

VARIOUS DEPARTMENTAL ONLINE ACTIVITIES DURING LOCKDOW

Activities	Coordinator
Fun with Physics	Dr Sundeep Deulkar
Fun with Mathematics	Dr Sachin Wani
Chemistry Quiz	Dr Manju Pillai
Ideathon	Dr Arun Pillai

One Week Faculty Development Program on "Scilab" - Prof. Archana Ingole and Prof. Suchitra Patil

Online Workshop on Assessment Tools - Prof. Lilly Pradhan and Prof. Suvarna Gaikwad

A Workshop on 'Curriculum Development with a Learner Centric Approach' - Dr Arun Pillai

Webinar on Role of Plastic in Pandemic Dr Biswajit Panda

3 Day Online Conference on ' Efficiency Improvement on Polymer Processing and Advanced Characterization Techniques " Dr Biswajit Panda

Online Faculty Orientation Programme of Engineering Mathematics III and Engineering Mathematics IV (for REV- 2019 'C' Scheme) Dr. Sachin Wani and Prof. Neethu P.

A Series of Webinars on Mathematica and Applications of Mathematics -Prof. Kamini Chaudhari and Prof Lilly Pradhan

Unlock Engineering - Prof. Ranjita Goankar and Prof. Yogesh Kene

Webinar on "How to Improve Concentration During Online Learning Through Simple Yoga Activities" - Prof. Sonali Nikam

RESEARCH PAPER PUBLICATION

Kuberal S. and Dr. Anshu Muraka "Adjunct Octagonal Array Token Petri Nets" International Journal of Recent Technology and Engineering (IJRTE). ISSN: 2277-3878, Volume-8, Issue-4.

Kamini Chaudhari. "Thermoelastic modelling of a Rectangular Plate under the Hyperbolic Heat Conduction with an internal heat source". International Journal of Mechanical and Production Engineering Research and development. ISSN: 2249-6890 Vol 9, issue 6.

Kamini Chaudhari. "Thermoelastic Response of a Rectangular Plate under Hyperbolic Heat Transform Domain" International Journal of Engineering and Advanced technology. ISSN: 2249-8958 Vol 9 issue 4.

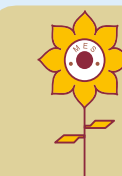
SPORTS ACTIVITIES

First year students, Rubin Sajan and Aditya Khilare played at University level in the Handball team for University Champion Trophy.



MAHATMA EDUCATION SOCIETY'S
PILLAI COLLEGE OF ENGINEERING
NEW PANVEL

DEPARTMENT OF APPLIED SCIENCE, MATHEMATICS AND HUMANITIES



KALEIDOSCOPE A MULTIFACETED VISION CONCEPT BASED TEACHERS' TRAINING IN PHYSICS



Dr. Daphne Pillai, Secretary MES and Chairperson Management Board graced the occasion with her presence.

Pillai College of Engineering in association with Homi Bhabha Centre for Science Education, TIFR, Mumbai organized a training programme for Physics teachers titled as "Concept Based Teachers' Training in Physics". It was a two-day training programme scheduled on 25 and 26 July 2019. The event began with the welcome address by Principal, Dr. S. M. Joshi. Prof. P. S. Goyal, the Research Head of PCE was the chief guest for the event.

The Guest of Honor Prof. H. C. Pradhan, former Director at HBCSE gave the key-note address. He spoke on the common misconceptions about Physics, highlighting the objectives of teaching physics through various common examples. This

was followed by a lecture on 'Role of pedagogical content knowledge' by Dr. Narendra Deshmukh and Mr. Vinod Sonawane of HBCSE. This session was followed by a laboratory session on 'Experiments in Physics' jointly conducted by Mr. Vinod Sonawane, Ms. Mayuri Pawar and Mr. Karun Hambir of HBCSE.

A lecture cum demonstration on 'Understanding Physics through Simulations and Virtual Laboratories' conducted by Dr. Arun Pillai and Prof. Dinesh Tiwari of PCE. A lecture on 'Nature of Science' conducted by Ms. Aditi Muralidharan of HBCSE who spoke on developing scientific temper/aptitude and highlighted the various techniques to include nature of science in class with the help of activities. Dr. Sandhya Thakur from S.K. Somaiya V.M. Junior College presented rejuvenating views on the impact of teachers on a student's life. The laboratory session on

'Exploring Physics via DIY Toy making' was conducted by Mr. Ravi Sinha of HBCSE.

Dr. Mahendra Khandkar and Prof. Ravindra Nikam of PCE spoke on de Broglie hypothesis, the history of science and life history of scientists. A unique 'Game based learning' session was conducted by Dr. Malavika Sharma and Prof. Dipti Nair from PCE. They emphasized the impact of it on learning by involving games in the classroom. This was demonstrated through hands-on gaming activities that were unique creations of the speakers.

The event finally concluded with the valedictory address by Mr. Suhas Naik-Satam of Nehru Planetarium on the on-going Chandrayaan 2 mission.

Edited By:

Leena Potdar

Darshana Pachkawade

ONE-DAY WORKSHOP ON GROUP DISCUSSION



The department of Humanities conducted a one-day workshop on 'Making GD more Meaningful' on 10 August 2019. The purpose of this workshop was to emphasize the significance of group discussion in academics, business and administrative spheres. Currently most group discussions are conducted as a part of the selection criteria by the recruiters. This workshop provided the opportunity to explore the evaluation parameters that form the basis of judgement in depth, by using participant exercises to enhance the discussion. Twenty-two students from the final year engineering registered for the workshop. Participants represented students from computer, information technology and mechanical engineering. The workshop was coordinated by Dr. Malavika Sharma, Prof. Rakhee Pillai, Prof. Darshana Pachkawade and Prof. Leena Potdar.

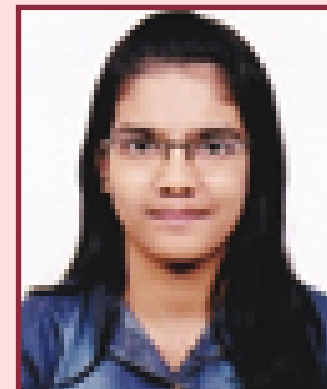
FELICITATION AND FRESHERS' PARTY



First Year Toppers with their parents and teachers

The annual felicitation and fresher's event was held on the 20 September 2019 in the Auditorium at Pillai College of Engineering. The occasion was graced with the presence of Dr. K. M. Vasudevan Pillai, CEO of Mahatma Education Society, Principal Dr. Sandeep Joshi and P. Kumaran, Registrar. The event was also blessed by the very presence of our alumni Captain Ankur Mahale as the Chief Guest. The Guest of Honor Dr. K. M. Vasudevan Pillai addressed the gathering and shared his valuable thoughts with students. The Chief Guest, Captain Ankur Mahale spoke few words on future ventures of students. This was followed by the felicitation of toppers from all branches. The FE toppers were felicitated by their respective faculty members and coordinator Dr. Arun Pillai and Dr. Manju Pillai. It was followed by the competition of Mr. and Ms. Fresher. Mr. Anirudh Acharya and Ms. Hemangi were selected as Mr. and Ms. Fresher for 2019.

First Year Toppers



Gcharge Saloni



Gadge Pratik



Anant Vishwakarma

MATHEMATICS QUIZ 2019



Mathematics Quiz winners

Mathematics Quiz 2019 was organized by the Department of Applied Mathematics on 23 September 2019 for first year and second year engineering students. The quiz was organized in two parts. First part was the elimination round which was successfully conducted on 30 August 2019. There were a total 289 participants for the elimination round. Out of which 218 students successfully completed round one. The final quiz was conducted on 23 September 2019 in the Auditorium. It was organized in three rounds, first Bonus round coordinated by Prof. Archana Ingole and Prof. Suvarna Gaikwad, second Mastermind round coordinated by Dr. Anshu Murarka and Prof. Lilly D. Pradhan, third fastest finger round was coordinated by Prof. Sneha Jhondhale and Prof. Suvarna Gaikwad. The fourth round was audience round and it was conducted by Prof. Sneha Jhondhale. The six groups were formed and named as De Moivre and Karl Pearson, Newton and Laplace, Leibnitz and De-Morgan, Taylor and Fermat, Euler and Cauchy-Riemann and Karl Gauss and Milne-Thompson. The first prize was given to Newton and Laplace group represented by Mehnaz Uluwa, Gokul Gopalakrishnan and Siddhesh Shimpi. The second prize was awarded to De Moivre and Karl Pearson group represented by Chinmay Malkar, Rithesh Karkera and Harshvardhan Pandey. The third prize was given to Leibnitz and De-Morgan group represented by Parth Kochar, Rohan Balasaheb Lokhande and Ashutosh Santosh Jadhav. The Winners of the Quiz were awarded with a cash prize and a certificate of appreciation. The remaining three groups were also awarded with certificates of appreciation.

PLASTIC AWARENESS PROGRAM UNDER UMBRELLA OF NATURE CLUB



Students with dry plastic waste collection

Mankind has disturbed the pristine nature of life on earth to an irreparable extent. The resulting environmental problems exist due to the reckless use of non-recyclable manmade materials such as plastic. Encouraging minimal use of plastic and observing a total ban on single use plastic is the need of the hour. This is a first step in our global effort for cushioning the environmental impact of plastic.

With this ideology, on the 5 of October, 2019, Pillai College of Engineering, New Panvel in association with ICPE (Indian Centre for Plastic in Environment), Biocrux, Reliance Industries, NSS unit of PCE, Stree Mukti Sanghathan, and PMC conducted "Plastic Awareness Program" under the umbrella of Nature Club.

There were 500 students from the First Year Engineering course at PCE guided by 50 NSS volunteers. There were 32 groups, each of 15 students. Each group was assigned a residential area for solid plastic waste collection viz. Podhi 1, 2, New Panvel sector 15 to 18, Vichumbe, and Sukhapur. The college authorities provided garbage bags, safety equipment and some refreshments to the participants.

Competition often helps to bring out the best in an individual, with this objective, prizes were distributed to the winners of 1st, 2nd and 3rd positions, based on the amount of solid waste collected by the respective groups.

NGOs such as Stree Mukti Sanghathan (SMS), are working in the domain of collection and recycling of plastic and solid wastes. The solid waste collected by the students was handed over to SMS. SMS also helped in the weighing and segregation of the collected solid waste. The function was presided by the Honorable secretary of ICPE, Managing Director of Biocrux, President of Reliance PET division, Assistant Commissioner of Police (ACP), Principal Dr. Sandeep Joshi and Prof. Biswajeet Panda. Through such activities, PCE is indeed making environmentally conscious engineers by training them to find solutions that have minimal impact on the ecology.

ARDUINO BASICS WORKSHOP FOR FIRST YEAR STUDENTS



Prof. Ruchira Patole during Arduino Workshop

The Arduino workshop was conducted for First year students from 14 to 17 October 2019 at Pillai College of Engineering by the faculty members: Prof. Mimi Cherian, Prof. Ruchira Patole and Prof. Ishmeet Singh. The workshop aimed to find out solutions for the hardware and software problems by developing innovative project models. In this workshop students were able to learn about Arduino and its working.

They were taught to program an Arduino using Arduino IDE (Integrated Development Environment) with different methods for coding and prototyping. The students were trained to use & interface various hardware components with Arduino.

YOGA CAMP



First year students participating in Yoga Camp

Yoga seeks the union of mind and body, once this union is achieved, limitless happiness flows, and this itself is the ultimate goal of human beings. It has been scientifically proven that yoga helps in decreasing the impact of stress in students, emanating due to failures, peer pressure and tough competition.

As a first step in this direction, PCE organized a four-day nishulk (free of cost) Yoga camp in association with Patanjali Yog Samiti (PYS), Raigad district, for First year engineering students from 14 to 17 October 2019. The yoga activity was aimed at spreading awareness and importance of

yoga amongst youngsters.

The session was inaugurated in presence of Principal, Pillai College of Engineering, Dr. S.M. Joshi, FE coordinator Dr. Arun Pillai and Convener /Organizer Prof. Ravindra Nikam. Class coordinators and enthusiastic FE teachers were also present for the event.

Mr. R. P. Yadav, Jila Prabhari of Patanjali Yog Samiti, Raigad district and a former Retd. Lieutenant Indian Naval Services presided over as the chief yoga teacher. Around 560 students were benefited by this unique four-day program, with three hours of yogic activity on each day. The yogic activity started with a prayer and ended with shantipath. The different yogic activities included physical exercise, hard sit-ups, pranayam, talivandan, lion roaring, and asanas. One of the hallmarks of the yogic meet was the proactive participation of staff members in the yoga sessions. The valedictory function included enlightening talks from Prof. Ravindra Nikam and Mr. R. P. Yadav. An amount of Rs. 5000 was donated by PCE to PYS towards the noble cause of spreading awareness of yoga, especially amongst youngsters.

MAKERTHON 2019:AN INTER SCHOOL AND INTERCOLLEGIATE TECHNOLOGICAL BRILLIANCE



The winners of MAKERTHON

MAKERTHON 2019, an event giving a platform for budding innovators to create and exhibit their innovations was organized on 13 November 2019 in association with MHRD Innovation Cell, Indian Society for Remote Sensing and Homi Bhabha Centre for Science Education. The event witnessed over 100 schools and colleges participating. The students had to design and develop the viable operating model and exhibit their model to scale the solutions and present their elevator pitches in front of a panel of esteemed invigilators.

The inaugural function was presided over by Dr. Priam Pillai (COO, Mahatma Education Society), Dr. Sandeep Joshi (Principal) and Dr. Arun Pillai (Event Coordinator). The importance of "learning outside the classroom", "team work" and "time frame" was emphasized by the organizers. Dr. Manju Pillai and Dr. Avinash Vaidya defined the problem statements for school and junior college sections respectively. A four-member student team was accompanied by their school teacher who supported the students and guided them for a best solution.

In accordance with MAKERTHON's theme of 'Clean Environment, Green Energy' the participating teams were given the topics of 'Water Purification' and 'Electricity Generation'. The teams worked on various permutations and combinations of the chosen component options for finding the optimum solution. In the valedictory function, Dr.S. Basu (Dean, Homi Bhabha National Institute) spoke about the aptness of the chosen topics with the current energy and environment situation and emphasized on the tradeoffs between the two. Dr. Arun Pillai emphasized the importance of such revolutionary patterns to be introduced in education to motivate students toward research-based learning. The winners of the Clean Environment competition were: St. Joseph High School, Kalamboli and winners of the Green Energy competition were Apeejay School, Kharghar.

INDIAN WOMEN SCIENTISTS' ASSOCIATION-SCIENCE DAY CELEBRATION



First year students' visit to the Indian Women Scientists' Association center, Vashi.

To mark the celebration of 'Science Day' Department of Applied Science, Mathematics and Humanities organized a visit to Indian Women Scientists' Association (IWSA) center, Vashi. The Department of Atomic Energy exhibited their projects on 'Novel Materials and Smart Materials' for college students and faculty on 17 and 18 January, 2020. The first-year students could observe these projects and interact with the IWSA members about recent technological development. Around 400 first year students visited IWSA center, Vashi.

ALEGRIA-THE FESTIVAL OF JOY

The zealous students celebrating 50 years of Mahatma Education Society during Alegria



Algeria-The Festival of Joy hosts many remarkable and exceptional events every year like concert night, EDM night, movie promotions, etc. But every year a banner unveiling ceremony is held to give this magical journey a kick-start. This year, Algeria 2020, with the theme Dreamland was launched with a captivating flash mob where talented dancers appeared as Harry Potter, Aladdin, Jasmine and Genie, the sisters from Frozen, Elsa and Anna along with Willy Wonka to entertain the excited crowd. Pillai campus also celebrated the 50 years mark of MES. Students enjoyed various technical, cultural and sports events during this festival.



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DST INSPIRE INTERNSHIP SCIENCE CAMP



Winners of Essay Writing Competition with the dignitaries

Pillai College of Engineering successfully organized a five- day INSPIRE Internship Science Camp sponsored by Department of Science and Technology, Government of India under the component of “Scheme for Early Attraction of Talents for Science (SEATS)”. The camp was held during February 11 – 15 2020. The camp was attended by around 150 students of various colleges from all over Maharashtra state.

Dr. Vasudevan Pillai, CEO, Mahatma Education Society emphasized the need to learn the basics of science to enjoy science. Dr. Sandeep Joshi, Principal, Pillai College of Engineering, in his inaugural talk congratulated the participating students for their successful selection for the DST Inspire Internship Science Camp and also highlighted the importance of Science for the growth of mankind.

The eminent speakers who graced the occasion were-Dr. Rajendra M Pawale- Professor, University of Mumbai, Dr. Sanjeev Sabnis- Professor, Indian Institute of Bombay (IITB), Suhas Naik Satam -Scientist , Nehru Planetarium, Mumbai, Prof. S.T.Maske- Head, Department of Polymer and Surface Engineering at Institute of Chemical Technology (ICT), Mumbai, Prof. Sanjay Wategaonkar -TIFR (Tata Institute of Fundamental Research), Dr. Nandkishor Chandan- Vice Principal, Associated Professor & Head, Department of Chemistry, Siddharth College, Fort, Mumbai, Prof. Amol Dighe- TIFR (Tata Institute of Fundamental Research), Prof. Avinash V. Mahajan - IITB, Dept. of Physics, Padmashree Dr. Kale, Prof. S. Gurubaran- Indian Institute of Geomagnetism (IIG), New Panvel. Dr. Priam Pillai, Prof. Jayadeva Bhat - IITB, Prof. Swati Patankar- IITB. Dr. Umesh Sharma - DST.

The prize distribution for the Essay writing contest was followed by the felicitation of mentors and teaching faculty of the lab sessions. The vote of thanks was proposed by Dr. Biswajit Panda, the coordinator of this event.

SPORTS DAY FOR FIRST YEAR STUDENTS

Enthusiastic participation of first year students in Chess competition



The annual sports tournament for First Year Engineering students was held on 13 - 14 February 2020. Various events were conducted including chess, carom, table tennis as solo events and throw ball for girls and football for boys as group events. In his inaugural speech, Principal Dr. Sandeep Joshi gave a boost to every player and encouraged them for the event. The faculty members

motivated the participants with their presence. The winners for the various solo games were- Anup Joshi winner for Chess, Kshitij Patade for carom and Ayush Koli for table tennis. The group events were highlights of the tournament, the throw ball was won by A Division and Football by D Division. The event was well organized and resulted in huge success due to the active participation of the First-year students and great efforts of the organizing team.

SCIENCE DAY POSTER PRESENTATION COMPETITION

Prof. Dr. P. S. Goyal and Dr. Deepali Srivastava interacting with students

As part of the National Science Day Celebration Week (28 Feb. to 8 March, 2020) PCE organized a Science Day Poster Presentation Competition for the First-Year students on 7 of March 2020. The themes for poster presentation were Scientific Achievements of the Decade and

Use of Modern Non-conventional Energy Resources. Thirty-four groups registered for the competition with diverse topics. PCE R&D Dean, Prof. Dr. P. S. Goyal and Dr. Deepali Srivastava graced the occasion in the role of judges. The first prize was won by a group from G Division for their poster G 4 GMRT. Second and third prizes were given to groups of Div. C for the posters LIGO and Optical Fiber respectively. A consolation prize was given to Div. F for the poster Green Chemistry. The entire program was a significant research experience to the students.

