



Periyar University Newsletter

NAAC A Grade | State University | NIRF Rank 90



From the Vice Chancellor's desk...

**To Provide an Academic Ambience for
the Bright Minds to Blossom**

Greetings and best wishes from Periyar University.

I have always thought that a news letter should be published by the University as a registry of happenings in the campus to serve twin purposes: to inform the stakeholders of the goings-on and for posterity. For me it is a ready reckoner for the period of its publication to provide a glimpse to the themes of deliberations and the luminaries that visited the campus. In that respect, we have in the coming pages pictures and write ups of about the distinguished scientists and scholars who have interacted with our students, scholars and teachers.

Higher education at all times has been crucial for the development of the country. More so, if it is in the period of cusp, between tradition and modernity, between conventional practice and contemporary methodology, between collectivism and individualism – or when there is a dilemma to choose between the beaten path to sustenance or a blind uncharted course to may be glory and fame.

All of the stakeholders are thinking about bringing about change in the way teaching learning takes place. The students want to pick and choose the best courses that will land them a plum job. The teachers want their students to achieve the best in their studies for the same reason. The educational administrators want the best process to be put in place with sufficient checks and balances to realize the full potential of both the teacher and the student in order to be relevant to the societal development and also to make a mark in the educational realm to be able to attract the best minds for further achievement.

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The regulating agency is evolving methodologies by which the earmarked funding reaches the right hands at the right time to carry forward the governments' vision mission of addressing the fulfillment of even the basic needs of people. The industry is altogether on a different wicket with an aim at increased relevance of its produce, maximization of profit and be cost effective as well.

The synergy of all the above said dynamics results in the best teaching learning environment to be set up that will output the best results in the given scenario in any field. Competition is the order of the day. All of the Universities, colleges, governments and research organizations chase the limited financial and personnel resources that is for anyone to lay hands on.

In order to achieve some standardization in the process of selection various agencies are coming forward with a measurement system that will place the applicants on a

plane. But with a lot of disparity in the way it is carried out, with no normalization possible to keep state and central Universities; public and private Universities; technical and academic institutions and teaching and research only bodies on a single platform - as their funding pattern and the number of stakeholders are significantly different - some ranking system is in vogue and without any predilection, Universities submit themselves for such assessment.

Suffice it say, that we get ranked or are out of the race for consideration. That said, it becomes imperative for the teachers and researchers to note this in mind and work towards excellence. Though numbers speak, it has to be supported by some class. Empty numbers make big noise but result in no significant contribution. Hence, I appeal to my University students, scholars and the faculty members to think about quality publication and collaboration with agencies for socially and academically useful research work. This will go a long way into improving our standing the in the all India assessment.

To that end, this Newsletter will chronicle the happenings in the campus and be a window to our activities. Let us march towards improving the quality of research work in order to make our existence fruitful in the short span of time we traverse in the campus and make it worth the while.

P. Kolandaivel

◀ All materials have chemicals: Prof Balaram ▶



'The nature is a treasure; no material in the world is free of chemicals', declared the former director of Indian Institute of Science Padma Bushan P. Balaram while inaugurating the Faculty Lecture Series programme during the commemoration of the national science day celebrations in March this year in the Periyar University campus.

In order to enrich the teaching and research caliber of the faculty members, Periyar University initiated Faculty Lectures Series in the campus which is the pet project of the Vice Chancellor.

While delivering the presidential address, Prof. P. Kolandaivel stressed the need for teachers to listen to important lectures and imbibe cross disciplinary concepts to remain in the forefront of contemporary research.

Prof. P. Balaram in his key note address highlighted the nature and existence of chemical communication in the biology. He pointed out that human beings are the only species that communicated with sound whereas while all other organisms did only through chemicals.

Cell to cell communication takes place through hormones for which nature has instituted a mechanism of extraordinary cooperation among the species realised by the electrical signals amongst themselves.

Plants produce chemicals that are responsible for their spicy and smelly characteristics. The predator prey relationship is easily maintained in due course of time through biological equilibrium.

We cannot say how many organisms are available in the space, but available data estimates the availability of an approximate 1.5

million of them and the chemical space is filled with about one million compounds.

Biology and Chemistry have strong association with genetics and evolution. Mathematics and Physics have significant contribution in the instrumentation for measurement of mass and weight and estimation of their unknown numbers.

Nature is a wonderful phenomenon and it does not change its core characteristics that allow us to measure it and estimate its parameters with relative ease. It is ideal to start the study of chemistry from Alice in Wonderland that gives glimpses of genius. No material in the globe is free of chemicals. By profiling their chemical composition we come to understand nature.

Nature has its own way of balance and microbes can feed on anything. Hence, to digest and control anything, we need to turn to a microbe which also throws a big question of ethics in research.

At the end of the lecture he fielded questions from the teachers. To a question as to how non recyclable waste could be controlled, he answered in the positive that nature will find its own way.

Dean, Sciences Prof. V. Krishna kumar welcomed the gathering while Dr. R. Balagurunathan, Head, Dept of Microbiology proposed the vote of thanks. ■

◀ Only Quality takes us to glory: Former IIT Dean ▶

The story of how Indian Institute of Science Education and Research [IISER] was built around the strong belief in quality teaching and research by both committed teachers and students was narrated by Prof. N. Sathyamurthy, its founder director, in the second lecture of the Faculty Lecture Series programme held in the University campus in April this year.

In his special lecture he declared that only quality teachers will enable quality students to come out as academic and industry leaders in the society.

His address was around the story of how IISERs around the country evolved. He traced the history of university evolution around the globe and India in particular, starting from the oldest of them all, Takshashila and Nalanda.

He stressed the need for the institutional head to have sufficient freedom and autonomy to choose the best of the teachers in order to have quality output.

He quoted the examples of how Khelkar, Malavika, AN Jha and



Ashutosh Mukherjee who were all known for appointing Nobel laureates in their staff. Prof. N. Sathyamurthy said there will be teething problems during the developmental phase and one has to overcome them for the overall good.

This effort is the need of the hour to train quality man power in science; combine science, education and research; encourage interdisciplinary endeavors; integrate technology with science and science with society. This will allow thinking beyond training our children to become engineers and doctors.

Prof N. Sathyamurthy stressed the five basic tenets that drove the IITs to fame. They are trust, quality faculty, students and infrastructure in the environment of academic freedom.

Prof. P. Kolandaivel, Vice Chancellor, Periyar University during the presidential address pointed out the need for the faculty to draw inspiration from academic luminaries like Dr. N. Sathyamurthy.

While Prof. V. Natarajan welcomed the gathering, Prof. V. Krishnakumar proposed the vote of thanks. ■

Lending a helping hand to the needy

To learn, affordability though plays a big role, should not be a limiting factor. Keeping this mind, from this year, a bright student from the economically weaker family will be provided with full financial assistance in each of the courses in the University departments to pursue higher studies. The selection of the recipient is decentralised and will be done at the departmental level by a committee constituted for that purpose.

**TWEAKING
TOWARDS
EXCELLENCE...**

◀ Teach through technology ▶

“Teachers ought to make use of all available latest technologies to improve teaching” insisted Prof. P. Kolandaivel Vice Chancellor, Periyar University during the presidential address for the seminar on Social Media in Teacher Education in the university campus.

Visualizing the eventual growth of technology in India, he pointed out that more than 100 crore people are effectively using cell phones and most of them actively subscribe to WhatsApp.

After the advent of technological advancement, teachers now have more chances to bring changes in

the teaching learning process, he added. If properly utilized, the technological advancements will minimize the gap in the teaching and learning process. The quantum mechanics and classical mechanics are full of mathematical equations that can be taught effectively by using computer technology to enable the students to grasp the concepts, principles and equations better, he assured. For instance, the visualized form of waves in the computer may yield better output. Teachers from sciences and social sciences disciplines can effectively use technology to bring revolutionary changes in the ways of understanding theories.

Mr. V. P. Joshith, from Central University of Kerala delivered the special address in which he pointed out that India has the largest electronic repository of e learning material in the world. Multimedia packages from MOOC and Swayam receive overwhelming response from the student community, he further added. So far 1.6 million people have enrolled in it and he hopes that it is likely to reach one crore soon. Teachers and researchers from various educational colleges participated. ■

TWEAKING TOWARDS EXCELLENCE...

Common syllabus for MPhil

The syllabi followed in both affiliated colleges and the University departments are different till now for the M.Phil. programme. The BoRS have passed the resolution to make them uniform for both the courses from this academic year in order to ensure parity between students of affiliated colleges and the University departments who pursue the course. The M.Phil. course will be conducted with a common entrance test for admission and common dates for examination.

Four Paper Course Work

The Board of Research Studies [BoRS] has passed a resolution to adopt the UGC guidelines that will enable quality doctoral dissertations. In that respect the research scholars pursuing their Ph.D. will have to take four papers for their Pre Ph.D. course work. This will enable them to obtain a firm footing on their areas of interest and the methodology to handle their research problem. They will also have to publish two research papers in quality publications before submitting their thesis which will be scrutinized by the doctoral committee.

TWEAKING TOWARDS EXCELLENCE...

◀ Convocation Welcome Address by Vice Chancellor ▶

The learning, which a man acquires in one birth, will last him for seven births - Thiruvalluvar
 "Education is the ability to listen to almost anything without losing your temper or your self-confidence." - Robert Frost



This is an occasion for the University to share her honours, achievements and social contributions with all the well wishers.

The Governor-Chancellor of Periyar University Shri. Banwarilal Purohit is a senior political personality having shaped public affairs in a big way for the last four decades. He represented Nagpur Lok Sabha constituency three times. Besides, he is a journalist, renowned social reformer, prolific orator, nationalist thinker and an eminent educationist. Born on April 16, 1940, he obtained his commerce degree from Nagpur University. He won the Assembly elections from Nagpur East segment in 1978 and from Nagpur South Constituency in 1980. He served as a Minister of State for Urban Development, Slum Improvement and Housing in the Maharashtra Government in 1982. All through his political career, he has carried out a relentless fight against corruption in public life. He has been associated with many social, charitable, religious and sports

organizations and has generously donated to the cause of education and social welfare. He is the National Trustee and Vice President of Bharatiya Vidya Bhavan, one of the premier societies running more than 250 educational institutions across the globe.

He served as Governor of Assam from August 2016 to October 2017 and also held the additional charge for the State of Meghalaya. Shri. Purohit assumed office as Governor of Tamil Nadu on 06th October 2017 since which time Tamil Nadu State Universities have been witnessing sweeping reforms.

Hon'ble Minister for Higher Education, Government of Tamil Nadu and the Pro Chancellor of our University Thiru. K.P. Anbalagan represents the Palacode assembly constituency of Dharmapuri District, which comes under the territorial jurisdiction of our University. He has been showing keen interest

in the various developmental activities of Universities and Colleges in Tamil Nadu.

Our Chief Guest Dr.B.Chandrasekaran, Director, Central Leather Research Institute (CLRI), Chennai which is one of the prestigious laboratories of CSIR. Who has specialized in Cleaner Production Technologies, Leather Education, Leather Product Design & Development and CAD Techniques for Leather Product Design. He is the recipient of Kannammal Memorial Award for holding First Rank in M.Tech, Sulabh International Award and the AIMO Award. He is the Vice-President of Indian Leather Technologists Association, and Life-Member A.C. Tech Leather and Footwear Association (ALFA), ISO-Leather, American Leather Chemists Association, International Union of Leather Technologists and Chemists Society. He is the Project Coordinator for CSIR's prestigious International Consultancy assignment in Ethiopia which focuses on capacity building for Leather Industry Development Institute (LIDI) at Ethiopia and Kenya, respectively. He is the coordinator for the National Monitoring Unit (NMU) for Department of Industrial Policies and Promotion (DIPP), Govt. of India and the principal leader for the Project Design Innovation Center for Life Style Products for providing designers for the leather products sector. He is with Leather Sector Skill Council (LSSC) in development of curriculum and vertical growth integrating the skills with levels of education.

Periyar University – An outline

Periyar University was established on 17th September 1997 by an Act of the Legislative Assembly. Started with three departments in 1997, the University has five Science Schools and three Arts schools comprising 27 departments offering 29 PG programmes and 27 Research programmes. Periyar University has been re-accredited with 'A' Grade (CGPA of 3.15 on a four point scale) by the

NAAC in 2015 and obtained 85th rank among 724 entries across India in the NIRF-2017. The faculty strength is 158 in the University departments, 57 in six constituent colleges and 21 in the PG centre at Dharmapuri. At present, 101 colleges are affiliated to Periyar University from the districts of Salem, Namakkal, Dharmapuri and Krishnagiri which cater to the needs of students from rural and urban areas. This includes 14 Government colleges and 4 Government aided colleges. The student strength has been steadily increasing and nearly one lakh eighty thousand students have enrolled - University departments (2,311), affiliated colleges (1, 66,716) and Periyar Institute of Distance Education (10,971).

Academic and Research Activities

The University departments have taken up 63 research projects with a financial outlay of Rs.10.31 crores during the last three years. So far, 193 projects have been completed with an outlay of Rs.19.22 crores. The departments of Mathematics, Physics, Geology, Food Science and Nutrition and Biotechnology have been recognized by the DST under the FIST program. The UGC has granted Rs.12.67 crores under the 12th plan. Faculty members have published more than 4500 articles as on date of which 1999 articles have been cited in Web of Science and SCOPUS. The average h-index is 39. The faculty members of the University departments are carrying out major research projects sponsored by DST, DBT, MoEF & CC, ICMR, UGC and CSIR to the tune of Rs. 6.5 crores.

Further, a total of 79 Conferences, Workshops, Seminars and Awareness programmes have been organized during this academic year. Our faculty members have delivered numerous lectures in national and international academic programmes. Eminent Professors and Scientists were invited to the Departments to share their experiences with students and faculty.



Tamil Nadu State Council for Science and Technology conferred the Tamil Nadu Scientist Award (TANSA) last year to Prof. D.Gopi of Department of Chemistry for his contribution in the biomedical domain.

The University hosted the Forty First Indian Social Science Congress with the focal theme of "Indian Universities Educational System – A Critical Appraisal" during December 18-22, 2017 in collaboration with the Indian Academy of Social Sciences, Allahabad. The Hon'ble Governor Chancellor inaugurated the Congress and the Hon'ble Minister for Higher Education delivered the valedictory address.

Faculty Lecture Series Programme

To attract faculty members to interdisciplinary and cutting edge research, Faculty Lecture Series Programme has been launched recently. The idea is to bring eminent scholars of national repute every month to deliver lectures in their respective domain. This programme was inaugurated and the first lecture was given by Padma Bhushan Prof. P.Balaram former Director of IISc, Bangalore.

Infrastructure

We faced many challenges in housing the Departments and Laboratories due to space constraint. On realizing the immediacy of the need, Periyar University obtained the approval of the Government for new and additional buildings. The various buildings worth of Rs. 38 crores are in the completion stage and the construction of new buildings to the tune of Rs. 19 crores are to be commenced soon.

The campus is Wi-Fi enabled and all the departments are provided with internet connectivity through optical fiber cable. The Central Library is well equipped with 87,200 volumes of text and reference books, 167 journals and magazines, 3,926 back volumes, 2,629 CD's/DVD's. We have also established a digital library to access journals from American Chemical Society, American Physical Society, American Institute of Physics, Springer Link, Web of Science, Nature, Taylor and Francis, Wiley and Cambridge University Press.

The Student Amenity Centre is providing reprography, refreshment, health care, LAN connectivity etc. to students and research scholars.

Placement Cell

The Placement Cell of Periyar University has conducted campus recruitment drives at regular intervals and more than 750 students have been placed in various leading companies including Infosys Technology, IDBI, HCL, Maruthi Suzuki Ltd. etc. Further, 200 teachers from affiliated colleges were trained by companies through the Placement Cell.

Physical Education

The Physical Education Department has organized twenty nine inter collegiate tournaments during the academic year 2017-2018. The hand ball teams - both Men and Women - of Periyar University have won Gold Medals in the State level Inter University, South Zone and All India tournaments.

Periyar Institute of Distance Education (PRIDE)

Nearly 65,000 students have enrolled in the 200 study centers across Tamil Nadu for various UG and PG programmes. We have introduced online admissions from this academic year.

Activities of NSS, YRC and RRC

Our University NSS unit is implementing the vision of Swachh Bharat through 'One student one tree' programme. Up to 12th March, 2018 our NSS volunteers have planted 28,615 saplings in the main campus and in the Constituent College campuses. Our students observe days of national importance and take pledge.

YRC and RRC have conducted numerous camps and training programmes pertaining to social issues in many villages of Salem, Namakkal, Dharmapuri and Krishnagiri Districts.

University Gold Medals

A Total of 128 candidates were awarded gold medals for securing University First Rank in this convocation including 32 in UG, 30 in PG and 17 in MPhil courses. From university departments 26 PG candidates and 22 MPhil candidates received medals. 380 PhD candidates received their degrees. Altogether, 67,081 candidates were awarded various degrees. ■

◀ Scholars get a glimpse of advances in differential equations ▶

A three day workshop on Partial Differential Equations and its applications was held for 50 research scholars and students of Mathematics in the campus in March.

Prof. P. Kolandaivel, Vice Chancellor inaugurated the proceedings by lighting the kuththuvilakku.

Dr. Shakthivel, Indian Institute of Science and Technology, Trivandrum; Prof. P.D. Datti, Tata Institute of Fundamental Research, Bangalore; Dr Shankar Ganesh, National Institute of Technology, Goa and Dr. Bharani Balan, Central University of Tamil Nadu, Tiruvarur were the resource persons who handled classes on various topics in PDE.



Potential applications of PDE include understanding heat conduction problems, wave phenomenon and resolving issues in image processing were deliberated in the three day workshop.

◀ Convocation address of B.Chandrasekaran ▶

At the outset I would like to congratulate all those who are receiving their degrees today. It is one of the most prestigious moments in everyone's life and you are all now entering a new phase in your life. India has 17 % of the World's population and more than 65% of Indian population, are less than 35 years and 50% of them is less than 25 years of age. This means, not only the future, even the present is in your hands.

Our Prime Minister has given a clarion call to the scientific community of the nation to address at least 100 problems of the common man and come out with solutions. Areas such as water, health, energy, food and affordable houses derive significant attention.

Our former President Dr. A.P.J. Abdul Kalam has asked the youth to dream about the future because only then we can work hard to realise our dreams coming true. Dreams transform into thoughts and thoughts result in action. He also goes out in saying all of us may not have equal talent but all of us have equal opportunity to develop our talents. The same has been emphasized by Swamy Vivekananda as "Arise, Awake, Stop not till the goal is reached".

He had tremendous belief in the youth and said "Give me 100 energetic young men and I shall transform India". In this context, Universities and Research Organisations have greater role in nurturing the younger brains for constructive nation building exercise.

With focus on developing younger generation to meet the challenges of the nation, Council of Scientific & Industrial Research (CSIR) under our Prime Minister's direction has conceptualized "Jigyasa" wherein each of its constituent Institution would adopt at least one Kendriya Vidhyalaya to propagate scientific temper in the young minds. In this context, Central Leather Research Institute has interacted with more than 12 KV Schools reaching out to hundreds of bright minds. Universities and Research Organizations have greater role in nurturing the younger brains for constructive nation building exercise.

On this momentous occasion I would like to illustrate few success stories of India. In the sixties when India was grossly inadequate in meeting the hunger,



Dr. M.S. Swaminathan staged the green revolution with the incorporation of new high yielding seed varieties and introduction of multiple cropping. Here, I have to mention the complementary role played by CSIR through its indigenous fertilizer, pesticides and the affordable tractor called 'Swaraj' all of which made the Food Starving nation to Food Sufficient nation.

Similarly, "White Revolution" in milk production was achieved by Dr. Verghese Kurien with his 'billion-litre idea' and 'Operation Flood'. The above two achievements signifies inclusive growth which provide greater opportunity for socio economic development of the weaker sections of our population.

Further, in the late eighties India was looking for acquiring a supercomputer for the developmental purposes but the US imposed embargo and denied the export of their Cray supercomputer. Dr. Vijay Bhatkar, now the president of Vigyan Bharathi developed the indigenous supercomputer within three years C-DAC (Centre for Developing Advanced Computing) came out with PARAM 8000 A multiprocessor machine, benchmarked at 5 Gflops, making it the second fastest supercomputer in the world. As of 2016, many PARAM systems have been deployed in the country and abroad. Today, India is designing Petascale supercomputers. Only USA and Japan have this capability and the crowning glory of India's advanced computing and IT capability, once achieved this computer will be a symbol of India's undeniable position as an IT superpower. and it has been installed in IIT's and NIT's to encourage the younger generation to participate in R&D programmes of our country.

Similarly, our nuclear scientists demonstrated their acumen to the world under the leadership of Shri. Atal Bihari Vajpayee in 1998 by making India join the super powers. Our scientists have immensely contributed to our self-defence and space research programmes through GSLV's and Indian Regional Navigation Satellite System (IRNSS).



As a country we need more such revolutions for the development. Prime Minister's Make in India – movement which aims at massive and rapid enhancement of the manufacturing sector combined with the Skill India programme that links the vocational programmes with academic programme which is the need of the hour. This calls for immediate attention to nurture Industry-Institute interactions. And today Agriculture and Agro-based industries such as textile, leather and other crafts provide us the largest employment opportunities and yet to be fully exploited.

With the state and private participation, Indian academic programmes offer greater scope for sustained growth for achieving the knowledge super power. Information Technology coupled with such knowledge resources are considered as the future developmental areas of agriculture, transport, alternative fuel, communication, medical and other manufacturing sectors. Artificial intelligence, augmented reality, 3D printings are some of the complementary areas that could change the total perception of our life style.

Sustainable environmental measures are in place which focuses on Zero Effect and Zero Defect (ZED) and green efforts of the textile and leather sectors in Tamil Nadu are the models that need to be adopted by the nation.

As the government is encouraging youngsters with incubation centres like the Start-up programmes, the students are sure to achieve success and find employment but also to provide employment to others too. ■

◀ Geo Park to be set up in Periyar University campus : VC ▶



'In order to exhibit the complete inner dynamics of the earth, Periyar University is planning to set up a Geo Park in the campus' Prof. P. Kolandaivel, Vice Chancellor, Periyar University, stated in the inaugural function of the national seminar on Sustainable Open Cast Mining At Small Mines as part of the two-day National convention of Mining engineers held in February in the campus.

The 29th National Convention of Mining Engineers under the aegis of the Institution of Engineers, Salem and Geo Exploration Mining Solutions aimed at exploring solutions to share the best industry practices and technologies for sustainable opencast mining for small mines by involving stakeholders such as mining companies, mining lessees, consultants, engineers, industry suppliers and service providers, R&D and educational institutions, geologists and environmentalists who are involved in the mining sector.

Geology is one of the main subjects in the Science discipline. Philosophers Aristotle, Socrates and Democritus have sowed the seeds for scientific inventions. After the birth of experimental science, we started realizing the fullest potential of the inventions.

Astrophysics tried to make out the scientific truth of Sun, Moon and the Earth. We are yet to come to grips with the fullest structural dimensions of earth and universe. After the intensive research on Earth, much information was unearthed. The inner earth core has high density fluids. It consists of 80% Iron, 15% Oxygen and Nickel and 5% of Silica. The chemical reaction to taking place inside the earth is yet to be explored completely which is the reason why we are unable to accurately predict the untoward incidents like earthquakes. The complete fluid dynamics in the atmosphere is yet to be explored. In order to exhibit the full potential of the earth, Periyar University is planning to set up the facility to help young students, scientists, researchers to draw inspiration from the proposed live and meaningful Geo Park.

Mr. P. Selvakumar, Director, NLC, Director of Mines Safety P.P.Singh, representatives from various government departments and faculty members of the Department of Geology participated. ■

TWEAKING TOWARDS EXCELLENCE...

Updated course structure and curricula

The boards of studies of all subjects are involved in drafting the syllabi in the common uniform pattern as directed by the UGC with explicit statement of objectives, unitized course work, explicit outcome goals and list of reference that are accessible.

◀ Anything that impacts society is history: Vice Chancellor ▶

“History has multidimensional characteristics and the impact of anything on the society turns into history.” Prof. P. Kolandaivel, Vice Chancellor, declared during the inauguration of the one day workshop on *History of Science technology and environment* held in the premises of Periyar University.

The one day workshop was organized by the department of History with a vision to deliberate the multidimensional growth of the history of science, technology and environment.

In the inaugural address the vice chancellor detailed the chronological growth of history of science and technology highlighting, ‘History is the base for all the developments’. History of Science is 2500 years old. Philosophers like Archimedes laid the foundation stone for scientific inventions, he added.



Inquiry into the phenomenon in natural sciences has consistently led to many inventions in the history of science. Greek philosophers like Socrates, Aristotle and Plato laid path for scientific inventions. 2000 year old science was moved by experimentation in the contemporary history of science. Many inventions like the X-rays were serendipitous in nature. History of science gradually moved towards technological processes. Though the transistor was invented by America, it was effectively commercialized by Japan by way of producing many transistorized products. As a concluding remark he appealed the students to become historic in the process of studying history. ■

Logical examination pattern

Each of the subjects has had a variety of patterns for its end semester examination. Now it has been decided to make it uniform across disciplines with a set pattern of having questions in objective and descriptive patterns that will test their information, comprehension and analytical skills. The evaluation pattern also will have machine reading component in the answer book to expedite the process.

**TWEAKING
TOWARDS
EXCELLENCE...**

◀ Periyar University in the first 100 of MHRD National ranking ▶

Periyar University features prominently in the top 100 of the third edition of the National Institutional Ranking Framework (NIRF), released by MHRD.

Teaching learning resources, research and professional practice, graduation outcomes, outreach and inclusivity and perception are the five parameters based on which the ranking was arrived at.

Started in 2015, MHRD hires independent peer agencies to rank institutions based on their subject categories including management, medicine, engineering, law and architecture. The overall ranking list is released for the year 2018.

A total of 779 institutions from all over the country participated in which Periyar University is ranked at 90 in the overall categories.

It was possible to achieve this distinction with the help of 749 publications submitted (out of the best 2000 papers of the faculty members) featured in the Scopus index. Research grant worth of Rs 10.3 crores generated from various funding agencies also enhanced our standing in the ranking framework.

Significant among the scores obtained by Periyar University was the 52% from teaching learning and resources and 59% in the graduation outcomes, he added. Our University will continue to strive to achieve better results in future.

In the NIRF ranking process of 2016, 2017 and 2018 Periyar University retains its position within top 100. This position would enable us to improve the standards of the University. Teaching learning would improve as a direct result of such an achievement and there is more likelihood of getting better funding for ongoing research. ■

International Day of Yoga in Periyar University



Center for manufacturing business Incubation infrastructure in the University

A plenary meeting headed by the Vice Chancellor Prof.P.Kolandaivel was held in Periyar University to submit a detailed proposal to set up a Center for manufacturing business Incubation infrastructure to the Entrepreneurship Development Institute (EDI) Chennai.

The officials of the EDI are planning to visit the campus to assess the infrastructure facilities soon. In the plenary meeting the Vice Chancellor said that the proposed center aims at foster entrepreneurial culture among the students and the local public as well.

The centre will provide opportunities to explore and implement the innovative ideas into commercially viable products through technology startup companies and also to identify the core sectors to discuss issues related to successful establishment and smooth functioning. Eminent people from industries, other



successful centers, entrepreneurship development institute, and faculty members participated in the meeting.

Areas like food processing, herbal medicine, energy studies and computer science & technology were to be considered initially. A round the clock facilitation center, high bandwidth internet facility, spacious workstations, laboratories, computer labs, innovation design center, accounting and book keeping system, updated technology, applied research, production and marketing training programmes, mentoring, monitoring and evaluation system are some of the key areas that are to be focused here, said Dr.V.R.Palanivelu the organizer of the meeting. ■

Free Rice through PDS for Hunger free TN

A judicious public distribution system has led to a hunger free state, declared the district collector in the two day workshop in Periyar University. It is executing currently an intercontinental collaborative project on food security with Hartfordshire University, UK with Rs 1.89 crore funding from the UGC to the team headed by Prof. A. Elangovan of Commerce department.

The collaborative research is conducted to realise the UN extended development targets 2030 for the stakeholders by Periyar University and Hartfordshire University in UK as a joint venture programme. While inaugurating the two day deliberations, the district collector R. Rohini said, with the active implementation of providing 35 kgs of rice free, which is being monitored digitally, the benefits reach the last beneficiary in full without any wastage. For effective PDS coverage, a village in Kadayampatti to cater to their needs of only 20 tribal families, there is a mobile PDS system developed and put in place. It is imperative to have an accurate database that will enable efficient use of land.

◀ Call for Psychologists to serve Tribal people: VC ▶



Periyar University will establish a Centre for Wellness and Wellbeing for Tribal people of Salem hills intended to enhance their psychological well being, Prof. P. Kolandaivel, Vice Chancellor, Periyar University, announced in the two-day National workshop on Neuro-Linguistic programming [NLP] held February in the campus.

The Department of Psychology organized the workshop to spread awareness about NLP and help Psychologists and allied professionals to make available to the common people the NLP techniques when in need.

Prof. P. Kolandaivel, Vice Chancellor in his inaugural address pointed out that "the service of psychological counselor is to restore well being of the people who require restoration of normalcy without any side effects. The role of neurons in the mental process is of paramount focus to physicists and other life scientists are interested in these nerve cells as they are very unique. They have limitation for regeneration but other cells regenerate faster. They are the building

blocks of the human brain. The chemical reactions influence the mental processes that construct the human mind. Neuronal deaths cause degenerative diseases like Alzheimer's and also the psychological issues like distress and depression".

Mr. V. Ranganathan, a Master Practitioner of NLP delivered special address highlighting the importance of the psychological training. The programme provided hands on training to the participants to handle such psychological process as to alleviate negative thinking; transform difficult situations into opportunities for growth; and focus on personal goals.

Students of Psychology and Allied subjects, Research Scholars, Teachers, Professionals and Practitioners across South India participated in the workshop. The cost effective workshop inculcated professional skills among the participants to make their professional service available to those who require psychological assistance. ■

**TWEAKING
TOWARDS
EXCELLENCE...**

Enhanced travel funding

In order to encourage participation in quality international conferences, the teachers and research scholars will be provided funding for their partial travel to foreign countries from a corpus of Rs 10.00 lacs for the teachers and Rs 5.00 lacs for the research scholars. This will alleviate their travel burden to some extent. If there is encouraging response, quantum of funding will be increased in future.

◀ Training for SC ST women on mushroom cultivation ▶

A Three day training programme on “Edible Mushroom Cultivation Technology for Unemployed Women SC/ST Population in the Salem district” was conducted by the Department of Botany under the aegis of DST and National Science and Engineering Research Board.

Mushroom has high nutrient content with lots of minerals and vitamins and digests at a slower rate sustaining energy level for a longer duration, that comes at a cheaper

rate. Getting trained in cultivation and marketing is easier in mushroom than the rest of the crops, he added. ‘There is sizeable profit in this business and more women should come forward to involve in this mushroom cultivation’, Dean, Sciences made a passionate appeal during his inaugural address.

Inculcating the habit of mushroom cultivation and its marketing was the prime objective of this training programme targeting economically weaker SC/ST women in rural Salem. More than 200 women were taught methods of mushroom cultivation and its marketing by the experts in the field. Dr. K. Selvam, Member Syndicate and Head of the Dept of Botany welcomed the gathering while the organizing secretary, Dr. S. Murugesan, Assistant Professor, proposed the vote of thanks.

◀ MOOC Courses for University students ▶

"Periyar University introduces massive open online course (MOOC) to the students in the varsity to help them compare their course content with that of the eminent faculties across the country", Prof. P. Kolandaivel, Vice Chancellor, Periyar University said.

He was inaugurating the SWAYAM awareness cum orientation programme in the university held in March. He noted that 'the UGC has taken serious steps to improve the quality of higher education in India'. The University students will have to take two online courses for eight credits, made compulsory from the academic year 2018-19 onwards.

With the motto line of 'No age, No boundaries, now no more limitations', MHRD introduced seventeen types of massive online

courses. SWAYAM and SWAYAM PRABHA are two such notable programmes intended to take the best teaching learning resources to all, including the most disadvantaged. These initiatives have been envisioned to bridge the digital divide that prevent them from joining the mainstream of the knowledge economy.

All the Universities and colleges across the country can recommend their students to enrol and take the examinations. The online courses contain video lectures, specially prepared reading materials, self-assessment tests and online discussion forums.

Periyar University will revise the curriculum and syllabi accommodating the MOOC Courses. For the effective implementation of the online courses in the University, SWAYAM cell of Periyar University organised an awareness cum orientation programme for the mentors representing each of the university departments. All the master level students must enrol and complete two courses in the SWAYAM and SWAYAM PRABHA related to their discipline of study.

This initiative provides better learning opportunity to the students to expand their horizon of knowledge'. Prof. V. Krishnakumar, Dean, CDC explained the modus operandi of the course enrolment and nature of examinations. The University SWAYAM cell coordinator Dr. R.Subramanaya Bharathy welcomed the gathering. ■

Every day conversations and dialects are Reflection of Culture: Sirpi

Don't search for cultural indicators in epics and literature. It is available aplenty in the day to conversations of the common man, declared Sahithya Academy award winning poet laureate Sirpi Balasubramaniam in the two day conference in March this year on cultural reflections in folk arts and literature here in the campus.

Prof. P. Kolandaivel, Vice Chancellor, Periyar University inaugurated the conference which had five sessions: folk songs, folk lore, proverbs, riddles and performances. He said that only in villages the tradition is intact and the youth should look forward to understanding them to perpetuate them to sustain our identity.

Civilization is the pinnacle of culture that reflects its maturity and existence. If modernity sets in, the language will have to reflect the contemporary and the grammar should not be a hindrance to



blossom in full. Folk lore and performance and our proverbs is a reservoir of our values and one should not search for them in only epics and grand literature. Once a layman averred to Oo Ve Saa a riddle thus: sheppard's cut is half cut which means to feed the cattle the sheppard only cuts the tree outwardly without affecting its foliage. This may look simple morphologically but a deeper look will reveal the holistic life he leads and the environmental consciousness he has for the flora and fauna.

P. Rajendran, President, Malayasian Writers Association felicitated the inauguration. Kavya Shanmugasundaram, Dr. Aru Ramanathan, O. Muthiah and Dr. Samsuddin and many authors and writers participated. ■

TWEAKING TOWARDS EXCELLENCE...

International and industry tie up

Faculty members are encouraged to embark on international cooperation in their respective fields for possible collaborative projects and research works. All the faculty are encouraged to take up applied research and development activities with industry and other organizations that need active student and scholarly input and participation.

◀ Control of Hospital Bugs poses great challenge: V C ▶



'Finding, Identifying, and controlling the bugs in the hospitals are the stiffest challenges faced by medical researchers, Prof. P. Kolandaivel, Vice Chancellor, Periyar University, declared in the one-day seminar on Recent Advances in Antimicrobial Textiles held this February in the campus.

The Department of textiles and apparel design organized the seminar to promote interdisciplinary research knowledge in the field of antimicrobial textiles and learn the significant and instrumental techniques in characterization of antimicrobial textiles with an aim to update recent advances in antimicrobial textiles and to explore implementing nanotechnology for innovative product expansions.

'Textile programmes were initially offered by engineering discipline focussing on the technological rather than fabric dimension. Nowadays Arts and Science Universities have started offering Textiles programmes concentrating on the fabric rather than mechanics and technology, VC added. Further he stressed the pertinence of the topic and even developed western countries find it hard to identify, control and eradicate the bugs in the hospitals.

Even super sterilized hospitals face this hardship. The threat from Nasocomial (hospital acquired) infection is what the researcher in microbiology are trying to grapple with being the foremost challenging task.

The deliberations centered around creating newer materials with innovative designs.

Dr. R. Rajendran, Associate Professor, PSG Arts College in his special address appealed the students 'to take up interdisciplinary, multidisciplinary and cross disciplinary research for their prosperous future'.

Dr. E. Santhini, Senior Scientific Officer and Tmt. V.M.Pramila, Senior Microbiologist and Technical Associate in Centre of Excellence, Govt of India elaborated on the characterization of antimicrobial textiles and fabrication of wound dressing materials.

Dr. S. Lakshmi Manokari, Head i/c welcomed and Dr. K. Parveen Banu, Asst. Professor proposed the vote of thanks. ■

Learning beyond the physical boundaries

After the recommendation of the UGC to include MOOC courses in the syllabus, we have adopted that and have made two courses to be completed by the students in MOOC as a requirement for the degree. Swayam centre is active in the campus and a coordinator helps all the university departments to organize MOOC related courses for their students with individual department coordinators taking care at the department level.

**TWEAKING
TOWARDS
EXCELLENCE...**

◀ Empowering Self Workshop in Vivekananda Studies Centre ▶

Prof. Dr. P. Kolandaivel, Vice- Chancellor, Periyar University delivered the Presidential Address in the workshop for the empowerment of self by the Centre for Vivekananda Studies. He spoke about the glories of countries like Greece and India and how their legacies were left behind for the rest of the world. The philosophical knowledge emanated from ancient Greek and the intellectuals formulated the concepts that underlie the entire spectrum of academic study and curriculum.

He also pointed out the role of Greek Philosophers such as Socrates, Plato, Aristotle, ancient Greek philosophy that paved way for the development of Western intellectual tradition, including modern science.

India is known as the land of spirituality and philosophy. The teachings of Swami Vivekananda is significant for the empowerment of youth that had to be taken across the country. Swami's legacy to youth and his notion of nationalism was unique. He had a strong love for the country and its masses.

Thiru. Senthil Kumar, Director, Centre for Cultural Education, Training & Research, Tamil Nadu delivered the Inaugural address. Though Swami Vivekananda gone about a hundred years ago, his philosophy is still relevant and will bring many changes in our society that he had envisioned with a

new breed of youth in whom knowledge, action, work and focus should be nurtured for the development of country.

Mr. Sivaraman Advocate and Consultant, Foreign Trade Policy and Customs, Chennai trained participants on goal setting and destressing and in entrepreneurship development. About 120 students drawn from various departments of Periyar University, faculty and scholars actively participated.



Dr. A. Murugan, Coordinator, Centre for Swami Vivekananda Studies, in his welcome address stressed the need to emulate Swami Vivekanandha as a role model for nation building. Dr. S. Ravichandran, Assistant Professor in History proposed the vote of thanks. ■

**TWEAKING
TOWARDS
EXCELLENCE...**

Boost to Infrastructure facility

The campus is given a facelift in terms of additional infrastructure and procurement of high quality equipment to set up research and development activities. More funding is made available and more physical space is being allotted to carry out frontier research and training. More building infrastructure are being added and existing ones renovated with University's own funds and funding received under Rashtriya uchchatar Shiksha Abhiyaan (RUSA).

◀ VC advocates collaborative research in the campus ▶

“Faculty members and researchers should accord top priority to develop and advance interdepartmental research”, insisted the Prof. P.Kolandaivel, Vice Chancellor, Periyar University in his presidential address in the inauguration of the three day third national conference on eco biological sciences and its applications here in the campus.

The Periyar University School of Life Sciences organized and deliberated about Water, Food and Energy nexus in which it was pointed out the importance and eventual growth of the scientific findings that shaped human well being.

He further added that the earlier findings such as DNA and laser have paved way for many interesting findings. After the Second World War especially, many inventions came into the light from the scientific community and he narrated how that became useful for the common man.

We have identified the functions of 2000 protein structures out of 1.25 lakh structures available in literature and urged the scientific community to focus their research on the scientific problems yet to be deciphered.



Further he noted that researchers and faculty members ought to undertake the interdepartmental joint research projects in the life sciences realm. The funding agencies are ready to provide enough funds for joint projects that researchers may make use of the available funds for their individual and joint venture researches.

Prof. K. Murugan, Vice Chancellor, Thiruvalluvar University and Prof. M.Krishnan, Dean, Central University of Rajasthan delivered the inaugural and key note addresses respectively. Nearly 100 researchers from all over the country presented their papers in the seven sessions. ■

Prize Distribution for Interdepartmental Sports Meet



◀ Tamil computing training for scholars ▶

In order to impart computer science subject in Tamil, TN government have earmarked Rs 25.00 lakhs to set up a Tamil Computing Centre through which software development and knowledge dissemination takes place.

Government higher secondary and high school teachers of computer science, primary and middle school teachers in Omalur taluk and headmasters were provided training.

44 research scholars in the department of Tamil including M.Phil. scholars were given two day training in January in Tamil computing.

Prof. P. Kolandaivel, Vice Chancellor, Periyar University inaugurated the proceedings. He said that



computer science knowledge assumes significance and Tamil apps, internet, blogs and thesaurus require proper training and awareness for using them effectively. ■

◀ Display Calorie values prominently : VC ▶

“All food items ought to display the calorie details in the label and be found in all display boards as like in the practice of Japan” Prof. P. Kolandaivel, Vice Chancellor, Periyar University, insisted in the two-day workshop on Nutrition foods for sports persons held in February in the campus.

In his note he pointed out that sports persons' food pattern is entirely different from common people's diet scheme and that they are high calorie diet.



For example, one parotta has 300 calories of energy and three parottas add 900 calories of energy in our body which we should be conscious of while eating them.

In Japan, the hotels have details of calorific value of each food item in the display boards making it easy to take food according to ones needs. But, we are not aware of the fat and carbohydrate levels of our regular food which when consumed in excess deposit excess fat in our body that becomes difficult to burn.

The surplus fat particles stored in our body are attracted by the auricle of our heart that invariably leads to heart ailment and that is the reason why conscious food habits should be practised.

Exclusive nutritionists maintain food habit of sports persons abroad but not in India and such workshops assume significance to help sports personnel. ■

◀ Glimpses of events in the Campus ▶



**TNPSC Competitive Examinations
Coaching Session**



**Department of Microbiology:
Seminar on Recent Advances in
Microbial Technology**



**Department of Physics:
Science Day Celebrations**



**Department of Commerce:
Conference on Commerce & Business to
A Paradigm Shift to ICT**



**Department of Journalism and Mass Communication:
Portrayal of Social issues in Literature and Media**



**Department of Clinical Nutrition & Dietetics:
Awareness programme on
Smoking Risk Factors of NCD's**