

ASSOCIATION REPORT

FOOD SCIENCE AND QUALITY CONTROL

2017-2018



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Association Report 2017-2018

INTRODUCTION

At the beginning of the twenty-first century, many colleges and universities have an educational mission to develop the “whole student”. On college campuses extracurricular involvement is a key tool in the personal development for college and university students, involvement in extracurricular activities plays an integral role in the collegiate experience. Students become involved in extracurricular activities not only for entertainment, social and enjoyment purposes, but its important, to gain and improve skills.

Impact on Students

The importance of extracurricular activities on college campuses is well established. The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. According to a 1993 article by Alexander Astin, almost any type of student involvement in college positively affects student learning and development. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. Specifically, a student's peer group is the most important source of influence on a student's academic and personal development. By identifying with a peer group, that group may influence a student's affective and cognitive development as well as his or her behavior.

As the development of the well-rounded individual is a principal goal of extracurricular activities on college and university campuses, the numerous experiences these activities afford positively impact students' emotional, intellectual, social, and inter-personal development. By working together with other individuals, students learn to negotiate, communicate, manage conflict, and lead others. Taking part in these out-of-the-classroom activities helps students to understand the importance of critical thinking skills, time management, and academic and intellectual competence. Involvement in activities helps students mature socially by providing a setting for student interaction, relationship formation, and discussion. Working outside of the classroom with diverse groups of individuals allows for students to gain more self-confidence, autonomy, and appreciation for others'

differences and similarities.

Students also develop skills specific to their career path and imperative for future job success. Students have opportunities to improve their leadership and interpersonal skills while also increasing their self-confidence. Extracurricular involvement allows students to link academic knowledge with practical experience, thereby leading to a better understanding of their own abilities, talents, and career goals. Future employers seek individuals with these increased skill levels, making these involved students more viable in the job market. Specifically, participation in extracurricular activities and leadership roles in these activities are positively linked to attainment of one's first job and to managerial potential.

Getting stuck into activities outside of your studies is great for both personal and practical reasons. There should be plenty of opportunities on hand at universities to find something that suits you.

Societies, the union, clubs or becoming a rep are all part and parcel of the university experience (and hopefully a fun way to take time out away from your studies), while work experience and internships can offer you a glimpse into the working world. All are good for personal development and enhancing your CV.

WHY DO WE NEED FOOD SCIENTISTS AND TECHNOLOGISTS?

Food scientists have, from time to time, been labelled as 'meddlers' in food, of creating 'unnatural foods' that are the antithesis of the 'grow your own' movement. In short, the bad boys of food!

Yet, the reality of the work of food scientists and technologists in today's world could not be farther from the truth, which may explain why we are in demand.

The health and well-being of the nation depends on the ready availability of good quality food. How to feed 60 million people and ensure the safety and quality of the food products that they eat? That's partly the work of the food scientist. How does the food we eat impact on our health, for better or worse? That's our work too. How can food companies develop new products linked to optimal nutrition? And perhaps, most importantly, who is advising Government about food security and the role that the UK will have to play in the future security and sustainability of the world's food supply.

Traditionally, food processing has been largely concerned with preserving the safety and nutritious properties of food whilst allowing distribution to consumers. Canning was, for instance developed by Nicholas Appert during the Napoleonic wars as a means of preserving food for the French Army. He used glass jars which were replaced by metal cans in early canning processes such as that of Donkin Hall and Gamble in Bermondsey. Canned products were originally for the army and navy but

consumer products rapidly followed. Other significant developments include the development of the quick-freezing process in 1932 by Clarence Birdseye which laid the foundation of the frozen food industry.

Food science is a study of chemical and physical properties of foods and the changes that may occur during processing, storage etc. This course explores the details of food chemistry, production development and safety and can lead to a range of careers in manufacturing, research and retail as well as associated health, legislation, engineering and agricultural options. The department aims at an overall development of its students not only in academics but also in other curricular activities. It is a need of the century to provide food to the population through scientific conservation, eliminating avoidable losses and making available, more balanced and nutritious food.

Recently the Indian food industry is poised for huge growth, increasing its contribution to world food trade every year. In India food sector has a high growth and a high profit sector due to its immense potential for value addition particularly within the food processing industry. So as the growth of food industry is increasing and the market, the need of Food Scientist is also increasing day by day.

Members of FSQC Association

“PREMORA“

2017-2018

The office bearers of the Association for the academic year 2017-2018 were the following members

President	: Madam Anju Annette Cherian, Head of the Department	
Vice President	: Miss J.J. Shruthimol	III D.C Food Science
Secretary	: Miss Jossy Koshy	III DC .Food Science
Treasurer	: Miss Alphy Siby	III DC Food Science
	: Miss Eulia Joy	III DC Food Science
Magazine Editors:	Miss liyana Jawahar Kevi	III DC Food Science
	: Miss. Aswathy Manoj	III DC Food Science

Sub committees were also formulated.

1. ACADEMIC PERFORMANCES

- **Rank Holders from the department**

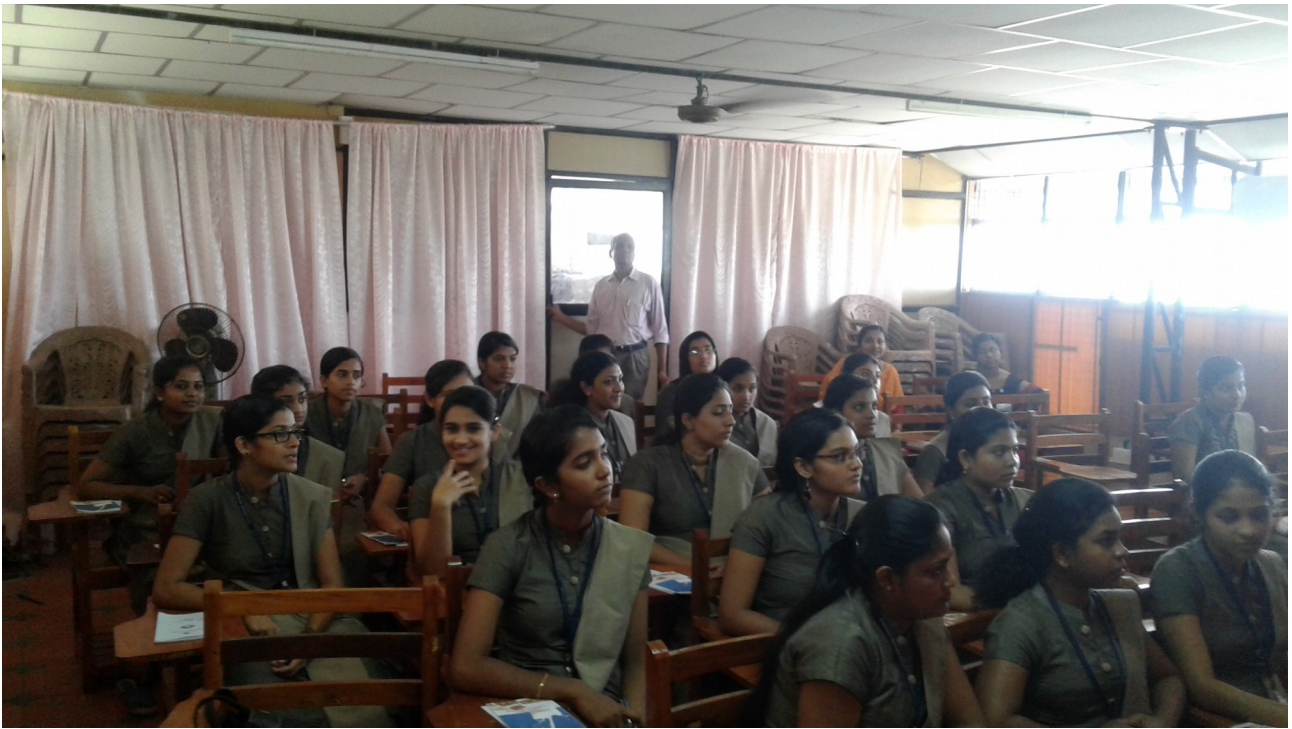
1. **2nd Position : Richa Elsa Thomas 9.31 A +**
2. **3rd Position : Twinkle Jose 9.21 A +**
3. **4th Position : Ann Mariya Kurian 9.03 A +**

- A + Holders: 3 students

- **Workshops :**

July 20th - 22nd 2017: Workshop and Training for IIIrd year students at Dairy Training Centre(DTC), Kottayam





Inorder to enhance the skill requirements of the students , they were made to undergo an on the job training and workshop with lectures at the Dairy Training Centre , Erayilkadavu on the above mentioned dates. The training included classes on nutritive value and composition of milk, Methods of processing , Types of milk and various milk products , packaging and storage. The students attended workshops on the preperation of products like Peda, Khoa, Rasagolla, Gulab jamuns, Home Made Chocolates, Ice Creams, Paneer, Curd, Yogurt

Seminars conducted by the department:

1. State Level – Lecture Series Kalavara 2017-18

The lecture series – Kalavara, was inaugurated by Smt.A.K.Mini, Asst.Commissioner Food Safety, Kottayam on 25th July 2017, followed by a detailed class on “Food Safety Practices”



26.07.2017



Day I- 10.00 a.m. -12.30pm

Scientific Session I- Banana Cultivation Techniques

Resource Person : Dr Shyla Kumari, Krishi Vignyan Kendra, Kottayam

The class was based on management practices, marketing and harvesting of banana cultivation. The class also emphasised on the importance of nature of the soil ideal for banana crops. Information on land preparations, manures and fertilisers needed for a better yield is also discussed.

Afternoon 1.30-3.30pm



Scientific Session II - Processing of Banana and Banana products

Resource Person - Smt Elizabeth Joseph, Krishi Vignyan Kendra, Kottayam

The session highlighted the importance of banana processing into various products of value addition, varieties and included examples like jam, jellies and pickles. The class highlighted the nutritional and compositional value of banana and its products

27.7.2017

Scientific Session III- Organic Vegetable Cultivation

Resource Person - Smt Greeshma R, Krishi Vignyan Kendra, Kottayam



Scientific session III dealt with the methods employed for organic vegetable cultivation effective and various preparation methods of vegetables. The detailed class was on the types of fertilisers of organic nature which could be prepared on a home scale and utilised for manuring purposes.

Scientific Session IV- Processing of Organic Foods

Resource Person - Smt Lisset Mathew, Managing Director, Ethnic Foods ,
Pala



Ethnic foods are of great importance in terms of nutritional value and also because there is excess availability. The session highlighted conversion of these products into various edible products both raw and processed enhancing its nature by value addition. The products included jackfruit, jackfruit pickles, dried jackfruit, jellies and syrups. These products were handed out for tasting.

28.7.18

Scientific Session V - Processing of Pineapple and Its Products

**Resource Person - Smt Rashida P.R., Pineapple Research Station,
Muvattupuzha**



Another natural cultivation found in excess and carrying lots of nutritional importance has lately been tapped as one of commercial importance. The class emphasised on planting procedures, medicinal values, canning as well as the nutritional aspects. By products like pineapple marmalades, toffees and powder was discussed.

- **National Level Seminar**

JANUARY

Jan 10th 2017:

One day **National Seminar** titled “ **Healthy Bakes**”

Total No: of participants : 480

Participants : Kerala bakers Associaton – 20 No:s

Students and faculty delegates : BCM College Kottayam
St.George's College,Aruvithura
St.Teresa's College, Ernakulam
St.Thomas College, Pala
St.GITS College, Kottayam
CMS College, Kottayam
St.Mary's College, Thiruvalla
MACFAST College, Thiruvalla

Chief Guest – Dr. Christy Fernandez IAS, Chairman KSIDC and Former Secretary to the President of India



NATIONAL SEMINAR “HEALTHY BAKES”

PROGRAMME SCHEDULE

1. Prayer Song
2. Welcome and Introduction of Chief Guest : Mrs Anju Cherian,
Head, Dept of Food Science,
B.C.M College.
3. Presidential Address : Very Rev Fr. Michael Vettickat,
Vicar General
Archeparchy of Kottayam.
4. Inaugural Address and Inauguration
of National Seminar and Incubation
Centre FOODTIC : **Sri Dr .Christy Fernandez IAS**
Chairman, KSIDC and Former
Secretary to the President of
India
5. Keynote Address : Rev.Sr. Dr. Betsy SVM
Principal
B.C.M College
- 6 Felicitation : Rev Fr. Philmon Kalathra,
Secretary,
Corporate Educational Agency of
Colleges,
Archeparchy of Kottayam.
7. Presentation of Memento : Very Rev Fr. Michael Vettickat,
Vicar General,
Archeparchy of Kottayam
7. Vote of thanks : Smt Asha Yohannan,
Asst Professor,
Dept. Of Food Science ,
B.C.M College,
Kottayam

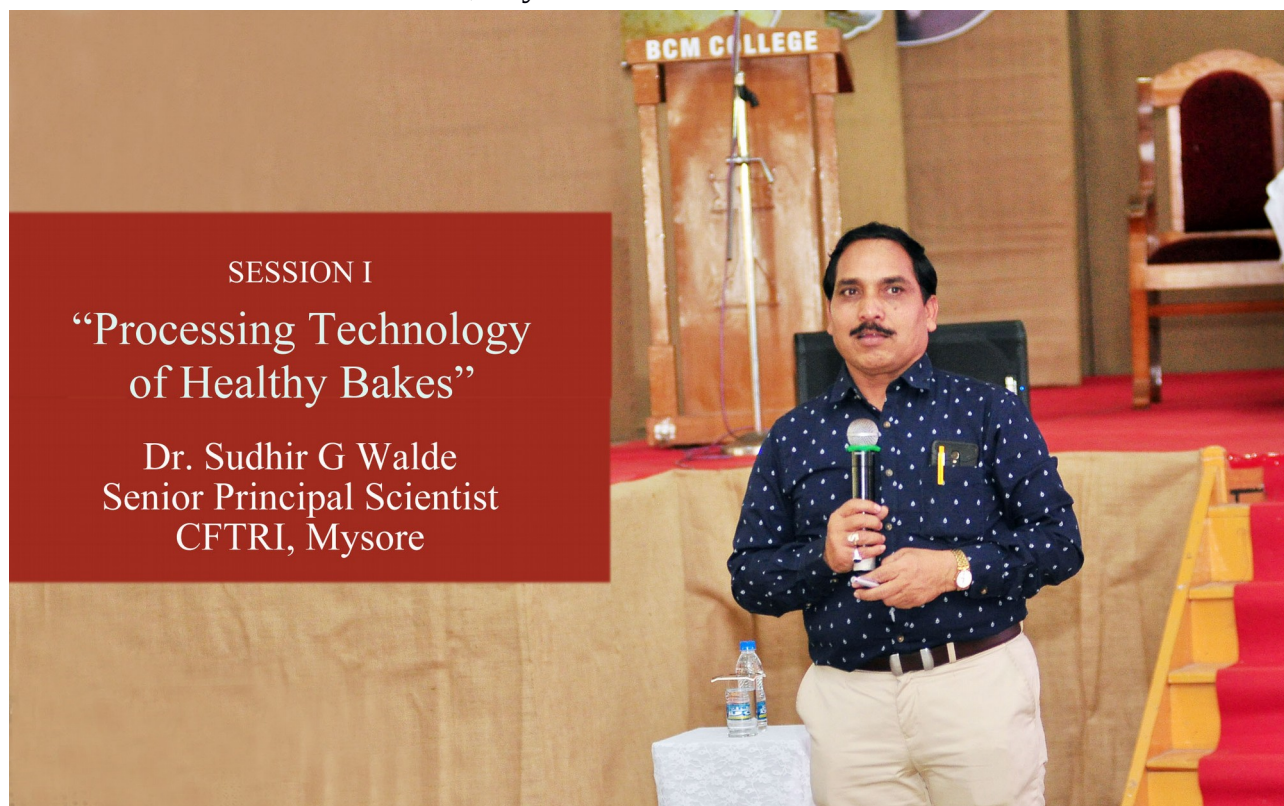
Interactive Session with Kerala Bakers Association



An opportunity for various delegates to interact with the self made entrepreneurs of the bakery industry given an insight into the problems of venturing into a business requirements, financing, licensing, motivational factors, research and development of new products and at present making a nutritious choice was the discussion for the day.

Scientific sessions I – 11.30 am to 1.00 pm

Dr. Sudhir G Walde,
Sr.Principal Scientist,
Dept.Flour milling, Baking and Confectionary,
CFTRI, Mysore



The session focused on the various processing technologies of bakery and its substitutes to develop a healthy and nutritious bakery products along with functions of ingredients in bread making, substitutes used in formulation of baked products, enzymes in bakery, bakery products micronutrients fortification, functions of micronutrients, development of high fiber bakery products, gluten free bakery products, hydrocolloids used in bakery goods.

Scientific Session II – 2.00 pm – 3.45 pm

Ms.Divya Christodoss, Asst.Professor, Dept.
Food Processing and Food Chemistry, Loyola College,
Chennai



- **Personality Development Programmes:**

An orientation class was arranged for the final year students . The same was arranged inorder to bring out the abilities of the students and make them aware of their potentials and weaknesses which were worked on. This also provided the students an opportunity for goal achievement and methods of working constructively in a group. It was a fun filled activity session taken by Sri Visakh Mohan, Asst Prof. , Dept. Of Social Work, BCM College.

- **Laboratory Manual for B.Sc.Food Science and Quality Control:**



Release of Laboratory Manual by Smt. A.K Mini, Asst Commissioner, Food Safety Kottayam on 25th July 2017.

The Laboratory manual specially prepared for the B.Sc.Food Science students is an overview of the practical based techniques employed in Food Analysis, Food Chemistry and Food Microbiology by the Food Science dept. Of B.C.M College Kottayam

All labs must have a written procedure manual for the performance of all tests performed in the lab. The manual must be readily available and followed by laboratory personnel. Textbooks may be used in addition to the procedure manual

Specimen collection, processing, and rejection criteria requirements.

- Procedures for microscopic examinations, including the detection of inadequately prepared slides.
- Step-by-step performance of the procedure, including test calculations and interpretation of results.
- Preparation of slides, solutions, calibrators, controls, reagents, stains, and other materials used in testing.
- Calibration and calibration verification procedures
- The reportable range of patient test results as established or verified through method performance specifications.
- Control procedures
- Remedial action to be taken when calibration or control results fail to meet the lab's criteria for acceptability.
- Limitations in methodologies, including interfering substances.
- Reference or normal ranges
- Imminent life-threatening lab results or panic (critical) values.
- Pertinent literature references
- Appropriate criteria for specimen storage and preservation to ensure specimen integrity until testing is completed.
- The lab's system for reporting patient results including, when appropriate, the protocol for reporting panic values.
- Description of the steps to be taken in the event that a test system becomes inoperable.
- Criteria for the referral of specimens including procedures for specimen submission and handling.

- **Fests Conducted by the Department**

College fests usually provide an excellent platform to showcase all kinds of different talents ranging from arts, educational and sports . A process of “increasing your social circle.” and the career development phase. It instills cultural sensitivity. College fests, especially if it’s your own, serve as a well-deserved break that though drains the students out of the physical energy, mentally gives them an energy boost that replenished their minds with fruitful memories of the fests that can be now cherished and can be survived on, until the season of college festivals comes around again

AUGUST

August 2nd 2017 : Chaat Fest organised by the dept.of food science students





There is no denial that “*the department*” also known as is a foodie’s paradise, offers some of the most authentic flavours from ages. It is a hub of every foodie with mouth watering delicacies at awaited moments.

Inorder to promote the traditional flavours of India, the department of Food Science organized a fest for each academic term with various themes. The first theme involved a Chaat fest which highlighted the traditional snacks of Northern India . The students were attired in the traditional dress, stalls put up infront of the auditorium and sales conducted. There was live entertainment in the form of traditional dances by the students

The dishes ranges from lip-smacking *Paani puri*, *dahi puri*, *sev puri*, and various other forms of sweets, the list goes on till infinity.

Aug 16th 2017 : KOZHIKODAN FEST



The second fest conducted by the department adopted the kozhikodan theme. The traditional attire, language and culture was imbibed in the food stalls. The stalls had a variety of sweets , drinks and main courses, all specialities of Kozhikode. The dishes included Khava, Garba Kol (Veg and Non Veg), Pazham Narechethu, Pathiri ,Chicken Roast, Bread Pola, Kuluki Serbeth, Naranga Mittai, Salted Pineapple, Carrot and Amla. The vent was a huge success with a commendable turnout.

SUBJECT ENRICHMENT PROGRAMMES

June 13th 2017 : Seminar on “ **Food Safety and Hygiene Practices**” by Ms.Neethu Pratheep, (Former Alumni) Hygiene Officer, Capital Club International, Dubai



Alumni interaction of various batches is extremely strong. The department is honored to have a number of alumni visits, where interactive sessions on job opportunities, job descriptions, skill enhacement and communication is frequently updated for value

addition and skill addition of the students.

Ms.Neethu Pratheep, (Former Alumni) Hygiene Officer, Capital Club International, Dubai , took a one day session on Food safety and hygienic practices which stressed on importance of safety and hygiene from farm to fork.

Honoring of Alumni : Ms.Neethu Pratheep was honored by the department as a prominent alumni and as one who has keenly showed continued support and lent technical knowledge and assistance at interactive sessions



Aug 10th 2017 : One Day Seminar on “ Enzymes and its Application in Food Industry” by Alumni

Inorder to equip the students with the latest advances in science and technology with respect to the food industry, a one day seminar on the above mentioned topic was conducted by Ms.Jency P Mathew, Former Alumni and Former faculty, BCM Community College, Kottayam for II nd yr and Ist year students. The class explained in detail the definition, types, Activators and inhibitors and the applications of enzymes in the food industry and the measurement of enzyme activity.



Aug 21st 2017

ONE DAY SEMINAR ON SPECTROSCOPY AND ITS TECHNIQUES

A one day seminar on Spectroscopy and Its Techniques was held on August 21st 2017. The class was conducted by Dr. Harikrishnan R, Asst. Prof, CFT, Konni for the second year students. The class covered areas on the regions of electromagnetic spectrum, properties of electromagnetic radiations, spectroscopy, advantages, disadvantages, wave properties of electromagnetic radiation, absorption spectra, emission, atomic absorption, molecular absorption, types of molecular spectra,

fluorescence, interference and uses in food industry

Oct 4th 2017 : One day seminar on “ Vitamins and minerals” by Mrs.Beena Cherian,
Dean, School of Biosciences, MACFAST College, Thiruvalla for Ist
Yr students





December 12th 2017: Class on “ Food Hygiene practices in food industry” by Alumni

On December 12th 2017, Ms. Treesa Vincent, Food safety and Hygiene Manager, Four Seasons Hotel, Abu Dhabi, Al Marayah Island” Alumni of the department took a detailed class on “ Food Hygiene practices in food industry” and shared her experiences as working as a hygiene officer in an international platform.

2. ARTS COMPETITIONS AND INTER DEPARTMENTAL COMPETITIONS

Inter departmental competition:

1. Slogan writing competition organised by the Dept.of Zoology on 14th June 2017
Topic : Blood Donation.

IIIrd position Secured by **Helen Basil Tharakan(III .D.C)**

2. Music dhamaka Competition organized by Sociology Dept.in accordance with music day celebrations on 21.6.2017, **Devika Krishna (III.D.C) and Sneha R(II.D.C)** secured **IIIrd Position**

3. Arts and Craft Competition based on natural products, organised by the dept of zoology on 22.6.2017, **Helen basil Tharakan (III .D.C)** secured **Ist Position**

4. Poster designing competition, organized by the department of computer science on the effect of drugs on modern society in accordance with Anti drug Day, **Ramona Simon(III.D.C), Aleena Maria Tomy(III.D.C) participated** in the competition and **J.J.Sruthimol (III.D.C) secured 1st Position**

5. Logo puzzle competition, organized by the department of commerce on 11.7.17 as part of commerce week celebration, **Liya Mariyan Ignatious (III.D.C)and Liyana Jawahar Kevi (III.D.C)** have **participated**.

6. Essay writing competition, organized by the department of Botany on 12th July 2017, **Helen Basil Tharakan(III.D.C) has paticipated**

7. Chocolate Reciepe competition, organized by the Dept.of English, **Amina Hakkim (Ist D.C) has won 1st Prize**

8. Debate Competition organized by the department of Maths, titled “ Role of Women in the world” on 24.7.2017, **Reenu C Manu(I.D.C) and Chinju Baby (I.D.C)** have **participated**.

9. Pi Value Writing competition organized by the Dept of Maths on 26th July 2017
J.J.Sruthimol secured IIIrd Prize.

10. Story writing competition organized by the department of Maths on 28th July

2017, **Helen Basil Tharakan(III.D.C) and Theertha Ayyappankandy Poyil(I.D.C) secured 2nd position**

11. Star Making competition as part of X'mas day celebrations of the college, Nimmy Mathew(III.D.C) and Abhirami Anil(III.D.C) won 3rd Position

12. Santa Claus competition as part of the christmas day celebrations of the college, **Helen Basil Tharakan (III.D.C) has participated and Aleena Maria Tomy (III.D.C) secured IIIrd Position**

13. Pencil Drawing competition organized by the dept of Zoology, Gopika B (II.D.C) and Indhu (II.D.C) have participated.

14. Photography Competition organized by the department of Zoology, Liya Marian and JJ Shruthimol were participants (Result not yet announced)

ARTS COMPETITION

- | | | |
|--------------------------|-------------------------|------------------|
| 1. Oppana | - Renilda Reji & Team | (Participation) |
| 2. Group Dance | - Sneha R & Team | (Participation) |
| 3. Group Song | - Sneha R & Team | III Prize |
| 4. Nadan Pattu | - Sneha R & Team | III Prize |
| 5. Thiruvathira | - Gopika & Team | (Participation) |
| 6. Mime | - Anupamam U & Team | (Participation) |
| 7. Western Music | -Fathima Shabana & Team | III Prize |
| 8. Film Review | - Els Mary Eldho | (Participation) |
| 9. Essay Writing (Mal) | - Indhu P (II DC) | (Participation) |
| | Helen Basil Tharakan | (Participation) |
| 10. Cartoon Drawing | - Ramona Simon | III |
| | - Aleena Mariya Tomy | (Participation) |
| 11. Painting | - Liya Ignatius | (Participation) |
| 12. Poster Designing | - Ramona Simon | (Participation) |
| 13. Collage Making | - Ramona Simon | (Participation) |
| 14. Poetry Writing (Mal) | - Helen Basil Tharakan | (Participation) |
| 15. | | |

4. NSS and NCC

NCC participants: Anupama Subhash and Anns Thomas (II.D.C)

5. ALUMNI SUPPORT

This year the 2007-2010 batch decided to sponsor the best outgoing student of the department with a certificate, trophy and Cash prize for Rs 2500/-. The best outgoing student of the department for this academic year is Miss J.J Sruthimol

7. PRIZES IN INTERCOLLEGIATE COMPETITIONS CONDUCTED BY OTHER COLLEGES

Sl.No:	Date	State Level/ National Level	College	Class	Student Name	Participation	Prize
1.	10 th and 11 th June 2017	State Level Fest	MACFAST College	III.D.C	Liyana Jawahar Kevi	Master Chef-	iii
				III.D.C	Nimmi Mathew	Master Chef	iii
				III.D.C	Preethy Sara Dilip	Photography	ii
				II .D.C	Elsa Mary Eldho	Essay Writing (Eng)	i
				III D.C	Ramona Simon	Essay Writing	-
				II D.C.	Anancy Thomas	Photography	-
				III D.C.	Devika Krishna	Duet Music Contest	II
				II D.C .	Sneha R.	Duet Music Contest	II
				II D.C.	Anjali & Team	Treasure Hunt	-
				III D.C.	Helen Tharakan and Team	Treasure Hunt	-

				III D.C.	JJ Shruthimol & Team	Treasure Hunt	–
				III D.C.	Aleena Tomy & Team	Group Dance	-
				I D.C.	Maria Chacko	Facial Painting	III
					Athira Dileep	Facial Painting	III

8. INNOVATIVE / UNIQUE Programme Conducted by the Department:

Food Incubation Center: FOODTIC



NAME : FOOD TIC (Food Technology Incubation Centre)

INTRODUCTION

The small scale industries and the potential small scale entrepreneurs in food products need technical assistance in areas like product formulation, healthy ingredient substitution, compliance with food safety standards , cost effective

preparations and substitutions, value additions, storage and shelf life.

The incubation centre named FOODTIC intends to provide technical assistance in the above areas. This is the first stage towards a full fledged incubation centre.

INFRASTRUCTURE

1. Food Microbiology Laboratory
2. Food Analysis/Chemistry laboratory

This facility will be utilized

FUTURE

In a phased out manner this will be converted into a full fledged incubation center.

9. Union Members:

- **Aleena Maria Tomy- III D.C : General Secretary(College Union)**