Manju S. Nair
3. Highest Grant (Individual): Dr. Anil Kumar, Dr. Sameer Babu M.

Meritorious Research Awards 2020

KU has initiated annual awards for teachers excelling in research and academics. The award is based on the performance in academics, Publications, Research Projects, Consultancy, Outreach activity, Technology Transfer, Patents and E-content developed. The awardees for 2019 were

Hon'ble Vice Chancellor Dr. (Prof.) V P. Mahadevan Pillai presented the Academic Excellence Award 2020 to teachers who excelled in research and academics. The teachers were selected based on their performance in the year 2019. The awardees were:

Sciences and Applied Sciences

1. Dr. S. Sankara Raman, Professor, Department of Optoelectronics.
2. Dr. S M A. Shibili, Professor, Department of Chemistry.
3. Dr. A. Bijukumar, Professor, Department of Aquatic Biology and Fisheries.
4. Dr. G. Subodh, Assistant Professor, Department of Physics.
5. Dr. Sony George, Assistant Professor, Department of Chemistry.
6. Dr. K G. Gopchandran, Professor, Department of Optoelectronics.
7. Dr. Achuthsankar S. Nair, Professor, Department of Computational Biology and Bioinformatics.

Social Sciences and Languages

1. Dr. Abhayan G S., Assistant Professor, Department of Archaeology.
2. Dr. Chandrasekhar K S., Professor, Institute of Management in Kerala.
3. Dr. A M. Unnikrishnan, Professor of Malayalam, School of Distance Education.
4. Dr. Rajesh S V., Assistant Professor, Department of Archaeology.
5. Dr. Sameer Babu M, Assistant Professor, Department of Education.

6. Dr. Josukutty C A., Associate Professor, Department of Political Science.
7. Dr. Siddeek M A., Assistant Professor, Department of Malayalam.
8. Dr. Ajit Kumar, Professor, Department of Archaeology (Rtd.)

Consolation Awards

1. Dr. Manju S. Nair, Professor, Department of Economics
2. Dr. S. Sankaraman, Professor, Dept. of Optoelectronics
3. Dr. S. M. A. Shibili, Professor, Department of Chemistry
4. Dr. K. G. Gopchandran, Professor, Department of optoelectronics.



The Academic Excellence Award carries a cash prize of Rupees Fifteen thousand, memento and citation. Meritorious Research Achievements Award for the year was given to Dr. Manju S. Nair, Professor, Department of Economics, Dr. S. Sankara Raman, Professor, Department of Optoelectronics, Dr. S M A. Shibili, Professor, Department of Chemistry, Dr. K G. Gopchandran, Professor, Department of Optoelectronics. The Award includes a prize money of Rupees Five thousand with a certificate and memento. The Award for Best Project was presented to Dr. G. Subodh, Department of Physics and Dr. Manju S. Nair, Department of Economics. The Award for receiving Highest Grant was presented to Dr. E. Shaji, Department of Geology and Dr. Manju S. Nair, Department of Economics. Special Awards for Highest Grant (individual) was presented to Dr. Y. Anil Kumar, Department of Geology and Dr. M. Sameer, Department of Education. Pro-Vice Chancellor Prof. (Dr.) P P. Ajayakumar honoured Reshma Rajeev and S. Gokul for achieving meritorious success in the Civil Services Examination; Lakshmi R. Krishnan for securing the first rank in the Combined Defence Service Examination.

The winners of the Theatre Festival organized by the Kerala University Union 2019-20 were awarded Kavalam Narayanapanicker Memorial Award. The first place was shared by Cherthala S N College and Alappuzha S D College. Best Actors of theatre festival were also felicitated in the event. Members of the Syndicate, Adv. K H Babujan, Dr. S Naseeb, Adv. B. Balachandran, Dr. K G. Gopchandran, Dr. K B. Manoj, Prof. K. Lalitha, Sri J. Jayaraj, Sri. R Arunkumar, Sri. G Bijukumar, Sri. Riyas Wahab, Registrar Dr. K S Anilkumar, participated in the event along with other dignitaries. The Award distribution ceremony was held at the Aquatic Biology Hall, Karyavattom.

Sports Merit Scholarship

University of Kerala Sports Merit Scholarship was distributed. Tokyo Olympics bronze medallist Lovlina Borgohain and her coach Sandhya Gurung were the special invited guests. The conference was inaugurated by Hon'ble Minister for Education and Labour, Sri. V. Sivankutty. Hon'ble University Vice Chancellor Prof. (Dr.) V P Mahadevan Pillai chaired the function. Pro-Vice Chancellor Prof. (Dr.) P P Ajayakumar, Members of the Syndicate, Adv. K H Babujan, Adv. A. Ajikumar, B P. Murali, Dr.



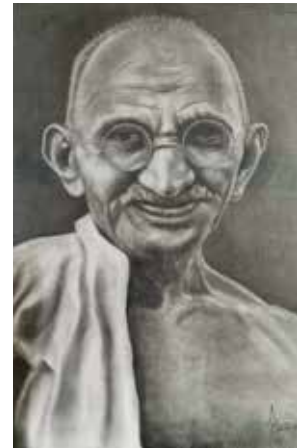
S Naseeb, Adv. G Muraleedharan Pillai, Adv. B. Balachandran, Dr. K B. Manoj, Dr. M Vijayan Pillai, Dr. Gopchandran K G., Prof. K. Lalitha, Srimathi Ranju Suresh, Sri J. Jayaraj, Sri. R Arunkumar, Sri. G Bijukumar, Sri. Riyas Wahab, 'Sai' Regional

Director Dr. G. Kishore, Arjuna Award winner P J. Joseph, University Union Chairperson Anila Raju, Registrar Dr. K S Anilkumar, Physical Education Director Dr. D. Jayarajan David along with other dignitaries participated in the event.

The First Gurushreshtha Award



Dr. P.P. Ajayakumar, Pro-Vice Chancellor and Professor of English of the University was awarded the first *Gurushreshtha Award* of the Dr R Bhadrhan Foundation. Besides an academican of note Prof Ajayakumar is also an artist who has held exhibitions of his oil paintings and charcoal sketches. His recent charcoal works include the portraits of Gandhiji, Tagore, ONV and Sahodaran Ayyappan. Amidst the busy life as the PVC, he also finds time to give academic lectures and he has contributed several talks to the *KU Padasala* video collection. Another notable contribution is his efforts in bringing out the *Littcrit* journal with no break or delay twice a year ever since he took over as the Chief Editor after the sad demise of his teacher and mentor, Dr PK Rajan. *Littcrit* has been in the Care List of the UGC from the very beginning.



Minister Sri. Antony Raju joins the Alumni Association



The Hon'ble Transport Minister Sri Antony Raju joined the Alumni Association of the Kerala University. After inaugurating the first phase of the Carbon-free campus project, the Minister received membership from the Hon'ble Vice Chancellor Prof. (Dr.) V P Mahadevan Pillai at the Karyavattom campus. Pro-Vice Chancellor P P. Ajayakumar, Members of the Syndicate, Adv. K H Babujan, Dr. S Naseeb, Adv. A. Ajikumar, Dr. K B. Manoj, Dr. M Vijayan Pillai, Srimathi Ranju Suresh, R Arunkumar, G Bijukumar, Sri. Riyas Wahab, Senate member N Noufal, Registrar Dr. K S Anilkumar, Alumni Association Secretary Prof. (Dr.) R Vasanthagopal along with other dignitaries participated in the function.



Finance Minister Sri. K N. Balagopal joins the Alumni Association

Hon'ble Finance Minister Sri. K N. Balagopal joined the Kerala University Alumni Association. He received membership in 'Ente Sarvakalasalakoppam Abhimanathode' ('Proud to be with My University') programme conducted in the senate chamber. He accepted membership from the Hon'ble Vice Chancellor of the university Prof. (Dr.) V P Mahadevan Pillai. Pro-Vice Chancellor Prof. (Dr.) P P Ajayakumar, Members of the Syndicate, Adv. K H Babujan, Dr. S Naseeb, Adv. A. Ajikumar, B P Murali, Adv. B. Balachandran, Dr. K B. Manoj, Dr. M Vijayan Pillai, Prof. K. Lalitha, Srimathi Ranju Suresh, Sri J. Jayaraj, Sri. R Arunkumar, Sri. G Bijukumar, Registrar Dr. K S Anilkumar, Heads of Departments, Alumni Association General Secretary Prof. (Dr.) R Vasanthagopal, Joint Registrars, Deputy Registrars, Assistant Registrars along with other dignitaries attended the function.



Minister Sri. Saji Cheriyan joins the Alumni Association

The Hon'ble Minister for Fisheries, Culture and Youth Affairs Sri. Saji Cheriyan received membership from the Hon'ble Vice Chancellor Prof. (Dr.) V. P. Mahadevan Pillai. Pro-Vice Chancellor Prof. (Dr.) P P. Ajayakumar, Members of the Syndicate, Adv. K H Babujan, Dr. S. Naseeb, Adv. A. Ajikumar, Sri. R. Arunkumar, Alumni Association Secretary Prof. (Dr.) R. Vasanthagopal along with other dignitaries participated in the function.

Laid the Foundation stone for the International Students Hostel at Kariavattom Campus



Hon'ble Vice Chancellor Dr. (Prof.) V P. Mahadevan Pillai laid the foundation stone for the International students' hostel which is being constructed at the Karyavattom campus, University of Kerala, for accommodating the foreign students. Rupees 3.18 crore is the cost estimate for the phase I of the hostel construction. Pro-Vice Chancellor Prof. (Dr.) P P. Ajayakumar, Members of the Syndicate, Adv. K H Babujan, Adv. A. Ajikumar, B P Murali, Dr. S Naseeb, Adv. B. Balachandran, Dr. K G. Gopchandran, Dr. K B. Manoj, Prof. K. Lalitha, Sri J. Jayaraj, Sri. R Arunkumar, Sri. G Bijukumar, Sri. Riyas Wahab, Registrar Dr. K S Anilkumar attended the function.

Hi Tech Facilities for Teaching / Learning: Construction work of 10 Theatre Halls & 33 Multimedia Classrooms Inaugurated

Minister of Higher Education and Social Justice Dr. R, Bindu inaugurated the construction work of 10 Multimedia Theaters and 33 Multimedia Classrooms at various departments of the University. The project aims at equipping university education with world-class ICT and other innovative technologies. The Hon'ble Vice Chancellor Prof. (Dr.) V. P. Mahadevan Pillai presided over the function. Pro-Vice Chancellor Prof. (Dr.) P.P. Ajayakumar and Syndicate members Adv. K.H Babujan, Adv. B. Balachandran, Dr.S. Naseeb, Adv. A. Ajikumar, Dr. K.G. Gopchandran, Smt.Renju Suresh, Shri.R. Arunkumar, Shri. G. Bijukumar, Shri. Riyas Wahab, Research Union Chairman Jibin Francis, Registrar Dr. K. S. Anil Kumar, heads of various departments, teachers, students and staff attended the function.



Startup Revolution in University of Kerala



The Kerala University Business Innovation and Incubation Centre (KUBIIC), formed to promote innovation and entrepreneurial activities of students and faculty, will soon receive ₹43.5 lakh from the varsity this year for stepping up its activities. KUBIIC has already got three startups registered as companies while another 12 are in the stage of company formation. Along with 63 startups in the idea

phase, KUBIIC has enabled 78 startups to sign MoUs with the University of Kerala. This year, KUBIIC conducted an idea hackathon in two phases from which 80 startup ideas were selected for idea grants. "Taking feedback from experts drawn from diverse domains, we had formulated a startup policy which was approved at the recent meeting of the syndicate. One of the major recommendations in the policy was to set up the proposed incubation centre as a non-profit company so that its functioning is not to the university departments and colleges alone,". KUBIIC will also establish links with the TIMed technology business incubator of Sri Chitra Tirunal Institute of Medical Sciences and Technology (SCTIMST) and will seek support from the Union Government's MSME Development Institute in Thrissur.

Also, KUBIIC is in touch with several venture capitalists for funding innovative startup companies. While a portion of funds that KUBIIC will get from the varsity this year will be for setting up a dedicated incubation centre, it will also be used as grants for the new startup ideas. In 2021 itself, KUBIIC selected seven new startups through a strict selection process by a panel comprising experts from the industry, funding agencies and research and development centres.

The new startup ideas include a smart reverse vending machine for plastic waste management, a system to manage industrial waste from sludge by additive aided composting, BIOcure-AGR, a bio-degradable wound dresser; FEED SOLUTIONZ, a solution for all fish feed needs; Fish4Trialz, a platform for Fish Seeds'; JOBOPSY, exclusively for home needs and WPIGGY, a financial app for children.

KUBIIC success stories

- **MakLab - Innovations:** An ed-tech company that manufactures electronic hardware and software products for prototyping and learning of electronic design and computer coding. Their motive is to habituate hardware and software education through gamification and computational thinking.
- **Auggen21:** A research and development based organisation specialising in Computer Vision and Artificial Intelligence by bridging contemporary research solutions.

- **KALAVARA:** Working towards becoming a full-fledged centre for Malayalam Language Resources Technology and Application Development.
- **Biocure - AGR:** Developed a useful, biocompatible, cost-effective wound dressing for burn wounds.
- **Wellsread Technologies Pvt. Ltd:** Develops automation systems for industrial, medical and agricultural fields.



Innovative products

- Among the products launched by the varsity-mentored startups, N-Sour, the ripened fruit extract of Malabar tamarind or 'kudampuli' has generated a lot of interest. The product has been brought by KU CraVings, a startup project by research scholars of the Department of Botany.
- Other notable products include a magnetic field-assisted 3D printer by the Department of Physics; and Rebin - a bin system developed by the Department of Environmental Sciences for better collection of single-use plastics. The system has been designed so as to enable the user to get credits for waste collected.

'Samam': Drama Camp



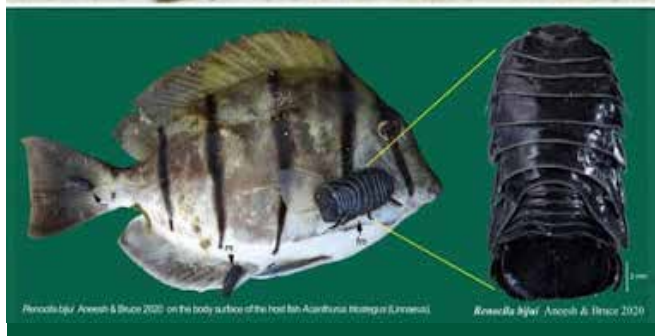
The Hon'ble Minister for Fisheries, Culture and Youth Affairs Sri. Saji Cherian inaugurated the five day drama camp "Samam" organized by Department of Kerala Studies in collaboration with Malayalam Mission. The Hon'ble Vice Chancellor Prof. (Dr.) V. P. Mahadevan Pillai presided over the function. Pro-Vice Chancellor Prof. (Dr.) P. P. Ajayakumar, Members of the Syndicate, Adv. K. H. Babujan, Dr. S. Naseeb, Adv. A. Ajikumar, Dr. C. R. Prasad (Head of the Department, Department of Kerala Studies), Malayalam Mission Director Smt. Suja Susan Varghese attended the function.

Animal Species Named after Faculty

A new tree-spider crab species discovered from the endangered mangrove ecosystems by Prof. Peter Ng, head of the Lee Kong Chian Natural History Museum, National University of Singapore is named *Leptarma biju* in honour of Prof. A. Biju Kumar, head of the Department of Aquatic Biology and Fisheries for his contribution and support to biodiversity research in the state. This is also the first report of the genus *Leptarma* from India.



Another marine crustacean organism parasitizing the coral reef fish *Acanthurus triostegus* from the Andaman Islands, India, is also named after Prof. A. Biju Kumar, as *Renocila bijui* by a post-doctoral fellow working in the University of Kerala and the researchers in Zoological Survey of India in honour of his contributions to taxonomy research.



Extension Activities

1. Village Adoption programme - 2020-2021



The department council selected Valiazeekkal Government Higher Secondary School, Arattupuzha, the 2004 tsunami-affected Arattupuzha Village in Alappuzha District, and Government Higher Secondary School, Ramapuram in Alappuzha district for the village adoption programme in 2020-2021.

As part of this programme, the implementation of mangrove afforestation of about 2 km was undertaken by planting saplings in the coast towards the landward part of the sea wall as a bioshield to reduce coastal erosion due to coastal storms. *Avicenia* and *Rhizophora* are the common mangrove species planted there. Continuous monitoring programme is done with the help of Kudumbasree members of the Arattupuzha panchayath.

2. ACU Knowledge Exchange Program Stakeholder Meeting



Stakeholder meeting and with Mayor, Kollam Corporation in relation to Association of Common wealth Universities Blue charter knowledge exchange program on “Marine Plastic Waste Management” on 16th March, 2021. (Photo: Dr.Salom Gnana Thanga.V. Program chair of the event, briefing the details of the program. In chair: Mayor, Kollam Corporation)

Report on Best Practices

Koithulsavam

A harvest fest, ‘koithulsavam’, was conducted to harvest the paddy cultivated in the University campus as part of the Harithalayam programme. Traditional methods were adopted for harvesting and students were excited to participate in the event organized on 28th September, 2020.



Initiation of Miyawaki forestation

The method of afforestation popularized by the Japanese Botanist, Akira Miyawaki is being implemented in the campus, considering the appreciable advantages it has. The method involves the development of urban indigenous micro-forests in small areas of land that help to conserve biodiversity, regulate temperature and protect nature.



Making and Distribution of mask and sanitizer to public

Even during lockdown, due to the novel corona virus, the department was functioning and conducting diverse activities in online mode. The scholars actively participated in preparing sanitizers and masks and distributed them to the public.



Webinar series on 'Advances in Biological Science', 2020

A lecture on 'Integrin Biology' by Dr. Yoshikazu Takada, Professor, Department of Biochemistry and Molecular Medicine, University of California Davis School of Medicine, was organized on 15th October, 2020. Participants from different parts of the country attended the lecture.

Prof. A. Abraham Memorial Lecture, 2020

A lecture to commemorate the great visionary, Prof. A. Abraham, was conducted by the Department of Botany in association with the Kerala Academy of Sciences, on 28th October 2020, through online platform. The lecture, 'From Cytogenetics to Genomics - the Journey So Far' was delivered by Prof. (Dr.) Manoj Dhar, Vice Chancellor, University of Jammu. The event witnessed the participation of academicians and scholars across the country.

Dr. Kamarudeenkunju Remembrance Day, Webinar on Biodiversity Conservation & Inauguration of Kamarudeen Memorial Systematic Garden



Dr. Kamarudeenkunju Remembrance Day was observed on 13th November, 2020 to remember the great teacher Dr. Kamarudeenkunju, who was a committed environmentalist, plant taxonomist, orator and, moreover, a great human being who lived a very meaningful life. Along with organizing a webinar on Biodiversity Conservation, a systematic plant garden was inaugurated in his memory in the campus.

Online Training on LMS for Teachers

University of Kerala had made it mandatory to adopt LMS under CSS from 2019 onwards and we have provided several introductory training sessions on the relevance and use of the same. However, most of the teachers are yet to adopt

the same. Considering the significance of LMS based in the online teaching learning methods and its relevance for the accreditation process, there was a need to urgently put LMS into practice. The training programme was conducted in the online mode for all teachers of the University, including contract lecturers. The 14-day programme was conducted in association with HRDC, University of Kerala as a refresher course from 5th August 2020 to 18th August 2020.

In continuation with the online training programme on LMS conducted during 2020, a two-day add-on online training programme on LMS was conducted on the 2nd and 3rd November 2020. Dr. Ashkarali P, FLAIR International Intern 2015, Assistant Professor of Electronics, Government Arts and Science College, Tanur, and Dr. Ramesh A. R., FLAIR International Intern 2014, Assistant Professor of Chemistry, Government Victoria College, Palakkad engaged the sessions. The focus was on student enrolment and initiating semester one courses. There was also a for teachers who missed out the first programme.

Karyavattom Campus sees 'green' shoots of change

Hostels have ventured into efforts to adopt sustainable practices with its source-level segregation of waste materials. Despite having no consolidated system for waste collection, the Karyavattom campus of the University of Kerala has recently witnessing localised efforts to move towards green protocol.



Following the footsteps of various departments that managed to transform themselves into zero-waste institutions, hostels at the campus have also ventured into efforts to adopt sustainable practices such as source-level segregation of waste materials.

The women researchers' hostel, one of the five hostels in the campus, has successfully undertaken a plastic collection drive that has enabled its authorities to prevent plastic burning in its backyard. Through the 'pilot project', the hostel, which has 129 inmates, could collect over 1,500 plastic covers from the rooms as well as the hostel mess within a month.

According to the hostel secretary Miss Vinumol Devassy, who is a research scholar, plastic covers were collected, washed and dried floor-wise. The washed and dried

plastics, which would otherwise be burned, were packed and handed over to the plastic waste collection centre run by the Thiruvananthapuram Corporation in Kazhakuttom," she said. Sanitary workers later collected these on a weekly basis. A large number of medicine covers, brushes and plastic bottles were also collected separately. The waste items also comprised numerous hand sanitiser containers.

'Green' Vishu

Despite teething problems, the endeavour to make inmates of Karyavattom campus conscious against littering irresponsibly has started showing positive signs. The first signs of change were visible recently when the hostelites opted for a 'green' Vishu by avoiding the use of plastic leaves and disposable glasses for sadhya.

The hostellers have now recommended a centralised system to manage plastic wastes from the five university hostels that houses around 800 postgraduate students and researchers. Assigning a nodal officer was also vital for monitoring the mechanism and constantly evaluating its progress. The students also mooted a total ban on plastic burning inside the Karyavattom campus.

Inauguration of Travel through Nobel Winners Programme

Prof. C. Vijayan, Professor of Physics, IIT Madras, delivered the inaugural talk on the theme "Raman Effect and Raman's Effect" as part of the innovative lecture series "Travel through Nobel Winners" organised by the IQAC, University of Kerala on 11th December 2020 through video conference. He spoke on the need to dwell deeper into nature and draw inspiration from understanding nature in order to make learning complete.



The Hon'ble Vice Chancellor, Prof. V. P. Mahadevan Pillai, presided over the function in which felicitations were offered by Hon'ble members of the Syndicate Adv. K.H. Babujan, Dr. S. Nazeeb, Dr. K. G. Gopchandran as well as Shri. Ramshad Khan R., Chairman, Kerala University Departments' Union and Smt. Ilfa K.M. Chairperson, Kerala University Research Students' Union. Prof. A. Bijukumar, Vice Chairman of CSS, welcomed the gathering, while Prof. Gabriel Simon Thattil, Director, IQAC, proposed the vote of thanks.

Carbon-Free Campus



The first phase of Carbon-free campus programme of the University of Kerala was inaugurated by the Hon'ble Minister for Transport Sri Antony Raju. The Minister inaugurated the first phase of the Karyavattom on-campus carbon-free project by flagging off the journey of students in seventy five bicycles and a battery powered electric buggy that can carry eleven people at a time. After the inauguration, Hon'ble Transport Minister travelled in the electric buggy along with other dignitaries including Hon'ble Vice Chancellor Prof. (Dr.) V P Mahadevan Pillai, Pro-vice Chancellor Prof. (Dr.) P P Ajayakumar, Members of the Syndicate, Adv. K H Babujan, Dr. S Naseeb, Adv. A Ajithkumar, Dr. K G Gopchandran, and Srimathi Ranju Suresh.

In his inaugural address, the Minister highlighted the importance of minimizing the use of petrol-diesel vehicles within the campus. Members of the Syndicate Dr K B Manoj, Dr M Vijayan Pillai, Sri R Arunkumar, Sri G Biju Kumar,



Sri R Riyas Wahab, Senate member N Noufal, University Registrar Dr. K S Anilkumar, members of the faculty of all the departments of the University, students, research scholars and employees, took part in the event. Another electric buggy will also be added to the existing one in the campus. Anyone who visits the campus can use the service of public electric buggy or bicycle to move within the campus. Its activities are focused upon the security section of campus. The project is aimed to make the campus carbon free by gradually reducing carbon pollution through encouraging travel by cycle and battery vehicles.

Conservation to Surplus Water



UoK Karyavattom campus was ill-famed for its water shortage. With the inauguration of the 6-lakh litre water tank on 4th October, 2021 by Mr. G. R. Anil, Minister for Civil Supplies, the water woes of the campus has become a story of the past. Water is now sourced from the KWA and the four traditional wells found in the campus. The tank was built by KWA with the help of the Jalasamridhi project.

MoU to collab on research and education

The University of Kerala has a Memorandum of Understanding (MoU) with the Digital University of Kerala for a period of ten years to further co-operation in research and education. The MoU was signed by DUK Registrar P. Suresh Babu and KU Registrar Dr. K. S. Anil Kumar in the presence of Hon'ble Vice-chancellors Prof. (Dr.) V.P. Mahadevan Pillai and Dr. Saji Gopinath of UoK and DUK respectively.

As per the MoU, DUK and UoK will engage in a mutually beneficial way to execute collaborative projects, co-operation in the field of teaching, research and development, organising training programmes, and conferences and in providing industrial inputs and value addition in Data Science and Technology Management. Exchange programmes involving researchers, faculty, technical faculty and students of DUK and UoK. Curriculum development is



also one of the thrust areas where both universities will work on incorporating skills sets that could equip students with the changing employment scenario, the statement added.

Inauguration of Piper Conservatory cum Conservation Education House

As part of an initiative for the conservation of 'Black pepper' germplasm of Kerala under the Emeritus Scientist Scheme (2019-2022), a greenhouse, particularly designed for the conservation of the traditional Piper varieties of Kerala, was established in the campus. The planting inauguration of the 'Piper Conservatory cum Conservation Education House' was jointly done by Prof. (Dr.) T. S. Swapna, Head, Department of Botany, Dr. P. J. Mathew, KSCSTE- Emeritus Scientist, Department of Botany and Dr. Achuthsankar S. Nair, Head, Department of Bioinformatics and Computational Biology, University of Kerala on 7th December, 2020.

A new taxon from Southern Western Ghats of Kerala discovered

A new subspecies of *Rungia* named as *Rungia longifolia* subsp. *keralensis* has been discovered from the Shenduruny Wildlife Sanctuary in Kollam district, Kerala, by Santhosh Kumar E. S., Jagadeesan R., Gangaprasad A. and Sam P. Mathew. The new subspecies resemble *R. longifolia* subsp. *longifolia* but differ from it by the decumbent or diffuse habit, terete or subterete hairy stems and branches, long linear-lanceolate leaves with fairly long petioles, much long hairy peduncles, shorter and narrowly scarious margined sterile and fertile bracts with acuminate apices.

Inauguration of vegetable planting in Department Agriculture plot

The Department of Botany, University of Kerala, is always in the forefront of promoting agriculture and forestry. A vegetable garden was inaugurated in the agricultural plot of the campus by planting seedlings by Prof. (Dr.) T. S. Swapna, Head, Department of Botany, University of Kerala.

Students participate in farming practices



As part of involving students in farming activities and spreading the message of self-sufficiency, a vegetable garden was established in the Department of Botany and different varieties of vegetables were planted with active participation on the part of the staff and the students. The initiative helped to develop an interest towards farming among the scholars.

Establishment of Aquatic Plant Garden

A conservatory of aquatic plants was established at the field of Department of Botany, University of Kerala, which includes a valuable collection of diverse aquatic plants. The plants are well maintained and properly monitored.

Dr. Kamarudeen Foundation Environment Protection Award 2020

The Department of Botany, in association with Dr. Kamarudeen Foundation for Biodiversity Conservation, handed over the first Dr. Kamarudeen Foundation Environment Protection Award in 2020 to Shri. V.S. Achuthanandan, former Chief minister of Kerala, on 29th December, 2020. The award was given away by Dr. S. Faizi, an Indian ecologist specializing in international environmental policy.

Webinar series on 'Advances in Biological Science', 2020

The fourth lecture of the series on 'Enzymes for Biorefineries: Addressing Technical Challenges and Limitations' by Dr. Rajeev Sukumaran, Principal Scientist and Head, Microbial Processes and Technology Division, CSIR- NIIST, Thiruvananthapuram, Kerala, was held on 30th December 2020. The lecture was very informative and students actively participated in discussions with the speaker.

Project Dhatri – Micro Level Intervention for Zero Waste Institutions

Project Dhatri is an Action Research Project implemented in the Department of Sociology, University of Kerala in order

to convert the space into a Zero Waste Institution through execution of Source Level Solid Waste Management and Green protocol. As part of Project Dhatri, following activities were done in the Department of Sociology:

1. Waste Audit conducted in order to analyze the quantity and characteristics of Solid Waste being generated in the Department of Sociology on an average working day and during event days.
2. Plan of Action prepared for implementing Participatory Source Level Solid Waste Management
3. Four interventions conducted as a Pilot for the Project
4. Necessary infrastructures procured and established.
5. Casual labourer of the Department trained to become a Green Technician (Facilitator for Source Level Solid Waste Management and Green Protocol).
6. Wide range of Awareness Campaigns conducted through social media to inculcate the message of "Responsible Solid Waste Management" in a wider audience.
7. Conducted regular monitoring and facilitated the Project for twenty-four months from the date of commencement.

The main project was initiated in January 2020 and as part of it, four interns were selected as Voluntary Associates from final year MSW Course of the Department of Sociology.

The initial phase included planning for sustainable infrastructural development for source-level Solid Waste Management, further activity implementation and extended

beautification of the Department premises. The department is also chalking out awareness activities for promotion of the Green Protocol in the Department.

Extension activities

Department of Sociology has planned for an outreach Programme titled Gramyatha, which has been approved and fund allocated in the Planned Budget of the University. It is to extend the classroom to the wider 'rural classrooms' of learning and practice. Gramyatha envisages that sociological learning and knowledge production occurs only when it engages creatively with people, especially that of the vulnerable and marginalized communities around us. To this effect, the project intends to adopt an underprivileged colony – Ambedkar colony in Ambalthinkara, Kazhakootam, which falls within 3 kilometers of the Kariavattom Campus. Focusing on the areas of education, health and employment, the project aims at bringing about an integral development of the colonies. As soon as the situation of the pandemic improves, we intend to initiate the programme in the field.

Alumini activities

Vishnu J. Menon, an alumnus of the department, has voluntarily set up a Solid Waste Management System in the Department. He has also produced a short academic movie, titled 'Haritham Mohanam' with the financial support of the Suchitwa Mission, Government of Kerala. The movie portrays the green initiatives and solid waste management at source level of the Department. On February 1st 2021, the movie was released by Sri. V.K. Prasanth, MLA, Vattiyoorkavu, in the Auditorium of his office building.

Inauguration of 'Meet the Scholar' Programme



Learning from eminent scholars and great men with experience and vision has always been the tradition of University of Kerala. With this motive we have launched an ambitious program entitled MEET THE SCHOLAR. We would invite eminent scholars, researchers, social reformers and leaders of repute to the campus to interact with our teachers and scholars on topics of contemporary interest and enriching academic value. Drawing inspiration

from them, the learning ecosystem of the campus would transform itself in to a truly mature and robust academic environment.

Dr. T. M. Thomas Isaac, Hon'ble Minister for Finance and Coir inaugurated and delivered the inaugural address for the flagship programme 'Meet the Scholar' initiated by the University of Kerala on 28th October 2020 at 5 p.m. through video conference. The inaugural address was followed by

an online interactive session where students, researchers and faculty interacted with the Hon'ble Minister on the theme 'Covid-19 and the Kerala Economy'. The Hon'ble Vice-Chancellor, Prof. V. P. Mahadevan Pillai presided over the function. Felicitations were offered by Hon'ble Pro-Vice-Chancellor, Prof. P. P. Ajayakumar, Members of the Syndicate, Adv. K. H. Babujan and Dr. K. G. Gopachandran. The programme was organized in the virtual mode complying with Covid-19 guidelines. Prof. Gabriel Simon Thattil, Director, IQAC welcomed the, while Prof. C. R. Prasad proposed the vote of thanks.

Meet the Scholar sessions were hosted by our teaching departments in association with the IQAC as follows:

- i. Department of Demography, Theme: "Epidemiology of Covid-19 in India: Learnings and Way Forward", Presentation by Dr. Giridhar Babu, Professor of Epidemiology at Public Health Foundation of India and Member of Epidemiology, Surveillance, & Research group, ICMR National Task Force for COVID-19 on 30th October 2020.
- ii. Department of Philosophy, Theme: "Philosophy of Humor", Presentation by Lydia Amir, Visiting Professor, Department of Philosophy, Tufts University, USA on 15th December 2020
- iii. Department of Zoology, Theme: "The Journey Inward: Perspectives of Knowledge", Presentation by Dr. V.P. Joy, Chief Secretary, Government of Kerala on 23rd February 2021.
- iv. Department of Sociology and Department of Law, Theme: "Social Identity and the Constitution in Contemporary India: The Question of Caste", Presentation by Prof. Mohan G. Gopal, Formerly, Vice Chancellor, Law University Bangalore and Director, National Law School of India University and Director, National Judicial Academy, Bhopal on 22nd March 2021.
- v. Department of Economics, Theme: "Public Policy in India: Unmasking the Debates", Presentation by M. H. Suryanarayana, Professor, Indira Gandhi Institute of Development Research (IGIDR), Mumbai on 25th March 2021.
- vi. Department of Psychology, Theme: "Sexual Harassment at Workplace", Presentation by Prof. Dr. J. Anitha Menon, Professor of Health Psychology, University of Zambia on 31st March, 2021

Department of Physics Organizes Meet the Scholar

Padmasree Prof. Deepankar Banerjee of Indian Institute of Science participated in the program that was conducted by University of Kerala in collaboration with the IQAC and the Department of Physics. Prof. Banerjee interacted with teachers and students on the topic 'Science, Technology and Society'. University Pro-Vice Chancellor Prof. (Dr.) P P. Ajayakumar delivered the keynote address. The program was conducted via Google meet in the evening at 5.30 pm.

Meet the Scholar Programme, Department of Sociology

Under the auspices of the IQAC, the Department of Sociology, in association with the Department of Law, organized and conducted the "Meet the Scholar Programme" on 22nd March 2021 at 3:00 pm in the Senate Chamber, Palayam Campus, University of Kerala. Prof. Mohan G. Gopal, the former Vice Chancellor of the Law University of Bengaluru and the Director of National Law School of India, and Director, National Judicial Academy, Bhopal, spoke on the topic "Social Identity and the Constitution in Contemporary India: The Question of Caste". Prof. Mahadevan Pillai, honourable Vice-Chancellor, inaugurated the programme and delivered the inaugural address. Dr. Antony Palackal, Professor and Head, Department of Sociology, the Chief Organizer of the programme, introduced the theme and welcomed the dignitaries and the participants present onsite as well as online. On this occasion, *Making of Distinctions: Inclusive Oppositions in Social Sciences*, book edited by Dr. Antony Palackal et al., and published by Information Publishing Age, Charlotte, NC, USA was released by Prof. Mahadevan Pillai, honourable Vice-Chancellor by handing over the first copy to Prof. Mohan G. Gopal. Dr. Lakshmi Priya, Assistant Professor, Institute of English, University of Kerala introduced the topic. Dr. Sindhu Thulaseedharan, Head, Department of Law, University of Kerala proposed the Vote Thanks. The programme was attended by more than 150 participants in the Senate Chamber and nearly 100 participants online in the livestream in YouTube.

MEET THE SCHOLAR Program by the Department of Philosophy

The Department of Philosophy in association with IQAC, University of Kerala, organised Meet the Scholar program with Prof. Lydia Amir on Google Meet on 15th December, 2020. The talk was on "The Philosophy of Humor". The program began with a note of welcome by Dr. Simon Thattil, Director, IQAC. Dr. P.P. Ajayakumar, honourable pro-vice chancellor, University of Kerala, delivered the inaugural address in which he highlighted the significance of the theme chosen. It was followed by the brilliant exposition of the theme by Prof. Lydia. In the first part of the lecture, she identified various recurrent misconceptions, over-generalizations, and errors that plague the depiction of philosophy's relation to the comic, and in the second part, she attempted to explain the reasons for their origin and perpetuation. It was followed by a vibrant interactive session where faculty members and students came up with a lot of queries and comments. The program, was attended by around 100 research scholars, students and faculties from various universities and institutions.



Clean Campus Drive

The Hon'ble Vice-Chancellor resolved in the meeting of the Heads of Teaching Departments and IQAC to launch a Clean Campus Drive Programme in November 2020. The Hon'ble Vice-Chancellor inaugurated the programme on 2nd November 2020 at Kariavattom Campus. The objective was to keep the campus clean and maintain cleanliness and hygiene.

Student Induction Programme

University of Kerala hosted a 3-tier induction programme for its newly admitted students of the 2020 batch. The 3-tier programme had a university level induction, school level induction as well as a department level induction. Over 600 students were admitted to the 43 teaching departments of various disciplines in the Sciences, the Social Sciences, the Arts, Humanities and Commerce.

The University level induction programme was formally inaugurated by Prof. C. Vijayan, Professor of Physics, IIT Madras on 11th December, 2020. The inaugural function was chaired by Prof. V. P. Mahadevan Pillai, Hon'ble Vice Chancellor, University of Kerala, Hon'ble members of the Syndicate Adv. K.H. Babujan, Dr. S. Nazeeb, Dr. K. G. Gopchandran as well as Shri. Ramshad Khan R., Chairman, Kerala University Departments' Union and Smt. Ilfa K.M. Chairperson, Kerala University Research Students' Union were present.

The Hon'ble Pro Vice Chancellor, Dr. P. P. Ajayakumar, urged students to take advantage of the unique opportunity that was bestowed upon them on securing admission to the University departments for higher learning. Dr. C. R. Prasad, Registrar, formally welcomed the newly inducted students on behalf of the University of Kerala.



On 12th December 2020, the second induction lecture was delivered by Padmabhushan Prof. P. Balaram on the theme *Science and Nature*. He spoke on how different scientific disciplines were connected and how they are in deeper connect with nature. The association between cultural evolution and biological evolution was well illustrated. He spoke on how to link the various elements in different sciences as well as how we

could understand the history of mankind by tracing the evolution of life from unicellular organisms to the present human race.

The final induction lecture was delivered by Prof. V. Madhusoodhanan Nair, Poet and Critic of Malayalam literature. The poet appealed to students to love their mother tongue so as to understand our own identity. The concluding session was chaired by Prof. V. P. Mahadevan Pillai, Hon'ble Vice Chancellor. Prof. R. B. Binoj Kumar, Research Director, Dr. E. Shaji, Joint Director, IQAC, Prof. S. Shifa, Head, Department of Malayalam and Prof. Gabriel Simon Thattil, Director, IQAC were present.

New Taxon from Southern Western Ghats of Kerala discovered

New subspecies of *Rungia* named as *Rungia longifolia* subsp. *keralensis* is described from the Shenduruny Wildlife Sanctuary in Kollam district, Kerala by Santhosh Kumar E S, Jagadeesan R, Gangaprasad A and Sam P Mathew. The new subspecies is resemble to *R. longifolia* subsp. *longifolia* but differ from it by the decumbent or diffuse habit, terete or subterete hairy stems and branches, long linear-lanceolate leaves with fairly long petioles, much long hairy peduncles, shorter and narrowly scarious margined sterile and fertile bracts with acuminate apices.

Success in Civil Service Examination: Neena Vishwanath Felicitated



Hon'ble Vice Chancellor Prof. (Dr.) V. P. Mahadevan Pillai felicitated Ms. Neena Vishwanath for her outstanding performance in the Civil Service Examination. Pro-Vice Chancellor Prof. (Dr.) P.P. Ajayakumar, Members of the Syndicate Adv. K.H. Babujan, Dr. S. Nazeeb, Adv.

A. Ajikumar, Dr. M Vijayan Pillai, Dr. K.B. Manoj, Adv.B. Balachandran, Shri. B.P. Murali, Adv.G. Muraleedharan Pillai, Prof.K. Lalitha, Shri. J. Jayaraj, Smt. Renju Suresh, Shri.G. Bijukumar, Shri.R. Arunkumar, Registrar Dr. K. S. Anil Kumar, Director of Planning and Development Dr. Mini Dejo Kappan, Kerala University Employees Union Secretary Shri.S.V. Saj and Kerala University Staff Union Secretary Shri. O.T. Prakash attended the function. Ms. Neena Vishwanath delivered the keynote address. Ms. Neena Vishwanath was a former assistant at Accounts Section, University of Kerala



Digital Garden at University of Kerala

Digital garden at University of Kerala Palayam Campus was officially inaugurated by Hon. Vice Chancellor of University of Kerala, Prof. (Dr.) V. P. Mahadevan Pillai, in the presence of the Pro Vice Chancellor, the Registrar and Syndicate members on 17th August 2021. More than 250 species of trees were documented in the Palayam Senate House and Kariyavattom Campus. All the documented data were digitized through website creation and QR code linking. By digitizing the information of the plants in University of Kerala, visitors can learn more about our biological diversity. Anyone interested in Plants can access the website freely at https://www.keralauniversity.ac.in/digital_garden/home. Through this project, University of Kerala becomes India's first University with a digital garden.



Established Digital Garden at Kerala Public Service Commission

The investigation involves the documentation of tree and garden plant species of Kerala Public Service Commission (KPSC). Documentation of trees of Kerala Public Service Commission gives a clear idea about the floristic diversity in the premise. The total number of trees and garden species documented in the KPSC is One Hundred and forty-four (144), which includes 68 tree species and 76 garden plant species. Anyone interested in Plants can access the website freely at <https://treesofkeralapsc.blogspot.com/>. Through this project Kerala PSC becomes India's first PSC with a digital garden. A book entitled 'Trees and Garden Plants of Kerala Public Service Commission – India's First PSC with Digital Garden' authored by A. Gangaprasad and Akhilesh S. V. Nair was released by the Hon. Chairman of KPSC, Adv. Sakeer, during the ceremony.

Digital Garden at Karivattom Campus

Digital Garden is a concept of digitization of floristic diversity of an area for the easy access of plant data using our mobile phones. The concept of a digital garden and the creation of India's first digital garden was done by Prof. A. Gangaprasad, Hon. Director, Centre for Biodiversity Conservation, and Shri Akhilesh S. V. Nair, Research Scholar, Department of Botany, University of Kerala, at Kanakakkunnu Palace, Thiruvananthapuram. After the success of establishing the digital garden at Kanakakkunnu Palace, Thiruvananthapuram, the authors also established a digital garden at Kerala Raj Bhavan, University of Kerala, Kerala Public Service Commission and Maharaja's College, Ernakulam.

CBC's First volume of newsletter published

The first volume of the newsletter entitled 'Green Paradise: The Voice of Nature' was published from the Centre for Biodiversity Conservation covering the various activities of

the Centre from November 2018 to June 2020. It was released on 11th December 2020 by the Hon. Vice Chancellor of the University of Kerala.



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