



**ST. XAVIER'S COLLEGE FOR WOMEN, ALUVA**  
REACCREDITED BY NAAC WITH A GRADE (CGPA 3.33)

**DEPARTMENT OF ZOOLOGY**  
**ANNUAL REPORT**  
**2017-2018**

## ACTIVITIES OF ZOOLOGY ASSOCIATION 2017-18

### WORLD ENVIRONMENT DAY CELEBRATION 2017

- KSCSTE sponsored World Environment Day Observation  
Organised a seminar on topic “Water conflicts and challenges” by Dr Martin G D on 15.06.2017. Students from SNDP Higher Secondary School, Aluva & St. Francis Higher Secondary School, Aluva attended the seminar.
- Cleaning Drive- Students cleaned the sides of River Periyar and collected plastic wastes which were handed to an NGO Plan @ Earth for recycling



### WORLD ENVIRONMENT DAY CELEBRATION 2017

### ZOOLOGY ASSOCIATION INAUGURATION

- The activities of Zoology Association was inaugurated on 26.09.17 by Dr. Priyaja P, Assistant Professor, Dept. of Marine Biology, Microbiology & Biochemistry, CUSAT
- Students participated in the Pookalam competition, Malayali manka competition and Onapattu competition organised by Students Council.



### **ZOOLOGY ASSOCIATION INAUGURATION**

#### **INTERNATIONAL OZONE DAY CELEBRATION 2017**

- In connection with International Ozone Day, an intercollegiate poster designing competition and documentary film making competition was organised on 26<sup>th</sup> September 2017
- Dr. Venu G Nair, Scientist, Centre for Earth Research and Environment Management, Kochi delivered an illuminating lecture on “Story of atmospheric ozone and its impact on biosphere”. In his intellectual discourse he outlined the significant role played by ozone layer to sustain the life on Earth. He also mentioned the plethora of diseases caused by the devastating UV rays, especially various forms of cancer affecting skin, eye and blood. The steps we have to follow diligently to prevent further deterioration of ozone layer were also one of the highlights of the talk.
- Dr. Priyaja p, Assistant Professor, Dept. of Marine Biology, Microbiology & Biochemistry gave lecture on “Ozone & Marine ecosystem”



**INTERNATIONAL OZONE DAY CELEBRATION 2017**



**POSTER MAKING COMPETITION**

### **SEMINAR ON 'CURRENT TRENDS IN BASIC SCIENCES RESEARCH AND EDUCATION'**

- The Department of Zoology, SXC, Aluva in association with IISER, Trivandrum organized a seminar on '**Current Trends in Basic Sciences Research and Education**' on Friday, **October 27th 2017**. The aim of the seminar was to enable the students (UG and PG) to have interactive sessions with scientists of IISER, Trivandrum working in different areas of Basic Sciences.

### **CAREER GUIDANCE CLASS**

- Career guidance class was organised for our students on 07-07-2017. Resource person was Sri. Ravikiran, Director, Research World, Ernakulam.

### **CITIZEN SCIENCE PROGRAMME**

- Students participated in Citizen Science programme and uploaded data into the e-birding site, also uploaded data on ovipositioning of *Aedes* mosquito

### **ENTREPRENEURSHIP TRAINING PROGRAMME**

Final year Zoology students (Model I and II) attended 3 days entrepreneurship training programme and Industrial visit to Hi-TechBio Fertilizers, Sreemoolanagaram, organised by the ED club.

### **INAUGURATION OF THE DEPARTMENT GOLDEN JUBILEE CELEBRATIONS**

On October 27<sup>th</sup> 2017, Rev.Sr. Speciosa formally inaugurated Golden Jubilee Celebrations of the Department



### **INAUGURATION OF THE DEPARTMENT GOLDEN JUBILEE CELEBRATIONS**

### **HONOURING RETIRED FACULTY MEMBERS**





### **HONOURING RETIRED FACULTY MEMBERS**

#### **LAUNCHING OF CERTIFICATE COURSE ON “NUTRITION”**

#### **ACADEMIC WEEK OBSERVATION**

As a part of the college academic week ‘Academia 2018’ a talk was organized by the department on ‘Adolescent Health Issues’ by Dr. Divya Jose, Consultant Gynecologist, Centre for Infertility Management & Assisted Reproduction (CIMAR), Kochi on 12<sup>th</sup> January 2018.

#### **INTERACTIVE SESSIONS**

- **ONE DAY LECTURE ON ‘APPLICATIONS OF CYTOGENETICS IN MEDICINE’** –was conducted on 29<sup>th</sup> January for the final year BSc Zoology (Model I & II) students. Mrs.Jayalakshmi M Menon, Cytogeneticist, Centre for Infertility Management & Assisted Reproduction (CIMAR), Kochi was the resource person

- **Workshop on Research Report Writing**

In the one day workshop on ‘Research report writing’ was conducted 23<sup>rd</sup> March for the final year BSc Zoology (Model I & II) students. The resource person Mrs.Ranju R, DST Inspire fellow, CUSAT in the first session focussed on how to write a scientific paper and publish it in a journal. The structure of the paper was on IMRAD rule. This was followed by a training session. Students

prepared storyboard with all the basic sections including title, objectives, procedure, observation and conclusion in a very short and crisp way. Lively group discussions and interactions made the sessions fruitful.

- **Training on Plankton Identification**

One day training programme on the sorting and identification of marine plankton was conducted on 21<sup>st</sup> March, 2018. Dr. VineethaGopinath, DST-National Postdoctoral Fellow, FEMD, CMFRI gave an introductory class which included the characteristics of the marine ecosystem, types of plankton, collection, sorting and identification of phytoplankton and zooplankton. This was followed by a demonstration on the subsampling, sorting and identification of zooplanktons. About 22 marine zooplanktons spanning the various phyla were exhibited and students got familiarized with their morphological characteristics. Marine phytoplankton samples were also observed.

- **Workshop on 'Techniques in Molecular Biology'**

One day workshop on 'Techniques in Molecular biology' was conducted in association with, Department of Biotechnology, Union Christian College, Aluva on March 21<sup>st</sup>, 2018. The students had a rigorous hands on training in DNA extraction, Gel electrophoresis, PCR and Blotting techniques.

**Campus bird count** was conducted in the college campus as part of Greater Backyard Bird Count. Bird expert Mr. Prem Chand R gave a class on bird identification and also familiarized the students to identify birds by their calls. Twenty five bird species were identified within the campus. The students also visited Kadamakudy wetlands where they took Bird count. The data of both the bird counts were uploaded to e-bird a citizen-based bird observation network in the biological sciences.

## **HANDS –ON TRAINING**

Under the DBT Star Scheme, students were given Hands –on training in Statistical Analysis by Dr. Ansa Alphonsa Antony of Statistics department. Mr Amal T Anup took a class entitled "*Mastering MS Excel*".

## RESEARCH INSTITUTE VISITS

### ➤ **Visit to NBFGR Unit, Central Marine Fisheries Research Institute**

About 10 III BSc Zoology (Model I&II) students paid a visit to the NBFGR Unit, CMFRI on 24<sup>th</sup> February, 2018. The Senior Scientist, Dr. PR Divya explained to the students on the kind of research work that was carried out in the institute. The students had a demo of the various techniques in molecular biology and cell culture such as DNA extraction, Gel electrophoresis, PCR and fish tissue culturing. Students also had a hands on experience in the above techniques.

### ➤ **Visit to School of Marine Sciences, CUSAT**

About 20 III BSc Zoology (Model I & II) students paid a visit to the Department of Marine Biology, Microbiology and Biochemistry, School of Marine Sciences, CUSAT on 6<sup>th</sup> March, 2018. Dr. Rosamma P, Head gave an overview of the kind of research activities conducted in School of Marine Sciences. The students had a demonstration of the various techniques in microbiology and molecular biology such as autoclaving, serial dilution, culturing of bacteria, DNA extraction, Gel electrophoresis and PCR.

## FIELD VISITS

### **Visit to Aiswaryagram, Kalady**

On 22<sup>nd</sup> March 2018 ,thirty Students of B.Sc Zoology model 1 visited Aiswaryagram a Training a Research Institute of Save a Family Plan (India), which is a registered Charitable Trust (M 603/90) committed to sustainable development put up in the year 1988,with the objective promote, facilitate and play a pro-active role in empowering and strengthening the primary agriculture and allied sectors to generate rural employment, increase the outputs of agriculture allied activities for achieving food security and reduces the cost & improves the quality of farm inputs to make farming cost-effective. The centre had facilities spread over nine hectares of land for conducting training programs in Dairying, Rabbit rearing, Goat rearing, Poultry, plant nursery etc. The land has been suitably laid out to accommodate different crops, as well as sheds for



cows, goats, rabbits, poultry, sericulture, fishery, etc.



### **VISIT TO AISWARYAGRAM, KALADY**

#### **SUMMER TRAINING PROGRAMMES**

##### **Internship Programme in National Institute of Oceanography**

A three day internship programme on Laboratory practices in Microbiology and Molecular Biology was conducted in the Microbial Ecology Laboratory, CSIR-National Institute of Oceanography, Regional Centre, Kochi. Dr. Anas Abdul Aziz, Senior Scientist gave a description on the glimpse of research conducted in NIO to the students. The programme involved hands-on training in microbiological media preparation, autoclaving, preparation of serial dilutions, plating, isolation of bacteria, preservation of cultures, DNA isolation, Gel electrophoresis and PCR

##### **STUDY TOUR**

Final year students accompanied by teachers of the department visited Mysore and Wayanad as part of their study tour from 12<sup>th</sup> to 15<sup>th</sup> January .

## **STUDENT ACHIEVEMENTS**

**1) Vandhana T.M** bagged First Position with A+ for the MG University BSc Zoology Model II examination held in March 2017.

**2) Sr.Mary K.P** bagged **11<sup>th</sup>** Position with A+ for the MG University BSc Zoology Model I examination held in March 2017

**3) Greeshma.K.S & Shilja Sajeevan** of IIIrd B Sc Zoology (**Voc**) won **IIIrd Prize** in Quiz competition conducted by Biotechnology Dept. of Al Ameen College Edathala.

**4) Gladys K.T & Drisya Wilson** of IIIrd B Sc Zoology( **Voc**) won **Ist prize** in Essay Writing competition held at SNM College Maliankara.