

PHYSICS

2015-16

Beats (Physics Association 2015-16)

(Report)

CERTIFICATE

This is to certify that the details furnished in this report of the activities of Physics Association is an authentic description of the events held in the academic Year 2015- 16

Dr. Sindu Jones
Head of the Department
Department of Physics

Dr. Ambika D.
Teacher in charge
Physics Association

Office Bearers

PresidentProf. Alexander V. George
Principal, Baselius College,
Kottayam.

Vice President..... Dr. Sindu Jones

Teacher in Charge..... .. Dr. Ambika D.

General SecretaryMr. Sreejith S.

Joint Secretary..... Tibin Iype

Documentation OfficerSinu Mathew

Acknowledgement

Thanks are due for the Principal, all the members of the staff of the Physics Department and also to all the members of the association.

**Dr. Ambika D
Association Teacher in Charge**

Sl. No.	EVENTS	DATE
1.	ENVIRONMENTAL DAY CELEBRATION	5/06/2015
2	PHYSICS ASSOCIATION INAUGURATION	19/06/2015
3	LEAP SECOND	30/06/2015
4	C.K.K MEMORIAL LECTURE 1	22/07/2015
7	STRESS MANAGEMENT AND POSITIVE THINKING	30/07/2015
8	CONDOLENCE MEETING OF PROF. V JOHN	24/07/2015
9	FRESHERS DAY	1/08/2015
10	HIROSHIMA DAY	6/08/2015
11	ALL KERALA INTERCOLLEGIATE PHYSICS QUIZ COMPETITION	11/08/ 15
12	WOMEN EMPOWERMENT PROGRAMME	15/08/2015
13	CHARITY PROGRAMME	19/08/2015
14	ONAM CELEBRATIONS	21/08/2015
15	TALK BY PROF. P.N SANTHOSH, IIT CHENNAI	11/09/2015
16	WORLD OZONE DAY	16/09/2015
17	SPACE WEEK CELEBRATION	12/10/2015
18	20 TH INCEPTION DAY OF OUR DEPARTMENT	16/11/2015
19	EDUCATIONAL TRIP- NUCLEAR POWER PLANT, KOODUMKULAM	23/11/2015
20	100 TH PROPOSED YEAR OF GTR	26/11/2015
21	ENERGY SAVING AND ECO- FRIENDLY LED LIGHT BULB ASSEMBLING	5/12/2015

ENVIRONMENTAL DAY CELEBRATION

The Physics Association activities started its long triumphant journey on June 5th 2015 with the “Environmental day celebration”. As a part of environmental day celebration, an awareness class was conducted at 2.30 pm at Mrs. Mamman Mapilla Hall. The programme commenced with a prayer song by Bhavya S of D3 Physics. Association secretary Sreejith S welcomed the gathering. The Head of the Department, Dr. Sindu Jones gave the presidential address by reminding the theme of the environmental day for the year 2015 “Seven Billion Dreams one planet, consume with care”. She also added that the unscientific, obliterating deeds of man just for some petty gains can in near future wipe out the human race from the face of the earth. The college Principal Prof. Alexander V George gave a thought provoking message. He pointed out that the substratum of World Environmental Day is that, each and every animal species have the right for fresh air and water, the right and freedom for receiving all the benefits of biodiversity.

Further awareness class was conducted by Dr. Nibu A George and Prof. Linju Ann Jacob. Both of them pointed out the various causes and effects of environmental pollutions. Dr.Nibu A George spoke about the different types of sound pollution, it’s causes, effects and preventive measures. Prof Linju Ann Jacob talked on the harmful effects of the plastics. Both the classes generated a flood of thoughts. Ms. Sinu Mathew, D3 Physics, rendered the vote of thanks. The programme concluded with the national anthem.

PHYSICS ASSOCIATION INAUGURATION

“Good beginnings, good going, unbelievable results “.

June 19th 2015 witnessed the inaugural ceremony of the Physics association “BEATS”, opening the windows of the magical world of physics. The inaugural function was held at 2.30 pm in the Dr. AP Mani auditorium. The propitious occasion commenced with a prayer song sung by Bhavya S of D3 Physics. Association secretary Sreejith S gave the welcome speech. Head of the department Dr. Sindu Jones gave the presidential address by reminding that BEATS is a way to find the hidden abilities in the students and also for the students to show case their talents. The college principal Prof. Alexander V George wished all success reminding the students to become conscientious fellows. Dr. Jinu Paul, Assistant Professor, Dept of mechanical engineering, IIT Kharagpur, inaugurated the association by lighting the lamp. He talked on “career after BSc Physics”. He pointed out the various opportunities for a physics student. Also a quiz programme was conducted by Sreejith S, Tibin Iype and Sinu Mathew of D3 physics. Further various cultural programmes were conducted. Sinu Mathew of D3 physics proposed the vote of thanks. Thus one could sense the spreading of the rhythm of beats in the inaugural ceremony.



Inaugural ceremony:

Dr Jinu Paul inaugurating the Physics association by lighting the lamp

LEAP SECOND

An extra second was added to the world clock on June 30th 2015, due to the changes in the Earth's rotation. This phenomenon is called leap second. Every now and then a *leap second* is added to Coordinated Universal Time (UTC) in order to synchronize clocks worldwide with the Earth's ever slowing rotation. Atomic clocks are slightly too accurate. *Leap seconds* are added to realign clocks worldwide with the Earth's rotation or in other words a second which is occasionally inserted into the atomic scale of reckoning time in order to bring it into line with solar time. It is indicated by an additional bleep in the time signal at the end of some years. Physics association conducted an awareness programme through college media and by way of poster presentation on the same day. Sinu Mathew of D3 Physics spoke via the college media on the importance of adding the second to the Coordinated Universal Time (UTC). The posters on the awareness of Leap second was presented at the main entrance to the college.

C.K.K Memorial lecture series

In memory of the founder Head of the department of Physics, Prof. C. K. Kuriakose, the physics association organizes a lecture series in Physics. This year on 22nd July 2015, the Physics association conducted a lecture series on computer language. The topic was focused on C++. Prof. K. Mathew, former H.O.D of Physics and syndicate member was the resource person. Prof. K. Mathew took his M.C.A from Bharathiar university. C++ is an object oriented programming (OOP) language, developed by Bjarne Stroustrup, one of the basic computer programming language. The lecture series was held at Mrs. Mammen Mappilai Hall. The inauguration was at 3 pm. Head of the Department, Dr. Sindu Jones gave the

welcome speech. She also introduced the resource person. Prof. Major K. Mathew, started with the basics of C++. That is, C++ is a statically typed, compiled, general-purpose, case-sensitive, free-form programming language that supports procedural, object-oriented, and generic programming.

C++ is regarded as a middle-level language, as it comprises a combination of both high-level and low-level language features. C++ was developed by Bjarne Stroustrup starting in 1979 at Bell Labs in Murray Hill, New Jersey, as an enhancement to the C language and originally named C with Classes but later it was renamed C++ in 1983. C++ is a superset of C, and that virtually any legal C program is a legal C++ program.

This class provided a new inspiration for the beginners in computer programming language. Students also responded well to the classes and also the resource person cleared their doubts. Association secretary Sreejith S. proposed the vote of thanks.

CONDOLENCE MEETING

Prof. V. John served the Physics department from 1969 to 1999. In his 30 years of his service, he is remembered as an extremely sincere and dedicated teacher. He is known for his capability of remembering the students name and also the places from which they come from.

But to us, his colleagues, Prof. V. John was much more than an outstanding teacher. He will be remembered as a warm and caring friend and as a dedicated mentor. He is also remembered for his soft spoken words, for his simplicity and also for his gentle but sometimes very blunt humor. He will be remembered as a wonderful colleague who gave freely of his time, advice and expertise. And he will be remembered for serving the college with great distinction in many capacities. At

times like this, we are reminded that a department such as ours is truly a family, and that we must rely on one another and support one another under these difficult circumstances

Prof. V. John passed away on 24th July 2015. The entire college community grieved on his demise and a condolence meeting was held in A.P. Mani hall at 3 pm on the same day, where teachers from all department including the Principal was present.

STRESS MANAGEMENT AND POSITIVE THINKING

To put an end to the unsaid sorrows and deep insecurities faced by the students in this modern world and to relieve them from the stress and burden, the Physics association organized a class on 'stress management and positive thinking' on 30 July 2015. The programme was conducted in Mrs. Mammen Mapilla Hall at 2.30 pm. The association in charge Dr. Ambika .D welcomed the gathering. The class was conducted by Vedhavyasa. In his inspirational talk, he pointed out that our mind and attitude towards life are the sole reasons for our own inbuilt sorrows and miseries. His talk provided the students with a new outlook of life. He taught the students to handle the problems and secure peace of mind through meditation. As a token of appreciation, the Physics Association secretary Sreejith .S provided the resource person with a memento. The programme concluded with the proposal of vote of thanks by head of the department Dr. Sindu Jones.

FRESHER'S DAY

"We must welcome the future, remembering that soon it will be the past and we must respect the past, remembering that it was once all that was humanly possible".

The association gave a warm welcome to the Baselian first year degree students on 1st August 2015. The students of the first year BSc Physics was received with a rose flower. The fresher's day marked its beginning by paying special tributes to the great scientist and India's 11th President [APJ Abdul Kalam](#). [APJ Abdul Kalam](#) died on 27th July 2015 Monday evening at a hospital in Meghalaya, where he had gone to deliver a lecture. He was 83.

"Dreams is not what you see in sleep it is the thing which doesn't let you sleep"-is a famous quote by A.P.J. Abdul Kalam. The man who wrote wings of fire, the man who taught India to dream, the man who never be equaled- a great scientist, a great administrator, our pride Dr. A.P.J. Abdul Kalam. He is Known as the Missile Man of India, Dr Kalam played a pivotal role in the Pokhran-II nuclear test in 1998. One of the most loved Presidents, he was also known as the People's President. While in his 70s, he was nominated for the MTV Youth Icon of the Year award in 2003 and in 2006. He was awarded the Padma Bhushan and Bharat Ratna for his achievements.

Dr Kalam was born in Rameswaram on October 15, 1931, to a humble family. His father was a boatman. A bright student, his interest in flying led to a degree in aeronautical engineering, and eventually to supervising the development of India's guided missile programme. He was also the [author of 10 books](#). His autobiography, Wings of Fire, written in 1999, had been a best seller.

Paying a special [tribute to Dr Kalam](#) on this day, Dr. Sindu Jones said that he was an inspiration to an entire generation." The death of Dr. Kalam is an irreparable loss to this nation. He has left a big void hard to fill.

The welcome speech was rendered by Sreejith.S, association secretary. The college principal Prof. Alexander V. George gave a thought provoking message which was followed by various cultural activities by second and third year students. The ice breaking event was a hilarious session for them which was taken in a sports man spirit. This became a platform to unleash their hidden talents and to form a strong bond with seniors and teachers. Fresher's day concluded with a thanks giving by Anandhu Mohan of final year UG Physics.

HIROSHIMA DAY

To mark the seventieth anniversary of Hiroshma Day, on behalf of the Physics association, Ms. Sinu Mathew spoke on the bombing of Hiroshima through the college media. The bombing - and a second one on Nagasaki three days later - is credited with bringing to an end World War Two. But it claimed the lives of at least 140,000 people in the city. A US B-29 bomber called the Enola Gay dropped the uranium bomb, exploding some 600m (1,800ft) above the city, at around 08:10 on 6 August 1945. On that day alone, at least 70,000 people are believed to have been killed. Many more died of horrific injuries caused by radiation poisoning in the days, weeks and months that followed. She said that atomic bomb not only killed thousands of people in Hiroshima but also caused unspeakable suffering to survivors. She reemphasized the necessity of world peace. To coexist we must abolish the ultimate inhumanity that is nuclear weapons. Now is the time to start taking action," A poster exhibit about Hiroshima to bring in the suffering of the people was put on. Also a caption competition was conducted. The entire Baselian community participated in the competition and Aswathy Anil kumar of D3 zoology was announced as the winner.



Poster displayed for caption Contest which was sketched by Mr. Abhijith of D3 Physics

All Kerala Intercollegiate Physics Quiz Competition

All Kerala Physics intercollegiate Quiz competition was conducted on 11th Aug 2015 in memory of Late Prof. Susan John K. Prof. Susan John K. was a perfect teacher, friend, guide, educator, and confidante, all rolled into one. *She was* famous because of her dedication and was an inspiration for her students as well as her colleagues. She had an Enthusiasm for teaching and her integrity projects a genuine concern for students that generated trust and affection. She was honest and open and shares from the heart not just lessons from books, but her life. She was patient, even in stress. She taught, and helped them strive for goals. She gave her very best! With her very touch she sparked the creativity in students. With these attributes she was like a magnet with the powerful effect of stimulating students to learn. She was a special teacher that no words can truly tell that how much she was valued for the work she did so well in her short life span of 48 years till 15th Aug 2008.

Prof. Sebastian Mathew, Former Head of the Department of Physics, K.E. College, Mananam served as the Quiz Master. 28 teams from different colleges from

all over Kerala participated in the quiz competition. Mr. Suryan Sivadas and Amal George Cheriyan of Baselius college, Kottayam bagged the first prize, which includes a cash prize of Rs 3000 and an ever rolling trophy. Ms. Alphy Thomas and Ms. Deepam Elizabeth Baby representing St. Stephens College, Uzhavoor became the first runner up and the second runner up was Maharajas College, Ernakulam represented by Vaisak Vishwanatham and Unnikrishnan Potti.

The prizes were distributed by Prof. Alexander V George and the memorial speech was rendered by Prof. Elsie Elizabeth, H.O.D. of Commerce. She spilled out her memory with Prof. Susan John K. She remembered her as a sincere and enthusiastic friend. The session ended by the proposal of Vote of thanks by the Association in-charge Dr. Ambika D.

Prof. Sebastian Mathew, Former Head of the Department of Physics, K.E. College, Mananam conducting the Quiz



Suryan
Sivadas

and Amal George Cheriyan of Baselius college receiving the Susan memorial quiz competition winners trophy from Principal Prof. Alexander V George.

WOMEN EMPOWERMENT PROGRAMME

The term women empowerment refers to the increasing of the spiritual, political, social or economic strength of all women. It has been observed that the empowered women in their capacities develop confidence. Women today are ruling over the world and making their mark in various fields with the dedication and hard work shown by them to excel in their area of experience.

A counseling class was organized jointly by physics department and women cell for the female students of Baselius college on 15.8.2015 at Dr. A. P. Mani Auditorium at 2:00 pm. Dr. Beena Kumari, MBBS, MD, Professor Of obstetrics and Gynecology, Govt. Medical college, kottayam was the counselor of the day. The counselling section began with the welcome speech by Head of the Department Dr. Sindu Jones she also introduced the resource person Dr. Beena Kumari to the gathering. Dr. Beena Kumari gave a class on women Empowerment and teenage related health problems of women. The purpose of the class was to introduce some of the basic practices and guidelines of healthy living. The thanks giving speech was given by Prof. Sheethal Elizabeth Thomas, Department of chemistry.

CHARITY PROGRAMME

"It's not how much we give but how much love we put into living".

The most memorable day of the physics association 2015- 16, D3 physics students and teachers jointly visited the inmates of providence home on 19th August 2015. The money often thrown to show extra vengeance and pride was donated to this charity centre and filled everyone heart with pride. The members of the Physics association joint hands to donate an amount of Rs.15,000/- together with a days' lunch to the differently abeled inmates of the providence home.

Onam celebrations

As a part of onam celebrations organized by the Baselius College on 21/08/2015, the members of Physics association participated in Pookalam competition and in Kerala Sreeman – sreemathi contest. Mr. Aakash Francis of D1 Physics was declared the second runner up in the Kerala sreeman contest.

Talk By Prof. P.N Santhosh, IIT Chennai

The Physics association organized a talk by Prof. P.N Santhosh, IIT Chennai on Friday, the 11th of September 2015 in Dr. A. P. Mani media centre at 10:30 am. The program was initiated with a motive of bringing about awareness for the students community of Physics to pursue higher studies and research in national institutes. Prof. P.N Santhosh, IIT Chennai spoke on the wide possibilities of research areas in

- Electroceramics
- Low temperature characterization of Advanced materials
- Condensed Matter Physics
- Magnetism and Magnetic Materials
- Powder X-ray and Neutron diffraction and Rietveld analysis

The event began by Dr. Sindu Jones, H.O.D of Physics department, introducing Prof. Dr. P.N Santhosh to the esteemed gathering. Prof. Alexander V George, Principal felicitated on the occasion. Faculties and students alike participated actively in the event. This enthusiasm hints the need to talk about the recent developments and opportunities that are available in the Physics field. The huge number of questions from student community was indeed impressive and subtly conveyed that the young minds are open for discussions with an honest

frankness. All in all, the event went off very well, and was well appreciated by one and all.

WORLD OZONE DAY

In 1994, the UN General Assembly proclaimed 16 September the International Day for the Preservation of the Ozone Layer, commemorating the date of the signing, in 1987, of the Montreal Protocol on Substances that Deplete the Ozone Layer.

All the countries are expected to devote the Day to promote activities in accordance with the objectives of the Protocol and its amendments. The ozone layer, a fragile shield of gas, protects the Earth from the harmful portion of the rays of the sun, thus helping preserve life on the planet.

The out of controlled uses of ozone depleting substances and the related reductions have not only helped protect the ozone layer for this and future generations, but have also contributed significantly to global efforts to address climate change; furthermore, it has protected human health and ecosystems by limiting the harmful ultraviolet radiation from reaching the earth.

This year marks the **30th anniversary of the Vienna Convention for the Protection of the Ozone Layer**, an important milestone in the protection of the ozone layer. The theme for the celebration of the anniversary and this year's International Day for the Preservation of the Ozone Layer to be marked on 16 September is, "30 years of healing the ozone together." The theme is supported by the slogan, "Ozone: All there is between you and UV."

Based on the importance and necessity of the ozone layer, ozone day was observed on September 15th 2016 by Physics association. Ms. Sinu Mathew, D3

physics student gave a small talk on the importance of ozone day through the college media.

SPACE WEEK CELEBRATION

"The General Assembly has declared 4th to 10th October as the world space week to celebrate at the international level the contribution of space science and technology for the betterment of the human condition". Each year, the world space week association selects a theme for the upcoming world space week. The theme for 2015, "Discovery" celebrates the exciting discoveries in space, teaching as a lot about our origin and our future.

2015 space week celebration was celebrated by physics department on 12th October at Mrs. Mammen Mapilla Hall from 2:00 pm onwards. A small video presentation was done on the occasion which portrays the importance of the space week which was in turn followed by another video presentation on the making of a rocket by the ISRO. The welcome address was done by the Association teacher in charge Dr. Ambika D. A question and answer section was held for the students and the program marked its end with a vote of thanks by Association Secretary Sreejith.S.

20th Inception day of our department

15th Nov 1995, the department of Physics was flagged off to mark its beginning in the academic arena. Every Year, the physics association commemorates the inception day of the physics department in the month of November. This year the association celebrated the inception day on 16/11/2015. Former HOD, Prof. K Mathew was the chief guest of the day. He talked about the pains suffered by then faculty members of the department to take the department to the present status. Every inception day is a trip down the memory lane of the hardships undergone in the past and also a reminder to the younger generation. Also the HOD Dr. Sindu Jones delivered a talk on Physics Noble winning work of 2015 - Neutrino Oscillations.

The Nobel Prize in Physics 2015 recognizes Takaaki Kajita in Japan and Arthur B. McDonald in Canada, for their key contributions to the experiments which demonstrated that neutrinos change identities. This metamorphosis requires that neutrinos have mass. The discovery has changed our understanding of the innermost workings of matter and can prove crucial to our view of the universe.

Around the turn of the millennium, Takaaki Kajita presented the discovery that neutrinos from the atmosphere switch between two identities on their way to the Super-Kamiokande detector in Japan.

Meanwhile, the research group in Canada led by Arthur B. McDonald could demonstrate that the neutrinos from the Sun were not disappearing on their way to Earth. Instead they were captured with a different identity when arriving to the Sudbury Neutrino Observatory.

A neutrino puzzle that physicists had wrestled with for decades had been resolved. Compared to theoretical calculations of the number of neutrinos, up to two thirds of the neutrinos were missing in measurements performed on Earth. Now, the two experiments discovered that the neutrinos had changed identities.

The discovery led to the far-reaching conclusion that neutrinos, which for a long time were considered massless, must have some mass, however small.

For particle physics this was a historic discovery. Its Standard Model of the innermost workings of matter had been incredibly successful, having resisted all experimental challenges for more than twenty years. However, as it requires neutrinos to be massless, the new observations had clearly showed that the Standard Model cannot be the complete theory of the fundamental constituents of the universe.

Educational Trip- Nuclear Power Plant, Koodumkulam

Educational trips provide valuable educational opportunities away from the classroom, without using textbooks. Students and Faculty can often learn and get a first hand information while having fun in a more informal environment. This academic year the Physics association organized an Educational trip, where nuclear reactor was the destination. Twenty Six PG students assisted by seven faculty members left for visiting Nuclear power plant on 23rd Nov 2015.

The staff members together with the PG students received the working of a nuclear reactor by the method of “see and learn. Also an Awareness programme on the safety features of Koodumkulam Nuclear Power Plant (KKNPP) in particular reference to the events at Fukushima (Japan) and radiation safety during normal and abnormal operation of Nuclear power plant. Mr. Sanjeev V Nair, Senior scientific officer received the team and took them around the nuclear plant explain its construction, working and also clarifying doubts of the team. The trip was in indeed a feast of knowledge for the teachers and the students.



Students and faculty members at Nuclear Plant, Koodumkulam



Power

Along with Sanjeev V Nair, Senior Scientist officer, KKNP.

100th proposed year of GTR

100 years of General Relativity. November **2015** marked a notable anniversary in the history of physics: one hundred years before, Albert Einstein presented his general theory of relativity, in the form of four papers, to the Prussian Academy of Sciences in Berlin on 4, 11, 18 and 25 November **1915**. In connection with the 100th year of the General Theory of Relativity Prof. Linju Ann Jacob, Assistant Professor, Department of Physics, Baselius college delivered a talk on 26/11/2015 at Mrs. Mammen Mapilla Hall at 2:00 pm.

The programme began with a silent prayer, followed by the introduction of Prof. Linju Ann Jacob by the association in-charge Dr. Ambika D. Prof. Linju Ann Jacob said that, Prior to general relativity, the leading theory of gravity was Isaac Newton's law of universal gravitation, which unified the description of moving massive bodies both on Earth and in the Solar System. In Newton's framework, gravity is a long-range attractive force, acting between any two massive objects. It

is directly proportional to the product of their masses and inversely proportional to the square of their distance. While Newton's theory is still a great approximation to address gravity in a variety of situations, especially in our daily life, Einstein's novel approach achieved a more complete account of gravity's behaviour, especially in extreme cases.

Using the sophisticated mathematical formalism of non-Euclidean geometry, developed by Bernhard Riemann and other mathematicians in the 19th century, Einstein could describe spacetime in a more flexible way, identifying gravity as the source of its curvature. In general relativity, spacetime is not 'flat' but is curved by the presence of massive bodies and, as these move in spacetime, they continually change its curvature. Gravity then provides a description of the dynamic interaction between matter and spacetime.

The talk concluded with a questionnaire session and vote of thanks was rendered by Ms. Gadha R.

Energy Saving and Eco- friendly LED Light Bulb Assembling

World celebrated this year (2015) as "International Year of light and light based technology". In connection with this we organized a one day Workshop on "Energy Saving and Eco- friendly LED Light Bulb Assembling" on 5/12/2015. This Program was organized in association with SPIE, CUSAT chapter. The workshop was led by Dr. S. Sankaraman, Associate professor, Dept. of Physics, Nirmala College. This workshop is intended to get hands-on

training in the assembling of LED light bulbs. It offers an opportunity for the students to understand the techniques involved in the making of LED bulbs and its importance. This was a workshop aimed the public participation too. Around 120 participants (including the students and faculties from various colleges and the public) attended the program which was a great success.



Dr. S. Sankaraman, Associate professor, Dept. of Physics, Nirmala College inaugurating the session

Participants from public, other colleges assembling their own LED bulbs at the LED workshop



Student Achievements

Academics

Individual:

Prize Won	Number	Details
First	2	<ol style="list-style-type: none">Miss Merin Yesudas, (M.Sc passed out) won the best oral presentation award in the three day National seminar on Material Science with Special Emphasis on Crystallography- 2015, organized by Department of Physics, Government College, Kottayam, on 9-11 September 2015.Ms. Gadha R, IInd M.Sc. Physics secured the first prize for All Kerala Inter Collegiate Essay Competition on the topic 'Atomic Energy Serves Humanity' Organized by the Department of Physics, BCM College, Kottayam.
Third	1	Ms. Ashlin Jacob , I st DC Physics secured the third prize for All Kerala Inter Collegiate Essay Competition on the topic 'Atomic Energy Serves Humanity' Organized by the Department of Physics, BCM College, Kottayam.

Group:

Prize Won	Number	Details
First	1	Mr. Suryan Sivadas and Amal George in Prof. Susan John K. Memorial 8 th All Kerala Inter- Collegiate Physics Quiz Competition conducted by Department of Physics, Baselius College, Kottayam on 11/8/2015.

Second	1	Ms. Ashlin Jacob and Mr. Philip Abraham position in Quiz competition organized in connection with National Science Day 2016 Celebrations held at CMS College Kottayam on 23 rd of February, 2016.
Third	2	<ol style="list-style-type: none"> 1. Mr. Suryan Sivadas and Amal George, in the Prof. Celine k. Joseph Memorial All Kerala intercollegiate Quiz completion in Physics conducted by Dept. Of Physics, St. Stephens College, Uzhavoor on 9/12/2016. 2. Mr. Suryan Sivadas and Amal George, Prof. P. T. Joseph Memorial . All Kerala intercollegiate Quiz competition conducted by Dept. Of Physics, St. Dominic College Kanjirapally on 1/01/2016.

- Ms. Gadha R, attended the winter school on “The physics of the sun and the space weather” at Indian Institute of Astrophysics, Kodaikanal, TN during 14-15, December 2015.
- Anjali V Murali and Aleena attended the 10-day “Workshop on Undergraduate Training in Mathematics” organised by Srinivasa Ramanujan Institute for Basic Sciences (SRIBS), Pampady, Kottayam to be held during 27 August – 06 to September 2015 at Kottayam.
- Anjali V Murali and Reshma Elizabeth Thomas won the fourth position in the Prof. Mohan Kurian Memorial Physics Quiz competition held at CMS College Kottayam on 14th January 2016.
- Best Outgoing student award of the college was awarded to Ms. Shilpa Teresa of D3 Physics.

Other Achievements

Cultural

- Miss Anusha Ann of D1 Physics got 'A' grade in Group dance at University Level
- Ann Geevarghese and Sreelakshmi Sasi of D1 Physics got Ist Prize in group dance at college level
- Arjun V S, Sreehari, rahul And Thomas got IInd prize for Mime at college level
- Samaja Krishnan got 2nd position in film review and in poem writing.
- D3 Girl students bagged first prize in group dance at college level.

Sports

Item	Position	Students
March past	<u>I</u>	Arjun sasi Kumar Arjun V S Thomas P V Sreeehari Rahul Akhil P. George
Flash Mob	III	Ashmey K Shaji Ann Geevarghese Devika Annsha Sreelakshmi

NCC

- Arjun P Kumar and Tibin Iype of D3 physics attended the Annual training camp
- Arjun P Kumar of D3 Physics attended the Basic Mountaneering Course at Himachel Pradesh which was sponsored by NCC directorate
- Akhil P George of D1 Physics attended two NCC camps (Annual training camp and Army attached camp) during this academic year

Faculty Achievements

- Following faculties attended the UGC sponsored National seminar on Nuclear, Astro and High energy Physics conducted by Dept. of Physics, KE college Mananm on 29-30 october 2015.
 1. Dr .Sindu Jones
 2. Prof.Linju Ann Jacob
 3. Dr.Anisha Mary Mathew
 4. Prof. Neha P R
- Following Faculties participated in one day seminar and demonstration on year of light (Neito 2015) held on 30/10/2015 at Mangalam College of Engineering, Ettumanoor, Kottayam.
 1. Dr. Misha Hari
 2. Aswathy R. Chandran
- Dr. Nibu A. George has been recognized as the Research guide by M. G. University.
- Dr. Ambika D, Assistant Professor, has participated the three day workshop on Rigid Body dynamics and small oscillations organized by Academy of Physics Teachers, Kerala at CUSAT on 19-21 December 2015
- The following teachers of the department attended 1day seminar conducted by the MOC management at Catholicate College, Pathanamtitta on 16th of this month. Dr. Sindu Jones (HOD), 2. Prof. Linju Ann Jacob, 3. Dr. Nibu A George, 4. Dr. Anisha Mary Mathew, 5. Dr. Misha Hari, 6. Dr. Ambika D, 7. Prof. Neha P. R.

Dr. Sindu Jones and Dr. Misha Hari received their doctoral degree from Mahatma Gandhi University and Cochin University of Science and Technology respectively.