



ESTD:1817

CMS COLLEGE KOTTAYAM

(AUTONOMOUS) Affiliated to Mahatma Gandhi University, Kerala

Kottayam, Kerala 686 001, India

NAAC 4th Cycle Accreditation

UGC College with Potential for Excellence
NIRF India Ranking 2022 (College): 81

UGC Special Heritage Status

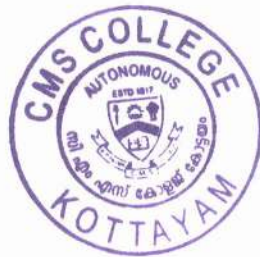
UGC PARAMARSH Mentor College

Criterion – 2 : Teaching-learning and Evaluation

Key indicator – 2.3 : Teaching – Learning Process

Metric – 2.3.1 : Student Centric Methods for Enhancing Learning Experiences

Seminars & Workshops



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Department of Physics

SEMINAR ON INTRODUCTION TO BIOMIMETIC TECHNOLOGY AND DR. GEORGE M THOMAS MEMORIAL LECTURE 2016-17



Keynote speaker:

Dr. Narayana Kalkura
Director and Professor at Crystal Growth Centre
Anna University, Chennai

March 16, 2017
10 am

Venue: E-learning Centre,
CMS College Kottayam

Organizing Committee :

*Dr. P Rajagopal(HOD, Department of Physics), Blesson George (Coordinator), Mr. Sam Rajan, Dr. C. Ravikumar, Mrs. Rincy Thomas,
Dr. Preema C.Thomas, Mrs. Neethu Theresa Willington, Mr. Blesson George, Dr. Arun Kumar K.V., Mrs. Jaya P. Dr. Thejal Abraham*



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Report of the Seminar on
Introduction to Biomimetic Technology
And Dr.George M Thomas Memorial Lecture-2017

16th March. 2017, 10.00 am

at E-learning centre, CMS College, Kottayam.

Organized by Dr. George M Thomas Endowment trust, Department of Physics, CMS College

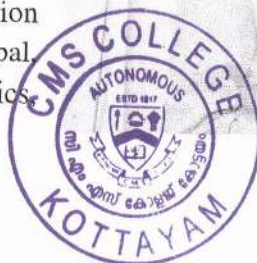
Biomimetic engineering takes the principles of biological organisms and copies, mimics or adapts these in the design and development of new materials and technologies. Biomimetics offers enormous potential for inspiring new capabilities for exciting future technologies. There are numerous examples of biomimetic successes that involve making simple copies, such as the use of fins for swimming. Others examples involved greater mimicking complexity including the mastery of flying that became possible only after the principles of aerodynamics were better understood. Some commercial implementations of biomimetics, including robotic toys and movie subjects, are increasingly appearing and behaving like living creatures. More substantial benefits of biomimetics include the development of prosthetics that closely mimic real limbs and sensory-enhancing microchips that are interfaced with the brain to assist in hearing, seeing and controlling instruments. Considering the relevance and significance of the subject, Biomimetic technology was selected as the topic of discussion for 2015-16 academic years' trust lecture.



person for the seminar and he delivered the Dr.George M Thomas Memorial Lecture-2016-'17

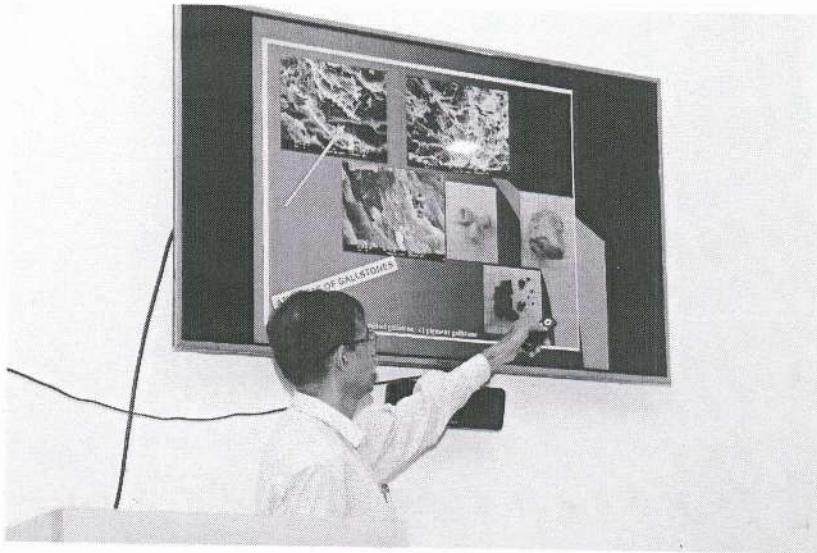
The session started at 10am with a prayer song. The inaugural session was presided by Dr.P.Rajagopal, HOD, Department of Physics.

Improving the level of knowledge of students and motivating the, to choose a career in Physics are the objectives of the seminar. Dr.Narayana Kalkura, Director and Professor at Crystal Growth Centre, Anna University, Chennai was the resource



George M Thomas
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CMS College and Chairman of Dr.George M Thomas Endowment trust.. Dr. Roy Sam Daniel, Principal, CMS College inaugurated the seminar. The gathering was welcomed by Sri.Blesson George, Secretary, Dr.George M Thomas Endowment Trust and was felicitated by Dr.Varghese C. Joshua, Vice Principal, CMS College, Dr.N.V.Unnikrishnan, Emeritus Professor, School of Pure and Applied Physics, MG University and Prof. Mathew C Mathew, Former Trustee of Dr.George M Thomas Trust and head of the Department of Computer Applications, CMS College.



About 75 students and 20 faculties from various colleges participated in the Seminar. All the participants were given the resource materials and local hospitality, free of cost. The expenditure incurred with regard to this was met by the college and Dr.G.M.T Trust.



The seminar ended with a concluding session in which the vote of thanks was delivered by Smt.Rinsy Thomas, Assistant Professor, Department of Physics



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Statement of Expenditure

Programme: **One day Seminar on 'Introduction to Biomimetic Technology'**

Date: 16th March ,2017 Venue: E- Learning Centre, C. M. S. College, Kottayam

Organized by: Dr.GMT Endowment Trust, Department of Physics, C. M. S. College, Kottayam

Receipts	Amount (Rs.)	Payments	Amount (Rs.)
1. CMS College	20,000.00	1. Honorarium	3,000.00
		2. Tea, Snacks & Meals (Rs140*100).	14,000.00
		3. Stationary and Course Material	3,000.00
Total	20,000.00	Total	20,000.00



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Department of Physics

SEMINAR ON "TRENDS IN THERMOELECTRICITY"



Keynote speaker:

Dr. Gunadhar S Okhram

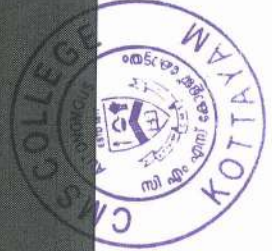
Scientist F,UGC,DAE Consortium for
Scientific Research, Indore

Feb 13 2017,
10 am

Venue: E-learning
centre, CMS College
Kottayam

Organizing Committee :

*Dr. P Rajagopal, HoD Physics, Dr. Seema R (Coordinator), Mr. Sam Rajan, Dr. C. Ravikumar, Mrs. Rinsy Thomas,
Dr. Preema C.Thomas, Mrs. Neethu Theresa Willington, Mr. Blesson George. Dr. Arun Kumar K.V., Mrs. Jeya P., Dr. Thejal Abraham*



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Report of One Day Seminar on “Trends in thermoelectricity”

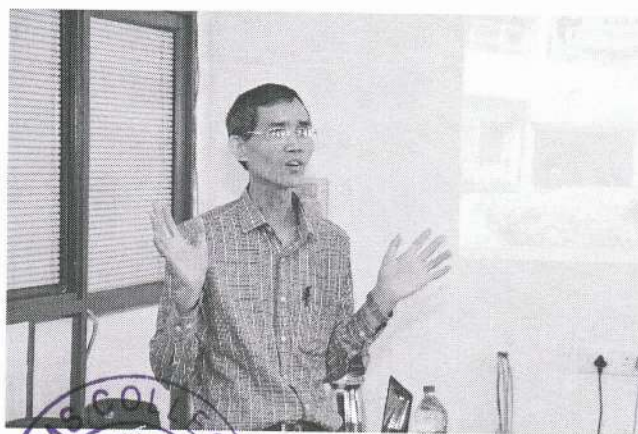
A one day seminar on “Trends in Thermoelectricity” was conducted on 13th feb 2017 by the Department of Physics, CMS College at the E- learning centre. The resource person for the seminar was Dr.Gunadhar S. Okhram, Scientist F,UGC,DAE consortium for Scientific research, Indore.



The session started at 10am with a prayer song. The inaugural session was presided by Dr.P.Rajagopal, HOD, Department of Physics, CMS College. Dr. Roy Sam Daniel, Principal, CMS College inaugurated the seminar. The gathering was welcomed by Dr.Preema C. Thomas and was felicitated by Dr.E.I.Anila of UC College,Aluva

Dr.Gunadhar S. Okhram gave a talk about latest trends in thermoelectricity. Thermoelectricity in general is of strong scientific and technological interest due to its application possibilities ranging from clean energy to photon sensing devices. He emphasised on the recent developments in theoretical studies on the thermoelectric effects, as well as the newly discovered thermoelectric materials which provide new opportunities for wide applications. Thermoelectric effects can be used to make solid-state refrigeration devices, or to sense temperature differences, or to convert thermal energy directly into electricity. Turning temperature differences directly into electricity could be an efficient way of harnessing heat that is wasted in cars and power plants.

He gave an overview about the progress on nanothermoelectrics which provides a new route for searching better thermoelectric materials. The study on thermoelectrics is becoming more important for solving today's energy challenges. Thermoelectric generators are being used in increasing numbers to provide electrical




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power in medical, military, and deep space applications where combinations of their desirable properties outweigh their relatively high cost and low generating efficiency. At the end of the seminar the students had an interactive session with the resource person.

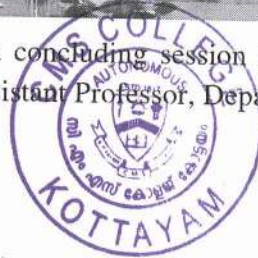



In the afternoon session, Dr.Gunadhar S.Okram talked about production of thermoelectricity from waste energy emitted by transport and other energy sources. Zeeback effect and Petlier effect was alspl discussed during the lecture.



He also shared the characterization techniques and research possibilities at UGC-DAE consortium, Indore

The seminar ended with a concluding session in which the vote of thanks was delivered by Dr.SeemaR.Nair, Assistant Professor, Department of Physics




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Statement of Expenditure

Programme: **One day Seminar on 'Trends in Thermoelectricity'**

Date: 13th February, 2017 Venue: E- Learning Centre, C. M. S. College, Kottayam

Organized by: Department of Physics, C. M. S. College, Kottayam

Receipts	Amount (Rs.)	Payments	Amount (Rs.)
1. CMS College	15,000.00	1. Honorarium	3,000.00
		2. Tea, Snacks & Meals (Rs140*55).	7,700.00
		3. Stationary and Course Material	4,460.00
Total	15,000.00	Total	15,160.00




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Brief Report of the Introductory Workshop on Astronomical Spectroscopy

26th and 27th August 2017 at CMS College, Kottayam.

Organized by: Department of Physics, CMS College & Academy of Physics Teachers (APT) Kerala
Sponsored by: KSCSTE, Trivandrum

Spectroscopy is a key tool in astronomical studies. By obtaining and analyzing the spectrum from a distant object, astronomers can identify what type of object it is and determine a wealth of characteristics for the object. These include its effective temperature, how fast it is rotating and whether it is moving towards or away from us, how large and dense it is and what it is made of. In the workshop, we reviewed the basic principles of optical astronomical spectroscopy and discussed how spectra is obtained and analyzed. The use of the spectra to classify stars is also discussed in some detail. A spectrum is reduced using IRAF software during the hands-on sessions of the workshop. The workshop succeeded in providing teachers and students with a range of ideas and activities and hands on sessions on data analysis to reduce the stellar spectra. This will in turn help the teachers and students to initiate minor projects related to astronomical spectroscopy.

Improving the level of knowledge of students on stellar spectra and providing them an hands-on experience in spectral reduction were the main objectives of the seminar. With this concept, we planned the workshop comprising of lectures and hands on sessions . Lectures were taken by Prof. Annapurni Subrahmaniam of Indian Institute of Bangalore, Prof. Paul K.T. and Dr.Blesson Mathew , both, from Christ University Bangalore on topics including Basic concepts of Astrophysics , Be-Stars spectral reduction, Understanding the circumstellar disk in Classical Be-Stars etc. The hands-on sessions were led by Dr.Blesson Mathew, Ms. Shruthi Bhat, Mr. Amith Govind and Mr. Devarshi S.

The program schedule is attached with the report. About 43 students and 14 faculties from various colleges participated in the Seminar. All the participants were given the resource materials and local hospitality. There was a registration fee of Rs. 600 for faculty and Rs.200 for students. The additional expenditure incurred with regard to this was met by the college .

The major expenses towards the honaraium and partial DA and TA for resource persons were sponsored by KSCSTE. I place on record our sincere thanks for the support and good will of KSCSTE.

The organizing committee is indebted to the support and contributions of the Principal of the College Dr.Roy Sam Daniel and all the staff of the Physics Department especially Sri. Blesson George for their cooperation and wholehearted support

Thank You

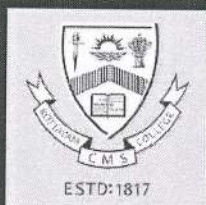


Dr.P Rajagopal

Convenor of the Introductory Workshop on Astronomical Spectroscopy


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**State level Seminar on
Theoretical Aspects of Group Theory**

**Organized by
Dr. George M Thomas Endowment Trust
Department of Physics
CMS College (Autonomous), Kottayam**

Resource Person

Dr. Sathish K P

**(Visiting Professor, IRBS, MG University,
Former Principal, Brennen College, Thalassery &
Former H.O.D of Physics, Govt. College, Kottayam)**

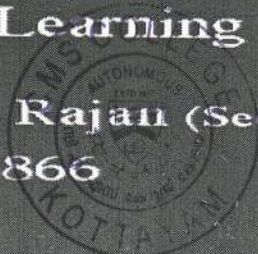
Date: 28.11.2018

Time: 9.30 a.m. - 4.00 p.m.

Venue: E-Learning Centre

Contact: Mr. Sam Rajan (Secretary, GMT Trust)

Mob.: 9567453866




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About us

CMS College Kottayam, the pioneer and oldest institution of higher education in India established in 1817 stands as a centre of excellence imparting quality education to many generations.

Department of Physics, one of the premier PG departments of the college has completed 59 years of committed service to the society. Dr. George M Thomas a great visionary and an excellent teacher shaped the department to the present state. The endowment trust framed to honour this great legend depicts how Dr. George M Thomas remains still as a role model to the present generation. Department takes special interest in conducting seminars, lectures and quality programmes every year to motivate talented minds for a dedicated career in Physics. This year also department has decided to provide a foundation in the field of Group Theory.

We cordially invite the Faculty members, Research Scholars and Students to participate in this seminar

Dr. Reenu Jacob
(Chairperson, GMT Trust)

Mr. Sam Rajan
(Secretary, GMT Trust)

Programme Schedule

Prayer	:
Welcome	: Mr. Sam Rajan, Secretary, GMT Trust
Presidential Address	: Dr. Reenu Jacob, Chairperson, GMT Trust
Keynote Address	: Dr. Roy Sam Daniel, Principal, CMS College
Inaugural Address	: Dr. Sathish K P
Felicitation	: Dr. P. Rajagopal
Vote of Thanks	: Mrs. Neethu Theresa Willington, (Treasurer, GMT Trust)

Organizing Committee

Dr. P Rajagopal

Dr. Reenu Jacob

Mr. Sam Rajan

Dr. Ravikumar C

Mrs. Rinsy Thomas

Mrs. Neethu Theresa Willington

Dr. Preema C Thomas

Mr. Blesson George

Dr. P. Nuja S John

Dr. Seema R

Dr. ArunKumar K V

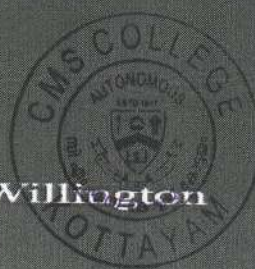
Mrs. Jeya P

Dr. Thejal Abraham

Ms. Sreelakshmi S

Ms. Vidyalakshmi I S

Mr. Arun B



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Sponsored by

Star College Scheme



Introduction to Group Theory (IGT) Workshop 2019

Resource Person:



Dr. M. V. N. Murthy

Professor Emeritus

Institute of Mathematical Sciences, Chennai

Research Interests: High energy Physics

Mathematical Physics

Organized by

Department of Physics, CMS College Kottayam

Date: 4-6 April 2019 Time :9.30 am to 4.30 pm

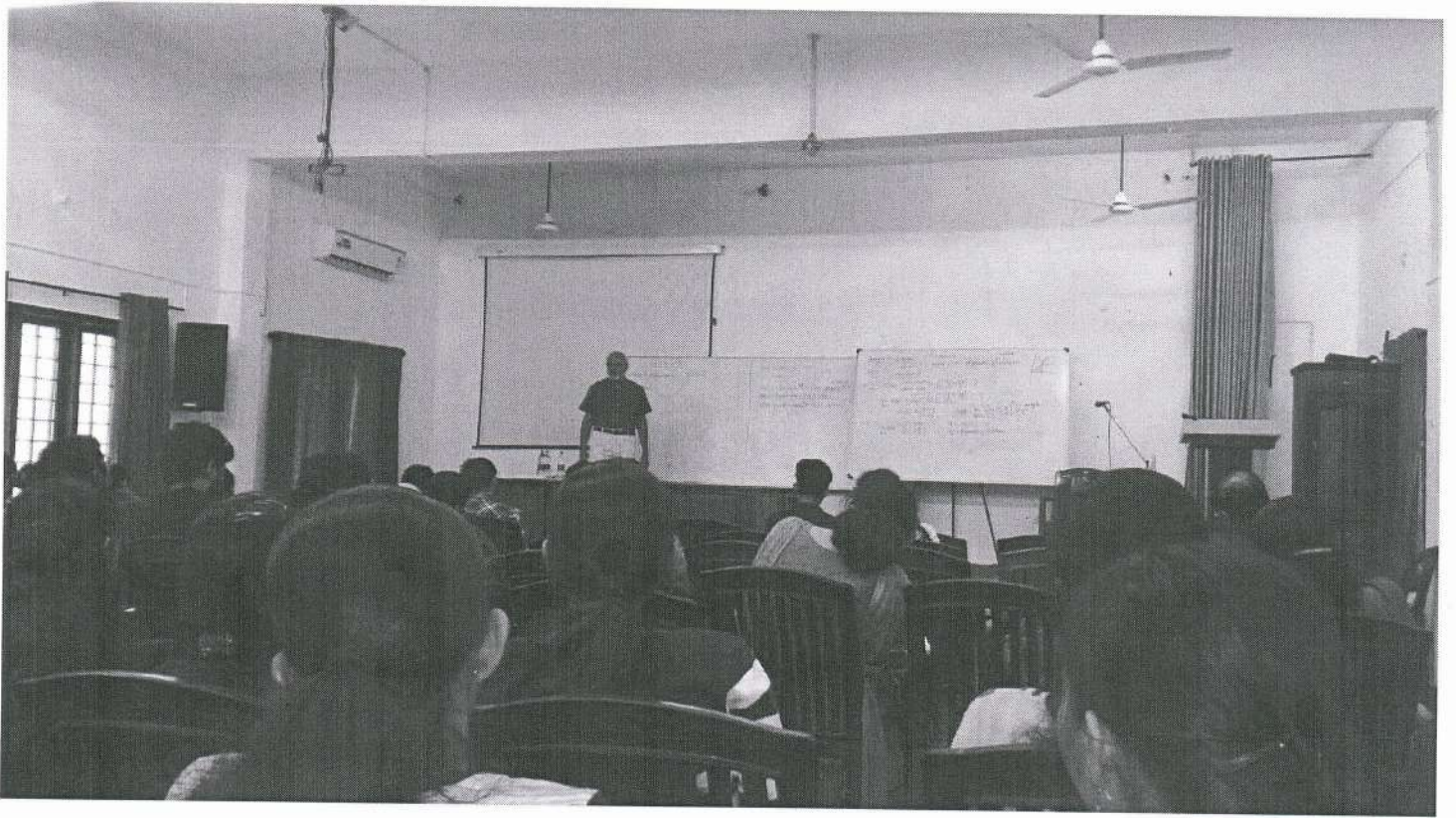
Venue: E-Learning Centre, CMS College



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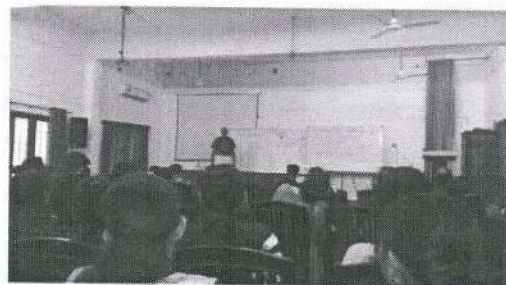
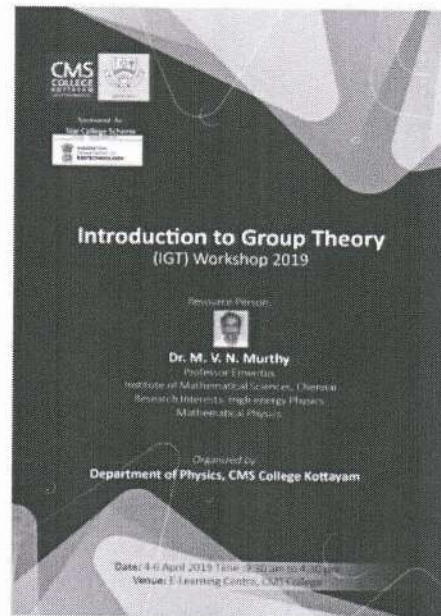
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Lecture :
INTRODUCTION TO GROUP
THEORY
Dr. M V N Murthy
Professor Emeritus




The Institute of Mathematical Science
Chennai

4, 5 & 6 April, 2019



- This lecture provided basic knowledge of the symmetries in Physics and gave access and exposure to enhance the quality of learning.




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REPORT of GMT Endowment lecture on Theoretical aspects of Group Theory (state)

A state level seminar was organized on 28/11/2018 by GMT Endowment trust, CMS College, Kottayam in theoretical aspects of group theory to college teachers and students in Kerala. Dr. Sathish K P the visiting faculty of IIRBS, MG University, Kottayam and former Principal of Brennen College, Thalassery was the resource person. Dr. Sathish K P discussed the basic topics of group theory in MSc Physics curriculum of MG University in two sessions each comprising two hours. He also clarified the doubts of participants. The class was very informative and useful to participants which reflected in their responses at the end of the programme. Around 50 students and teachers across the state participated in the programme. Mr. Sam Rajan, CMS College, Kottayam served as the coordinator of the seminar.



A handwritten signature in green ink, appearing to read "S. Rajan", is written over a horizontal line.

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REPORT of three day workshop on Group Theory(National)

Department of Physics, CMS College, Kottayam conducted a three day workshop in group theory on 04-06 April 2019. Dr. VPN Murthy IMSC, Chennai was the resource person. Around 60 learners including teachers, students and research scholars participated in the programme. The advanced topics of group theory were covered in this seminar. It also provided basic knowledge of the symmetry in physics which helped the learners to enhance their knowledge in the application of group theory in physics. It was so beneficial for the participating teaching faculties as the syllabus revision was carried out in MG university as well as in many autonomous colleges like CMS College during that period. Mr. Sam Rajan, CMS College, Kottayam was the coordinator of the programme.



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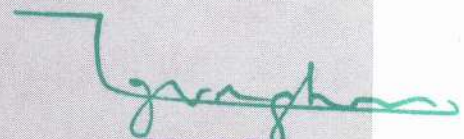
Report of the teaching methodology workshop of Department of Physics, CMS College, Kottayam held on 22-02-2018

A one day teaching methodology workshop was held on 22-02-2018 at Department of Physics, CMS College, Kottayam for the faculty members of the department with a main goal to ensure the contemporary standards and to address the challenges in higher education, there by participants are to be trained consistently and concurrently.

The programme began with the word of prayer at 10.00 am. The programme was inaugurated by Principal Dr. Roy Sam Daniel. Principal specified the importance of student centered teaching in his talk. The head of the Department (in-charge) of Physics Dr. Reenu Jacob welcomed the group. Dr. Sathesh Kumar Department of Future Studies at University of Kerala was the resource person for the workshop. Dr. Sathesh introduced the new technique of writing articles with digital reference. The discussion centered on the main area of publishing a paper with four clicks. All were inspired by the presentations and work done with the web of knowledge. It was an eye opener for the participants. In addition to that he described emerging trends in futures studies by emphasising present and past knowledge.

The post lunch session was very interesting with the introduction of new software for the participants. The exposure to the new software created interest to write journal papers. Participants expressed their feedback as it was effective and beneficial to them. This collective attempt of the faculty members has established a perennial link with the Department of Future Studies. The workshop came to an end by the vote of thanks by Dr. P Nija S John, Coordinator of the programme.

The one day workshop has enabled the participants numbering fourteen to meet the challenges with international standards so as to sharpen their performance and broaden their frontiers of knowledge. The era of blackboard chalk- lecture gave away to contemporary dynamic teaching methodologies. Through this workshop the participants could revamp and reorient their talents with international standards.


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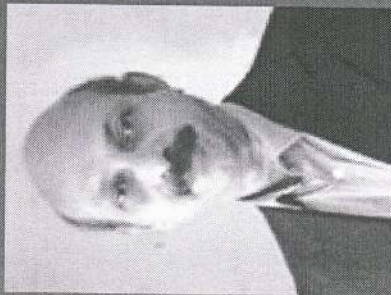
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Department of Physics

TEACHING METHODOLOGY WORKSHOP 2018-19



Keynote speaker:

Dr. K. Satheshkumar

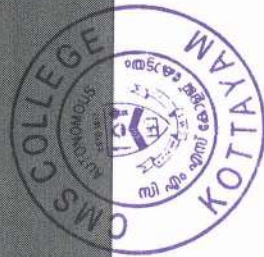
Associate Professor and HOD

Department of Future Studies, University of
Kerala, Karyavattom Campus, Trivandrum

27th October 2018
9.30-3.30 pm

Organizing Committee :

*Dr. Reenu Jacob, HoD Physics (94969 35890), Dr. P.Nuja S John (Coordinator), Mr. Sam Rajan, Dr. C. Ravikumar, Mrs. Rinsy Thomas,
Dr. Preema C.Thomas, Mrs. Neethu Theresa Willington, Mr. Blesson George, Dr. Arun Kumar K.V., Mrs. Jeya P., Dr. Thejal Abraham*




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Activity Report of Teaching Methodology Workshop 2018

The **Teaching Methodology Workshop 2018** was conducted on **27th October 2018** by **Department of Physics, CMS College, Kottayam (Autonomous)**. The Resource person was **Dr K. Satheesh Kumar**, Associate Professor and Head of the Department, Department of Future Studies, University of Kerala, Thiruvanthapuram.

The faculties of Physics department and various departments of CMS college, Kottayam and few interested students of M. Sc participated in the **Teaching Methodology Workshop 2018**. There were 35 participants in the workshop. The whole program was very useful and interesting for teachers and students attended as per the feedback collected.




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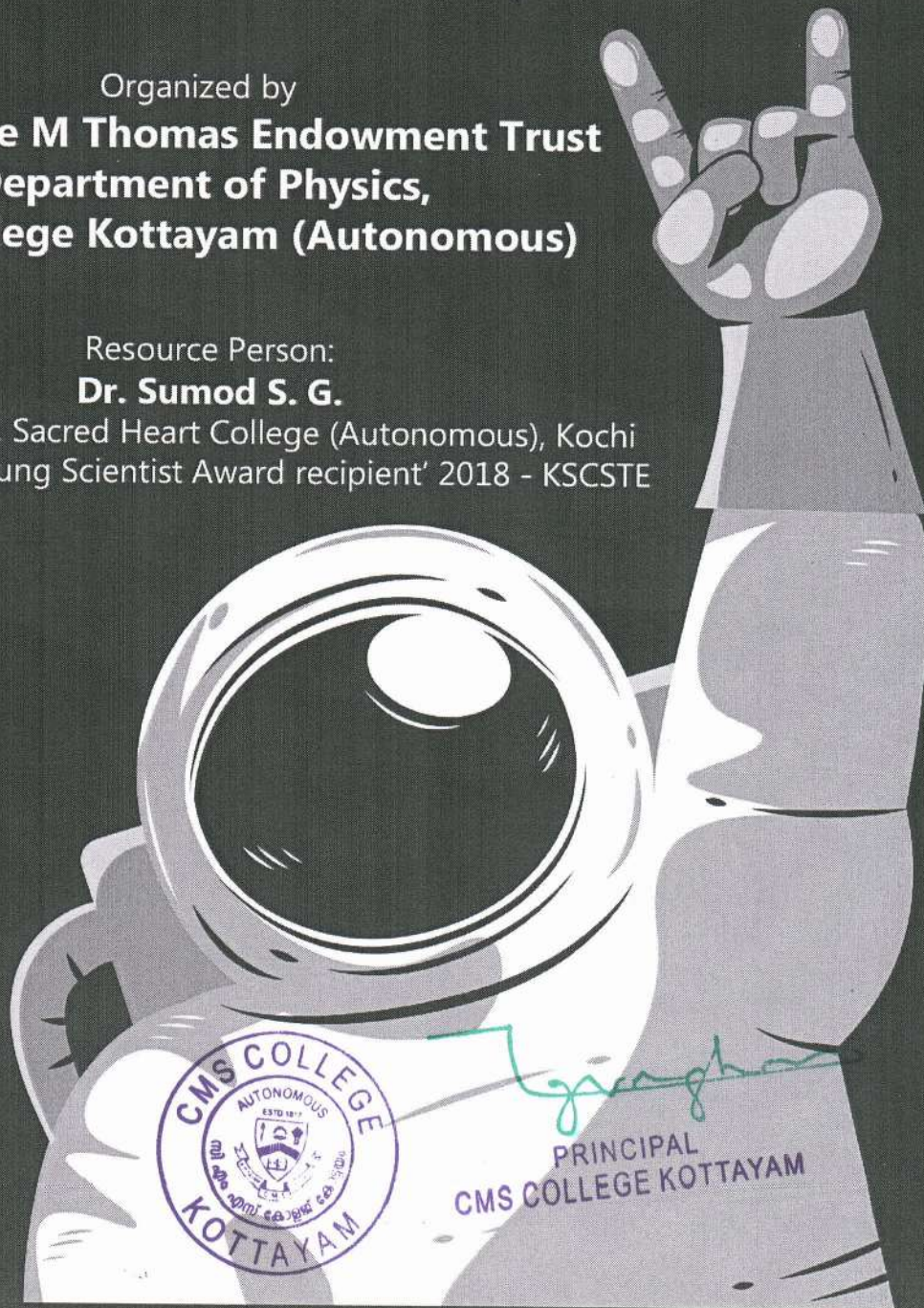
Seminar on
Exploring the Wonders of Space
- An Indian Perspective

Organized by
Dr. George M Thomas Endowment Trust
Department of Physics,
CMS College Kottayam (Autonomous)

Resource Person:

Dr. Sumod S. G.

Asst. Professor, Sacred Heart College (Autonomous), Kochi
'Kerala State Young Scientist Award recipient' 2018 - KSCSTE



Date: 29-11-2019

Venue: Rev. Joseph Fenn Hall

Time: 9.30 am - 12.30 pm

About us

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Department of physics, one of the premier PG departments of the college is at its 60th year of committed service to the society. Dr. George M Thomas is a visionary and excellent teacher shaped the department to the present state. The endowment trust framed to honour this great legend depicts how Dr. George M. Thomas remains still as a role model to the present generation. Department takes special interest in conducting seminar, lectures or quality programmes every year to motivate talented minds for a dedicated career in physics.

We cordially invite the faculty members, research scholars and students to participate in this seminar.

Dr. Roy Sam Daniel
Principal

Dr. Reenu Jacob
Chairperson

Rinsy Thomas
Secretary

Organizing Committee

Dr. Reenu Jacob (HOD of Physics)

Mr. Sam Rajan

Dr. Ravikumar C.

Mrs. Rinsy Thomas

Mrs. Neethu Theresa Willington (Treasurer)

Dr. Preema C. Thomas

Mr. Blesson George

Dr. Seema R.

Dr. Arun Kumar K. V.

Mrs. Jeya P.

Dr. Thejal Abraham

Ms. Sreelekshmi S.

Dr. Reenu Elizabeth John

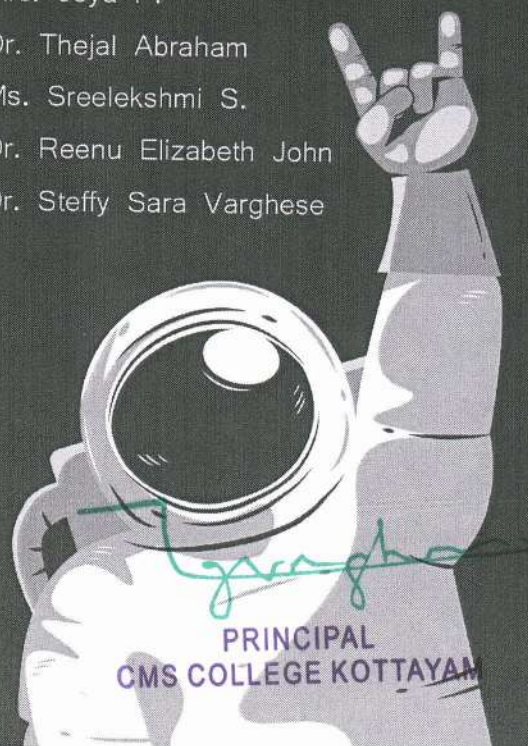
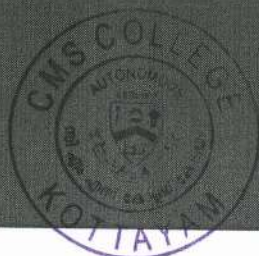
Dr. Steffy Sara Varghese

For more details:

Rinsy Thomas

Asst. Professor, Dept. of Physics

(9495764689)



REPORT OF SEMINAR ON “EXPLORING THE WONDERS OF SPACE -AN INDIAN PERSPECTIVE”

Department of Physics, one of the premier PG departments of CMS College is at its 60th year of committed service to the society. Dr. George M Thomas is a visionary and excellent teacher who shaped the department to the present state. The endowment trust framed to honour this great legend depicts how Dr. George M. Thomas remains still as a role model to the present generation. Department takes special interest in conducting seminars, lectures or quality programmes every year to motivate talented minds for a dedicated career in physics.

Dr. George M Thomas Endowment Trust conducted a seminar on “EXPLORING THE WONDERS OF SPACE -AN INDIAN PERSPECTIVE”. The seminar was conducted on 29th November 2019 from 9.30 am to 12.30 pm at Rev.Joseph Fenn Hall. The Resource person was Dr. Sumod S.G , Assistant Professor, Sacred Heart College (Autonomous) , Kochi. Also ‘Kerala State Young Scientist Award Recipient ‘2018 KSCSTE. The faculties of Physics department and various departments of CMS College Kottayam and interested students of UG and PG departments attended the seminar. The whole seminar session was absolutely interesting and useful for teachers and students as per the feedback collected.




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C. M.S COLLEGE
KOTTAYAM

Seminar on Advanced and Engineered Materials.



C.M.S College is organizing a two day seminar on July 25th and 26th 2019

The research in material science that exhibited an exponential growth in the last few decades is found to be ever-increasing in intensity in the present times. Its ability to influence and transform our lives is undisputable. Our symposium incorporates a broad range of subjects in materials science. It includes, understanding the challenges in the development of new and advanced materials, their characteristics and properties as well as their applications.

This symposium is organized to stimulate the understanding of novel phenomena in advanced materials and to boost basic research. It seeks to provide a platform where, people interested in material science can share their experiences and learn from their peers.

RESOURCE PERSONS

1

Dr. V. Biju

Assistant Professor & Head of the Department
Department of Physics
University of Kerala, Thiruvananthapuram.
Ph. No. 9961228468 E-Mail: bijunano@gmail.com

2

Dr. Jayakrishnan. R

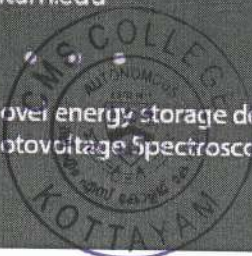
Assistant Professor
Department of Physics
Christian College Assistant Professor
Angadical P.O, Chengannur – 689122
Mob:+919447242210 Kerala,
India Tel: 0479-2452275 Fax: 0479-2450375
Email: rjayakrishnan2002@yahoo.co.in

3

Dr. P. Missak Swarup Raju

Assistant Professor
Department of Physics
GITAM University
India · Visakhapatnam
Ph. No. 9866702 Email: swarup.padala@gitam.edu

The program includes sessions on Supercapacitor- Novel energy storage device,
Nanomaterials for Harvesting Energy and Surface Photovoltage Spectroscopy for Material Characterization



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Report on “Two Day Seminar on Advanced and Engineered Materials” conducted on 25th and 26th in 2019 with the support of KSCSTE

A seminar titled “Two Day Seminar on Advanced and Engineered Materials” was conducted on July 25th and 26th at CMS College Kottayam. It was conducted with the financial support received from Kerala State Council for Science Technology and Environment.

The seminar was organized by the department of Physics C.M.S College, Kottayam. The thrust area for the seminar was chosen to be Recent Developments in Material Science. The main speakers in the seminar were Dr. V Biju, University of Kerala, Thiruvananthapuram, Dr. Jayakrishnan R, Christian College Chengannur, Dr. P. Missak SwarupRaju, GITAM University, Visakhapatnam. Each talk was followed by an interaction session, which were very helpful for the students planning to pursue a career in research. The seminar was a successfully conducted and was attended by 106 participants from various Institutions.




PRINCIPAL
CMS COLLEGE KOTTAYAM



DEPARTMENT OF PHYSICS
CMS COLLEGE KOTTAYAM (Autonomous)
One-day workshop – ExpEYES
 (Supported by DBT star college, Govt. of India)

Dear Sir/Madam,

Department of Physics, CMS College, Kottayam is organizing a one-day workshop on ExpEYES in collaboration with the Academy of Physics Teachers (APT) on 16/10/2019 at Physics Seminar Hall. The workshop is intended for Physics and Electronics teachers from Schools, Secondary Colleges and Universities and interested individuals. All are cordially invited to this programme.

ExpEYES is a package developed in the Phoenix Lab with Home-made Equipment & Innovative Experiment project of Inter-University Accelerator Centre, New Delhi. It has both a hardware and software framework, which is operated with a PC using a suitable computer program. Software packages like python are commonly used for designing and demonstrating lab experiments in a framework. It supports a wide range of experiments from schools to colleges.

Resource Person

Dr. Ajith Kumar B.P. Scientist (Inter-University Accelerator Centre, New Delhi)

Dr. Ajith has done his M.Sc. and Ph.D. in Nuclear Physics from the University of Calicut. Later he did an M.Phil. in Accelerator Physics from the University of Manitoba, Canada. His areas of interest are the design and development of accelerators and the associated experimental facilities. He is keenly interested in promoting free software and hardware tools for teaching and learning process.

Programme Schedule

REGISTRATION	: (09:00 – 09:30)
INAUGURATION	: (09:30 – 10:00)
INSTRUCTIONAL SESSION	: (10:00-12:00)
HANDS-ON SESSION	: (1.30 –4.00)

Organizing Committee

- Dr. Roy Sam Daniel (Principal)
- Dr. Recnu Jacob (H.O.D)
- Dr. Ravikumar C
- Mrs. Rincy Thomas
- Mrs. Neethu Theresa Willington
- Dr. Preema C Thomas
- Mr. Blesson George
- Dr. Seema R
- Dr. Arun Kumar K V
- Mrs. Jeya P
- Dr. Thilash Abraham




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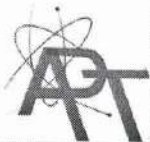
REPORT OF ONE DAY WORKSHOP- ExpEYES

The One Day Workshop-ExpEYES@cms was conducted on 16th October 2019 by Department of Physics, CMS College, Kottayam (Autonomous) supported by DBT STAR COLLEGE, Govt. of India.

The teachers and students of different colleges in Kerala participated in the One Day Workshop-ExpEYES@cms. There were 35 participants in the workshop. The whole program was very useful and interesting for teachers attending as per the feedback collected.




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DEPARTMENT OF PHYSICS, CMS COLLEGE KOTTAYAM
IN ASSOCIATION WITH
ACADEMY OF PHYSICS TEACHERS KERALA

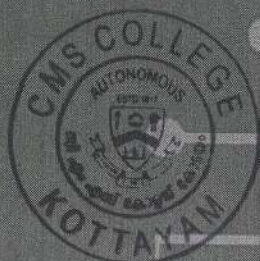
NATIONAL SCIENCE DAY CELEBRATION

Invites you to a talk on
'Seeing the nanoworld at femtosecond time scales'

Resource Person:
DR. RAJEEV KINI, IISER TRIVANDRUM



11 A.M - 28TH FEBRUARY 2020
PHYSICS DEPARTMENT SEMINAR HALL



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Activity Report of SEEING THE NANOWORLD AT FEMTOSECOND TIME SCALES

Seeing The Nanoworld At Femtosecond Time Scales was conducted on 11th February 2020 by Department of Physics, CMS College, Kottayam as the national science day celebration. The Resource Person was Dr. Rajeev Kini, IISER, Thiruvanthapuram.

The faculty members and students of B. Sc and M. Sc Physics of CMS College, Kottayam participated in the **Seeing The Nanoworld At Femtosecond Timescales**. The whole program was very useful and interesting for the students and teachers attended as per the feedback collected.




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Dr GEORGE M THOMAS ENDOWMENT LECTURE 2020-21

About 45

CMS College Kottayam, the pioneer and oldest institution of higher education in India established in 1817 stands as a center of excellence, imparting quality education to many generations. Dr George M Thomas, the former Principal and Head of the Department of Physics, CMS College was a great visionary and an excellent teacher. The Department of Physics attained remarkable progress during his long tenure. Dr George M Thomas Endowment Trust was framed in 1992 by the faculties of the Department of Physics to honour the life and contributions of this great teacher. The endowment lecture, conducted annually with scholarly personages from the scientific arena, is a prestigious programme of the Department of Physics.



Dr GEORGE M THOMAS
ENDOWMENT LECTURE 2020-21



DEPARTMENT OF PHYSICS, CMS COLLEGE *Welcomes*

Title of the Talk :

**'The Creation of Matter in the Universe -
Colliding Heavy Ions at the Speed of Light'**

Prof Rene Bellwied

MD Anderson Professor of Physics
University of Houston,
Physics Department
Houston, TX 77204

Rene Bellwied is a distinguished MD Anderson Professor of Physics at the University of Houston, TX, USA. Dr Bellwied received his Ph.D. from the Johannes Gutenberg University in Mainz, Germany, in 1989. He leads the Experimental Nuclear Physics at the University Houston which is involved in the STAR experiment at the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory (BNL) on Long Island, New York, and the ALICE experiment at the Large Hadron Collider (LHC) at CERN in Geneva, Switzerland. He is presently the Chair of the Texas Section of the American Physical Society and a member of the Sigma-Xi Honors Society. He has to his credit 1,000 peer-reviewed papers that gathered over 85,000 citations with an h-index of 151.

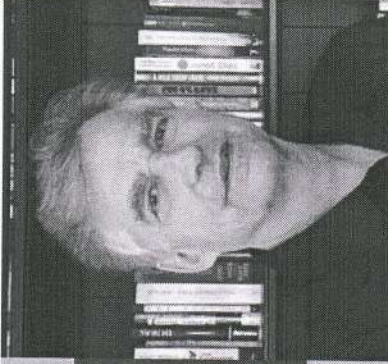
25 NOVEMBER 2020, TIME : 9.30 AM (IST)

Organized By
Department of Physics &
Dr George M Thomas Endowment Trust
CMS College Kottayam (Autonomous)

For details contact:
Dr Reenu Jacob,
Chairperson GMT Trust
Mob: +91 9496935890



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REPORT OF DR. GEORGE M THOMAS ENDOWMENT LECTURE 2020-21

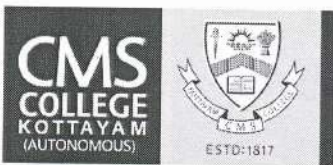
Department of Physics, one of the premier PG departments of CMS College is in its 61st year of committed service to the society. Dr. George M Thomas is a visionary and excellent teacher who shaped the department to the present state. The endowment trust framed to honor this great legend depicts how Dr. George M. Thomas remains still as a role model to the present generation. Department takes special interest in conducting seminars, lectures or quality programmes every year to motivate talented minds for a dedicated career in physics. Department of Physics CMS College Kottayam conducted a talk on 25th November 2020. The topic of the talk was "THE CREATION OF MATTER IN THE UNIVERSE-COLLIDING HEAVY IONS AT THE SPEED OF LIGHT". The Resource person was Prof. Rene Bellwied. The talk was arranged on the google meet platform at 9.30 am (IST)

Rene Bellwied is a distinguished MD Anderson Professor of Physics at the University of Houston, TX, USA. Dr Bellwied received his Ph.D. from the Johannes Gutenberg University in Mainz, Germany, in 1989. He leads the Experimental Nuclear Physics at the University Houston which is involved in the STAR experiment at the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory (BNL) on Long Island, New York, and the ALICE experiment at the Large Hadron Collider (LHC) at CERN in Geneva, Switzerland.

The faculties of Physics department and various departments of CMS College Kottayam and many interested students attended the talk session. The whole program was interesting and knowledgeable for teachers and students as per the feedback received.



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(AUTONOMOUS)**



Department of
BioTechnology,
Government
of India

सत्यमेव जयते

Hands on training

"Fabrication and characterization of DSSC"

Organized by
Department of Physics
(Under the aegis of DBT Star College
Scheme)



Resource Person:

Mr. Kurias K.M.
Research Scholar

Cochin University of Science and Technology, Cochin

Date: 29.3.2021



Session I -10.30 a.m. - 12a.m.
Session II - 2p.m. - 3.30 p.m.


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Dr. Varghese C. Joshua
Principal
CMS College Kottayam

Dr. Reenu Jacob
(HOD, Dept. of Physics),

Mrs. Jeya P.
(Department Co-ordinator,
DBT Star College Scheme)

FUNDAMENTALS OF SOLAR PHOTOVOLTAICS

Course offered to UG students

Course duration: 5 weeks (36 hrs)

Course Outline:

How we tackle our energy needs in future, why do we talk about solar cells, how solar cell produce power, and how can we measure solar cell efficiency? These are just a few of the questions the course addresses. For those who are looking for a general insight and those who aims a career in the field of solar cells, the course is an excellent.

You will learn the semiconductor physics necessary to understand the operations of a solar cells, solar cell design aspects and loss mechanisms. The course includes detailed discussions on design and fabrications of c-Si solar cell: from materials to device. The course will make you familiar with commercial and emerging photovoltaic (PV) technologies like Al-BSF, PERC cells, DSSC, perovskite, organic and quantum dot solar cells. At the end of the course you will have gained a fundamental understanding of the field. This will allow you to identify the most interesting or relevant aspects to be pursued in your future studies or in your professional career. You would have acquired a basic understanding of the field at the conclusion of the course. This will help you to recognise relevant and appropriate areas in the field to be tackled in your future studies or in your professional career.

Week 1:

Introduction to course, energy demands and consumption, primary energy sources, renewable energy, solar radiation basics, solar spectrum. Light absorption.

Week 2:

Physics of solar cell operations, review of semiconductor physics, carrier generation and recombination, basic device equations.

Week 3:

Solar cell operations, p-n junction model (dark and illuminated) and depletion capacitance, current voltage characteristics in dark and light, solar cell characteristics and parameters, conversion efficiency

Week 4:

c-Si photovoltaics, solar cell design, Si wafers, details of c-Si solar cell fabrication, depositions tools, characterization tools, losses in solar cells, optical and electrical losses, light management techniques, semiconductor metal contacts, amorphous and polycrystalline si solar cells (qualitative discussions)




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Week 5:

Thin film solar cells, qualitative discussions on DSSC, organic and perovskite solar cells, quantum dot solar cells, tandem solar cells, applications of various kinds of solar cells, Advanced concepts and innovations: high efficiency solar cells, nanomaterials for photovoltaics, PV band gap engineering and optical engineering, market and economy.

Text Books:

- [1] Solar Photovoltaics: Fundamentals, Technologies and Applications by Chetan Singh Solanki
- [2] website: <https://www.pveducation.org>

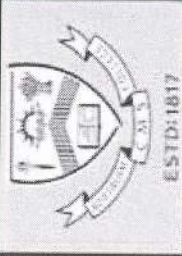
Reference text:

- [1] Physics of Solar Cells: From Basic Principles to Advanced Concepts, by Peter Würfel and Uli Würfel, Wiley
- [2] The Physics of Solar Cells, by Jenny A Nelson, world scientific publishing company (2003)
- [3] Semiconductor Material and Device Characterization, by D. K SCHRODER




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DBT Star College Scheme
Sponsored Credit based Programme on

Fundamentals of solar photovoltaics

Organized by
Department of Physics

Inaugural session on 25th February 2021

Time: 9.30 a.m.



Resource Person:

Mr. Kurias K.M.

Research Scholar

Cochin University of Science and Technology, Cochin

Join Us @
Googlemeet

PRINCIPAL
GMS COLLEGE KOTTAYAM

Attendance

DBT Star college scheme sponsored credit based programme on "Fundamentals of solar photovoltaics"

Date: 16.03.2021

Time: 4.30 p.m. to 6.00 p.m.

Session 19

Name	Batch	Feedback
Sivapriya S	B.Sc. Physics III DC	Good session
Jessin Joy Alex	B.Sc. Physics III DC	Good
Seethalakshmi M	B.Sc. Physics III DC	Good
Aparna Anil	B.Sc. Physics III DC	Very good session
Tona Elisa Scaria	B.Sc. Physics III DC	Good session
Naveena R Thomas	B.Sc. Physics I DC	Understood the topics taught in this session.
Miria Johnson	B.Sc. Physics III DC	Good
MALAVIKA SMITHA	B.Sc. Physics III DC	clear
Vysakh k kumar	B.Sc. Physics III DC	Very Good session
Vysakh k kumar	B.Sc. Physics III DC	Very good session
Abhishikth Joseph Anand	B.Sc. Physics III DC	Sir,Recapping of earlier class topics was good .
Rishika Ajay	B.Sc. Physics III DC	Good session
Parvathy S	B.Sc. Physics III DC	Good class
Ruth Susan Koshy	B.Sc. Physics III DC	Good class
Anitta Jose	B.Sc. Physics III DC	Clear
Anjaly Krishna S	B.Sc. Physics III DC	It was good
Prathibha P P	B.Sc. Physics III DC	Class was understandable
Nishy Mary Mathew	B.Sc. Physics III DC	Good
Akhil T R	B.Sc. Physics III DC	Present sir
Jacob Reji	B.Sc. Physics III DC	No feedback



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A Sreejith	B.Sc. Physics III DC	Good
Preedhi P P	B.Sc. Physics III DC	Nice class.
Devi Vrinda A	B.Sc. Physics III DC	Good
Aryalakshmy A	B.Sc. Physics III DC	Easy to understand
Minumol Jose	B.Sc. Physics III DC	Good
Immanuel Markose Paul	B.Sc. Physics III DC	Good
Aleena KM	B.Sc. Physics III DC	Good
Sivakami N Shibu	B.Sc. Physics I DC	Informative session
Divya P S	B.Sc. Physics III DC	Good sir
Ardra Ajith	B.Sc. Physics III DC	Very nice session and thank you sir for recalling the previous topics.
Vishnu V	B.Sc. Physics III DC	Good one..
Arya K N	B.Sc. Physics III DC	Good
Riya S Sam	B.Sc. Physics I DC	Carrier Transport and Drift current are well explained. The slides helps to understand more about the topic
Anitta Jose	B.Sc. Physics III DC	Clear
Vivek Vijay	B.Sc. Physics III DC	Good class
Nandan M	B.Sc. Physics III DC	The class was excellent as always .
Aryalakshmy A	B.Sc. Physics III DC	Interesting class



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Attendance

DBT Star college scheme sponsored credit based programme on "Fundamentals of solar photovoltaics"


Date: 17.03.2021

Time: 8.30 a.m. to 10.00 a.m.

Session 20

Name	Batch	Feedback
Sivapriya S	B.Sc. Physics III DC	Good session
Vysakh k kumar	B.Sc. Physics III DC	Good class
Shijina shanavas	B.Sc. Physics III DC	Very good session.understanding new terms.thank you sir.
Rishika Ajay	B.Sc. Physics III DC	Good session
A Sreejith	B.Sc. Physics III DC	Good
Malavika Smitha	B.Sc. Physics III DC	Clear
Aryalakshmy A	B.Sc. Physics III DC	Nice session
Anitta Jose	B.Sc. Physics III DC	Class was clear
Parvathy Das	B.Sc. Physics III DC	Session was informative.
Aleena KM	B.Sc. Physics III DC	Good sir
Vysakh k kumar	B.Sc. Physics III DC	Good class
Arya K N	B.Sc. Physics III DC	Good
Miria Johnson	B.Sc. Physics III DC	Good
Parvathy S	B.Sc. Physics III DC	Good lecture
Ardra Ajith	B.Sc. Physics III DC	It was an interesting session.
Preedhi P P	B.Sc. Physics III DC	Interesting class
Nandan M	B.Sc. Physics III DC	Present
Divya P.S	B.Sc. Physics III DC	Very good
Abhishikth Joseph Anand	B.Sc. Physics III DC	Good class




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Seethalakshmi M	B.Sc. Physics III DC	Good
Naveena R Thomas	B.Sc. Physics I DC	Understood the topics taught today.
Nishy Mary Mathew	B.Sc. Physics III DC	Good
Immanuel Markose Paul	B.Sc. Physics III DC	Good
Devi Vrinda	B.Sc. Physics III DC	Good
Prathibha P P	B.Sc. Physics III DC	Good class
Ruth Susan Koshy	B.Sc. Physics III DC	Good class
Akhil T R	B.Sc. Physics III DC	Present sir
Tona Elisa Scaria	B.Sc. Physics III DC	Good class
Riya S Sam	B.Sc. Physics I DC	The class was superb. Well explained the topics with good presentation.
Vivek vijay	B.Sc. Physics III DC	Nice class
Minumol jose	B.Sc. Physics III DC	Good
Jessin Joy Alex	B.Sc. Physics III DC	Good
Sandriya Raju	B.Sc. Physics I DC	Session helps in knowledge enhancement.
Aparna Anil	B.Sc. Physics III DC	Understanding session
Anjaly Krishna S	B.Sc. Physics III DC	It was good and informative



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Attendance

DBT Star college scheme sponsored credit based programme on “ Fundamentals of solar photovoltaics”

Date: 18.03.2021

Time: 8.30 a.m. to 10.00 a.m.

Session 21

Name	Batch	Feedback
ARYA K N	B.Sc. Physics III DC	Very well explained
Vysakh k Kumar	B.Sc. Physics III DC	Good
A Sreejith	B.Sc. Physics III DC	Good
Jacob Reji	B.Sc. Physics III DC	.
Naveena R Thomas	B.Sc. Physics I DC	Nice class.
Miria Johnson	B.Sc. Physics III DC	Good
Aleena KM	B.Sc. Physics III DC	Good sir
Abhishikth Joseph Anand	B.Sc. Physics III DC	Good class
Aryalakshmy A	B.Sc. Physics III DC	Nice class
Anitta Jose	B.Sc. Physics III DC	Class was clear
Sivapriya S	B.Sc. Physics III DC	Good session
Seethalakshmi M	B.Sc. Physics III DC	Good
Akhil T R	B.Sc. Physics III DC	Thank You sir
Divya P S	B.Sc. Physics III DC	Good
Preedhi P P	B.Sc. Physics III DC	Nice class
Ardra Ajith	B.Sc. Physics III DC	The session was very informative. Animations make the topics more clear.
Tona Elisa Scaria	B.Sc. Physics III DC	Good session
Prathibha P P	B.Sc. Physics III DC	Interesting class
Aparna Anil	B.Sc. Physics III DC	Very good session




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Vishnu V	B.Sc. Physics III DC	Good one
Rishika Ajay	B.Sc. Physics III DC	Good session
Shijina Shanavas	B.Sc. Physics III DC	Very good session. Thank You sir
Anjaly Krishna S	B.Sc. Physics III DC	Informative
Ruth Susan Koshy	B.Sc. Physics III DC	Good class
Parvathy S	B.Sc. Physics III DC	Good class
Sivakami N Shibu	B.Sc. Physics I DC	Informative
Riya S Sam	B.Sc. Physics I DC	Awesome session. Good sound quality
Nandan M	B.Sc. Physics III DC	good



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Attendance

DBT Star college scheme sponsored credit based programme on "Fundamentals of solar photovoltaics"

Date: 19.03.2021

Time: 8.30 a.m. to 10.00 a.m.

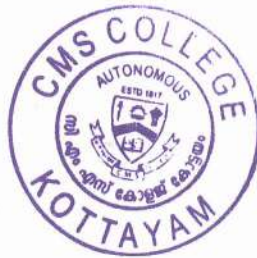
Session 22

Name	Batch	Feedback
Akhil T R	B.Sc. Physics III DC	Present sir
Sivapriya S	B.Sc. Physics III DC	Good session
Miria Johnson	B.Sc. Physics III DC	Good
Vysakh k kumar	B.Sc. Physics III DC	Good session
Prathibha P P	B.Sc. Physics III DC	Class was understandable
Parvathy S	B.Sc. Physics III DC	Good lecture
Aparna Anil	B.Sc. Physics III DC	Very good session
Riya S Sam	B.Sc. Physics I DC	Extremely helpful
Aryalakshmy A	B.Sc. Physics III DC	Nice class
Naveena R Thomas	B.Sc. Physics I DC	Understood the topics taught in the class.
Anitta Jose	B.Sc. Physics III DC	Class was clear
Preedhi P P	B.Sc. Physics III DC	Nice class
Immanuel Markose Paul	B.Sc. Physics III DC	Good
Jacob Reji	B.Sc. Physics III DC	Good class
Nishy Mary Mathew	B.Sc. Physics III DC	Good
Sivakami N Shibu	B.Sc. Physics I DC	Informative
Malavika Smitha	B.Sc. Physics III DC	Clear. Could you please post last class slides .
Divya P S	B.Sc. Physics III DC	The session was very clear




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Ardra Ajith	B.Sc. Physics III DC	The session was very informative and interesting.
Abhishikth Joseph Anand	B.Sc. Physics III DC	Good class
Jessin Joy Alex	B.Sc. Physics III DC	Good
Aleena KM	B.Sc. Physics III DC	Good
Seethalakshmi M	B.Sc. Physics III DC	Good
Nandan M	B.Sc. Physics III DC	good



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Attendance

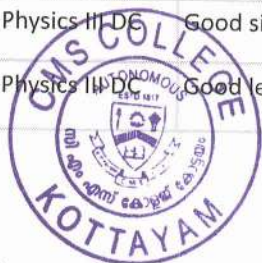
DBT Star college scheme sponsored credit based programme on “ Fundamentals of solar photovoltaics”

Date: 20.03.2021

Time: 8.30 a.m. to 10.00 a.m.

Session 23

Name	Batch	Feedback
Sivapriya S	B.Sc. Physics III DC	Good session
Jessin Joy Alex	B.Sc. Physics III DC	Good
Naveena R Thomas	B.Sc. Physics I DC	Nice class.
Aryalakshmy A	B.Sc. Physics III DC	Sir,could you please upload ppt in the classroom
Devi Vrinda	B.Sc. Physics III DC	Good
Malavika Smitha	B.Sc. Physics III DC	Clear
Vysakh k kumar	B.Sc. Physics III DC	Good session
Nishy Mary Mathew	B.Sc. Physics III DC	Good
Aparna Anil	B.Sc. Physics III DC	Understanding session
Immanuel Markose Paul	B.Sc. Physics III DC	Good
Divya P S	B.Sc. Physics III DC	very informative session
Abhishikth Joseph Anand	B.Sc. Physics III DC	Good class sir
Minumol Jose	B.Sc. Physics III DC	Nice class
Shijina Shanavas	B.Sc. Physics III DC	Good session .thankyou
Seethalakshmi M	B.Sc. Physics III DC	Good
Ardra Ajith	B.Sc. Physics III DC	Very informative and useful session
Akhil T R	B.Sc. Physics III DC	Thankyou sir
Anitta Jose	B.Sc. Physics III DC	The class was clear
Aleena KM	B.Sc. Physics III DC	Good sir
Parvathy S	B.Sc. Physics III DC	Good lecture



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Prathibha P P	B.Sc. Physics III DC	Informative session
A Sreejith	B.Sc. Physics III DC	Good
Tona Elisa Scaria	B.Sc. Physics III DC	Good
Nandan M	B.Sc. Physics III DC	Present
Preedhi P P	B.Sc. Physics III DC	Understandable class.
Riya S Sam	B.Sc. Physics I DC	The class was so nice. Very well taught all the topics.
Jacob Reji	B.Sc. Physics III DC	extremely helpful
Sivakami N Shibu	B.Sc. Physics I DC	Informative
Rishika Ajay	B.Sc. Physics III DC	Good session
Anjaly Krishna S	B.Sc. Physics III DC	It was nice



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Attendance

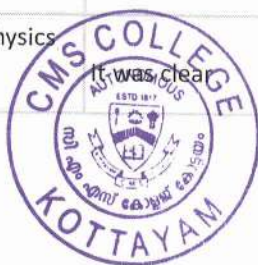
DBT Star college scheme sponsored credit based programme on "Fundamentals of solar photovoltaics"


Date: 25.03.2021

Time: 8.30 a.m. to 10.00 a.m.

Session 24

Name	Batch	Feedback on Fundamentals of solar photovoltaics - session 24
Sivapriya S	B.Sc. Physics III DC	Good session
Jessin Joy Alex	B.Sc. Physics III DC	Good
Shijina shanavas	B.Sc. Physics III DC	Good session
Ardra Ajith	B.Sc. Physics III DC	Topics were very clearly explained. The session was very good.
Arya K N	B.Sc. Physics III DC	Good
Párvathy S	B.Sc. Physics III DC	Good lecture
Malavika Smitha	B.Sc. Physics III DC	Clear
Aryalakshmy A	B.Sc. Physics III DC	Nice class
Miria Johnson	B.Sc. Physics III DC	Good
Immanuel Markose Paul	B.Sc. Physics III DC	Good
Abhishikth Joseph Anand	B.Sc. Physics III DC	Good class
Anitta Jose	B.Sc. Physics III DC	It was clear




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Divya P S	B.Sc. Physics III DC	Good
Nishy Mary Mathew	B.Sc. Physics III DC	Good
Prathibha P P	B.Sc. Physics III DC	Informative and understanding
Naveena R Thomas	B.Sc. Physics I DC	Understood the topics taught in the class.
Preedhi P P	B.Sc. Physics III DC	Good class
Anjaly Krishna S	B.Sc. Physics III DC	It was informative
Aparna Anil	B.Sc. Physics III DC	Nice session
Parvathy Das	B.Sc. Physics III DC	Session was informative.



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 PRINCIPAL
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Prof. E. C. G SUDARSHAN MEMORIAL ESSAY WRITING COMPETITION

TOPIC

U.G : Tachyons and its Indian discoverer.

P.G : Sudarshan-Glauber quantum representation of light.

RULES AND REGULATIONS

****All U. G and P. G students of Physics Department,
CMS College can participate.***

****Essay should not exceed more than 300 words***

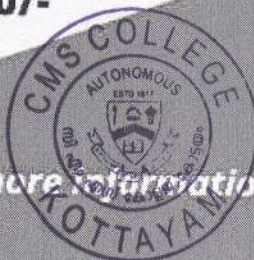
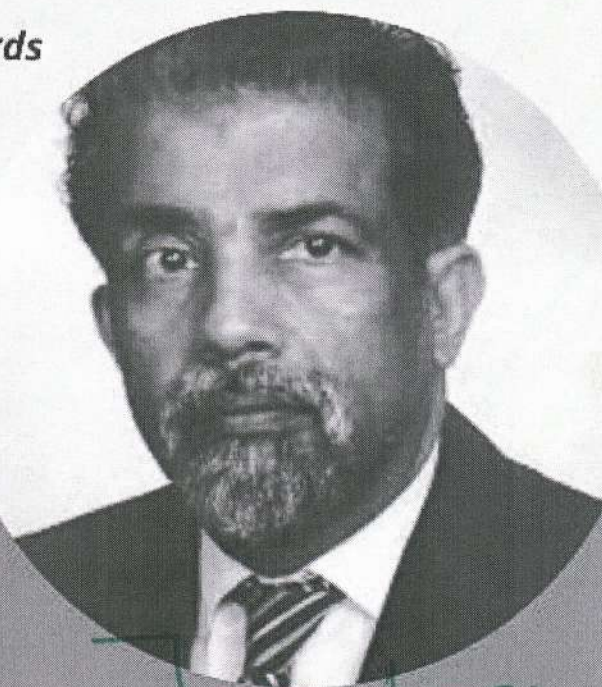
****Medium of language should be English***

****Handwritten essays in pdf format should
submit to physics@cmscollege.ac.in***

LAST DATE FOR SUBMISSION
20 MAY 2021

FIRST PRIZE : Rs 750/-

SECOND PRIZE : Rs 500/-



For more information, contact:

9496935890

Dr. Reenu Jacob
(HOD, Department of Physics
CMS College Kottayam)

9495764689

Mrs. Rinsy Thomas
Association Teacher -in Charge
Department of Physics

6282570974

Ms. Anitta Jose
Association Secretary
Department of Physics

PRINCIPAL
CMS COLLEGE KOTTAYAM

ACTIVITY REPORT OF PROF. E.C.G SUDARSHAN MEMORIAL ESSAY WRITING COMPETITION

Department of Physics , CMS College Kottayam conducted an essay writing competition as a part of Prof. E.C.G Sudarshan memorial organization. The essay writing competition was conducted by 'SUPERVIVENCIA' , Association of Physics, CMS College Kottayam. Almost all UG and PG students of Physics department participated in the competition. The topic for UG session was on 'TACHYONS AND ITS INDIAN DISCOVERER' and PG level topic was on 'SUDARSHAN-GLAUBER QUANTUM REPRESENTATION OF LIGHT'. The essay writing competition medium of language was in English. Students handwritten essays in pdf format submitted to the department's official mail id. The first prize goes to Devi Vrinda of III DC, UG department. The whole program was interesting for the students as per the feedback received.



A handwritten signature in green ink, appearing to read 'Sudharshan'.

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**SUPERVIVENCIA
ASSOCIATION OF PHYSICS
CMS COLLEGE KOTTAYAM (Autonomous)**

**NATIONAL SCIENCE DAY
CELEBRATION**

Webinar on
**CLIMATE CHANGE AND
EXTREME WEATHER EVENTS**



Resource Person

Dr. Roxy Mathew Koll

Climate Scientist

Indian Institute of Tropical Meteorology

(Ranked among the list of top 2% scientists published by the Stanford University. He was awarded the Kavli Fellowship in 2015 and the NRC Senior Research Associateship in 2018 by the U.S. National Academy of Sciences. The Indian Meteorological Society felicitated him with the Young Scientist Award in 2016 for his research on the changes in the Monsoon)

27 FEB 2021
2.00 p.m. - 3.00 p.m.
via Google meet

Inaugural Address

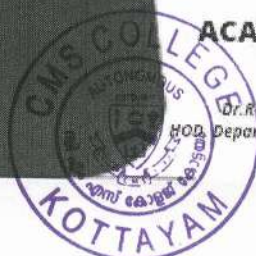
Dr. Varghese C Joshua

**Principal
CMS College Kottayam**



In association with

ACADEMY OF PHYSICS TEACHERS, KERALA



*Dr. Reenu Jacob
HOD, Department of Physics*

*Smt. Rincy Thomas
Association Teacher in Charge*

*Ms. Anitta Jose
Association Secretary*

**PRINCIPAL
CMS COLLEGE KOTTAYAM**

DEPARTMENT OF PHYSICS

WEBINAR


CMS
COLLEGE
KOTTAYAM
(AUTONOMOUS)




Stress management In Pandemic: Covid 19

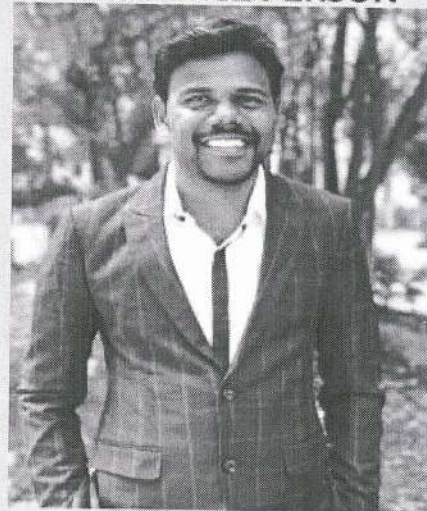
LIVE ON GOOGLE MEET



 1 August 2020

 10.30 am - 11.30 am

RESOURCE PERSON



MR. R. SHRAVAN KUMAR
Lean expert in manufacturing system

Inauguration by

Dr. Varghese C Joshua
Principal CMS College
Kottayam



NO REGISTRATION FEE

E Certificates will be
provided

Dr. Reenu Jacob
Head of the Department
Department of Physics
CMS College Kottayam

For more details
9496935890

ORGANISED BY PHYSICS ASSOCIATION
SUPERVIVENCIA 2020 - 21

PRINCIPAL
CMS COLLEGE KOTTAYAM

Webinar on
Food Safety Issues - Determination by application of
Physics and their management

Organized by

Department of Physics & Department of Family and Community Science
(Under the aegis of DBT Star College Scheme)

Date: 25th February 2021

Time: 11.30 a.m.

Resource Person:

Dr. Thomas Biju Mathew

Professor & Head and Associate Director (Rtd.)
Plant Protection, Pesticide Residue Laboratory College of Agriculture
Kerala Agricultural University, Thiruvananthapuram – 695522



Join us @



Organizing Committee: Dr. Reenu Jacob (HOD, Dept. of Physics), Dr. Miriam Mani (HOD, Dept. of Family and Community Science), Mrs. Jeya P. (Co-ordinator, DBT Star College Scheme), Mr. Sam Rajan, Dr. Ravikumar C., Mrs. Rinsy Thomas, Mrs. Neethu Theresa Willington, Dr. Preema C. Thomas, Mr. Blesson George, Dr. Seema R., Dr. Arun Kumar K. V., Dr. Thejal Abraham, Ms. Faseela Mohammed Rasheed



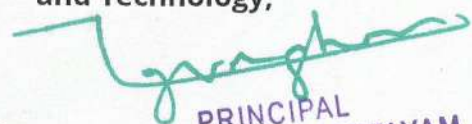
PRINCIPAL
CMS COLLEGE KOTTAYAM

Webinar on
**Solar Cells : Designing, Processing
and Deployment**

Organised by
Department of Physics
(Under the aegis of DBT Star College Scheme)



Resource Person
Dr. Aldrin Antony
Associate Professor, Department of
Physics //Honorary Director, Centre of
Excellence in Advanced Materials.
Nanophotonics & Optoelectronics Device
Laboratory, Cochin University of Science
and Technology,



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23 March 2021 | 11.30 - 12.30 p. m.

via Google Meet

Organising Committee

Dr. Reenu Jacob (HOD, Department of Physics), Mrs. Jeya P (Dept. DBT Coordinator, Physics),
Mr. Sam Rajan, Dr. C. Ravikumar, Mrs. Rinsy Thomas Mrs. Neethu Theresa, Dr. Preema C Thomas,
Mr. Blesson George, Dr. Seema R, Dr. Arunkumar K. V, Dr. Thejal Abraham.

CMS COLLEGE KOTTAYAM **(AUTONOMOUS)**

Webinar on
**Two dimensional materials for
photovoltaics**

Organised by
Department of Physics
(Under the aegis of DBT Star College Scheme)



Resource Person

Dr. Saji K. J

Assistant Professor,
International School of Photonics,
Cochin University of Science and
Technology,

PRINCIPAL
CMS COLLEGE KOTTAYAM



24 March 2021 | 11.30 - 12.30 p. m.

 *via Google Meet*

Organising Committee

Dr. Reenu Jacob (HOD, Department of Physics), Mrs. Jeya P (Dept. DBT Coordinator, Physics),
Mr. Sam Rajan, Dr. C. Ravikumar, Mrs. Rinsy Thomas Mrs. Neethu Theresa, Dr. Preema C Thomas,
Mr. Blesson George, Dr. Seema R, Dr. Arunkumar K. V, Dr. Thejal Abraham.

Webinar on

**"Nature Inspired Solar Cells : Indoor
Photovoltaics to Indigenous
Manufacturing "**

Organised by

Department of Physics

(Under the aegis of DBT Star College Scheme)



Resource Person

Dr. SURAJ SOMAN

Scientist || Assistant Professor AcSIR,
Ramanujan Block || Room 500,
Photosciences & Photonics Section, Chemical
Sciences & Technology Division (CSTD), CSIR-
National Institute for Interdisciplinary
Science & Technology, Thiruvananthapuram,
Kerala, India




PRINCIPAL
CMS COLLEGE KOTTAYAM



15 March 2021 | 11.30 a. m.

via Google Meet

Organizing Committee:

Dr. Reenu Jacob (HOD, Dept. of Physics), Mrs. Jeya P. (DBT Star College Scheme, Department Co-ordinator),
Mr. Sam Rajan, Dr. Ravikumar C., Mrs. Rinsy Thomas, Mrs. Neethu Theresa Willington, Dr. Preema C.
Thomas, Mr. Blesson George, Dr. Seema R., Dr. Arun Kumar K. V., Dr. Thejal Abraham

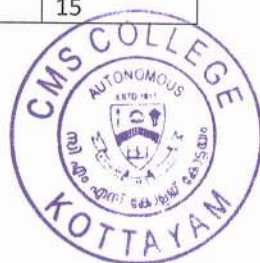
DEPARTMENT of PHYSICS, CMS COLLEGE, KOTTAYAM(Autonomous)


DBT course – FUNDAMENTALS OF SOLAR PHOTOVOLTAICS

Time:30mns

ONLINE TEST- MARK LIST:

	Name of student	out of 20
1	Abhishikit Joseph Anand	16
2	Akhil T R	16
3	Aleena KM	12
4	Anitta Jose	15
5	Anjalikrishna S	16
6	Aparna Anil	14
7	Ardra Ajith	18
8	Aryalakshmy A	15
9	DeviVrinda	15
10	Divya P S	13
11	Don Mathew	14
12	Immanuel Markose Paul	15
13	Jacob Reji	17
14	Jessin J A	16
15	Malavika Smita	15
16	Minumol Jose	16
17	Nandan M	15
18	Miria Johnson	15
19	Nishy Mary Mathew	17
20	Parvathy	15
21	Parvathy S	12
22	Preedhi PP	18
23	Prathibha PP	18
24	Ruth Susan	14
25	Seethalakshmi M	10
26	Shijina Shanavas	15
27	Sivapriya Santhosh	15
28	Tona Scaria	15
29	Vishnu v	15
30	Vivek Vijay	16
31	Vysak Kumar	15
32	Riya S Sam	13
33	Sivakami Shibu	14
34	Naveena R Thomas	15




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ACTIVITY REPORT OF WORKSHOPS ORGANIZED BY DEPARTMENT OF PHYSICS, CMS COLLEGE KOTTAYAM UNDER THE AEGIS OF DBT STAR COLLEGE SCHEME

Department of Physics CMS College Kottayam organises a series of webinars as a sponsored credit based programme under DBT Star college scheme. The first workshop 2021 was conducted on 25th february 2021 . The workshop topic was "FUNDAMENTALS ON SOLAR PHOTVOLTAICS" and the resource person was Mr. Kurian K M, Research scholar, cochin university of science and technology, cochin.


The second workshop 2021 was conducted on 25 th february organized by the Department of Physics & Department of family and community science under DBT Star college scheme. The workshop topic was "FOOD SAFETY ISSUES - DETERMINATION BY APPLICATION OF PHYSICS AND THEIR MANAGEMENT". The resource person was Dr. Thomas Biju Mathew, Professor & Head and Associate Director(Rtd) plant protection ,pesticide residue laboratory college of agriculture Kerala Agricultural university ,Thiruvananthapuram.

The third workshop 2021 was conducted on 15th March 2021 organized by Department of Physics , CMS College Kottayam under DBT Star college scheme.The workshop topic was "NATURE INSPIRED SOLAR CELLS: INDOOR PHOTOVOLTAICS TO INDIGENOUS MANUFACTURING". The resource person was Dr. Suraj Soman , Scientist and Associate professor , CSIR National institute for Interdisciplinary science and technology , Thiruvananthapuram.

The fourth workshop 2021 was conducted on 24th March 2021 organized by Department of Physics , CMS College Kottayam under DBT Star college scheme. The workshop topic was " SOLAR CELLS: DESIGNING PROCESSING AND DEPLOYMENT". The resource person was Dr. Saji K J , Assistant professor , International school of Photonics , Cochin University of Science and Technology.

The fifth workshop 2021 was conducted on 24th March 2021 from 11.30 -12.30 pm organized by the Department of Physics , CMS College Kottayam under DBT Star college scheme. The workshop topic was "TWO DIMENSIONAL MATERIALS FOR PHOTOVOLTAICS".The resource person was Dr. Saji K J , Assistant professor , International school of Photonics , Cochin University of Science and Technology.




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The faculties of Physics Department and various Departments of CMS College Kottayam and many interested students participated in the above workshops. The whole program was very useful and interesting for teachers and students as per the feedback collected.



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