DEPARTMENT OF PHYSICS
PROVIDENCE WOMEN’S COLLEGE
ANNUAL REPORT OF THE ACTIVITIES
2019-2020
1. CATCHING THEM YOUNG (Extending our expertise to society): August 12, 2019

A training program on LED bulb making was conducted for the children in the flood relief camp of our college, by the students and faculty. It was intended to effectively engage, entertain and motivate school children in the camp. Introducing them to the simplicity and fascinations of science, but even elderly people of the camp turned up with great enthusiasm.

2. STUDENT SOLAR AMBASSADOR (Subject related extension program): 02-10-2019

Organized jointly by Department of Physics, Providence women's College and IIT Mumbai on 02-10-2019 as part of Gandhi global Solar Yatra. In the wake of energy sustainability and mitigating climate change, the idea of “Energy Swaraj” or localized energy self-sufficiency has been conceptualized as a global movement. Gandhi Global Solar Yatra was planned by IIT Bombay not only in India but across the globe to sensitize the young minds towards solar energy and dire consequences of climate change. 250 students attended the training program including 150 students from various schools in Kannur, Calicut, Wayanad and Malappuram. The students took a pledge to protect, preserve and nurture our environment for a gratifying present and green future.
3. **Training workshop on Solar Lamp making:** A hands-on training on solar lamp making was given to selected 100 students from various CBSE schools by Dr.Latha P and Dr. Sandhya M in a workshop organized by Jawahar Navodaya Vidyalayam, Kozhikode on 16-11-2019.

4. **SOLAR LAMP ASSEMBLING WORKSHOPS ORGANIZED FOR STUDENTS**

   **20th Dec 2019**
   
   14 students from Gokulam Public School attended a training workshop on solar study lamp assembling conducted by the department.

   **22nd Dec 2019**
   
   Dr. Sini R, Sayoojya, VishnuPriya And Safaniya were the resource persons for LED bulb and solar study lamp assembling workshop conducted for the NSS volunteers and people of locality during NSS Camp at chelannur

   **14th Jan 2020**
   
   53 students from St Joseph Anglo Indian School were trained on solar study lamp assembling by the trained resource persons in the department.
OLD AGE HOME VISIT: September 27, 2019

Visited old age home (Cellere) and students learnt more about the true life and sharing and caring. To break their monotony, students performed some cultural activities and entertained the elderly by various cultural activities. Sensitising our students to the need to understand and take care of elderly and suffering people.

IMPORTANT DAYS OBSERVED

1. CHANDRA SMRITI: July 24-25

As part of 50th moon landing day various interdepartmental competitions like cartoon making, letter writing, illusion as an astronaut etc were carried out. The movie interstellar was screened in the auditorium which was attended by 300 students. After the show, a quiz based on the movie was conducted in which 25 teams participated.
2. VIGILANCE WEEK 28 October to 2 November 2019

The Vigilance Awareness Week 2019 was observed jointly by all faculty and our Students by taking the E-Pledge. The E-copy of the certificates was collected. Students were actively involved in spreading the theme of Vigilance Awareness Week “Integrity-A way of life “by flash mobs. An awareness talk was organised by BSc II year Physics students, for the students of LP and UP classes at Cholapurath A.U.P.S School, Paropadi on 1st November 2019. An online photography competition, “HORRORS OF SOCIETY”, was also conducted.

3. NATIONAL ENERGY CONSERVATION DAY CELEBRATION on 16th Dec

Department of Physics in association with Energy Management Centre, Govt of Kerala celebrated National Energy Conservation day by organising a quiz program on Energy and Environment around 20 teams from different departments participated and Sreenanda & Thanmayee of II Physics bang the first prize, followed by an interactive session on the topic “Rebuilding an Energy Efficient Kerala”
4. NATIONAL SCIENCE DAY

Celebrated “Women in Science “on National Science Day in association with Breakthrough Science Society on 3rd March. Dr Reshmi L. Associate Professor, Department of Earth and Space Science, Indian Institute Space Science and Technology, Trivandrum interacted with the students on the topic “Pride and Prejudice: the evolving Story of Women Scientists”
SPECIAL TALKS ARRANGED - MEET THE SCIENTIST

Students Scientist Interaction was done to motivated the students for doing research and to give awareness to the various scope and facility available in different laboratories.

- Dr Siddharth Gautam The Ohio State University USA, delivered a talk on "Using Neutrons and Computers to Study Molecules" on 2\textsuperscript{nd} December 2019
- Dr Hemant Kumar Alladi DST INSPIRE Faculty, Department of Space, National Atmospheric Research Laboratory, delivered a talk on “Air Pollution Aloft and its Influence on Climate” on 11\textsuperscript{th} December 2019

MOTIVATIONAL TALKS

Physics association was officially inaugurated by renowned highly experienced Pharma Trainer Mr.K.V.Balagopalan (DGM) and felicitated by Dr. Mini P Balakrishnan (Retired HOD, Department of Physics on October 25, 2019). He delivered a talk on "Lighting up young minds". He explained four goals to be followed in life to achieve their goal and the time management.
SEMINARS AND WORKSHOPS

1. SHORT TERM COURSE ON GRAVITATION AND COSMOLOGY

Organized a Short-Term Course for on Gravitation and Cosmology from the 25th to 30th of November 2019 at Providence Women's College, Calicut. The course was organized by the Teaching Learning Centre of the Inter-University Centre for Astronomy and Astrophysics (IUCAA) and the Department of Physics, Providence Women's College, Calicut, and supported by the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching scheme of the Ministry of Human Resource Development (MHRD), Government of India. 19 teachers from various colleges attended the course.

2. NATIONAL WORKSHOP ON STATISTICAL MECHANICS

Training for Teachers -15-16 February 2020

The 6th APT national workshop in Statistical Mechanics was conducted on 15-16 February 2020 at Providence Women’s College in collaboration with Academy of Physics Teachers, Kerala on the topic “Fermi System”. 24 Teachers from various college rom various part of india participated in the workshop.
MAJOR FUNDS GENERATED

1. ONGOING MAJOR RESEARCH PROJECTS

<table>
<thead>
<tr>
<th>Title of the Project</th>
<th>Funding agency</th>
<th>Fund in Lakhs &amp; duration</th>
<th>Teachers in Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of advanced multifunctional capacitors for electronic packaging</td>
<td>KSCSTE</td>
<td>Rs.12.65 3 Years(2016-2019)</td>
<td>Dr. Sobha A (P.I) &amp; Dr.Sumangala R(C.I)</td>
</tr>
</tbody>
</table>

2. WOMEN SCIENTIST SCHEME A (WOS-A)

<table>
<thead>
<tr>
<th>Title of the Project</th>
<th>Funding agency</th>
<th>Fund in Lakhs &amp; duration</th>
<th>Women Scientist A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of Extra – Tropical Forcing on Asian Monsoon – Agriculture and Economy</td>
<td>Ministry of Science and Technology-DST</td>
<td>Rs. 24.86 Lakhs 3 Years(2019-2022)</td>
<td>Dr. Sandhya M Dr. Latha P (Mentor)</td>
</tr>
</tbody>
</table>

RESEARCH PUBLICATION

- Reshmi Venugopal, Dhanya Prabha, Hysen Thomas & Sini R Optical Characterisation Of Cadmium Doped Fe3o4 Ferrofluids By Co-Precipitation Method, Materials today: Proceedings, issn:2214-7853 (accepted)

PAPER PRESENTED IN NATIONAL/INTERNATIONAL SEMINAR BY FACULTY

- Shija K, Kishan Kumar S R, Dr. N E Rajeevan; Study of Variation on dielectric properties of transition metal oxides with densification; SCICON-19 International Conference on Advanced Materials organised by Department of Sciences, Amrita School of Engineering during 15th-17th December 2019
- M. Sandhya, S. Sridharan, M. Indira Devi presented the paper “Convective responses due to a potential vorticity intrusion in tropical latitudes”, 3rd Conference on India Radar Meteorology, Indian Institute of Tropical Meteorology, Pune during 09-12 January 2019.
**FACULTY AS RESOURCE PERSON**

- **Dr. Jeena K** as Resource person at NSS College Mattannur on 18th July 2019 for the National Seminar
- **Dr. Latha P** was a member of the team to conduct Academic auditing at N S S College, Mattanur as part of quality enhancement on 26th July 2019.
- **Dr. Sini R** conducted an NSS Orientation Program at Providence Women’s College Calicut on 16/9/19
- **Dr. Latha P, Dr. Sini R, Dr. Jeena K, Dr. Sandhya M, Ms. Aswathy C** - Resource persons for the Student Solar Ambassador workshop conducted in collaboration with IIT Bombay to celebrate the 150th anniversary of Mahatma Gandhi.
- **Dr. Latha P and Dr. Sandhya M** - resource persons for the Student Solar Study Lamp assembling workshop conducted by Jawahar Navodaya Vidyalayam, Kozhikode on 16-11-2019.
- **Dr. Latha P** Chair ed a session of International Conference on Theoretical and Experimental Physics -2020 (ICTEP 2020) on 5-6 February 2020 organized Post Graduate and Research Department of Physics Farook College, Calicut
- **Ms Siji A J** as Recourse Person and delivered a talk on Latex Typography at MCC College Calicut on 7th Feb 2020
- **Dr. Sini R** as resource person and delivered a talk on "Mysteries Of Universe" on 25th February 2020 during National Science day celebration programme by Fathimabi Memorial Higher Secondary School, Koombara in association with KSCSTE

**FACULTY DEVELOPMENT PROGRAMME**

- **Dr. A. Sobha** attended a Short Term Course at MHRD TLC, Calicut University from 01/10/19 to 7/10/19
- **Dr. Sumangala R** attended a Short Term Course at MHRD TLC, Calicut University from 01/10/19 to 7/10/19
- Dr. A. Sobha attended a Short Term Course at MHRD TLC, Calicut University on 6-11-19 to 12/11/19
- **Dr. Sini R, Ms Shija K, Dr. Sandhya M and Ms. Aswathy C** attended the Short Term Course for on Gravitation and Cosmology from the 25th to 30th of November 2019 organized jointly by the Teaching Learning Centre of the Inter-University Centre for Astronomy and Astrophysics (IUCAA) and the Department of Physics, Providence Women's College, Calicut, and supported by the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching scheme of the Ministry of Human Resource Development, Government of India at Providence Women's College, Calicut.
- **Ms. Shija K** presented synopsis for Ph.D registration at Farook College on 20/01/2020.
- **Dr. Latha P, Dr. Sini R, Dr. Jeena K, Dr. Sandhya M & Ms. Aswathy C** attended and successfully completed the online course conducted by IIT Bombay on Solar Lamps.
PARTICIPATION IN INTERNATIONAL/NATIONAL SEMINAR

- All faculty members attended the seminar ‘Road Map to Accreditation’ on 24/07/2019 organized by IQAC

- **Ms Shija K & Ms Siji A J** attended a One day workshop on Master Mentor training program of Walk With A Scholar Program at Malabar Christian College, Calicut on 19/09/2019.

- **Ms Shija K** attended a Two day Yong Innovator’s Programme – Facilitators Workshop on Design for Kerala conducted by ICT Academy of Kerala (ICTAK) in association with K-DISC from 14/11/2019 to 15/11/2019 at ICT Academy of Kerala, Calicut

- **Ms Siji A J** attended 2 day national conference at Govt.college, Pattambi sponsored by Directorate of collegiate education. Govt.of Kerala from 21/11/19 to 22/11/19

- **Ms Shija K** attended a two-day National seminar on Advanced Condensed Matter Physics (NSACMP 2019), at the Department of Physics, University of Calicut, from 4/12/2019 to 5/12/2019

- **Dr Sumangala R** attended an international conference on “Frontiers of Material Science” (FOMS-19) on 16-18 December 2019 organised by St Joseph College Devagiri.

- **Dr. Latha P** attended a two day workshop on Nuclear Radiation Experiments organized by the Department of Physics, University of Calicut on 3rd & 4th January 2020

- **Ms Shija K & Ms Siji A J** attended a National Workshop on Advanced Analytical Techniques in Material Science (WAATMS-2020) at the Department of Nanotechnology, University of Calicut, from 21/01/2020 to 22/01/2020.

- **Dr. Latha P** participated in the NPTEL workshop conducted by IIT Madras on 25th January 2020.

- **Dr A. Sobha** and **Ms Shija K**, attended an International Conference on Theoretical and Experimental Physics -2020 (ICTEP 2020) on 5-6 February 2020 organized Post Graduate and Research Department of Physics Farook College, Calicut

- **Dr. Latha P & Dr. Sini R** attended the two day National Workshop on Fermi systems organized jointly by Academy of Physics Teachers, Kerala and Department of Physics, Providence Women’s College on 15 & 16th February 2020.


- **Dr. Latha P, Dr A. Sobha, Dr. R. Sini, Dr Jeena K** attended a workshop on “Quality Enhancement and Accreditation of Higher Educational Institutions by NAAC “ organised under UGC -PARAMARSH SCHEME of Providence Women’s College on 10/03/2020.
OUTSOURCING OUR EXPERTISE

- Ms. Viswani Grace Valley Arts and Science College, Kadambuzha, Malapuram, undertaken MSc. project on the topic “Influence of Eurasian and Himalayan Snow cover on the inter-annual variability of Asian Monsoon”, under the guidance of Dr. Sandhya M.

- Ms. Chandini, Grace Valley Arts and Science College, Kadambizha, Malappuram, undertaken MSc. project on the topic, “Signature of Indian Monsoon Variability on descending quasi biennial oscillation (QBO)” under the guidance of Dr. Sandhya M.

- Aneetta K T, Athira V, Haripriya V V PRNSS College, Mattannur undertaken BSc Project under the guidance of Dr. Jeena K on the topic X-RAY SPECTRAL ANALYSIS OF SEYFERT 1 GALAXY.

MAJOR RESPONSIBILITY TAKEN BY THE FACULTY

Dr. Sini R

→ Nodal Officer - UG Admission
→ Coordinator - Unnath Bharat Abhiyan Scheme
→ Member PARAMARSH COMMITTEE

Dr. Jeena K :-

→ Nodal Officer - PG Admission
→ Member PARAMARSH COMMITTEE

Dr. Latha P

→ IQAC member
→ Member PARAMARSH COMMITTEE
→ SPOC for NPTEL Local Chapter
→ Chairperson - II Sem PG Theory and Practical Examination
→ Chairperson - III Sem PG Theory Valuation

Ms. Shija K. – Coordinator, Walk With a Scholar
Ms. Siji AJ - Discipline Committee Coordinator
APT TALENT SEARCH EXAM 2019

About 40 students of our department have registered for the All Kerala physics talent search exam to be conducted on 30\textsuperscript{th} Nov 2019 at our college, which is a regional centre, with centre Co-ordinator as Dr.Sumangala R.

**STUDENT ACHIEVERS**

1. **SUMMER RESEARCH PROJECT**

- Vyshna Suresh (MSc 2018-2020) :-Department of Atomic and Molecular Physics, Manipal Institute of Technology
- Manisha (MSc 2018-2020) :- Centre for Advanced Research in Environmental Radioactivity (CARER), Mangalore University
- AnetTom (MSc 2018-2020):- Centre for Advanced Research in Environmental Radioactivity (CARER), Mangalore University

2. **STUDENTS WHO QUALIFIED NET/JEST/ GATE/ JAM**

Geethika BR

(MSc Physics 2018-19 Batch)

Qualified NET, JEST & GATE

NET Roll no: - TL0116206412

GATE Register no : - PH20S11319074

3. **STUDENTS WHO QUALIFIED JAM**

<table>
<thead>
<tr>
<th>Photo</th>
<th>Name</th>
<th>Roll No</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Photo" /></td>
<td>GAYATHRI</td>
<td>PH108F056</td>
</tr>
<tr>
<td><img src="image2.jpg" alt="Photo" /></td>
<td>AMISHA T</td>
<td>PH11OF067</td>
</tr>
<tr>
<td><img src="image3.jpg" alt="Photo" /></td>
<td>ANGANA B ASHOK</td>
<td>PH11O8002</td>
</tr>
<tr>
<td><img src="image4.jpg" alt="Photo" /></td>
<td>ANJALI T VINOD</td>
<td>PH109F055</td>
</tr>
<tr>
<td><strong>4. AWARDS AND HONOURS RECEIVED FOR CO-CURRICULAR ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Ann Maria George & Sreelakshmi H S  
(III BSc Physics)  
Best Poster award for Paper presented in National Seminar held at KKTM Government College, Kodungallur |
| Athira S & Thanmayee Gore  
(II B.Sc Physics)  
18<sup>th</sup> and 22<sup>th</sup> rank in All Kerala Physics Talent Search Examination 2019-20 conducted by APT Kerala |

<table>
<thead>
<tr>
<th><strong>5. HONOURS RECEIVED FOR EXTRA CURRICULAR ACTIVITIES</strong></th>
</tr>
</thead>
</table>
| Aparna O V  
(II B.Sc Physics)  
Member in best senior wing contingent in Republic Day Camp 2020 held at New Delhi |
| Amala John  
(II BSc Physics)  
got selected for NSS National Integration Camp |
6. CAMPUS RECRUITMENT  2019-2010

Vyshna Suresh
(II MSc Physics)
Campus Placement in Zifo’s RnD solutions, Chennai

Agnus Joseph, Ashlin Shaju, Haripriya B, Ann Maria George
(III BSc Physics)
got Campus Placement in Goan Institute International Consociation of Education (GICE), Cochin
### Students Who Successfully Completed Swayam-NPTEL Online Courses

#### Result of Online NPTEL Course 2019 January-April

<table>
<thead>
<tr>
<th>Sl. no</th>
<th>Course Id</th>
<th>Course Name</th>
<th>Name</th>
<th>Department</th>
<th>Certificate Type</th>
<th>Topper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>noc19-ce06</td>
<td>Electronic Waste Management - Issues And Challenges</td>
<td>MINNU PETER</td>
<td>Physics</td>
<td>Elite+ Silver</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>noc19-ce06</td>
<td>Electronic Waste Management - Issues And Challenges</td>
<td>SNEHA MARIYA</td>
<td>Physics</td>
<td>Elite</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>noc19-ce06</td>
<td>Electronic Waste Management - Issues And Challenges</td>
<td>ANJALI T VINOD</td>
<td>Physics</td>
<td>Elite+ gold</td>
<td>Toppe r of 5% in this course</td>
</tr>
<tr>
<td>4</td>
<td>hs22</td>
<td>Enhancing Soft Skills and Personality</td>
<td>MINNU PETER</td>
<td>Physics</td>
<td>Elite+ Silver</td>
<td></td>
</tr>
<tr>
<td>Sl. no</td>
<td>Course Id</td>
<td>Course Name</td>
<td>Name</td>
<td>Department</td>
<td>Certificate Type</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------</td>
<td>---------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>noc19-mm22</td>
<td>Structural Analysis of Nanomaterials</td>
<td>ANJALI T VINOD</td>
<td>Physics</td>
<td>Elite+Silver</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>noc19-hs34</td>
<td>Body language: Key to professional Success</td>
<td>AMISHA T</td>
<td>Physics</td>
<td>Elite+Silver</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>noc19-ph09</td>
<td>Experimental Physics II - Online</td>
<td>ATHIRA S</td>
<td>Physics</td>
<td>Elite</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>noc19-ph09</td>
<td>Experimental Physics II - Online</td>
<td>THANMAY EE GORE</td>
<td>Physics</td>
<td>Elite</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>noc19-hs32</td>
<td>Developing Soft Skills and Personality - Online</td>
<td>SREYA SANJEEV</td>
<td>Physics</td>
<td>Elite+Silver</td>
<td></td>
</tr>
<tr>
<td></td>
<td>noc19-hs32</td>
<td>Developing Soft Skills and Personality - Online</td>
<td>ANUPAMA M</td>
<td>Physics</td>
<td>Elite</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
<td>-----------------------------------------------</td>
<td>-----------</td>
<td>---------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>noc19-ph18</td>
<td>Waves and Oscillations - Online</td>
<td>THANMAY EE GORE</td>
<td>Physics</td>
<td>Elite</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>noc19-hs32</td>
<td>Developing Soft Skills and Personality - Online</td>
<td>SREERESH MI K B</td>
<td>Physics</td>
<td>Elite+Silver</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>noc19-hs32</td>
<td>Developing Soft Skills and Personality - Online</td>
<td>LIYANA SHERIN P</td>
<td>Physics</td>
<td>Elite+Silver</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>noc19-hs32</td>
<td>Developing Soft Skills and Personality - Online</td>
<td>ANAGHA P</td>
<td>Physics</td>
<td>Successfully completed</td>
<td></td>
</tr>
</tbody>
</table>
## 8. Paper Presented in National/International Seminar by the Students

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title of the Paper</th>
<th>Level</th>
<th>Sponsored by</th>
<th>Organized by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anjima K, Ann Maria George, Gayathri V, Maria Sibi, Rana Bishara C, Sreelakshmi H S, A. Sobha</td>
<td>Preparation and Characterization of Eco-friendly ion induced Aluminium oxide Dielectric material</td>
<td>National Seminar 16-17 th Dec 2019</td>
<td>Directorate of Collegiate Education, Govt of Kerala</td>
<td>KKTM Government College, Kodungallur</td>
</tr>
<tr>
<td>Ms. Reshmi Venugopal</td>
<td>&quot;Optical Characterisation of Cadmium Doped $\text{Fe}_3\text{O}_4$ Ferrofluids By Co-Precipitation Method&quot;</td>
<td>International Conference 5-6 Feb 2020</td>
<td>RUSA</td>
<td>Mar Athanasius College (Autonomous), Kothamangalam</td>
</tr>
<tr>
<td>Ms. Akshaya B</td>
<td>Gravitational lensing by Kiselev Blackhole</td>
<td>International Conference 5-6 Feb 2020</td>
<td>RUSA &amp; UGC</td>
<td>Post Graduate &amp; Research Department of Physics, Farook College Kozhikode</td>
</tr>
<tr>
<td>Aryananda M.S.</td>
<td>Weak Gravitational Lensing by ReissnerNordstorm Anti De Sitter Space Time</td>
<td>International Conference 5-6 Feb 2020</td>
<td>RUSA &amp; UGC</td>
<td>Post Graduate &amp; Research Department of Physics, Farook College Kozhikode</td>
</tr>
<tr>
<td>Anjima K, Ann Maria George, Gayathri V, Maria Sibi, Rana Bishara C, Sreelakshmi H S, A. Sobha</td>
<td>Preparation and Characterization of Eco-friendly ion induced Aluminium oxide Dielectric material</td>
<td>International Conference 5-6 Feb 2020</td>
<td>RUSA &amp; UGC</td>
<td>Post Graduate &amp; Research Department of Physics, Farook College Kozhikode</td>
</tr>
</tbody>
</table>
OTHER MAJOR ACTIVITIES IN THE DEPARTMENT

1. **NOVATO FIESTA: July 12th**
   The senior students and the teachers welcome the new comers into this new threshold of life. Dr Latha P, HOD gave a brief introduction about the department and the departmental activities. The department seniors gave then some questionnaire and tasks to welcome them to the department and make them feel at home.

2. **STUDY TOUR- 31st Dec, 2019 to 4th Jan, 2020**
   As a part of industrial visit Program, final BSc students visited Visvesvaraya industrial and Technological Museum Bangalore.

3. **ALUMNI MEET on 26th JANUARY, 2020**
4. SASTHRA 2020- 29th-30th Jan, 2020

An Intercollegiate Science Fest was organised by the department with following activities

+ Inaugural Talk “Sun -Our day time Star” by Sri. Jayanth Ganguli, Technical Officer, Regional Science Centre & Planetarium

+ Hands on Training session on “ExpEYES” by Dr. Sreekumar R Associate Professor, St. Joseph College Devagiri

+ Intercollegiate Science Quiz(Oorja)by Dr.Mini P Balakrishnan, Rtd. Head of the Department of Physics, Providence Women’s College

Sky Watch arranged by Regional Science Centre & Planetarium

Science Trivia for School Students by Ms.Surya Harikrishnan, Asst.Professor, Dept. of Atomic and molecular Physics,Manipal University

OTHER MAJOR EVENTS ARE

+ Science Project Competition for school students
+ Ideathon – An idea of something in someone’s mind
+ Face Painting Competition
+ Just A Minute
+ Mock Press
+ Dance Competition – Make awareness on energy conservation through your steps
5. **MAGAZINE RELEASE CUM VALEDICTORY FUNCTION**

Association Valedictory function held on 17-02-2020 with Ms Suchithra HoD Statistics Department Providence Women’s College as the chief guest. Manuscript Magazine was released on the same day.

![Image of the valedictory function]

**STUDENT PROGRESSION (BSc)**

<table>
<thead>
<tr>
<th>HIGHER STUDIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MSc</td>
<td>14</td>
</tr>
<tr>
<td>2. MSW</td>
<td>1</td>
</tr>
<tr>
<td>BEd</td>
<td></td>
</tr>
</tbody>
</table>

**DIPLOMA**

<table>
<thead>
<tr>
<th>CHEMICAL ENGINEERING IN POLYTECHNIC CAMPUS</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BANK COACHING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVIL SERVICE COACHING</td>
<td></td>
</tr>
<tr>
<td>SSC, PSC  COACHING</td>
<td></td>
</tr>
<tr>
<td>JAM COACHING</td>
<td></td>
</tr>
</tbody>
</table>
NEW INITIATIVES

a. **E-submission**
   Objectives:
   i. Students learning to submit assignments online
   ii. Correlating the concepts with what is observed in nature
   iii. Identifying these concepts in modern technology
   Outcome:
   PPT presentation by final year UG & PG students. Students were able to correlate the concepts with a deeper understanding and a different perspective. Rubrics was given to each of the student.

b. **Concept map on methodology**
   Objective:
   Enable the students to think independently, use their creativity, understand the concept and bring out examples from nature
   Outcome:
   Improvement in the confidence level of students. Group presentation by first year students

c. **Brain Gym games**
   Objective:
   To stimulate brain function, to improve learning and mental organisation, to increase concentration and to improve reading and listening skills
   Outcome:
   Increased alertness, noticeable improvement in memory, concentration, communication, and physical coordination

d. **Kahoot**
   To monitor each student’s progress towards learning objectives.

e. **Google Classrooms**
   Objectives:
   Enabling students to attend online classes and communicate with teachers and to organize and manage assignments, to go paperless, and for collaboration between students and between.
   Outcome:
   Teachers could complete the portions effectively through this method even though the regular classes were suspended in the wake of Corona virus (COVID-19)