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**BHARATA MATA
COLLEGE
THRIKKAKARA**

Affiliated to MG University, Re-accredited by NAAC with 'A+' Grade, ISO 9001-2015 Certified

ANNUAL REPORT

2022-2023

DEPARTMENT OF CHEMISTRY

Department at a Glance

The Department of Chemistry is one of the oldest departments in the college and it started functioning from the very inception of the college. Prof. Kurias J Kadavan is the founder member of the department who became the Head of the Department of Chemistry in 1965. The degree course started in 1982 and the PG course in M.Sc Pharmaceutical Chemistry in 1999. It became an approved research centre of M.G University in 2011 and so far, it has produced 4 Ph.Ds so far. The department has seven faculty (6 of them Ph.D holders and one currently pursuing P.h.D.) who have excellent academic credentials. The department has extensive instrumentation facilities with sophisticated instruments like FTIR spectrometer, Impedance Analyzer, Zeta Nanosizer, spin coater and a modern computer lab. Over the years, the department has conducted several excellent international, national and state level seminars on the frontier areas of chemistry. The department has been supported by funding from DST-FIST and KSCSTE. The department has to its credit more than 100 publications and 3 patents. The department has also done 3 major projects and 4 minor projects.

Department Vision

To mould globally competent individuals inculcated with scientific temper and a compassion for humanity.

Department Mission

To achieve excellence in teaching and research

Courses offered

UG B.Sc Chemistry

PG M.Sc Pharmaceutical Chemistry

Ph.D Chemistry

Certificate/ Addon Nano Science & Nano Technology

Department Highlights

Research Guides - 3

Paper Publications - 3

Paper Presentations- 5

Publications - 3

University Rank Holders - 4

MoUs - 2

Registered Alumni – 225

Faculty Profile

Dr. Sindhu Joseph

HoD, Assistant Professor

Qualification: B.Ed, Ph.D

Joining Year: 2012



Dr. Litty Sebastian

Assistant Professor

Qualification: Ph.D

Joining Year: 2012



Dr. Anu K John

Assistant Professor

Qualification: M.Phil, Ph.D

Joining Year: 2012



Baiju K. P.

Assistant Professor

Qualification: M.Sc.,

Joining Year: 2012



Faculty Profile

Dr. Divya Jose

Assistant Professor

Qualification: Ph.D, B.Ed

Joining Year: 2013



Dr. Jijisa Mary Jacob

Assistant Professor

Qualification: Ph.D

Joining Year: 2014



Dr. Anu George

Assistant Professor

Qualification: Ph.D

Joining Year: 2019



Manu Mohan

Guest Faculty

Qualification: M.Sc, M.Phil

Joining Year: 2021



Dr. Nimya Anu Mathews

Assistant Professor

Qualification: M. Sc, Ph. D

Joining Year: 2022



Dr. Amrutha U

Assistant Professor

Qualification: M. Sc, Ph. D

Joining Year: 2022



Student Profile

Class	Batch 2021-24	Male	Female
UG – 1st Year	2022-2025	6	20
UG – 2nd Year	2021-2024	9	22
UG – 3rd Year	2020-2023	6	29
PG – 1st Year	2022-2024	0	12
PG – 2nd Year	2021-23	0	13
Research Scholars			
Part Time	2	0	2
Full Time	0	0	0

Student Representatives

Class	Male (Name)	Female (Name)
UG – 1st Year	Aron George	Ann Biju
UG – 2nd Year	Ambady Pavithran	Rakhitha T. S
UG – 3rd Year	Amal Sunny	Divya Minch
PG – 1st Year		Aan Mariya Joseph
PG – 2nd Year		Ann Maria Thomas

Result analysis of Students

No of Students registered/appeared

UG (2019-2022)						PG (2020-2022)			
Semester									
I	II	III	IV	V	VI	I	II	III	IV
35	35	35	35	35	35	13	13	13	13

No of Students Passed

UG (2019-2022)						PG (2020-2022)				
Semester										
	I	II	III	IV	V	VI	I	II	III	IV
Count	32	18	34	33	32	31	6	9	5	9
%	91.4	51.4	97.1	94.2	91.4	88.5	46.1	69.2	38.4	69.2

Result analysis of Students of other batches

Program	Batch	Semester	No of Students registered	No of Students Passed	Percentage
B.Sc Chemistry	2021-24	I	31	27	83.87
B.Sc Chemistry	2021-24	II	31	24	77.41
B.Sc Chemistry	2021-24	III	31	19	61.29
M.Sc Chemistry	2021-23	I	13	11	84.61
M.Sc Chemistry	2021-23	II	13	12	92.3
B.Sc	2019-2022	VIth Sem	28	23	82.14
B.Sc	2019-2022	Total	28	19	67.85
B.Sc	2020-23	I st Sem	35	32	91.42

Department contribution to examinations

Name of the Faculty	Role Taken
Dr. Litty Sebastian	Chief Examiner, Additional Examiner, External Examiner for Practical Examination, Question Paper and Scheme Setter
Dr.Sindhu Joseph	Additional Examiner, Chief Examiner, Question Paper and Scheme Setter, Skilled Assistant for University Practical Exams, External Examiner
Dr. Anu K John	Chief Examiner, Additional Examiner , External examiner
Baiju K.P.	Additional Examiner
Dr. Divya Jose	Additional Examiner
Dr. Jinsa Mary Jacob	Additional Examiner, Question Paper and Scheme Setter, External examiner
Dr. Anu George	Additional Examiner
Dr. Amrutha U.	Additional Examiner
Dr.Nimya Ann Mathews	Additional Examiner
Manu Mohan	Additional Examiner

Institutional responsibilities held by the faculty

Name of the Faculty	Responsibilities Held
Dr. Litty Sebastian	Class Teacher of 2nd B. Sc Chemistry, Coordinator of FDP Cell, Coordinator of Young Chefs Club, Coordinator of Autonomy Working Committee.
Dr. Sindhu Joseph	Head of the Department of Chemistry, Dean of Research, Council Member, In- Charge of Common Instrumentation Facility, Class Teacher of 3rd B. Sc Chemistry.
Dr. Anu K John	Women's cell coordinator, Governing body member of BEFORE, Council member, Internal examination committee member, University examination committee member, Admission committee member, Class Teacher of 1st M. Sc Chemistry.
Baiju K.P.	College Union Advisor, Member of Ethics & Discipline Committee, Board of Study Member of Value Education, Member of Grievance Redressal Cell for Staff, Media & Film Club Member, NSS Governing Body Member, Team Member of RETNA BHARATA
Dr. Divya Jose	Dean of Science, Add-on course Co-ordinator, Admission committee member, Class Teacher of 1st B. Sc Chemistry.
Dr. Jinsa Mary Jacob	Class Teacher of II M.Sc. Chemistry, Mentor - MOOC on Organic farming, Placement Cell Coordinator, College Union Advisory Committee Member
Dr. Anu George	Co-Class Teacher of 2nd M. Sc Chemistry.

Memoranda of Understanding (MoU)

The Training and Placement Cell along with the Departments of Chemistry, Botany and Zoology of BMC signed the MoU to collaborate with Episource India Pvt Ltd, Chennai, to support us with Training, project works, Internships, Academic Exchange programs, Joint conferences along with Placement support to our students. Placement officers Dr. Jinsa Mary Jacob and Mr. Saravana Kumar co-ordinated the execution of MoU.



Department Association

Chemistry Association

Staff In charge: Dr. Litty Sebastian

President : Alby Biju

Secretary : Vishnupriya

The Chemistry Association is a student group of undergraduate and postgraduate students and the teachers of the Department of Chemistry. The aim of the association is to host and organise different academic and non academic activities of the department. Many programmes are organised by the students at the department and the college level during the academic year. The Association secretaries are selected from II B.Sc Chemistry (one boy and one girl) and the 2nd Year B.Sc class teacher will, generally be the staff in charge of the Chemistry Association

The inauguration of the association was held on 12th October 2022 at Management Hall, MSW block. The event was attended by around 100 students, along with faculty members and special guests from the scientific community. The highlight of the event was a lecture delivered by Dr. P Manoj, Head, Department of Chemistry, St. Michael's College, Cherthala, a renowned scientist in the field of Chemistry. Dr. Manoj spoke on the topic of "Plastic Electronics: Present Status and Future Prospects". The lecture focused on the latest developments in the field of plastic electronics, which has emerged as a promising area of research in recent years.

The poster is for the inauguration of the Research & Post Graduate Department of Chemistry Association. It features the logo of Bharata Mata College, Thrikkakara, and the title of the lecture: "Plastic Electronics: Present Status and Future Prospects" by Dr. P Manoj. The poster also lists the teacher coordinators (Biju K P, Dr. Litty Sebastian) and student coordinators (Vishnupriya A Nair, Alby Biju). The event took place on 12-10-2022 at 11 AM in the Management Hall, Second Floor, MSW Block.

BHARATA MATA COLLEGE
THRIKKAKARA

RESEARCH & POST GRADUATE
DEPARTMENT OF CHEMISTRY
ASSOCIATION INAUGURATION

Plastic Electronics:
Present Status and Future Prospects

Dr. P Manoj
(Head, Department of Chemistry
St. Michael's College, Cherthala)

Teacher Coordinators: Biju K P, Dr. Litty Sebastian
Student Coordinators: Vishnupriya A Nair, Alby Biju

Date: 12-10-2022, Time : 11 AM
Venue: Management Hall, Second Floor, MSW Block



The event began with a warm welcome speech by the Head of the Chemistry department, Dr. Sindhu Joseph, who expressed her excitement about the establishment of the association and the potential it holds for fostering a community of Chemistry enthusiasts. This was followed by a presidential address by the principal of the institution, Dr. Johnson K M who emphasized the importance of encouraging scientific curiosity and innovation among students and highlighted the significant contributions that Chemistry has made to society. The inauguration of the association was then carried out by Dr. P Manoj, a distinguished scientist and expert in the field of Chemistry, who delivered the keynote lecture on the topic of plastic electronics. Finally, the association secretary, Vishnupriya, delivered a vote of thanks, expressing his gratitude towards the distinguished guests and the organizers of the event for making the inauguration a success. The program coordinators, Baiju K P and Dr. Litty Sebastian, played a vital role in organizing the event and ensuring its smooth execution.

Chemistry Association Day

BMC BHARATA MATA COLLEGE THRIKKAKARA
POSTGRADUATE AND RESEARCH DEPARTMENT OF CHEMISTRY

Chemistry Association Day

"CRYSTALLA"

DR. JIJO VJ
DEPARTMENT OF CHEMISTRY
NIRMALA COLLEGE
MUVATTUPEZZHA

15TH MARCH 2023
10:30AM

At College Auditorium
TOPIC: Self-assembled Materials for Enzyme Catalysis, Drug-delivery and Diagnostics



Day Observations

Onam Celebration

The first event organised by the chemistry association was an Onam celebration titled 'Chem Kemam' on 02 September. Head of the department Dr. Sindhu Joseph felicitated the function. It was made colourful by games like 'kasera kali', 'Uriyadi', and many more cultural activities. Students and teachers actively participated in the programme and the event happily concluded with Onasadya.



Christmas Celebration

The association also celebrated the occasion of Christmas 'Jingle Bells' on 23rd December 2022. Principal Dr. K M Johnson gave a message and the Head of department conveyed her greetings. The joy of Christmas was shared by cutting cake and it was followed by vibrant dance performances and carol songs by both teachers and students. Everyone exchanged Christmas gifts. Students actively participated in various games organised by various departments. Ann Leah and Aron Goerge took part in Tableaux competition and the crib making job was easily handled by Agna Johnson and team which was organised by campus ministry. The Carol song competition was led by Ann Biju and team. The Christmas Star making competition was handled by Seniya and team. Our students bagged second position in a Christmas tree making competition organised by the department of Physics.



International Conference On Materials Science

Date and Time : 9th and 10th January 2023

Coordinator : Dr. Anu K John, Dr. Shibi Thomas

Resource Person/s : 4

Number of Participants : 303

Organized by Post graduate and Research departments of Chemistry and Physics

In Collaboration with Mahatma Gandhi University, Kottayam

The International Conference on Materials Science jointly organized by the Postgraduate and Research Departments of Chemistry and Physics, Bharata Mata College, Thrikkakara was held on 9th and 10th January 2023 at the BIMM Seminar Hall of Bharata Mata College. Dr. Anu K John and Dr. Shibi Thomas from the Departments of Chemistry and Physics respectively were the coordinators of this conference.

This conference was aimed to bring together the academicians, scientists, technologists and experts to share their knowledge on recent developments and advances in Materials Science. This provided a platform for undergraduate and postgraduate students, research scholars, faculty and scientists to refine their knowledge and share their ideas and to broaden their horizon. This conference discussed current research trends and future research directions in Material Science. The conference featured thematically- arranged invited lectures by eminent faculty from top Universities in the areas such as Material Science, Nanotechnology, Energy harvesting and storage etc.

The inaugural session of the conference commenced with the blessings of God almighty with a prayer song by Ms. Swathy of I BSc Chemistry. Dr. Sindhu Joseph, Head, Department of chemistry & Research Dean welcomed the gathering. Dr. K. M. Johnson, Principal, Bharata Mata College delivered the presidential address. Dr. Suresh C. Pillai, Director, Health and Biomedical Centre, & Head of Nanotechnology and Bio-Engineering Research Group, Atlantic Technological University, Sligo, Ireland inaugurated the conference. Ms. Lissy Kachappilly, Vice Principal felicitated the gathering. Conference Convenor Dr. Shibi Thomas delivered the vote of thanks for the inaugural session.

The scientific sessions of Day 1 began at 10.00 AM with the technical session of Dr. Praveen C. S, Asst. Professor, International School of Photonics, CUSAT on the topic “Bridging the gap between theory and experiments”- The synergetic way of thinking. The session was chaired by Dr. Sindhu Joseph, Research Dean and HoD, Department of Chemistry.

Session 2 started at 12.00 PM after the inaugural meeting. The session included the keynote address of Dr. Suresh C. Pillai, Director, Health & Bio-Medical (HEAL) Centre & Head of Nanotechnology & Bio-Engineering Research Group, Atlantic Technological University, ATU Sligo, Ireland on the topic, “Nanotechnology for Energy and Environmental Applications”. This session was chaired by Prof. Dr. Shiny Palatty, Former Principal, Bharata Mata College, Thrikkakara.



Session 3 was again handled by Dr. Suresh C. Pillai on “Connecting Research, Technology and Innovation” which was followed by the interaction of the keynote speaker with the faculty and the students and it was a dynamic session.

On the 2nd day of the Conference, there were two technical sessions and oral/poster presentations. The first technical session was by Dr. Ajith R. Mallia, Assistant Professor, Department of Chemistry SB College Changanassery addressed the topic “Organic Semiconducting Materials for Solar Light Harvesting”. Dr. Manesh Michael, Assistant

Professor, Department of Physics chaired the session. The second session was handled by Dr. M Mayarani, DST INSPIRE faculty, Department of Physics, IIT Palakkad on the topic, "Soft Matter: Matter that Matters a lot!". Dr. Jinsa Mary Jacob, Assistant Professor, Department of Chemistry has chaired the session.



The technical sessions were followed by oral and poster presentations. About 16 papers were presented during the oral presentation and 6 posters were also presented. Prof. Jessy George, Retired Faculty, Department of Physics and Dr. Litty Sebastian, Assistant professor, Department of Chemistry evaluated the presentations/posters. Mr. Praveen P, Research Scholar, International School of Photonics, CUSAT got first prize in oral presentation and Ms. Meenu Eldose, Research Scholar, Department of Chemistry, Newman college Thodupuzha got first prize in poster presentation.

During the valedictory session, the prizes were distributed and some of the participants shared their feedback about the conference. Conference convenor Dr. Anu K John, Assistant Professor, Department of Chemistry proposed the vote of thanks. Around 400 participants which includes faculty members, students and research scholars from our college and various institutions benefited from the conference. Certificates were issued for all the registered participants.

Distinguished lecture

Date and Time : 08.12.2022

Coordinator : Dr. Sindhu Joseph & Mr. Manu Mohan

Resource Person/s : Prof. Pierre H. Dixneuf

Number of Participants : 12

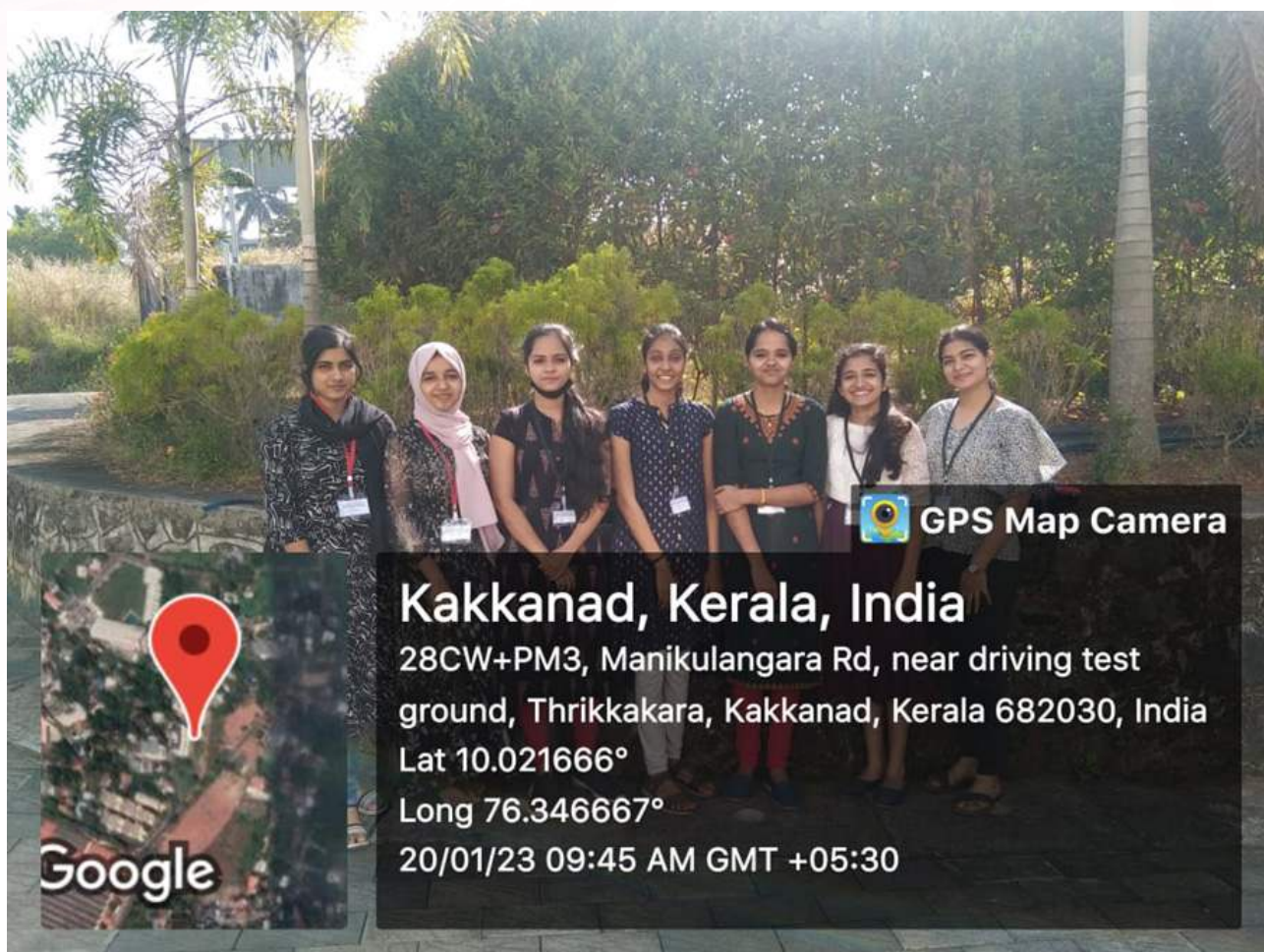
The first semester M. Sc Pharmaceutical Chemistry students of Bharata Mata College were taken to the Department of Chemical Oceanography, School of Marine Sciences, CUSAT for the distinguished lecture by Prof. Pierre H. Dixneuf of the Rennes Institute of Chemical Sciences, University of Rennes, France. The program was inaugurated by Prof. (Dr.) K. N. Madhusoodanan, Honourable Vice Chancellor of CUSAT. The topic of Prof. Pierre's lecture was "Metal catalysts and Green Chemistry : transformations of alkynes, alkene metathesis and C-H bond functionalization". After interaction with Prof. Pierre, the students were taken for a lab tour where Mr. Manu Mohan and research scholar Shameem of COD introduced the various high end equipment to them and helped them to understand its principle and instrumentation. Students were able to understand GC- MS (Perkin Elmer), FTIR (Perkin Elmer), LCMS (Shimadzu), UV-VISIBLE spectrophotometer (Analytik Jena), Voltammetry (Metrohm), Ion Chromatography (Metrohm), AAS (Thermo Fisher Scientific), ICP-OES (Thermo Fisher Scientific)



Workshop on Ground Water Quality Testing and Water Resources Management

A one day workshop on “Ground Water Quality Testing and Water Resources Management” was conducted by the ground water department, regional analytical laboratory, Ernakulam on 20th January, 2023. It was inaugurated by Dr Renuraj IAS.

The keynote speaker was Dr. Madhavan Komath, retd. Scientist, CWRDM, Kozhikode. Nearly 50 students from various colleges in Ernakulam participated in the same. 7 final year B. Sc Chemistry students of Bharata Mata College attended the programme which concluded at 4pm in the evening.



Rajagiri Research Day 2023

Date and Time : 25.02.2023
Coordinator : Dr. Sindhu Joseph
Resource Person/s : Prof. Alison Baker
Number of Participants : 12

M. Sc Pharmaceutical chemistry students (Batch 2021-2023) of Bharata Mata College, along with Head of the department Dr. Sindhu Joseph visited Rajagiri College of Social Sciences (RCSS) Autonomous, Kalamassery for the Rajagiri Research Day on Saturday 25th February 2023 organized jointly by the Department of Biosciences and Rajagiri Research and Development Cell (RRDC). The program was



RCSS Rajagiri College of Social Sciences (RCSS) (Autonomous), Kalamassery, Kochi-683104, Kerala, India.

Cordially invites you for the
Rajagiri Research Day-2023

Date: 25th February 2023 (Saturday); Time: 2:30 PM
Venue: Carmel Hall, RCSS, Kalamassery

International Lecture by
Prof. Alison Baker,
School of Molecular and Cellular Biology,
University of Leeds, UK

Topic
"The Phosphorus paradox. Why it matters and how plants can help us solve it."

Registration link: rajagiriresearchday2023.org
Fee: Rs 100
Last Date: 22-02-2022

Organized by
Department of Biosciences
&
Rajagiri Research & Development Cell (RRDC),
RCSS, Kochi-683104, Kerala, India.
Email: biosciences@rajagiri.edu Cell: 7401170648

An IQAC Initiative



convened at Carmel Hall at 2:30 pm. As part of this program, an International Lecture was also delivered by Prof. Alison Baker of the School of Molecular and Cellular Biology, University of Leeds, UK. The topic of her lecture was “The Phosphorus paradox. Why it matters and how plants can help us solve it”.

Students also got an opportunity to visit the molecular biology and phytochemistry laboratories of the Department of Biosciences headed by Dr. Antony Caesar Stanislaus. Dr. Rajiv Gandhi Gopalsamy and Dr. Theivanayagam Maharajan explained the various research activities going on there in the field of Millets. Students could see various equipment like RTPCR machine, Nanodrop, Geldoc, rotary evaporator, tissue culture laboratory etc.,



World Environment Day

Date and Time : 6th and 10th June, 2022

Coordinator : Dr. Sindhu Joseph

Resource Persons : Adv. Marian Paul, Shana Susan Ninan, Smitha Nair

Number of Participants : 60

The Post graduate and Research Department of Chemistry observed World Environment Day on Monday 6th June, 2022 and also organized a series of talks in collaboration with the NGO named 'Tree for Life' on the Friday, 10th June 2022 at 2: 30 pm, with Dr. Sindhu Joseph as the teacher Co-ordinator.



**Post Graduate and Research
Department of Chemistry
Bharata Mata College, Thrikkakara**


In collaboration with


DR. TREE FOR LIFE DR.


Organizes

**WORLD ENVIRONMENT DAY
2022**

**Campus Cleanliness Drive
Tree Saplings Plantation
Series Talks, and so much
more, with...**


Adv. Marian Paul


Shana Susan Ninan


Smitha Nair

- ONLY ONE EARTH -

Coordinators,
Dr. Sindhu Joseph (HOD)
Jacqueline Saira Korah
Stephan Alias

Programs on 6th June, 2022.

II Semester B. Sc Chemistry students cleaned the department premises on Monday, 6th June, 2022 as part of a cleaning drive to observe the WED. Teachers co-ordinators Dr. Sindhu Joseph and Dr. Sajin K Francis took initiatives for coordinating the students for cleaning. This was followed by planting of tree saplings, which was inaugurated by Principal Dr. K. M. Johnson.



Programs on 10th June, 2022

The meeting which was organized at the A V room started with a Prayer song by Farhamol P. U of 2nd semester B. Sc. The Head of the department, Dr. Sindhu Joseph warmly welcomed all the three speakers from 'Tree for Life' as well as the participants to the function. Principal Dr. K. M. Johnson gave the Presidential Address and also felicitated the gathering. The three resource persons Adv. Marian Paul, Ms. Shana Susan Ninan and Ms. Smitha Nair interacted with the students. Adv. Marian Paul (practicing at the High Court of Kerala and Managing Partner of the law firm 'Acecorp Legal Consultancy') talked about the different

environmental Laws through her power point presentation. Ms. Shana Susan Paul, secretary of 'Tree for Life' sensitised the students on different environmental issues, and how we can contribute towards the betterment of our 'Only one Earth'. Ms. Smitha Nair (Founder, Trainer and Story Educator at Marigold Creative, Kochi) illustrated the problem of plastic pollution in the sea through a wonderful storytelling session. She also did a group activity named 'Leave your Mark', involving all the student participants.



Vote of Thanks was delivered by Jacqueline Saira Korah of 2nd semester B. Sc. The meeting concluded at 4 : 30 pm.



Independence Day Quiz

An Independence Day Quiz was organized as a part of 75th Independence Day of India, 'Azadi Ka Amrit Mahotsav' by the post graduate and Research Department of Chemistry at the students' Hall at 2:00 pm. Quiz master was Shri. P. S. Panicker, trainer for competitive exams and general knowledge in PSC exams. Head of the Department Dr. Sindhu Joseph welcomed the 7 participating teams from various departments as well as the audience. Ms. Jacqueline Saira Korah helped with the scoreboard.

1. Chemistry- Fathima Latheef, Merin Joy
2. Physics- Aravind Krishna, Sarah S Panikulangara
3. English- Joel John, Sandra Soney
4. B. Com TT- Joseph Rithin, Benyamin John Paul
5. Botany- Kurian Elias, Sneha Alias
6. Zoology- Alex Jose, Pratheeksha Lal
7. Maths- Ann Mary M.M, Gifty Maria Saju




DEPARTMENT OF CHEMISTRY
INTER-DEPARTMENTAL QUIZ PROGRAMME
By, P. S. Panicker

Guidelines

- * Theme- Indian Independence
- * A team of 2 members from each department can participate



Students Hall

19 August 2022
2:00 pm





Teacher coordinator -
Dr. Sindhu Joseph (9349287416)



Student coordinators -
Divya Minch(95674 50720)
Dev Dilip(8589926251)





DEPARTMENT OF CHEMISTRY
INTER-DEPARTMENTAL QUIZ PROGRAMME



First Prize (₹500)
Kurian Elias & Sneha Alias
(Botany)



Second Prize (₹300)
Fathima Latheef & Merin Joy
(Chemistry)



Third Prize (₹200)
Joel John & Sandra Soney
(English)

The preliminary round was a written test containing 10 multiple choice questions. Each correct answer was given 4 marks and for each wrong answer 1 mark was lessened. Based on the first round, 4 teams were selected for the final round. The final prize winners are listed as below:

First Prize- Kurian Elias, Sneha Alias (Botany department)

Second Prize- Fathima Latheef, Merin Joy (Chemistry department)

Third Prize- Joel John, Sandra Soney (English department)

Fifth semester- B. Sc Chemistry student, Divya Minch delivered the vote of thanks. The programme came to an end by 4: 00 PM.



World Science Day For Peace & Development 2022

Every year, the Department of Chemistry celebrates World Science Day for Peace and Development on 10th November. The theme of World Science Day 2022 is Basic Sciences for Sustainable Development. Applications of basic sciences are vital for advances in medicine, industry, agriculture, water resources, energy planning, environment, communications and culture.

We invited students and researchers from various institutions to visit our research lab and gain an understanding of laboratory equipment and the research world. Another program that was well-received was the interdepartmental poster making competition. A lecture was given by Dr. Manesh Michael, Department of Physics, Bharata Mata College, Thrikkakara on the topic, "A Journey Through Groundbreaking Basic Science Theories".

The World Science Day celebration at our institution was a great success, with the main program being a research lab visit by nearby institutions. We invited students and researchers from various institutions to visit our research lab and gain an understanding of laboratory equipment and the research world.



BHARATA MATA COLLEGE THRIKKAKARA

WORLD SCIENCE DAY FOR PEACE & DEVELOPMENT 2022

The Postgraduate Department of Chemistry & Research Centre
Bharata Mata College, Thrikkakara

Open Day We invite you to visit our research lab to understand laboratory equipments & research world.

List of Equipment
FTIR Spectrometer, Particle Size Analyser, Impedance Analyzer, Visible Spectrophotometer, Homogenizer, Spin Coater, Pelletizer, Sonicator, Conductometer, Potentiometer, Ostwald Viscometer, Stalagmometer, Magnetic Stirrer, Microwave Oven, pH meter, Colorimeter, Melting Point Apparatus, Rotary Evaporator, Autoclave, Muffle Furnace, Hot Air Oven, UV- Cabinet, etc...

Poster Making Competition
Topic :Basic Research for Sustainable Development (Interdepartmental)
Size : 70cm X 55cm
Date & Time : Submit on/before 10/11/2022,11.30 AM

Lecture Topic: A Journey Through Groundbreaking Basic Science Theories
Dr. Manesh Michael
Assistant Professor
Department of Physics
Bharata Mata College, Thrikkakara
Venue: Management Hall, Second Floor, MSW Block.
Date & Time: 10/11/2022, 2.30 PM

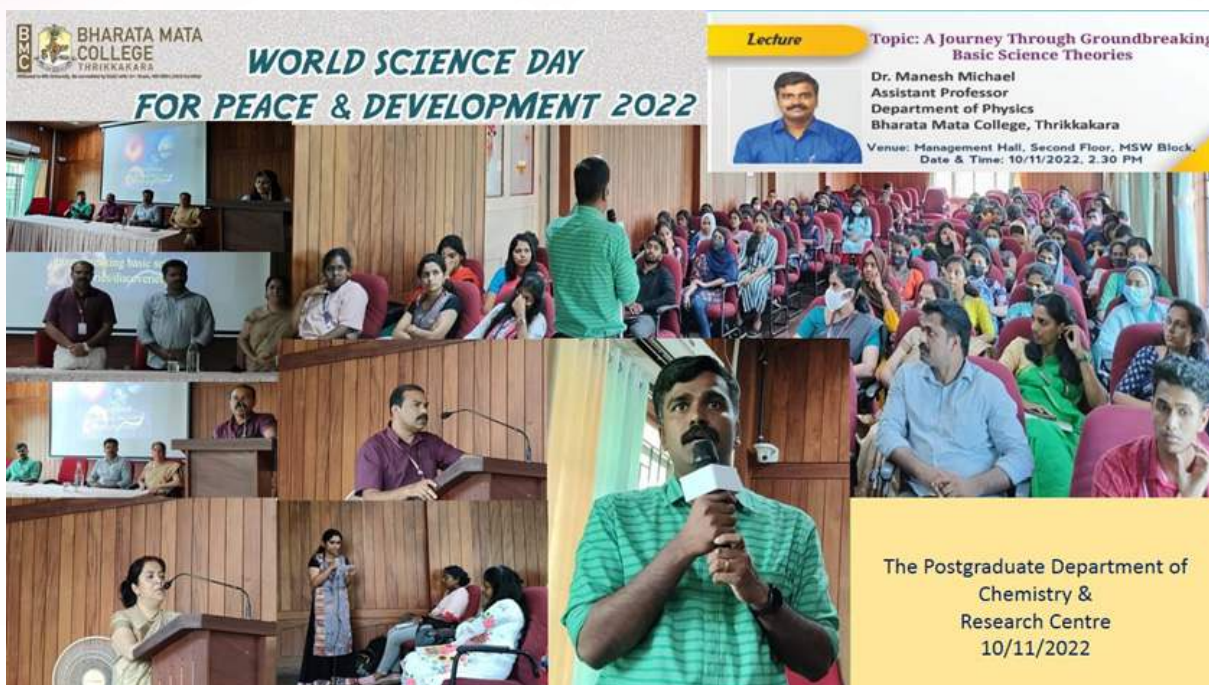
Basic Sciences for Sustainable Development
Every year, Department of Chemistry celebrates World Science Day for Peace and Development on 10th November. The theme of World Science Day 2022 is *Basic Sciences for Sustainable Development*. Applications of basic sciences are vital for advances in medicine, industry, agriculture, water resources, energy planning, environment, communications and culture.
All are Welcome

Baiju K P
Coordinator
Phone No: 9961569910

Dr. Sindhu Joseph
HoD
Department of Chemistry

Dr. Johnson K M
Principal

During the lab visit, we opened around 30 instruments like FTIR, UV, Particle size analyzer, Impedance analyzer, and many more, which were available for visitors to explore and learn about. Each instrument was manned by a knowledgeable student who explained its functions and capabilities to the visitors. Visitors were also allowed to ask questions and interact with the students to learn more about the instruments and the research conducted in the lab. The lab visit provided an excellent opportunity for visitors to gain an understanding of the research world and laboratory equipment, which is not always accessible to the general public. It also highlighted the importance of scientific research and the role of research institutions in advancing knowledge. We received positive feedback from visitors who appreciated the opportunity to learn and explore the laboratory equipment. Three nearby institutions participated in this event.



The highlight of the day was the lecture given by Dr. Manesh Michael, Department of Physics, Bharata Mata College, Thrikkakara on the topic, "A Journey Through Groundbreaking Basic Science Theories". He took the audience on a fascinating journey through the history of science, starting from ancient times to the present day. The lecture began with an overview of the scientific method and emphasized the importance of the scientific method in advancing our knowledge of the world.

The lecture then moved on to discuss some of the most groundbreaking basic science theories in history. The speaker started with the theory of evolution by natural selection,

which was first proposed by Charles Darwin in the 19th century. The theory explains how species evolve and adapt to their environments over time. The speaker then discussed the theory of relativity, which was developed by Albert Einstein in the early 20th century. This theory revolutionized our understanding of space and time and is the foundation of modern physics. The lecture also touched on the theory of quantum mechanics, which is a fundamental theory in physics that describes the behavior of matter and energy at a very small scale. The speaker explained how this theory has led to the development of new technologies such as transistors and lasers. Dr. Manesh spoke about the discovery of DNA also. Overall, the lecture on “A Journey through Groundbreaking Basic Science Theories” provided an engaging and informative overview of some of the most significant scientific theories in history. The speaker emphasized the importance of scientific research in advancing our understanding of the world and encouraged the audience to continue to explore and question the world around us. 100 students from the Chemistry and Physics Departments participated in this lecture. Overall, the World Science Day celebration was a great success. It provided an opportunity for people to learn about the latest scientific discoveries and appreciate the work done by scientists. The event also encouraged young people to pursue careers in science and contribute to the advancement of knowledge.



National Science Day - EUREKA 2023

National science day was celebrated jointly by all the science departments of the college on 28th February 2023. The programme includes a documentary presentation, science quiz for highschool and higher secondary students of various schools and a science exhibition for school and college students. The official inauguration of the program was done at 10.30 am in the auditorium. Dr. Simi Joseph P, Coordinator of the programme welcomed the gathering. The meeting was presided over by the principal. The program was inaugurated by Rev. Dr. Abraham Oliyapurath, Manager, Bharata Mata College. The official inauguration was followed by a documentary presentation. The science quiz was conducted in the auditorium at 11.30 am. Dr. Manesh Michael, Department of Physics was the quiz master. The quiz was followed by a science exhibition at different science departments. About 70 science aspirants from various institutions like Cardinal Higher Secondary, Champion School, Rajagiri Public School, Nava Nirman, Bharatiya Vidya Bhavan and St. Jude's School visited Bharata Mata college to watch the exhibition. All students and staff of the college also visited the exhibition venues. The exhibition came to an end at 3.30 pm.

Programme Schedule

10:00 am	:	Inauguration Venue: Auditorium
10:30 am	:	Inter-School Quiz Venue: Auditorium
10.30 am to 4:00 pm	:	Exhibition & Lab visits Venue: Respective Departments

Inter-School Science Quiz Competition for Windermere Rolling Trophy for High School & Higher Secondary Students

1st Prize- Rs 3000 & Certificates
2nd Prize- Rs 2000 & Certificates
3rd Prize-Rs 1000 & Certificates

A team of 2 students can participate from a school
One team member must be a HSS Student
Register on or before 12.00 pm Monday 27th February 2023

Advisory Committee
Rev. Fr. Dr. Abraham Oliyapurath (Manager)
Dr. K.M Johnson (Principal)
Co-ordinator
Dr. Simi Joseph P (HoD, Dept. of Zoology)

Organising Committee
Dr. John T Abraham (HoD, Dept. of Computer Science)
Dr. Sindhu Joseph (HoD, Dept. of Chemistry)
Dr. Newby Joseph (HoD, Dept. of Botany)
Dr. Anu Phillip (HoD, Dept. of Physics)
Dr. Seethu Varghese (HoD, Dept. of Mathematics)

For details and registration,
Contact : Dr. Simi Joseph P. 9447665821, 8590823919

The Science Departments of Bharata Mata College
cordially invite you to

EUREKA 2023
A Journey through Science

in connection with
National Science Day
28th February 2023

Event Highlights:

- * Inter-School Quiz for Windermere Rolling Trophy (For High School & Higher Secondary Students)
- * Exciting opportunity to visit different labs & exhibitions conducted by various departments

Free Entry

OPEN TO PUBLIC



ക്രിസ് മത്തരം: കാമ്പയിൻ സ്കൂളിന് ഒന്നാം സ്ഥാനം

ഭാരതമാതാ കോളജിൽ യുറേക്ക 2023 ഇന്ന്
 കൊച്ചി: ദേശീയ ശാസ്ത്ര ദിനാചരണത്തിന്റെ ഭാഗമായി തൃക്കാക്കര ഭാരതമാതാ കോളജിലെ സയൻസ് വിഭാഗങ്ങളുടെ ആഭിമുഖ്യത്തിൽ ശാസ്ത്രപ്രദർശനവും ഹൈസ്കൂൾ ഹയർ സെക്കൻഡറി വിദ്യാർത്ഥികൾക്കായി ക്രിസ് മത്തരവും സംഘടിപ്പിക്കുന്നു. ഇന്ന് നടക്കുന്ന യുറേക്ക 2023 പ്രദർശനത്തിൽ കോളജിലെ മാൽസ്, കെമിസ്ട്രി, ഫിസിക്സ്, കമ്പ്യൂട്ടർ സയൻസ്, ബോട്ടണി, സൂവോളജി വിഭാഗങ്ങളുടെ ലാബുകളും മ്യൂസിയവും സന്ദർശിക്കാവുന്നതാണ്. കൂടുതൽ വിവരങ്ങൾക്ക് ഫോൺ: 9447665821, 8590823919.

മെമ്പർ ആക്കംകര ഭാരതമാതാ കോളജിലെ സയൻസ് വിഭാഗങ്ങളുടെ ആഭിമുഖ്യത്തിൽ ശാസ്ത്രപ്രദർശനത്തിൽ ഒന്നാം സ്ഥാനം നേടിയ റ്റു യൂണിവേഴ്സിറ്റി സ്കൂൾ ക്രിസ് മത്തരം സമ്മാനിച്ചു. കോളജ് അനലുകൾ വലിയ ഹയർ സെക്കൻഡറി വിദ്യാർത്ഥികൾക്കായി ക്രിസ് മത്തരം സമ്മാനിച്ചു. കോളജ് അനലുകൾ വലിയ ഹയർ സെക്കൻഡറി വിദ്യാർത്ഥികൾക്കായി ക്രിസ് മത്തരം സമ്മാനിച്ചു. കോളജ് അനലുകൾ വലിയ ഹയർ സെക്കൻഡറി വിദ്യാർത്ഥികൾക്കായി ക്രിസ് മത്തരം സമ്മാനിച്ചു. കോളജ് അനലുകൾ വലിയ ഹയർ സെക്കൻഡറി വിദ്യാർത്ഥികൾക്കായി ക്രിസ് മത്തരം സമ്മാനിച്ചു.



സമ്മാനം നൽകിയ ഭാരതമാതാ കോളജിലെ സയൻസ് വിഭാഗങ്ങളുടെ ആഭിമുഖ്യത്തിൽ ശാസ്ത്രപ്രദർശനത്തിൽ ഒന്നാം സ്ഥാനം നേടിയ റ്റു യൂണിവേഴ്സിറ്റി സ്കൂൾ ക്രിസ് മത്തരം സമ്മാനിച്ചു. കോളജ് അനലുകൾ വലിയ ഹയർ സെക്കൻഡറി വിദ്യാർത്ഥികൾക്കായി ക്രിസ് മത്തരം സമ്മാനിച്ചു.



Department Non-Academic activities

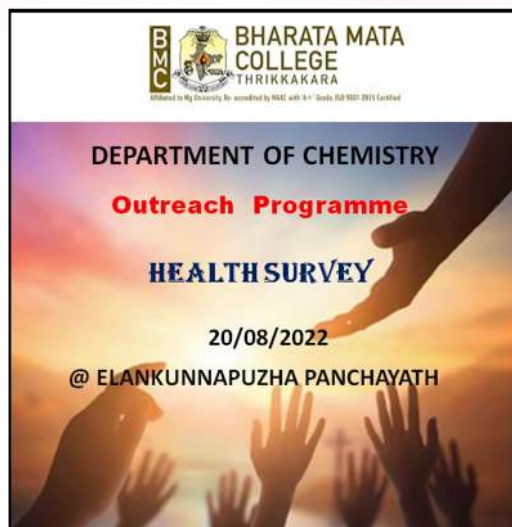
Health Survey at Elankunnapuzha Panchayath, Vypin

Date and Time : 20-08-2022

Coordinator : Baiju K. P

The students had taken the initiative to take a survey on different wards of Vypin, Ernakulam as part of their outreach program. On reaching the destination; the students had to split themselves according to their respective sections. It helped to give exposure to our students. It helped us understand how each family is different. The students' interaction with the villagers exposed them to the daily lifestyle, social and economic conditions of the people. The students informed families about the basic human rights and the facilities provided by the Governments, both from Centre as well as State.

The outreach program aims to promote an eco-friendly environment, sustainable development of natural resources, effective solid waste management, rejuvenation of the water reserves, sanitation and social hygiene, promotion of organic cultivation, zero pesticide food products, healthy foods, propagation of herbicides and Organic farming, protection of biodiversity and so on. Environmental sustainability is framed with a biocentric approach which places humans within the greater context of their natural environment ensure that no havoc is wrecked to our Earth ,Water, Air, Soil and Water sources.



Extension activities

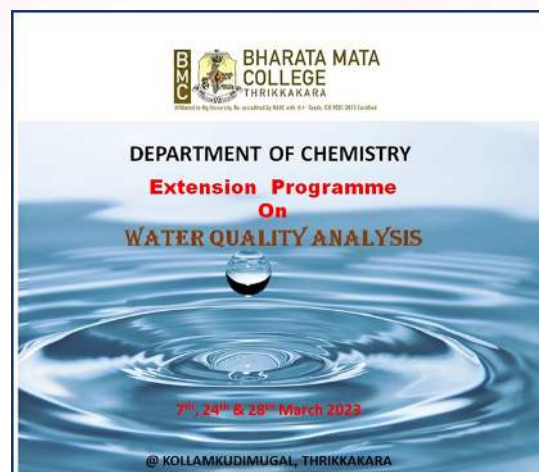
Water Quality Analysis

Date and Time : 07, 24 and 28th March 2023

Coordinator : Mr. Manu Mohan

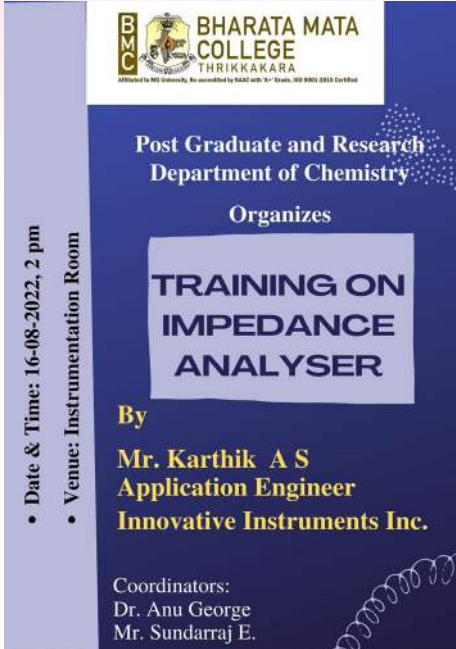
Number of Students : 35

Department of Chemistry conducted ground water analysis of samples collected from different wells of the nearby ward Kollamkudimugal of Thrikkakara Municipality. The programme was coordinated by the faculty Mr. Manu Mohan. 3rd year B.Sc Chemistry students participated in this activity. The sample collection and analysis of the samples were done on 7, 24 and 28th March 2023. About 19 samples were collected and tested for various hydrographic parameters such as pH, Hardness, Chlorine, Alkalinity, Dissolved oxygen, colour, odour as well as for the presence of sulphate, Phosphate and iron. From this endeavour, the students gained the knowledge to analyze the purity of water using the necessary chemical based on parameters. Also, they were able to understand the method of collecting samples while testing for various parameters, especially collection of samples in a DO bottle to test for the dissolved oxygen in the water and calculations of the considered parameters. This activity was a valuable learning experience for the students.



Training on Impedance Analyser

Post Graduate and Research Department of Chemistry, Bharata Mata College organized an instrument training programme on impedance analyser on 16-08-2022 at 2 pm. The programme was held in the instrumentation room, Bharata Mata College. The working of the instrument was demonstrated by Mr. Karthik A. S, Application Engineer, Innovative instruments Inc. The faculty and a few students from physics and chemistry department participated in the programme. This programme was conducted to strengthen the interdisciplinary research between physics and chemistry. The programme was coordinated by Dr. Anu George (Assistant Professor, Department of Chemistry) and Mr. Sundarraj E (Technical Assistant).



BMC BHARATA MATA COLLEGE THRIKKAKARA
Approved by MCI University, Accredited by NAAC with 'A' Grade, ISO 9001:2015 Certified

Post Graduate and Research Department of Chemistry
Organizes

TRAINING ON IMPEDANCE ANALYSER

By
Mr. Karthik A S
Application Engineer
Innovative Instruments Inc.

Coordinators:
Dr. Anu George
Mr. Sundarraj E.

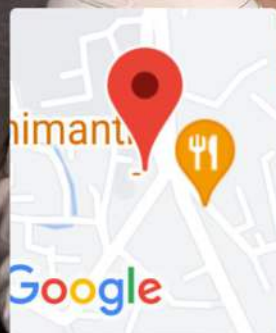
Date & Time: 16-08-2022, 2 pm
Venue: Instrumentation Room



Orientation program for first year B. Sc chemistry students



GPS Map Camera



Ernakulam, Kerala, India

NGO Quarters - Bharathmatha College Rd, Thrikkakara,
Edappally, Ernakulam, Kerala 682021, India

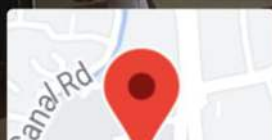
Lat 10.028977°

Long 76.335853°

12/09/22 10:56 AM GMT +05:30



GPS Map Camera



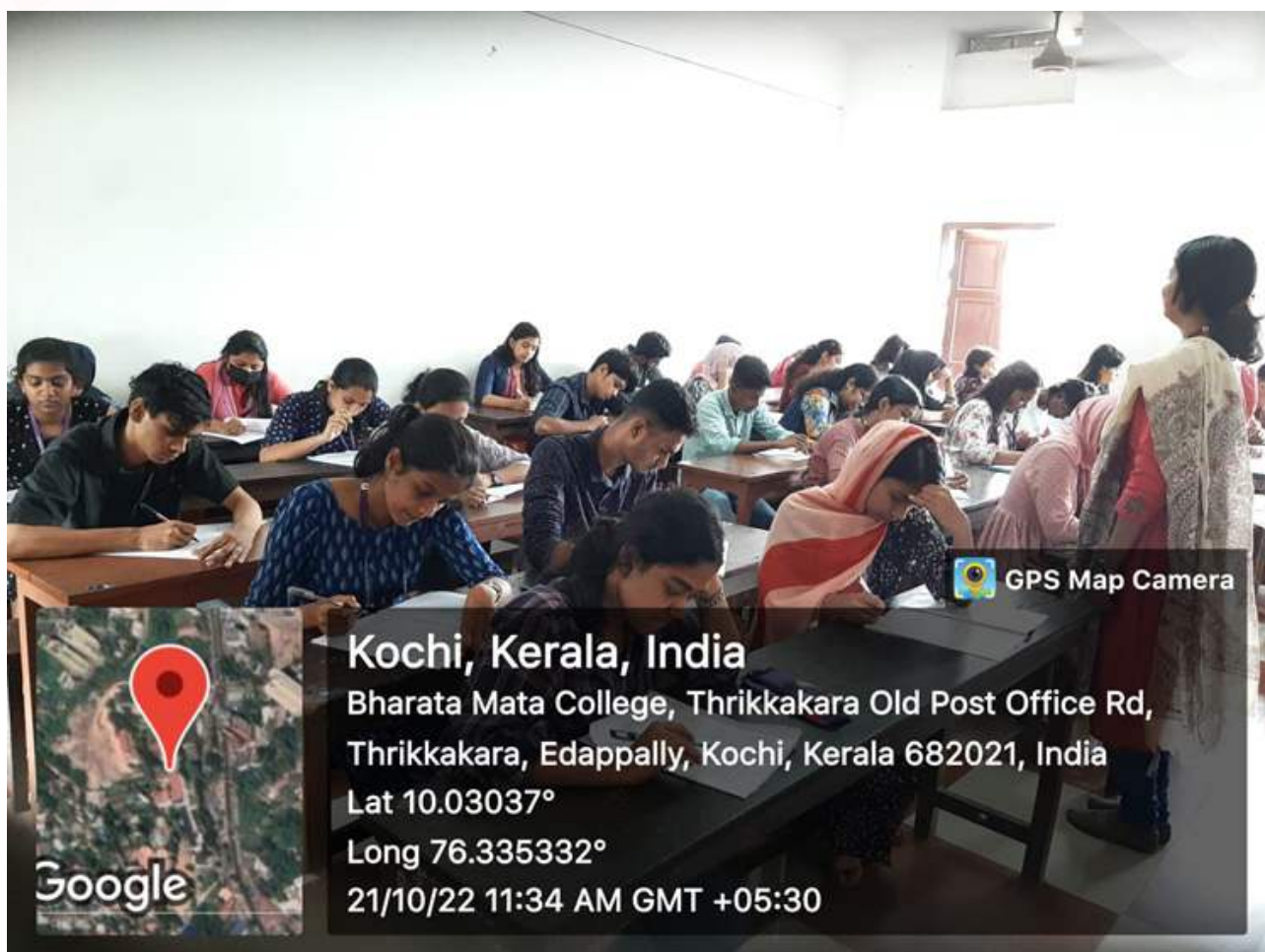
Kochi, Kerala, India

Bharata Mata College, Thrikkakara Old Post Office Rd,

Anti Ragging Awareness Program

Entry Level Examination

Category	No of Students
Advanced Learners	3
Average Learners	28
Slow Learners	1
Total	32

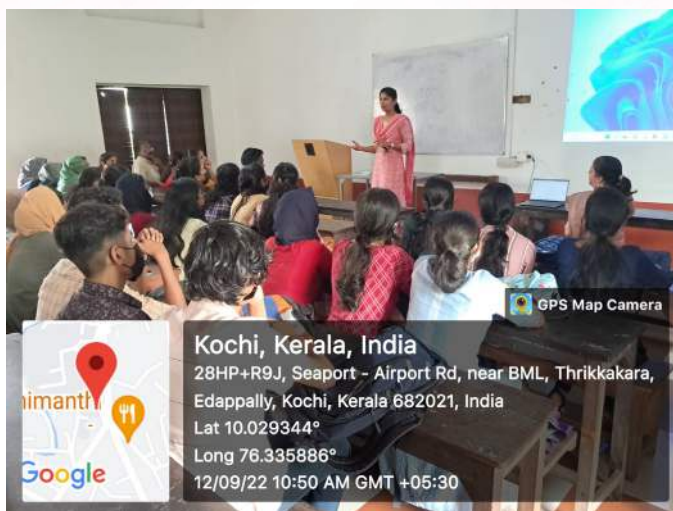


Bridge course

Date/s of Bridge course : 12-09-2022

Teacher In charge : Dr. Divya Jose

Bridge course was conducted for all the newly admitted first year B.Sc. Chemistry students to revise the fundamental concepts of Chemistry like periodic properties, analytical methods in Chemistry, chromatography etc. and to facilitate and bridge the gap between school and college level of learning. The classes which covered the bridge course syllabus of four hours were handled by Dr. Jinsa Mary Jacob and Dr. Divya Jose. The topics covered were key concepts based on periodicity of properties – ionization energy, electronic affinity, chromatographic techniques like column chromatography, thin layer chromatography, analytical methods in chemistry etc.



Mentoring Report

The mentoring system in the Bharata Mata College is highly efficient and the college employs a full time counsellor. The counsellor is part of the mentoring cell of the college. As per the direction of the mentoring cell, the students of the Department of Chemistry were divided into groups and a mentor was assigned to each group. It was decided that a student will be having the same mentor throughout her/his course of study in the college. In the beginning of the academic year, 2021-22, the classes were started in June in the online mode due to the covid pandemic. The long hours in front of the computer and mobile phones were affecting the students mental health. The teachers took special care to personally talk to them on phone. It was found that many parents had lost their jobs and the

students were facing financial difficulty. Some financial assistance was arranged for the needy students at that time. The lockdown and isolation at home led to depression and lack of interest among students. The classes started in the offline mode in the month of November, as per the government order. The mentoring process could be more efficient after that. Teachers met them at regular intervals during the lunch break and after the class hours. The mentoring focussed on three areas: their academic performance, their future plans and also their personal issues. Students who needed professional assistance was referred to Sissy Sashidharan, the counsellor. Any free hours that could not be adjusted were taken by the counsellor, Sissy Sasidharan and this helped the students interact with her and be familiar with her. This also helped the students in overcoming any hesitancy in meeting her.



Department Mentor list 2022-23

SI No.	Name of the Mentor	No. Mentees
1	Dr.Litty Sebastian	16
2	Dr.Sindhu Joseph	17
3	Dr. Anu K John	12
4	Baiju K.P.	13
5	Dr. Divya Jose	13
6	Dr. Jinsa Mary Jacob	13
7	Dr. Anu George	17
8	Manu Mohan	12
9	Dr. Amrutha U	12

Addon / Certificate courses

Course Name: Introduction to Nanoscience and Nanotechnology

Objectives: Nanoscience and Nanotechnology is a vibrant research area of Science and Engineering which offers a new ability to manipulate and characterize matter at the level of single atoms and small groups of atoms. So this course will help to familiarize nanomaterials with their synthesis procedures and analytical methods in this area.

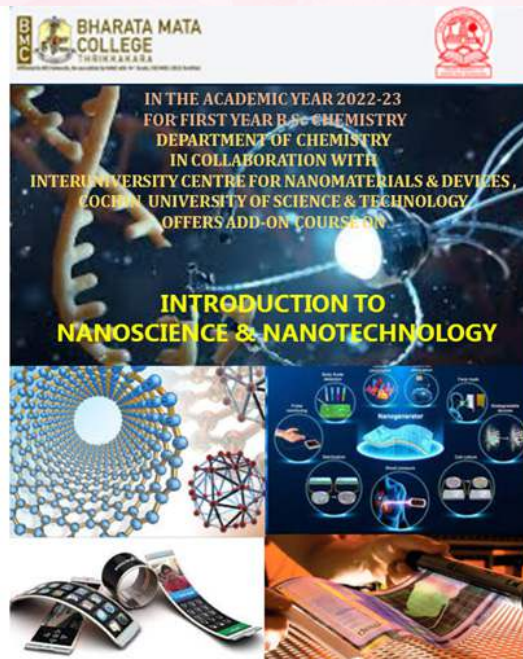
Course coordinator: Dr. Divya Jose

It was decided in the department meeting held in May 2022 that a certificate course should be conducted by the Department of Chemistry on Nanoscience and Nanotechnology in the next academic year 2022-2023. This course is open to first year B.Sc Chemistry students. Dr. Divya Jose was selected as the course coordinator of the Department.

Inter University Centre for Nanomaterials and Devices (IUCND), Cochin University of Science and Technology readily agreed to assist us to conduct the course. Prof. (Dr.) Honey John, Director of IUCND was the contact personnel. The Board of studies was constituted by the Principal in June 2023 to frame the syllabus to ensure the smooth conduct of the course. The Board of Studies included the Principal, all the Faculty of Departments, and three Members of IUCND. Head of the Department of Chemistry Dr. Sindhu Joseph was the Chairperson of the Board of Studies, Texin Joseph, Head of the Department of Chemistry, St. Paul's College, Kalamassery was the external expert.

The Board of Studies met in the months of June and July and decided that the course title was Introduction to Nanoscience and Nanotechnology and also framed and approved the syllabus. An MOU was signed between IUCND and Principal regarding the conduct of the course. The course commenced on 20-10-2022 and concluded on 2nd May 2023. 27 students enrolled for the course in the academic year 2022-23. Dr. Jelmy E.J Post Doc Fellow and Dr. Nisha T .P Post Doc Fellow in IUCND were the resource persons for the classes. Classes were conducted on Wednesdays and Thursdays 3.30 to 4.30 p.m. 30 hour classes were engaged for completing the syllabus during Saturdays, Valuation Camp Days etc.

A summative assessment was conducted at the end of the course. 26 students passed the exam (1 student took TC from the College and joined in Engineering/Medical Field). The certificates were issued for the completion of the course.



MOOC Courses Attended details

Sl No.	Name of the Student	Platform (SWAYAM, Edu net etc.)	Name of the Course
1	Afnitha M A	MG University	Organic Farming
2	Aiswarya Lakshmi K M	MG University	Organic Farming
3	Amal Sunny	MG University	Organic Farming
4	Angel Antony P	MG University	Organic Farming
5	Anu Paul K	MG University	Organic Farming
6	Dev Dilip	MG University	Organic Farming
7	Fousiya C M	MG University	Organic Farming
8	Harriet Ros Benny	MG University	Organic Farming
9	Josiya Johny	MG University	Organic Farming
10	Liyana Pallachi	MG University	Organic Farming
11	Merin Johnson	MG University	Organic Farming
12	Muhammed Midlaj K B	MG University	Organic Farming
13	Nandana S	MG University	Organic Farming
14	Sanjay T A	MG University	Organic Farming
15	Shahna Aysha	MG University	Organic Farming
16	Suman M Subair	MG University	Organic Farming
17	Aleena C N	MG University	Organic Farming
18	Arathi M Rose	MG University	Organic Farming
19	Aysha Beevi Marakkar	MG University	Organic Farming
20	Bhavana Suresh	MG University	Organic Farming

21	Binny Joseph	MG University	Organic Farming
22	Devika Rajesh	MG University	Organic Farming
23	Divya Minch	MG University	Organic Farming
24	Diya Fathima	MG University	Organic Farming
25	Hridya Varma P	MG University	Organic Farming
26	Labeeba T N	MG University	Organic Farming
27	Muhammed Shin K N	MG University	Organic Farming
28	Nandana Shaji	MG University	Organic Farming
29	Niranjana Krishna K	MG University	Organic Farming
30	Pavithra P Prakash	MG University	Organic Farming
31	Rohith K Sukumaran	MG University	Organic Farming
32	Sandra Sivadas	MG University	Organic Farming
33	Sona Jaison	MG University	Organic Farming
34	Sradha A S	MG University	Organic Farming
35	Sumithra S S	MG University	Organic Farming

Department level Infrastructure

Number of Classrooms : 5

Computers & Peripherals

Laptops : 1

PCs : 5

Projectors : 6

Printers : 2

Furniture & Fittings

Desk : 46

Bench : 46

Tables : 90

Chairs : 50

Almirah : 6

Shelf : 20

Lab Equipment

Instrumentation Room

1. Nicolet iS5 FTIR spectrometer of Thermofischer

2. IM 3570 Impedance Analyzer of Hioki

3. Spin Coater

4. Litesizer 500 Zeta Nanosizer of Anton Parr

Other equipments

Rotavapour

Microwave oven

Millex, Durapore filter

Visible spectrophotometer

Digital Ultrasonic Bath

Photoreactor chamber

Muffle furnace

Magnetic Stirrer : 5

Computer with printer

Hot Air Oven : 4

Autoclave 22 Ltr : 1

Soxhlet Extraction Unit

Digital Ultrasonic Bath

Magnetic Stirrer

Computer with printer

Autoclave 10 Ltr

Homogenizer

Distillation unit

Refrigerator

Mechanical Stirrer

Department Meetings

Departmental meetings are opportunities for everyone in the department to assemble and speak in person about various aspects to be taken care of for the smooth running of the department. They happen on a consistent basis. A positive department meeting strengthens relationships and helps to collaborate, work more efficiently with team members, lowers staff stress, and encourages engaging conversations. The official department meeting will be held at least three times in an academic year apart from instant online/offline meetings as and when required. HOD/HOD in charge will preside over the meeting and one of the faculty is assigned to maintain the minutes of the meeting.

Main topics for discussion:

- Students' attendance
- Students' participation in the departmental activities
- Internal exams
- Plan the activities to be done in the next three months
- Review of activities of previous months
- Assigning duties to teachers for various departmental programmes



Retired Teachers' Get-Together



BHARATA MATA COLLEGE
THRIKKAKARA

Your comfort place

ComeFORT
Your comfort place

പ്രിയ കൂട്ടുംബന്ധം...

കാതൊരാളെയും 37 വർഷത്തെ പ്രയാണത്തിൽ അങ്ങ് തരികിയ ഊർജ്ജം അങ്ങീക്ക് പ്രചോദനം നൽകുന്നു. അങ്ങയുടെ പാവപാ ദേവതയുടെപേര്യാം സ്മരണയാം സ്വീകരിച്ചുകൊണ്ട് കാതൊരാളെയും മികവിന്റെ വഴികളിൽ ഓർജ്ജമേറിയവീര്യങ്ങളുള്ള യാത്രയിലോ ഞാനു് താരതമ്യപ്പെടുത്തും അറിയിക്കുന്നു. നമ്മുടെ കരുണയിലേ, മലയാളം വാരാജി, കലാരാസ്യങ്ങളിലേക്കി, ജ്ഞാനാസിദ്ധിയിലേ, പുസ്തകം, മൂന്നു് ശുഭകർമ്മം, ഇന്നാദികൾ, പരീക്ഷണശാലകൾ, പാഠശാലകൾ, മാധ്യമപ്രവർത്തനം, പരിപാടികൾപോലെയ് ഞങ്ങളിലുള്ള രാസം ഇവയെല്ലാം അങ്ങങ്ങളോടുകൂടിയ്ക്കി അറിയിക്കുവേണ്ടി കാണിക്കുന്നു. നിങ്ങളും അങ്ങയോട് സമ്പർക്കത്തിലിരിക്കുന്ന മുൻപിനെ കഴിക്കേണ്ടതും, നിങ്ങളോട് ഇങ്ങനെയ്ക്കൊരു കാര്യമെങ്കിലും പ്രാർത്ഥിക്കുക അങ്ങയ്ക്കും ഈ കാര്യമെന്തിനെയ്ക്കും അല്ലെങ്കിലും കണ്ടെത്തുന്ന നമ്മളെക്കാൾ ഈ കാര്യമെന്തിനെയ്ക്കും മുൻപിനെയ്ക്കും അറിയാം. മറ്റു സ്മരണകൾ തുടർച്ചയായും പരസ്പരം കാണാം, സംസാരിക്കാം, കേൾക്കാം, ഒന്നിച്ച് അടങ്ങിക്കൂടാം, വരുത്തുക...

NOVEMBER 26 2022
SATURDAY 10.00 AM

VENUE : BMIM (NEW MBA HALL)

Rev. Fr. Dr. Abraham Olapureth
Manager
Bharata Mata College

Dr. Johnson K M
Principal
Bharata Mata College



Alumni Interaction

FROM BMC TO RESEARCH IN SPAIN

Date: 25/06/2022

Venue: Online

An alumni interaction with Gibu George, BSc alumni was held on 25 th June 2022 in the online mode. He completed his BSc in the Department of Chemistry, Bharata Mata College in the year 2017 and is now pursuing Ph.D

in theoretical chemistry in the Institute of Computational Chemistry and Catalysis, Uniiversity of Girona, Spain.

The talk titled, "From BMC to Research In Spain" was held at 3.30 pm in the google meet platform. Christima

Shajo compered the program. Dr. Litty Sebastian, the teacher coordinator warmly welcomed Gibu and Dr.Sindhu Joseph, HOD, Department of Chemistry and everyone else to the session. Gibu talked about the procedure to apply for Ph.D in Spain and listed the webpages that lists such opportunities for the students. The talk was followed by an interactive session wherein students interacted freely with Gibu. He deliberated on how to plan a career abroad and detailed the various steps the students have to take now. Sandra K.S., II M.Sc student gave the formal vote of thanks.

BMC BHARATA MATA COLLEGE
THE BHARATA MATA GROUP OF INSTITUTIONS

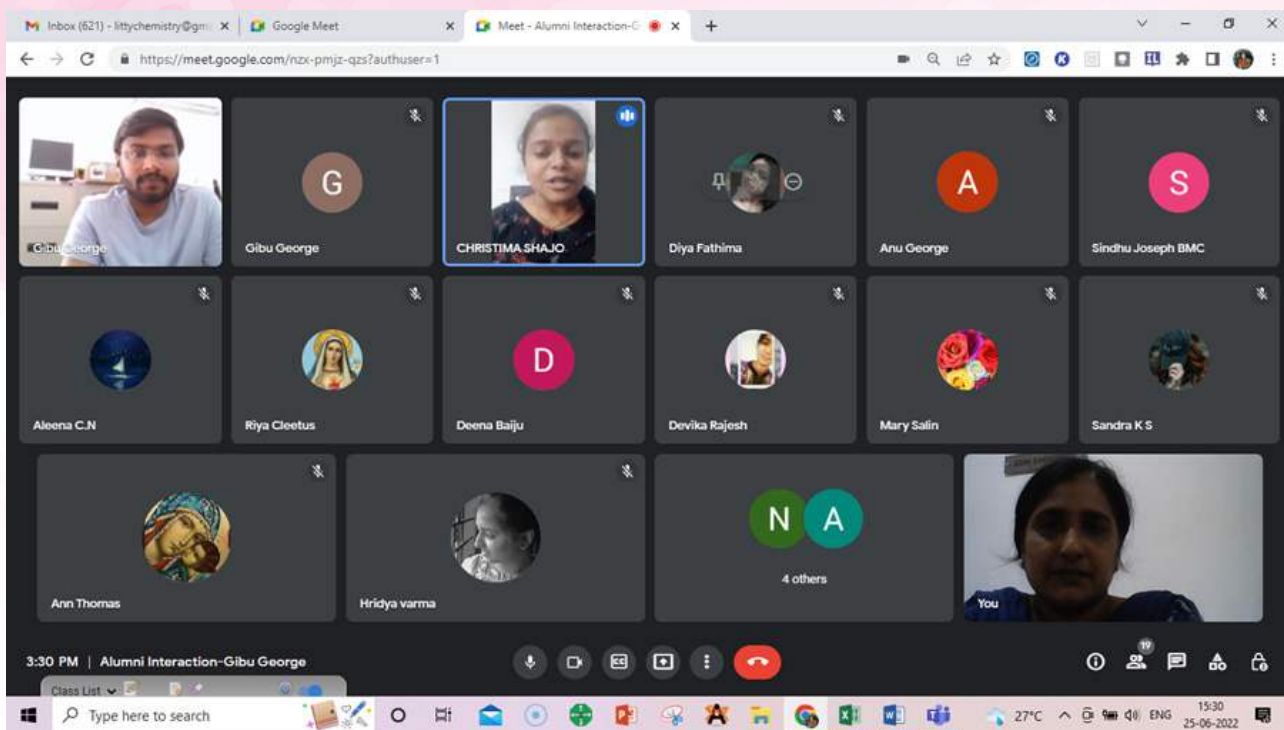
Department of Chemistry
Bharata Mata College

Alumni Interaction

BMC TO RESEARCH IN SPAIN

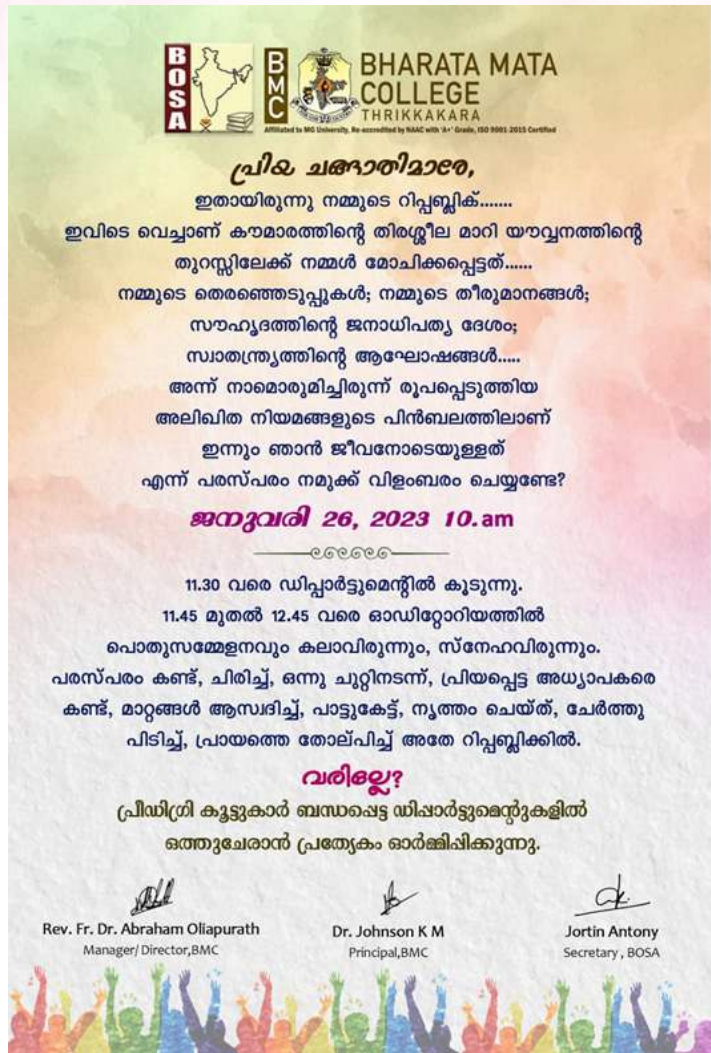
Gibu George (B.Sc Alumni 2014-17)
Research Scholar
Institute of Computational Chemistry & Catalysis, University of Girona, Spain

25-06-2022, 3.30 pm IST
<https://meet.google.com/nzx-pmjz-qzs>



Alumni Meet

Department of Chemistry of Bharata Mata College organized an alumni meet to bring together the former students of the department. The purpose of this alumni meet was to provide an opportunity for alumni to reconnect with their alma mater, network with fellow graduates, and share their experiences. The event was conducted on 26/01/2023 at 10.30 am at the 3rd year Chemistry classroom. Invitations were sent to different alumni groups well in advance of the event. The meeting started with a silent prayer followed by the welcome speech by Dr. Sindhu Joseph, HoD, Department of Chemistry. After the welcome speech, the former students shared their memories at Bharata Mata College. After an interactive session, the meeting ended with the vote of thanks by Dr. Anu K John, faculty of Chemistry Department. 20 former students participated in the meeting. The annual alumni meet provided an opportunity for the alumni to maintain their connections with their alma mater and to contribute to the continued success of the college.



Alumni Meet





PTA

PTA meeting of the II DC students was held on 31 st January 2023. The parents met the class teacher, Dr. Litty Sebastian who is also teaching chemistry course to the students. The parents were briefed in detail about the first and second internal marks of their children and also, the measures to be taken to improve their results. The discussion also focussed on the future career plans of the students and the ways in which the college can support in achieving their dreams. Some students were advised to go for college placement services, others were motivated to pursue their higher education abroad. Remedial measures taken by the college was also discussed. 21 parents came for the meeting and the one to one interaction with the parents and the students was held in the Department of Chemistry. The parents also met the Head of the Department, Dr. Sindhu Joseph.



II B.SC CHEMISTRY PTA Meeting 31-01-2023

Venue: Department of Chemistry



Student Projects

Roll No	Name of Student	Topic of Project	Research Supervisor
20C2121	Afnitha M A	Synthesis And Characterisation Of Flower Shaped Nanoparticles Of Zinc Oxide	Dr. Divya Jose
20C2122	Aiswarya Lakshmi K M	Green Synthesis Of Copper Oxide Nanoparticles Using Plassifora Foetida Leaf Extract	Dr. Jinsa Mary Jacob
20C2123	Amal Sunny	Green Synthesis Of Copper Oxide Nanoparticles Using Plassifora Foetida Leaf Extract	Dr. Jinsa Mary Jacob
20C2124	Angel Antony P	Green Synthesis Of Copper Oxide Nanoparticles Using Plassifora Foetida Leaf Extract	Dr. Jinsa Mary Jacob
20C2125	Anu Paul K	Green Synthesis Of Copper Oxide Nanoparticles Using Plassifora Foetida Leaf Extract	Dr. Jinsa Mary Jacob
20C2126	Dev Dilip	Green Approach To Organic Synthesis: Microwave Assisted Synthesis Of Schiff's Base	Dr.Amrutha U
20C2127	Fousiya C M	Green Approach To Organic Synthesis: Microwave Assisted Synthesis Of Schiff's Base	Dr.Amrutha
20C2128	Hariet Ros Benny	Green Approach To Organic Synthesis: Microwave Assisted Synthesis Of Schiff's Base	Dr.Amrutha U
20C2129	Josiya Johny	Green Approach To Organic Synthesis: Microwave Assisted Synthesis Of Schiff's Base	Dr.Amrutha U
20C2130	Liyana Pallachi	Green Synthesis Of Tio ₂ Nanoparticles Using Chromolaena Odorata	Dr. Anu K John
20C2131	Merin Johnson	Zinc Loaded Chitosan Nanoparticles: A Promising Nanocarrier For Plant Growth	Dr. Sindhu Joseph
20C2132	Muhammed Midlaj K B	Synthesis And Characterisation Of Flower Shaped Nanoparticles Of Zinc Oxide	Dr. Divya Jose

20C2133	Nandana S	Green Approach To Organic Synthesis: Microwave Assisted Synthesis Of Schiff's Base	Dr.Amrutha U
20C2134	Sanjay T A	Ground Water Quality Of Open Wells Around Thrikkakara Municipality Of Ernakulam District, Kerala, India	Manu Mohan
20C2135	Shahna Aysha	Ground Water Quality Of Open Wells Around Thrikkakara Municipality Of Ernakulam District, Kerala, India	Manu Mohan
20C2136	Suman M Subair	Ground Water Quality Of Open Wells Around Thrikkakara Municipality Of Ernakulam District, Kerala, India	Manu Mohan
20C1101	Aleena C.N.	New Lewis Acid Catalysts For Biginelli Reaction Of Benzaldehyde With Thiourea	Dr. Litty Sebastian
20C1102	Arathi M Rose	New Lewis Acid Catalysts For Biginelli Reaction Of Benzaldehyde With Thiourea	Dr. Litty Sebastian
20C1103	Aysha Beevi Marakkar	New Lewis Acid Catalysts For Biginelli Reaction Of Benzaldehyde With Thiourea	Dr. Litty Sebastian
20C1104	Bhavana Suresh	New Lewis Acid Catalysts For Biginelli Reaction Of Benzaldehyde With Thiourea	Dr. Litty Sebastian
20C1105	Binny Joseph	Zinc Loaded Chitosan Nanoparticles: A Promising Nanocarrier For Plant Growth	Dr. Sindhu Joseph
20C1106	Devika Rajesh	Zinc Loaded Chitosan Nanoparticles: A Promising Nanocarrier For Plant Growth	Dr. Sindhu Joseph
20C1107	Divya Minch	Zinc Loaded Chitosan Nanoparticles: A Promising Nanocarrier For Plant Growth	Dr. Sindhu Joseph
20C1108	Diya Fathima	Zinc Loaded Chitosan Nanoparticles: A Promising Nanocarrier For Plant Growth	Dr. Sindhu Joseph
20C1109	Hridya Varma P	Green Synthesis Of TiO ₂ Nanoparticles Using Chromolaena Odorata	Dr. Anu K John

20C1110	Labeeba T N	Green Synthesis Of Tio ₂ Nanoparticles Using Chromolaena Odorata	Dr. Anu K John
20C1112	Nandana Shaji	Green Synthesis Of Tio ₂ Nanoparticles Using Chromolaena Odorata	Dr. Anu K John
20C1113	Niranjana Krishna K	Ground Water Quality Of Open Wells Around Thrikkakara Municipality Of Ernakulam District, Kerala, India	Manu Mohan
20C1114	Pavithra P Prakash	Antibacterial Study Of Microwave Assisted Green Synthesis Of Silver Nanoparticles From Biophytum Sensitivum Plant Extract	Baiju K P
20C1115	Rohith K Sukumaran	Antibacterial Study Of Microwave Assisted Green Synthesis Of Silver Nanoparticles From Biophytum Sensitivum Plant Extract	Baiju K P
20C1116	Sandra Sivadas	Antibacterial Study Of Microwave Assisted Green Synthesis Of Silver Nanoparticles From Biophytum Sensitivum Plant Extract	Baiju K P
20C1117	Sona Jaison	Synthesis And Characterisation Of Flower Shaped Nanoparticles Of Zinc Oxide	Dr. Divya Jose
20C1118	Sradha A S	Synthesis And Characterisation Of Flower Shaped Nanoparticles Of Zinc Oxide	Dr. Divya Jose
20C1119	Sumithra S S	Synthesis And Characterisation Of Flower Shaped Nanoparticles Of Zinc Oxide	Dr. Divya Jose

Student achievements - co curricular / Sports activities

Sl No	Name of the Student	Class	Achievement	Position	University/ Institution
1	Aswathy Asokan	M.Sc 2020-22	Rank in M.Sc Pharmaceutical Chemistry	1st rank	M.G University
2	Aysha Nasrin	M.Sc 2020-22	Rank in M.Sc Pharmaceutical Chemistry	6 th rank	M.G University
3	Anaswara k.S.	M.Sc 2020-22	Rank in M.Sc Pharmaceutical Chemistry	7 th rank	M.G University
4	Anagha A B	M.Sc 2020-22	Rank in M.Sc Pharmaceutical Chemistry	8th rank	M.G University
5	Vishnu V.S.	III DC pass out	K.J. George Kureeckal Memorial Award for B.Sc Chemistry Student securing highest mark in part III Chemistry Main		Bharata Mata College, Thrikkakara
6	Merin Johnson	III DC	Prof Kurias J Kadavan Award for final year B,Sc Chemistry student securing highest mark in chemistry for the first and second year university examinations		Bharata Mata College, Thrikkakara
7	Aswathy Ashokan	II M.Sc	Augustine Paul Award for the Best Outgoing Student of M.Sc Applied Chemistry		Bharata Mata College, Thrikkakara
8	Sumithra S.S	III DC	Prof K.E. Antony Memorial Scholarship for Meritorious B.Sc student to pursue higher studies in Chemistry		Bharata Mata College, Thrikkakara
9	Diya Fathima	III DC	Xaverian National Award for Outstanding Young Woman Scientist 2022	-	Department of Chemistry, St.Xaviers College, Aluva
10	Diya Fathima	III DC	Best Paper Award at Albertian Knowledge Summit.	-	Department of Chemistry, St. Alberts College, Ernakulam
11	Diya Fathima	III DC	Dr Shiny Palatty Award for All Rounder among Chemistry students	-	Bharata Mata College, Thrikkakara

12	Diya Fathima	III DC	Prof. Kurias J Kadavan Award for securing highest marks in Chemistry in the 1st and 2nd year exams of the Mahatma Gandhi University.	-	Bharata Mata College, Thrikkakara
13	Swetha R	I DC	Light Music	II	Arts Day, Bharata Mata College, Thrikkakara
14	Swetha R	I DC	Oppana	III	M.G. University
15	Dhiya Jose	I DC	Javalin Throw	I	Sports Day, Bharata Mata College, Thrikkakara
16	Dhiya Jose	I DC	100 m race	III	Sports Day, Bharata Mata College, Thrikkakara
17	Dilna, Farha Mol, Sahala, Anamika, Eleain, Dhiya and Swetha	II DC & I DC	Patriotic Song competition	III	Department of Hindi, Bharata Mata College, Thrikkakara
18	Seniya, Ann, Rakhitha T.S.		Christmas tree making	II	Department of Physics, Bharata Mata College, Thrikkakara
19	Nasli Asharaf Ali & Swetha R	I DC	Quiz Competition	I	Union Bank of India
20	Ramoun Al- ande and Nasli Asharaf Ali	II DC & I DC	Quiz on Constitution	III	Department of Chemistry, Bharata Mata College, Thrikkakara
21	Farha Mol P.U	II DC	Oppana	III	M.G University
22	Farha Mol P.U	II DC	Mappillappattu	I	Arts Day, Bharata Mata College, Thrikkakara
23	Abhijith Babu	II DC	Pencil Drawing	I	Arts Day, Bharata Mata College, Thrikkakara
24	Merin Joy and Fathima	II M.Sc	Azadi ka Amrut Mahotsav Independent Quiz Competition	II Prize	Department of Chemistry, Bharata Mata College, Thrikkakara

25	Merin Joy	II M.Sc	Bottle Art Competition	I	S.H. College, Thevara
26	Merin Joy	II M.Sc	Slogan Writing Competition on Anti Drug Day	III	Bharata Mata College, Thrikkakara
27	Niranjana Krishna & Nasli Asharaf Ali	III DC , I DC	Intercollegiate Science Quiz Competition	III	Department of Chemistry, Sree Sankara Vidyapeetom College, Valayanchirangara
28	Niranjana Krishna & Liyana Pallachi	III DC	Quiz Competition -Inter departmental GST day quiz competition	I st	Department of Commerce, Bharata Mata College, Thrikkakara
29	Merin Joy	II M.Sc	Paper Presentation titled 'Effect of PEG-capped metal oxide nanofillers on the antistatic property of natural rubber composites'		ICNP 2023 - International Hybrid Conference on Nano Structured Materials and Polymers, May 12-14, 2023 organised by International & Inter University Centre for Nanoscience and Nanotechnology, MG University



BHARATA MATA COLLEGE
THRIKKAKARA

Affiliated to MG University, Re-accredited by NAAC with 'A+' Grade, ISO 9001:2015 Certified

Mahatma Gandhi University
Rank Holder

Congratulations

1st Rank



Aswathy Asokan
MSc Pharmaceutical Chemistry

6th Rank



Aysha Nazrin
MSc Pharmaceutical Chemistry

7th Rank



Anaswara K S
MSc Pharmaceutical Chemistry

8th Rank



Anagha A B
MSc Pharmaceutical Chemistry





The Oppana team of Bharata Mata College bags third prize in the M G University Youth Festival hosted by Maharaja's College (Autonomous), Ernakulam. Farhamol U., and Swatha R of B. Sc Chemistry were also part of the Oppana team.



Ms. Diya Fathima received Best paper Award for Oral presentation in the Albertian Knowledge Summit 2023 organized by St. Albert's College (Autonomous), Ernakulam on 02.02.2023.



Ms. Diya Fathima, Dr. Sindhu Joseph and Ms. Sandra K. S presented their papers in the Albertian Knowledge Summit 2023 organized by St. Albert's College (Autonomous), Ernakulam on 02.02.2023.



Merin Joy II M.Sc received Frist Prize for Bottle Art Competition Oroganized by Bhoomithrasena Club of S.H. College, Thevara




ആലുവ സെന്റ്സേവ്യേഴ്സ് വനിതാ കോളേജിൽ 'സേവേറിയൻ നാഷണൽ അവാർഡ് ഫോർ ഔട്ട്സ്റ്റാൻഡിംഗ് യംഗ് വുമൺ സയന്റിസ്റ്റ് 2022' അവാർഡ് പ്രഖ്യാപന ചടങ്ങിൽ കോളേജിലെ കെമിസ്ട്രി വിഭാഗം വിദ്യാർത്ഥിനി ദിയ ഫാത്തിമയ്ക്ക് കോയമ്പത്തൂർ ഷുഗർ കെയിൻ ബ്രിഡിംഗ് ഇൻസ്റ്റിറ്റ്യൂട്ട് ഡയറക്ടർ ഡോ. ജി. ഹേമ പ്രഭ കൈമാറുന്നു


സേവേറിയൻ നാഷണൽ അവാർഡ് സമ്മാനിച്ചു




Ms. Diya Fathima receiving the Xaverian National Award for Outstanding Young Woman Scientist, 2022



BHARATA MATA COLLEGE
THRIKKAKARA



പാഥേയം
CHEMISTRY DEPARTMENT



FOOD DRIVE

18-11-2022



Fr. Jimmichan Karthanam blessing the 'Padheyam' food packets before distribution to destitutes



Fr. Jain Periyappadan CMI - Alumnus of Chemistry Department with Teachers and Batchmates



Airapuram, Kerala, India

256X+MB, Airapuram, Kerala 682556, India

Niranjana Krishna and Nazli Ashraf secured 3rd prize in intercollegiate Quiz Competition in connection with international Mole day conducted by PG Department of Chemistry, Sree Sankara Vidyapeedam College, Valanchiragara



Ramoun Alandae and Nasli Ashraf of Chemistry department received 3rd Prize for Interdepartmental quiz competition on Indian constitution

Faculty Attended Programmes

FDPs/ STTPs/Workshops/Seminars / Conference/ Webinar

Total Number of FDPs/ STTPs	: 4
Total Number of Workshops	: 2
Total Number of Seminars / Conference	: 1
Total Number of Webinar	: 10

Name of faculty	Name of Programme	Date/s	Conducting Agency	FDPs/ STTPs/ Workshops/ Seminars / Webinar
Dr. Anu K John	Faculty Development programme for college/university teachers	12/12/2022 to 17/12/2022	M G University	FDP
Dr. Anu K John	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference
Dr. Sindhu Joseph	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference
Dr. Litty Sebastian	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference
Baiju K. P	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference
Dr. Divya Jose	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference
Dr. Jinsa Mary Jacob	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference

Dr. Anu George	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference
Dr. Amrutha U.	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference
Dr. Nimya Ann Mathews	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference
Manu Mohan	International conference on Materials Science	9th & 10th January 2023	Bharata Mata College in collaboration with M G University	International conference
Dr. Jinsa Mary Jacob	Science And Technology Of Advanced Materials (Stam 23)	18-20 April, 2023	Mar Athanasius College (Autonomous) Kothamangalam	International conference
Dr. Sindhu Joseph	Science And Technology Of Advanced Materials (Stam 23)	18-20 April, 2023	Mar Athanasius College (Autonomous) Kothamangalam	International conference
Dr. Sindhu Joseph	Albertian Knowledge Summit AKS 2023	02.02.2023	St. Albert's College (Autonomous), Ernakulam.	National Seminar
Dr. Sindhu Joseph	Rajagiri Research Day 2023 and International Lecture	25.02.2023	Rajagiri College of Social Sciences	International Seminar
Dr. Sindhu Joseph	Distinguished lecture by Prof. Pierre H. Dixneuf	08.12.2022	Department of Chemical Oceanography, School of Marine Sciences, CUSAT	International Seminar
Dr. Sindhu Joseph	Chemistry and Applications of Soft Materials	25- 27 July 2022	CSIR- National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram.	International Conference

Dr. Jinsa Mary Jacob	Nano Structured Materials and Polymers Conference (ICNP 2023)	12-14 May, 2023	MG University	International Conference
Dr. Jinsa Mary Jacob	Materials for the Millennium MATCON 2023	12-14 January, 2023	CUSAT	International Conference
Baiju K P	NTAC 2023	07.02.2023-08.02.2023	S H College, Thevara	International Symposium

Research Contributions

Publications – Faculty

Dr.Divya Jose	Research Publication	Scopus Indexed	Enhanced Triboelectric Performance of Graphene oxide-Conducting Polymer Hybrid Modified Polydimethylsiloxane Composites,	Materials Advances, Royal Society of Chemistry, 2022	DOI: 10.1039/D2M A00771A
Dr.Divya Jose	Research Publication	Scopus Indexed	Triboelectric nanogenerator based on polyaniline nanorods incorporated PDMS composites through a facile synthetic route"	Journal of Materials Science: Materials in Electronics, Springer Nature	
Dr.Divya Jose	Research Publication	Scopus Indexed	Enhanced Mechanical Energy Harvesting in Triboelectric Nanogenerator by the Reinforcement of Polypyrrole-Decorated rGO sheets in PDMS.	Advanced Engineering Materials	DOI: 10.1002/adem. 202201789

Research Publication in the
ADVANCED ENGINEERING MATERIALS
of Wiley Online Journal
Impact Factor 4.112 and
Science Citation Indexed (Clarivate Analytics)

Title of the Paper
"Enhanced Mechanical Energy Harvesting in
Triboelectric Nanogenerator by the Reinforcement of
Polypyrrole-Decorated rGO Sheets in PDMS"

Year of Publication: 2023
Dr. Divya Jose
Assistant Professor
Research and Postgraduate Department of Chemistry
Bharata Mata College, Thrikkakara

Co-authors
Jitay Elavithalappil Jibay, Vijay Kishorendr Varadhan,
Siji Kuchiyil Jaegh, Henry John
(Department of Polymer Science and
Engineer Technology CUSAT)

Congratulations

Internal Quality Assurance Cell

PG Dissertation

Roll No	Name of Student	Topic of Project	Research Supervisor	Agency/ Company associated (if any)
21C201	Aleena Augustine	Mobility and Bioavailability of sediment bound phosphate in ashtamudi wetland, Kerala	Dr.Ratheesh. Kumar C S., Baiju K. P.	School of Environmental Studies, CUSAT
21C202	Anila Johnson	Synthesis characterization and antibacterial studies of Zinc oxide nanoparticles incorporated chitosan films against staphylococcus Aureus bacteria	Dr. Divya Jose	
21C203	Ann Maria Thomas	chitosan zinc nanocomposite: A promising slow releasing zinc nano fertilizer and its application in finger millet (Eleusine coracana)	Dr. Theivanayagam Maharan, Dr. Sindhu Joseph., Jaiby Cyriac	Rajagiri College of social sciences, Kalamassery
21C204	Ann Mary Varghese	Chitosan zinc nanocomposite: A promising slow-release zinc nano fertilizer for the growth of proso millet (Panicum miliaceum)	Dr. Theivanayagam Maharan, Dr. Sindhu Joseph., Jaiby Cyriac	Rajagiri college of social sciences, Kalamassery
21C205	Blessy P. Baby	Green synthesis of TiO ₂ nanoparticles using Chromolaena Odorata :Exploring its photocatalytic activities	Dr. Anu K John	

21C206	Deena Baiju	Synthesis, characterization and antibacterial studies of zinc oxide nanoparticles incorporated chitosan films against pseudomonas aeruginosa bacteria	Dr. Divya jose	
21C207	Fathima latheef M. A	Synthesis of Dihydropyrimidones by new Lewis acid catalysts using Biginelli reaction.	Dr. Litty Sebastian	
21C208	Manasi K. A	Synthesis and molecular docking study of chalcone	Dr. Amrutha U	
21C209	Merin Joy	Effect of PEG-capped metal oxide nanofillers on the antistatic property of natural rubber composites.	Dr. Jinsa Mary Jacob	
21C210	Nadiya A. A	Green synthesis of TiO ₂ nanoparticles using chromolaena Odorata:- exploring its antibacterial activities.	Dr. Anu k john	
21C211	Rose Mariya T Paul	Transformation on Single-Metal Exchanged Au ₂₃ Nanocluster	Prof.(Dr.) Sukhendu Mandal., Dr. Anu George	School of Chemistry, Indian Institute of Science Education and Research, Thiruvananthapuram
21C212	Shahanas. K. N	Sequential extraction of metal fraction in forest soil of central kerala zone	Dr. Ratheesh Kumar C. S., Baiju K.P	School of Environmental Studies, CUSAT
21C213	Sruthy Mol P.B	Synthesis and characterization of copper oxide nano particle using hydrothermal	Dr. Jinsa Mary Jacob	

Resource Person in Seminars

Name of the Faculty	Type of Program Attended (FDPs/ STTPs/ Workshops/ Seminars/ Conference/ Webinar)	Date/ Dates of Program	Title of the Program	Institution or agency organized the Program
Dr. Sindhu Joseph	World Environment Day - 2022	06/06/2022	Only One Earth - One Planet, One Future	St. Paul's College, Kalamassery
Dr. Sindhu Joseph	Inauguration of Science Exhibition,	22-08-2022	'RISE – 2022- Rajagiri Initiates Scientific Erudition',	Govt.Higher Secondary School, Pezhappappilly
	Rajagiri Higher Secondary School, Kalamassery	5-04-2022	Environment Management Training-Workshop for Academic Fraternity	Bharata Mata College, Thrikkakara
Dr. Divya Jose	Invited talk on 'Innovation/Prototype Validation-Converting Innovation into a Start-Up'	31-08-2022	Orientation talk for Members of Innovation Cell and Chemistry Students	Department of Chemistry and Institution Innovation Council, Vimala College (Autonomous), Thrissur
Dr. Divya Jose	Invited talk on 'Scientific Experiments leading to Inventions/ Innovations or Start-Ups'	28-09-2022	Orientation for Computer Science students	Department of Computer Science, Bharata Mata College, Thrikkakara



DST - FIST progress presentation at University of Hyderabad by Dr. Sindhu Joseph (Dean of Research) on 02. 08. 2022





Rajagiri Higher
Secondary School
Kalamassery




RISE

Rajagiri Initiates
Scientific Erudition




**ST. PAUL'S COLLEGE
KALAMASSERY**



**Department of Chemistry
And
ENCON Club
Celebrates**

WORLD ENVIRONMENTAL DAY-2022
Only One Earth
Topic- One planet, One Future

**Chemistry Association Inauguration &
talk by**



Dr. Sindhu Joseph
HOD, Department of Chemistry
Bharat Mata College
Thrikakkara

Organizing committee
Dr. Sreya Suresha George (HOD)
Mency Jacob (ENCON Club Coordinator)
Mency George (ENCON Club Coordinator)
Maria Augustine (Association Secretary)
Tania Joseph
Dr. Minicy Jay
Tania Thomas
Prathiba C.Rail

**06/06/2022
10am
Seminar Hall**



Department of Computer Science



Special Innovation Session
on
Scientific experiments
leading to
inventions/Innovations
or Start-ups

Dr. Divya Jose by

Asst. Professor, Dept. of Chemistry
Sep 23, 2022 @ 1:30 PM

Mar Abraham Kattumana Seminar Hall

Dr John T Abraham
HoD

Students Placed

SI No	Roll No	Name of the Student	Institution Placed	CTC
1	20C2123	Amal Sunny	MRF (Supervisor- Technical)	2.86 LPA
2	20C2124	Angel Antony P	KGiS	2.60 LPA
3	20C1104	Bhavana Suresh	CAREREVENUE (Claims Specialist)	2.53 LPA
4	20C1103	Aysha Beevi Marakkar	Sutherland (Associate)	2.5 LPA
5	20C1116	Sandra Sivadas	Sutherland (Associate)	2.50 LPA
6	20C1119	Sumithra S S	ICICI Prudential (Trainee Sales)	2.60 LPA
7	20C2136	Suman M Subair	Sutherland content writer	2.50 LPA
8	20C2125	Anu Paul K	Sutherland Associate	2.5 LPA
9	20C1102	Arathi M Rose	Sutherland Associate	2.50 LPA
10	20C2127	Fousiya C M	HDFC (Trainee - Personal Banker)	3.5 LPA
11	20C2135	Shahna Aysha	slbs placement coordinator	1.80 LPA



BMC **BHARATA MATA COLLEGE**
THRIKKAKARA
Offer# 27 - 32

Congratulations

Successfully placed in SUTHERLAND

UNION : NOUN

Arya Shibu B.Sc Maths	Suman M Subair B.Sc Chemistry	Arathi M Rose B.Sc Chemistry	Anu Paul K	Krishnakanth N B.Com CA	Abhijith S

CTC : 2.50 LPA Designation : Associate

With Best Wishes: **Rev. Fr. Dr. Abraham Ollapurath** (Manager) **Dr. Johnson KM** (Principal)

BMC **BHARATA MATA COLLEGE**
THRIKKAKARA
Offer# 59 - 63

Congratulations

Successfully placed in FOCUS EDUMATICS

UNION : NOUN

Esther Antony B.Sc Zoology	Aysha M M B.Sc Zoology	Bhavana Suresh B.Sc Chemistry	Aysha Beevi M B.Sc Chemistry	Adithya B Vinu B.Sc Botany

CTC : 2.50 LPA Designation : Online Tutor

With Best Wishes: **Rev. Fr. Dr. Abraham Ollapurath** (Manager) **Dr. Johnson KM** (Principal)



Students who went for Higher Education

Teaching learning innovative practices promote the use of active teaching techniques that help teachers develop their students' learning abilities. The following innovative practices are undertaken by the faculty members of Chemistry department for improving teaching and learning experience

Innovative Practices	Outcome
Lecture method	Hands on experience, Peer-to- peer Learning Experiential learning, Collaborative Learning Audio-Visual presentations through LCD and Virtual classrooms.
Hosting exhibitions	This provides a platform for students to en- hance their subject knowledge and to show- case their communication skill by demonstrat- ing various experiments to school students.
Research presentations	Students are encouraged to present a litera- ture review to get an insight on research.
Research Instruments training	Students are given hands-on training to various research instruments which helps them to enhance their technical skills.
Major/Mini Projects	Prepare students to develop live projects on their own.
Student Seminars	Motivating students for self-Study and Group Study.
Course Assignments	Encourage student collaboration through sup- plement learning
Seminars/ Webinars/ workshops	Help students to know about the latest re- search topics and challenges and to meet various eminent speakers around the country.
Online Tutorial	Enhance the overall comprehension of stu- dents in a more dynamic way
NPTEL Lectures	Promote self-learning and to share knowledge among students

List of Research Scholars

SI No	Name	Part Time/ Full Time	Topic	Guide	Year of Admission
1	Reethumol V N	PT	Synthesis and photophysical studies of some novel triangulene compounds.	Dr. Dileesh S	2021
2	Reshma Prakash	PT	Synthesis and photophysical studies of azo substituted triangulene compounds	Dr. Dileesh S	2023

BMCian RESEARCH MEET AND TIMELINE PRESENTATION 11.02.2023

The first BMCian Research Meet and Timeline Presentation- II was held at AV Room of Bharata Mata College Thrikkakara, on 11th February at 9:30 am. The meeting began with a prayer by Bincy Joseph and Nihara Marie Thomas, Senior Research Scholars. Dr Sindhu Joseph, Dean of Research, welcomed the gathering. The meeting was inaugurated by Dr Johnson K.M, the Principal. Johnson sir made the audience understand the purpose of this meet. He also encouraged the researchers and faculty to publish more and informed them that the college is ready to meet the publication charges. The Chief Guest of the day was Sunil Prabhakar, who serves as online Consultant at Mathrubhumi. He made an elaborate discussion on the topic titled, "Internet information search for academic research". He showed how mere search engines could be converted into a library. He shared the anatomy of info search and usage of search operators which would save a lot of time during research. The audience found the session insightful. The vote of thanks was delivered by Elizabeth Joy, Senior Research Scholar. The participants included the research scholars from Commerce, Maths, Chemistry and Physics research centres. The respective guides along with the teaching faculties of these departments were present at the meeting. After lunch at MSW food court, the scholars presented the progress of their research work in their respective departments.

Guidelines to Research Scholars

1. Online registration is mandatory for all research scholars.
2. All research scholars should sign on the attendance register provided at the registration counter during 09:15 am -09:30 am
3. Research scholars should also sign on the attendance sheet, which will be circulated during the talk.
4. Certificates will not be issued to research scholars, if they fail to satisfy any of the conditions mentioned above.



For registration click here
<https://tinyurl.com/tuvj2c8d>
or scan the QR code



BMCian Research Meet 2023 Timeline Presentation-II

Organized by

Research Committee
Bharata Mata College

Session on:
Internet Information Search for Academic Research



Speaker
Sunil Prabhakar
Consultant Online, Mathrubhumi


11 February 2023


AV Room, BMC


09:30 am

Sir/Madam,

Greetings from Bharata Mata College, Kochi !!!

We are glad to extend this invitation to you for the BMCian Research Meet 2023, which is being held at Bharata Mata College, Thrikkakara under the auspices of BMCian Research Committee. Researchers from various disciplines under the different Research departments of the college can exhibit their work and engage in exchange of ideas at BMCian Research Meet. In addition, scholars can update the progress of their work during the meeting.

Rev. Fr. Dr. Abraham Oliapurath
Manager, BMC

Dr. Johnson K M
Principal, BMC

Dr. Sindhu Joseph
Dean of Research
Coordinator of Research Meet

Programme

Registration	:	09:15 am
Prayer	:	
Welcome Address	:	Dr. Sindhu Joseph Dean of Research
Inaugural Address:		Rev. Fr. Dr. Abraham Oliapurath Manager, BMC
Principal's Address:		Dr. Johnson K M Principal, BMC
Break for tea	:	11:15 am
Keynote Address	:	Sunil Prabhakar Consultant Online, Mathrubhumi
Vote of Thanks	:	Elizabeth Joy SRF, Commerce Department
Break for lunch	:	01:00 pm

Progress Presentation of Research Scholars
at Research Centres from 02.00 pm onwards

Bmc ian Research Meet 2023



Timeline Presentation of Research Scholars






**BHARATA MATA
COLLEGE**
THRIKKAKARA
Affiliated to MG University, Re-accredited by NAAC with 'A+' Grade, ISO 9001-2015 Certified

RESEARCH INDUCTION PROGRAM 2023

Organized by
Research Committee
Bharata Mata College

PROGRAM SCHEDULE

WELCOME ADDRESS : DR. SINDHU JOSEPH
(RESEARCH DEAN)

PRESIDENTIAL ADDRESS : DR. JOHNSON K. M.
(PRINCIPAL)

FELICITATION : DR. AJAY JOSEPH
(IQAC COORDINATOR)
: DR. JOSEPH JOY PUTHUSSERY
(RESEARCH COORDINATOR, COMMERCE)

RESEARCH RESOURCES
& TOOLS : MS. GREETY TOMS
(LIBRARIAN)

SELF INTRODUCTION OF NEWLY JOINED RESEARCH SCHOLARS

VOTE OF THANKS : AKHIL M. A
(RESEARCH SCHOLAR, COMMERCE)

01 March 2023 AV Room, BMC 12.30 pm



Research Induction Programme 2022

M. Sc Pharmaceutical chemistry students at the Banasura Sagar Dam - the largest Earth Dam in India and second largest in Asia



Study Tour of M. Sc Pharmaceutical chemistry students (2020 - 2022 Batch) to Wayanad

Study tour to Dandeli, Goa

30 students of Final year B. Sc Chemistry accompanied by 2 teachers, Dr. Sindhu Joseph and Dr. Jinsa Mary Jacob conducted a study tour to Dandeli and Goa from 3rd- 6th February 2023. They visited Murudeshwar temple and beach, checked into Dew Drop Jungle Resort at Dandeli, went trekking early morning near the Kali river, engaged in river rafting, water zorbing, rain dance and other water activities at Dandeli. At Goa, students visited Aguada Fort as well beach, Basilica of Bom Jesus and art gallery and Baga Beach.



Staff Tour to Village Canopy, Kumbalangi in December 2022



Industrial Visit

Gurucharan Industries, Mangalore

Coordinators - Dr. Sindhu Joseph, Dr. Jinsa Mary Jacob on 06-02-2023

On 6th February, a group of 30 students of final year B.Sc. Chemistry, accompanied by 2 teachers, Dr. Sindhu Joseph, and Dr. Jinsa Mary Jacob, visited Gurucharan Industries, located in Mangalore, as part of an industrial visit. The purpose of the visit was to provide students with a practical understanding of the manufacturing processes, quality control procedures, and operations of the industry in the real world. Gurucharan Industries is a leading manufacturer of the following: 1. Plastic Processing

Machineries. 2. Allied Machineries. 3. Spare Parts and Components of Plastic Processing & Allied Machineries. The company has state-of-the-art facilities equipped with advanced machinery and equipment to ensure the highest quality products are produced efficiently.

Upon arrival at the company, the students were greeted by the company representatives who gave them an overview of the company's history, products, and services. The students were then taken on a guided tour of the manufacturing plant, where they witnessed the various processes involved in the production of various plastic processing machineries like drilling machine, shaping machine, roll machine, plasma cutting, gas nitriding unit using ammonia and nitrogen (for hardening metal parts that work continuously), blow moulding machine for manufacturing plastic covers etc.

The industrial visit to Gurucharan Industries provided the students with valuable insights into the world of manufacturing and operations management. The visit helped the students understand the practical application of theoretical concepts learned in the classroom and provided them with an opportunity to interact with industry experts.

Overall, the visit was a success and the students gained a deeper appreciation for the manufacturing industry and its importance in the global economy.







Farewell to B. Sc Chemistry (2019- 2022 batch) and felicitation of overall A+ holders



Farewell to 4th semester M. Sc Pharmaceutical chemistry students (2020 - 2022 batch)



BHARATA MATA COLLEGE

Owned & Managed by Archdiocese of Ernakulam - Angamaly

NAAC with A+ Grade, NIRF is Ranked in the BAND of 151-200, DBT Star College

The WEEK - Hansa Survey-2023 Best Colleges of India Ranking 2nd in the State.

ISO 9001-2015 Certified

Internal Quality Assurance Cell

Website: www.bharatamatacollege.in, Email: manager@bharatamatacollege.in

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