ANNUAL REPORT 2022 -2023



PG DEPARTMENT OF BIOCHEMISTRY MARKAZ ARTS AND SCIENCE COLLEGE, ATHAVANAD

The college reopened for the academic year 2022-2023 on 1st June Wednesday.

STAFF AND STUDENTS

Biochemistry Department has 7 faculty members and 1 lab attender. Mrs. Seena P was the Head of The Department. Other faculties were Arifa P.P., Jaseela K.P., Thasleena K.K., Surur Jahan KK, Rincy CK and Maneesha Mohan. Deepika C, faculty resigned and new faculty Maneesha Mohan was appointed on 1st July. Abitha PP was the Lab attender.

Mrs.Arifa PP continued as Department Secretary for the academic year 2022-2023 also.

The department has 112 students on roll of which 87 are degree students, in which there were 13 boys and 75 girls and 25 are PG students (1 boy & 24 girls).

TOTAL NUMBER OF STUDENTS B.Sc. BIOCHEMISTRY DEGREE PROGRAMME 2022-2023

SL.NO	CLASS	NO: OF BOYS	NO. OF GIRLS	TOTAL
				STUDENTS
1	FIRST YEAR	4	13	17
2	SECOND YEAR	6	24	30
3	THIRD YEAR	3	37	40

Table 1:Number of students in B.Sc. Programme 2022-23

TOTAL NUMBER OF STUDENTS M.Sc. BIOCHEMISTRY DEGREE PROGRAMME 2021-2022:

SL.NO,	CLASS	NUMBER OF	NUMBER OF	TOTAL
		BOYS	GIRLS	
1	First year	0	10	10
2	Second year	1	14	15

Table 2: List of students in PG during academic year 2022-2023

ADVISORY DETAILS

The details of advisors were as follows;Mrs.Jaseela KP was assigned the advisory duty for first year B.Sc., Mis.Rincy CK was assigned the duty of advisor of second year B.Sc. and Mrs.Arifa PP was the advisor of third year B.Sc. Mrs.Suroor Jahan KK & Mrs. Seena P were the advisors of first and second year PG respectively.

LAST YEAR ACADEMIC RESULT

DEGREE

The number of candidates registered for the final year UG University examinations were 24. 24 students appeared for the examination and 23 passed for the examination with a pass percentage 95.8%.

POST GRADUATION

This academic year Department bagged fourth rank and ninth rank for PG examination under Calicut University.

In PG, 9 students appeared for final year University examination and 9 passed. The pass percentage was 100%. Muhammed Al Ghazi secured fourth position with CGPA 4.37 and overall grade O. Anisa Nehan bagged ninth position with CGPA 4.22 and overall grade A+.



Figure 1: Muhammed Al Ghazi -fourth position Calicut University PG examination

Figure 2: Anisa Nehan -Ninth position Calicut University PG Examination



Figure 3: Flex- congratulating winners

UNIVERSITY OF CALICUT (Pareeksha Bhavan)

No. 89755/PG-I-ASST-11/2022/PB

Calicut University.P.O Date : 30.01.2023

POSITION LIST (FINAL) M.Sc. BIOCHEMISTRY (CBCSS) EXAMINATION (April/2022)

SI No.	Name & Reg, No	College/Centre	CGPA	Grade	Position
l.	PZAUMBC010 ROBITHA P	PAZIIASSI RAJA COLLEGE PULPALLY	4.49	0	1
2.	PZAUMBC007 LAVANYA T	PAZHASSI RAJA COLLEGE PULPALLY	4.40	0	п
٦	PZAUMIBC003 ARYA S	PAZHASSI RAJA COLLEGE FULPALLY	4.39	ō	ш
4.	MZAUMBC008 MUHAMMED AL GHAZI	MARKAZ ARTS AND SCIENCE COLLEGE ATHAWANAD	4.37	0	IV
\$.	PZAUMBC012 THEERTHA SURESH KM	PAZHASSI RAJA COLLEGE PULPALLY	4.35	0	v
6.	PZAUMBC002 ARSHA KRISHNA P V	PAZHASSI RAJA COLLEGE PULPALLY	4.33	0	VI
7.	PZAUMBC001 AISWARYA S S	PAZHASSI RAJA COLLEGE PULPALLY	4.25	0	VII
8.	PZAUMBC006 LAKSHMIPRIYA S	PAZHASSI RAJA COLLEGE PULPALLY	4.23	A+	VIII
9.	MZAUMBC001 ANISA NEHAN P	MARKAZ ARTS AND SCIENCE COLLEGE ATHAWANAD	4.22	A+	IX
10.	PZAUMBC011 THEERTHA N	PAZHASSI RAJA COLLEGE PULPALLY	4.14	A+	x



CONTROLLER OF EXAMINATIONS

Figure 4: Final Position List from University

DETAILS OF WEBINARS/SEMINARS ATTENDED BY TEACHERS

- Seena P participated in the International Webinar on "Advanced Transparent Ceramic Materials for Defence Applications" organized by Centre for Research and Development in Education and Social Integration (CRESIHRD), Bharat Institute of Engineering and Technology in collaboration with Indian Ceramic Society, Hyderabad Chapter on 26/11/2022
- Arifa PP, Seena P & Suroor Jahan KK participated in the International Webinar on "Importance of Preparedness for Educators" organized by Centre for Research and Development in Education and Social Integration, Bharat Institute of Engineering and Technology and Indian Ceramic Society, Hyderabad Chapter on 31/12/2022.
- Seena P attended International Webinar Series On "Recent Advances In Biological Research" organized by department of Botany, PSGR Krishnammal College for Women on 23rd and 24th March 2023.

DETAILS OF FDP /WORKSHOP ATTENDED BY FACULTIES

Arifa PP & Suroor Jahan KK attended 3 days national FDP on "GURUSHISYA 2.0, Transforming the Teacher" organized by LEAD College of Management from 25th August 2022-27th August 2022.

- Seena P attended three days Virtual Faculty Development Program on "OUTCOME-BASED EDUCATION & BLOOM'S TAXONOMY" jointly organized by FDP Division, A.C.T Academy and IQAC, Arasu College of Arts and Science for Women, Karur during 21.11.2022 - 23.11.2022.
- All the faculties of the Department attended the FDP programme organized by IQAC of the college from 21st 26th November 2022.
- Seena P attended five days National Level FDP entitled"Achieving Excellence in Higher Education & Research" conducted by A.C.T Academy, Tamil Nadu & Academic and Research Conglomerate (AARC) from 26 December 2022 to 30 December 2022
- All the faculties of Department attended FDP, Orientation On "NAAC BENCHMARKS" organized by of the college on 25th January 2023.

DETAILS OF CONFERENCES OR WORKSHOP OR TRAINING ATTENDED BY FACULTIES

- Seena P has participated in e-Workshop (Skill Development Program) entitled "LaTex For Scientific Writing" conducted by the A.C.T Academy, Tamil Nadu on November 08 & 09, 2022.
- Seena P attended National Conference on "Interdisciplinary Academic Translational Research and Innovation 2023" organized by MES Asmabi College, Kodungallur, on 7th & 8th February2023.
- Jaseela KP, Rincy CK & Maneesha Mohan attended one day hands-on Workshop on "Molecular Biology Techniques" conducted by VETA Genomics, Thrissur,on 8th February 2023.
- Seena P attended a National Workshop on "Cancer Research In Ayurveda" organized by Arya Vaidya Sala, Kottakkal, during 20th to 22nd February 2023.
- Seena P & Arifa PP attended one day hands-on Workshop on "Microbial Genetics" conducted by VETA Genomics, Thrissur, on 27th February 2023.
- Suroor Jahan KK has successfully completed the two days Train the Trainer Level-1 Workshop of Mission Better Tomorrow – CEEP conducted on the 11th and 12th of March 2023, Kaloor, Kochi.



Figure 5: Images of Certificate of participation by faculties

DETAILS OF STUDENTS ATTENDED PROGRAMMES

- All the second year M.Sc. students participated in one day webinar on "Food Microbiology- Future Scope & Opportunity" organized by learntoupgrade recognized by DBT & nSDC on 5th July 2022
- 35 students of 3rd year B.Sc. Biochemistry and 10 students of first year M.Sc. Biochemistry attended a training program on "Detection of Food Adulteration & Additives" conducted by Amplicon Biolabs,Kakkanchery,on 7th & 8th November 2022 respectively
- 28 students of second year B.Sc.Biochemistry and 13 students of first year B.Sc.Biochemistry participated in one day hands-on Workshop on "Molecular Biology Techniques" conducted by VETA Genomics, Thrissur, on 8th February 2023.
- 8 students of second year M.Sc. attended National Conference on "Interdisciplinary Academic Translational Research and Innovation 2023" organized by MES Asmabi College, Kodungallur, on 7th & 8th February2023.
- 7 students of second year M.Sc. attended workshop on "Food Safety & Quality Control Techniques" organized by Albio Labs ,Kuttipuram, on 18th February 2023.
- 7 students of second year M.Sc. attended one day hands-on Workshop on "Microbial Genetics" conducted by VETA Genomics, Thrissur, on 27th February 2023.

2022 Certificat		FFI makejnte <u>cn</u>	2022 Certificat	e Learntoupgrade II	H nakejntern	
*	CERTIFICATE OF PARTICIPATION	6	*	CERTIFICATE OF PARTICIPATION		
	This is to certify that			This is to certify that		
	Swetha C A			Sreelahshmi K		
_	*					
	has completed I day Free webinar on			has completed 1 day Free webinar on		
	Food Microbiology -Future scope and opportunity	_		Food Microbiology -Future scope and opportunity	_	
	Organised by Learntoupgrade recegnized by DBT & NSDC Issued On: 05th July 2022			Organised by Learntoupgrade recegnized by DBT & NSDC Issued On: 02nd July 2022		
WLC BETERECTION PROVABLE COM	(Kerbes)	Haday Aug Hardeep Singh Puri Director Learntoupgrade	WLC BETLECE ON PROVIDE CON	(herber)	Hardeep Singh Puri Director Learntoupgrade	

Figure 5: certificate of participation by students for various programmes



Figure 6: certificate of participation by students for various programmes

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TO WHOM IT MAY CONCERN This is to certify that the following students of Markaz Arts and Science College Athanadu, had successfully completed their Orientation Workshop on Food Safety and Quality Control Techniques organised by Albio Testing & Research Laboratory, Kuttippuram held on 18th Fobruary 2023.				
Sreelakshmi.k				
Jiji R. Nair				
Muhsina.k				
Mumthaz v.v				
Rashidah farsath.T.k				
Rayeesa sherin c.k				
Shahanas .A				
	For ALBIO TECHNOLOGIES			
	and the second			
	Laboratory in - Charge			

Figure 7: Workshop attended details from Albio Labs

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Figure 8: students training at VETA Genomics

DETAILS OF DEPARTMENT ACTIVITES

1) WORLD ENVIRONMENT DAY CELEBRATION

As a part of World Environmental Day celebration PG Department of Biochemistry organized a talk on "Need for Environmental Protection" on 6th June 2022 (Monday). The Resource Person was Dr.Mohamed Azlam, Retd.Vice Principal, Govt. Arts & Science College, Calicut. The programme was held at main block, Markaz Arts and Science College. The resource person gave a detail explanation about the awareness of the need to take positive actions to protect environment. His words help the students to develop a deeper understanding of environmental issues. He motivated the students to participate in various environment protection programmes conducting by different organizations like THANAL, ATREE etc... He encouraged the students to initiate programmes for making our campus ecofriendly. A total of 35 students of final year B.Sc. Biochemistry attended the session. The Resource Person winded up the session by planting some seedlings in the college garden.

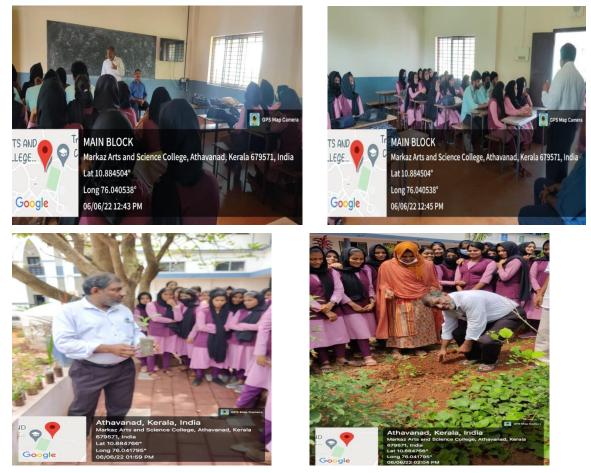


Figure 9: World Environment Day Celebration

2) WORLD FOOD SAFETY DAY CELEBRATION

PG department of Biochemistry in association with WDC, Markaz Arts and Science College, organized a talk on "KITCHEN CHEMISTRY" on 7th June 2022 at 11.30 am at Markaz College main

block. The session was handled by respected Principal of our college, Dr.C.P.Mohamed Kutty. A total of 38 PG students of different departments attended the session. Mrs.Suroor Jahan KK, WDC coordinator and faculty of Biochemistry department gave Welcome address. Mrs.Seena P ,HoD of Biochemistry department delivered the presidential address. The session was very interesting and informative. Principal sir gave a detailed explanation about the steps that can be taken in kitchens for food safety. He tried to inspire students to take actions to prevent,detect and manage food borne risks and improve human health. He gave amessage "Eat Safe, Stay Safe". He emphasised on the theme of 2022 World Food Safety Day "Safer Food, Better Health". He explained that safe food is the most important guarantors for good health. He told the students food safety must be started from our kitchen itself and he shared various tips to check the adulterants commonly present in food. Thasleena KK,Biochemistry Department gave a small talk on food safety. The students were really got inspired and session was worthwhile for them.



Figure 10: world Food Safety Day Celebration

ഭക്ഷ്വ സുരക്ഷാ സെപ്പിനാർ നടത്തി

വളാഞ്ചേരി: ലോക ഭക്ഷ്യ സുരക്ഷ ദിനത്തിൽ വളാഞ്ചേരി മർകസ് കോളജ് വനിതാ സെൽ സെമിനാർ നടത്തി പി. സീന അധ്യക്ഷയായി. ഡോ. സി.പി. മുഹമ്മദ് കുട്ടി വിഷയം അവ തരിപ്പിച്ചു. ശുരൂർ ജഹാൻ , തസ്ലീന പ്രസം ഗിച്ചു.

Figure 11: News from Daily On Food Safety Seminar

3) AIDS DAY OBSERVANCE:

PG Department of Biochemistry organized a talk on "IMMUNITY VIA AYURVEDA" at MMC Hall, on 1st December 2022, Thursday. The Resource Person was

Dr.Kirathamoorthy P.P, Professor (Retd.) & Head, Department of Samhitha & Sidhantha, VPSV Ayurveda College, Kottakkal. The session was very informative. The resource person handled the session in a very simple and easily understanding way. He explained the importance of Ayurveda to boost immunity. He shared his experiences with AIDS patients in his career. He gave an important message that "don't hate diseased people, but hate the disease". The session was attended by many local peoples along with our department students A total of 76 people attended the session.

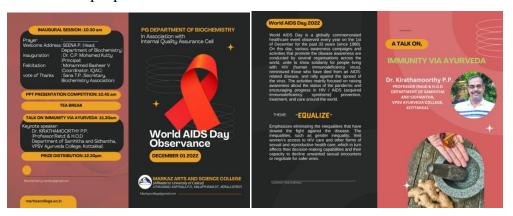


Figure 12:World AIDS Day Observance Brochure



Figure 13: Talk on "Immunity Via Ayurveda" -AIDS Day Observance

4) INTER DEPARTMENT POSTER MAKING & PPT PRESENTATION COMPETITION

As a part of World AIDS Day Observance PG Department of Biochemistry organized inter department competitions in Poster Making (Theme - "Equalize") on 30th November 2022and a Power Point Presentation Competition (Theme – "Prevention is better than treatment"). Students from other departments actively participated in both the competitions. Rafa & Najiya Fidha of second year B.Sc. Microbiology bagged first position and Sahada and Afeefa of second year BA English bagged second for poster making competition. Safeeda Nasrin of second year B.Sc. Biochemistry won first place and Nooru Zamana Beevi of first year BA English won second place for ppt presentation competition. The

ppt presentation competition was organized at MMC hall. The resource person came for AIDS Day talk, Dr.Kirathamoorthy P.P and Mr.Yasar Arafth, Faculty from Management Studies were the judges for ppt presentation. First and second place winners of both competitions were appreciated by a small momento by the Resource Person of the day.



markazcollege. ac. in

Figure 14: Poster of AIDS Day Competition

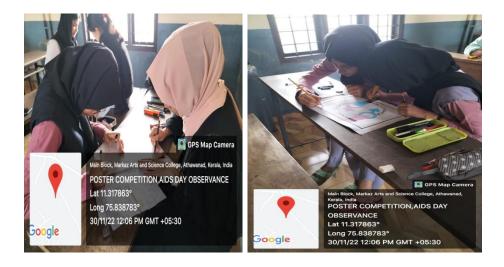


Figure 15: Inter Department Poster Making Competition



Figure 16: Inter Department PPT Presentation Competition



Figure 17: Awarding Winners Of Competition Figure 18:Appreciating Resource Person by HoD

5) NATIONAL SEMINAR ON "WATER QUALITY MONITORING AND ANALYSIS"

PG Department of Biochemistry, in association with Internal Quality Assurance Cell, organized a one day National Seminar on "Water Quality Monitoring And Analysis" at MMC hall on 26th October 2022 (Wednesday) at 10 am. The seminar was first planned to conduct on 25th October, but due to some inconvenience of the Resource Person the session was postponed to 26th October. The seminar was focused on water quality monitoring, a practical guide to the design and implementation of water quality. Mrs. Seena P, HOD, Biochemistry Department had delivered the welcome address. She gave an opening remarks and introduction of the programme. The Seminar was inaugurated by Dr. CP Mohammed Kutty, respected Principal of the college. HODs of various departments and IQAC Coordinator gave felicitation.Biochemistry Department Secretary, Mrs.Arifa PP, gave the presidential address.

The inaugural session was followed by the lecture of resource person Dr. Hariprasad P , Technical Head , THE CHEMI , Coimbatore. The resource person gave a detailed talk on water quality improvement and purification. He emphasized that making "every drop count' an agenda for water action. The session was very informative and interesting. After the talk, the session was opened for discussion. Students raised many queries and the resource person clarified all the doubts. Vote of thanks was given by Ms. Sana P, Fine Arts secretary, Department of biochemistry. All the UG and PG students of Biochemistry attended the session. A total of 96 students attended. The students were highly benefited by the session. They got a clear idea about the physical, chemical and biological properties of water. They were familiarized with acidity and alkalinity of water, Dissolved oxygen, Biological Oxygen Demand & Chemical Oxygen Demand. They were really enthusiastic to know about instruments such as spectrophotometer, TDS meter, COD Digester Unit, TSS Filter Assembly, used in water quality assessment. Thus the session was really informative for the students and they got an awareness of water Quality Monitoring and analysis.

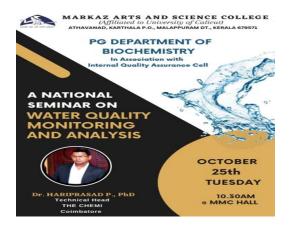


Figure 19: Brochure of National Seminar



Figure 20: Photos of National Seminar

6) EDUCATIONAL SEMINAR

PG Department of Biochemistry organized a educational seminar on "An Overview of Bioinformatics and its Applications" on 21st December 2022, at MMC Hall at 10am. The Resource person was Dr.Sahila M.M., Assistant Professor in Bioinformatics, SAFI Institute of Advanced Study, Vazhayoor. The seminar was mainly focused for second year UG and first year PG students, since they had a paper dealing with bioinformatics. The session was very informative and students gained knowledge in various databases, BLAST Analysis, protein and DNA sequence determination etc. A total of 40 students attended the session.



Figure 21: Brochure of Education Seminar



Figure 22: Photos of Education Seminar

7) OPEN HOUSE

On behalf of National science day, Department of Biochemistry in association with college union and IQAC conducted a two day open house exhibition on 28th February and March 1.The stall were made at PG lab and room number 20.The first day of the open house is for Public and second day for students of various institution. The students of biochemistry made different working and still model, charts,etc...related to Science, and it includes DNA working and still model, Mitosis still model, Dialysis working model, Heart working model, Lung working model and 3D Hologram. Students also showed the various instruments like colorimeter, spectrophotometer, pH meter, centrifuge, Hot air oven, water bath, etc..at the PG lab and also described their working.

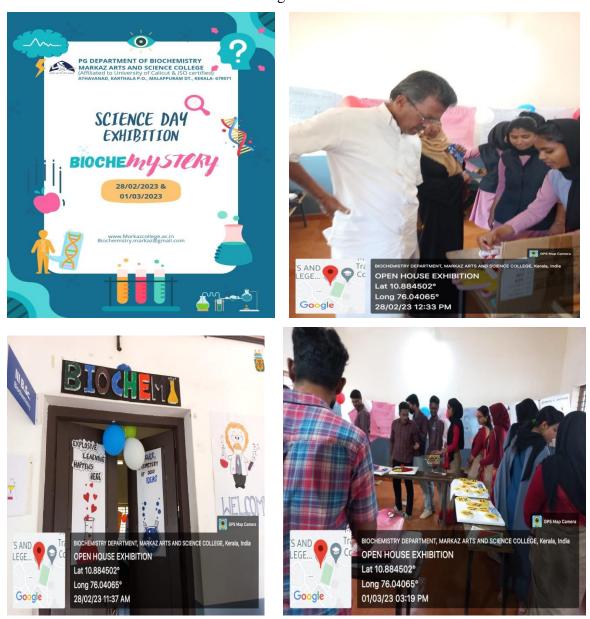


Figure 23: OPEN HOUSE Exhibition Brochure & Photos

A Blood Group detection stall was also arranged, in which a lot of students from the college, and the students of various institutions participated. The blood group detection was considered as an Extension activity of the department.



Figure 24: Blood Group Detection Stall on OPEN HOUSE

On the first day of Open House Exhibition, a PTA meeting was arranged for first year UG parents at room number 28 at 11 am. Seena P, HoD welcomed the audience and Principal Dr.C.P.Mohamed Kutty gave presidential address. Along with students academic matter discussion, a class was arranged for parents regarding energy conservation and management by Mr. Sabir P, Resource Person from Energy Management Center The parents were really satisfied by the session and got a detailed idea about how to operate household electric appliances without wastage of electricity. At the end of the session they appreciated the college authorities for organizing such a session. The session was winded up by the Vote of thanks by Jaseela KP, faculty of Biochemistry.



Figure 25: class by Mr.Sabir P, EMC, on PTA Meeting

8) CSIR 2023 LIFE SCIENCE COACHING CLASS: Department organized two sessions of CSIR coaching class for first and second year PG students on 27th and 29th March 2023. The resource persons were Mr.Abdul Vahid, CSIR UGC JRF 2022 Holder & HoD, Botany Department of Markaz Arts & Science College and Ms. Suroor Jahan KK, CSIR UGC NET 2020 Holder and Faculty of Biochemistry Department of Markaz Arts & Science College respectively. Arifa PP, department faculty coordinated the sessions. Both the sessions were really helpful for the students to prepare for the CSIR examination. Both the resource persons emphasised on the opportunities after clearing CSIR NET exam and also made the students aware that after qualifying CSIR NET exam they can easily get into Research & Development, can join as JRF in any research project and then pursue Ph.D.



Figure 26: CSIR 2023; NET Coaching Class Brochure



Figure 27: NET Coaching Class by Mr.Abdul Vahid Figure 28: NET Coaching Class by Mrs. Suroor Jahan

9) CAREER GUIDANCE CLASSES: Department organized two career guidance classes mainly aimed for final year UG and PG students.

"Career Options In Biochemistry" career guidance session was conducted on 22nd March 2023 at 10 am by Ramla Beevi CK, Chief Career Counsellor, CIGI,Calicut, via Google Meet Platform. The session was started at 10am by welcome address by Mrs.Seena P, HoD. The session was very interesting and informative. The resource person started the session with a motivation talk for students just like always be strong, confident, courage to ask questions etc.. She inspired the students by the words "How you see yourself means everything, Stay away from negative people" etc. She discussed about various Premiere Entrance Examinations for direct PG such as JLEEBILS, JAM, AIIMS, CUSAT, IISER etc. She also gave a detailed idea about main areas of study for post graduation. She also gave an idea about Ph.D entrance examinations for final year PG students. A total of 46 students attended the session. This career guidance session helped the students to understand their strengths, weakness and also provide them a clear idea about the career paths available to them. The students came to understand about the fields that they can choose from.



Figure 29: Career Guidance Class Brochure

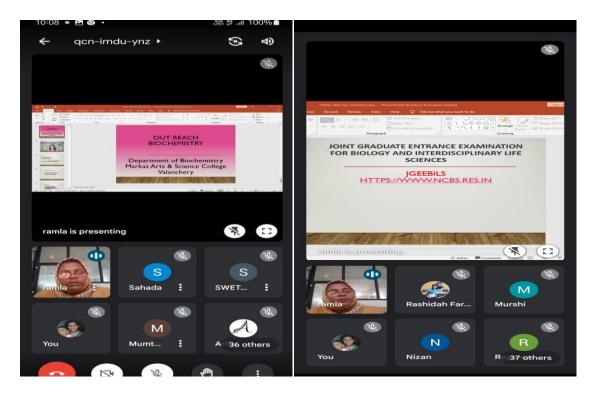


Figure 30: Screenshot of Career Guidance Class

. "After Biochemistry – What Next?" an online career enlightenment session was organized on 31st March 2023 at 5pm, by Fathimath Faseeha MA, alumni of Biochemistry Department. Mrs. Seena P, HoD gave welcome address. Suroor Jahan KK, Department Faculty gave a brief introduction about the Resource Person. A total of 44 students attended the session. This session helped the students to fulfil their aspirations by setting up realistic goals. The session made the students aware of different domains of life.



Figure 31: Brochure of Career Enlightenment Program

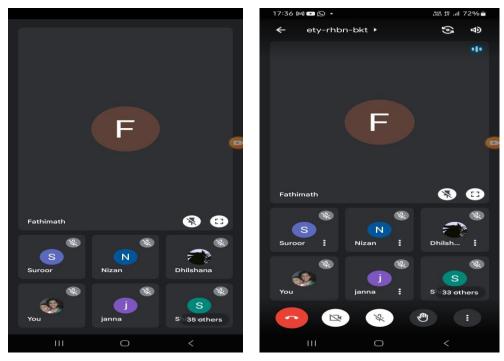


Figure 32: Sreenshots of Career Enlightenment Class

10) SOFT SKILL DEVELOPMENT PROGRAMME

To upgrade and enhance the inner potential of the students, PG Department of Biochemistry, organized a soft skill webinar on **'Life Skills'** through Google meet on 31st March 2023 at 8.00pm. **Ms.Prabha**, Advocate, Counseling Psychologist and Life Skill Trainer was the Resource Person. The session was started by welcome address of Mrs. Arifa PP, Biochemistry Department Secretary. A brief introduction about Resource person was given by Suroor Jahan, Faculty of Biochemistry Department. During the session, Ms.Prabha elaborated on various aspects and concepts of Life Skills like – self awareness, inter personal empathy, communication skill, thinking ability, decision making skill and problem solving skill. The webinar was attended by approximately 50 participants including students, faculty members and all of them gained confidence and competency to achieve life goals.

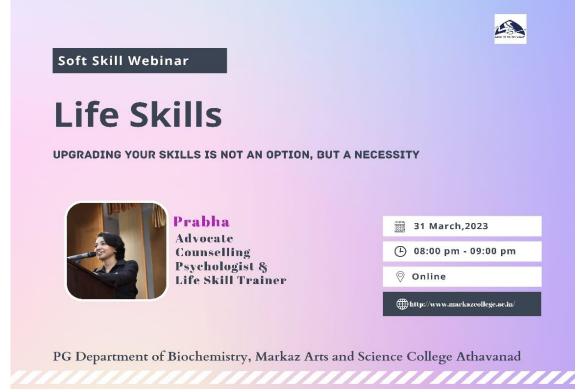


Figure 33: Brochure of Soft Skill Development Program



Figure 34: Sreenshots of Skill Development Program

11) SEMINAR -BY THE STUDENTS: FOR THE STUDENTS

Department conducted seminar sessions by PG students for UG students. Final year PG students took seminars on Plant Biochemistry topics for fifth semester B.Sc. Biochemistry students and first year PG students took seminars on Enzymology topics for fourth semester B.Sc. Biochemistry students. This was really a good experience for both PG and UG students.



Figure 35: Images of Seminar- By the students: For the students

CERTIFICATE COURSE DETAILS

In this academic year department provided two different certificate courses, one for UG students and other for PG students.

The course provided for UG students was "MZBCCC02-An Introduction to Analytical Methods for Water Quality Assessment". The Board of Studies include Dr.Hariprasad P, Technical Head, THE CHEMI, Coimbatore, as external faculty. Syllabus of the course was set by the BOS and signed by the external faculty on 26th October 2022 at Biochemistry Department in the presence of Seena P, HoD and ARifa PP, Department Secretary. 17 students of first year UG and 30 students of second year UG enrolled for the certificate course.



Figure 36: BoS Signing of Certificate Course Of 1st year UG

The course for PG students was "**MZBCCC03- Detection of Food Adulteration**". Mr.Vijesh Varghese, Senior Analyst, Amplicon Biolabs, Kinfra, was the external faculty of BoS. All the PG students (total 25 students) enrolled for the certificate course.

DETAILS OF MoU

Department of Biochemistry signed MoUs with two institutions during the academic year 2022-23. MoU with Savitr Bisciences Pvt. Ltd., Cochin and VETA Genomics, Thrissur. Both the MoUs were functionally active. UG and PG students had undergone hands on training in Molecular Biology at VETA Genomics. Three students of final year PG had completed their project at VETA Genomics. 15 students of final year UG Biochemistry had done their project at Savitr Biosciences.

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MEMORANDUM OF UNDERSTANDING	Accepted and Agreed	
	For and On behalf of	For and On behalf of
This Memorandum of Understanding (MoU) is made and entered into and executed on 02 of February 2023 by and between	Markaz Arts and Science Colege, Malappuram	VETA Genomics, Thrissur
section of the section of y 2025 by and between		, ⁶⁴ - 24
VETA GENOMICS PVT LTD.	Principal w/2	Mr. Praveen N M
ANNA TOWER, 2 nd FLOOR, PALLIMOOLA, THRINSUR, KERALA- 60609	Markaz Arts and Science Colege, Malappuram	Managing Director VETA Generates A GENOMICS PVT. LTD.
AND		Thrissur Tout
Department of Biochemistry	WITNESS Aug	WITNESS
Markaz Arts & Science College	Name: SEENA P	Name: RATEST. P.N
For VETA GENOMICS PVT. LTD. Athavanad,	Title: HEAD OF THE DEPARTMENT OF BIOCHEMISTRY	Title: F. Scientific Officeb
Malappuram District, Kerala	Date: 6-02-2023	Date: 0.2-0.2-2.3
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Figure 37: MoU d	letails	

DETAILS OF IV/ FIELD VISIT CONDUCTED

In this academic year Department conducted IV for UG & PG batches. Students visited different institutes and gained extra technical knowledge.

Second year PG (10 students) and final year UG (32students) students visited KFRI,Peechi on 21st June 2022. The students got an opportunity to visit seed germination and processing unit,bamboo nursery, butterfly garden, wild life museum, insect collection room,soil museum and analytical instrumentation room. In instrumentation room, the faculties explained in detail about CHNS analyser (used to measure weight percent of elements), GCMS analyser(used to measure volatile compounds), HPLC, HPTLC, x-ray crystallography(to determine the atomic and molecular structure of a crystal) etc. The students also got an opportunity to visit tissue culture lab. Three faculties of Biochemistry department - Seena P, Arifa PP & Suroor Jahan KK – accompanied the students.





Figure 38: Students IV at KFRI

2) Second year PG (12 students) and second year UG (31students) students visited IISR, Kozhikode on 14th September 2022, Wednesday. At IISR a seminar session was conducted by Dr.K.Anees, Scientist, Biochemistry department, at IISR Conference Hall. The students got an opportunity to visit IISR pesticide research analytical lab, IISR Instrument room and IISR Biochemistry lab. Dr.Anees explained the working of various instruments including GCMS, HPLC, Polarimeter etc. Rincy, Maneesha & Jaseela – faculties of Biochemistry department accompanied the students.





Figure 39: IV at IISR, ICAR

3) 6 students of first year PG Biochemistry visited CIPET,Palakkad on 6thJanuary 2023 along with Chemistry sudents. The students got a seminar session for one hour.After the seminar,they got an opportunity to visit the lab where the working of each apparatus was explained very well by the faculties.



:Figure 40: Visit to CIPET Palakkad by 1st year PG

4) 14 students of first year UG visited MILMA-KOZHIJODE DAIRY on 3rd March 2023. The faculties of Milma explained some of the processing techniques and the students got an opportunity to know about machines like Silo-milk collecting containers, HMST- horizontal milk storage tank, Homogenizer, pasteuriser, cream separator, Batch mixers, nonaseptic filling machines, continuous freezer,CIP and washing unit etc. Jaseela KP ,faculty of Biochemistry accompanied the students.



5) 29 students of Second year UG visited **KDHP Tea Museum,Munnar** on 10th March 2023. After an introduction session by the faculties of the institute, the students got an opportunity to visit processing unit. They explained well about the working of several processing machines. Suroor Jahan KK & Jaseela KP, faculties of Biochemistry Department accompanied the students.



Figure 42: 2nd Year UG Students at KDHP Tea Museum, Munnar

6) 7 students of Second year PG visited PIMS (Padmasree Institute of Management & Science), Bengalore, on 16th March 2023. The faculties of the institute briefly explained about the procedures of various methods used in lab. They got an opportunity to visit the labs in the institute like microbiology lab, biochemistry lab etc..The faculties of the institute explained about extraction method using soxhlet apparatus, working of thin layer chromatography etc. Suroor Jahan KK, faculty of Biochemistry Department accompanied the students.



Figure 43: 2nd Year PG Students at PIMS, Banglore

EXTENSION PROGRAMME:

As a part of AIDS Day Observance, a talk on "IMMUNITY VIA AYURVEDA" was organized at MMC Hall, on 1st December 2022. The Resource Person was **Dr.Kirathamoorthy P.P**, Professor (Retd.) & Head, Department of Samhitha & Sidhantha, VPSV Ayurveda College, Kottakkal. The session was attended by many local peoples along with our department students. The resource person handled the session in a very simple and easily understanding way. He explained the importance of Ayurveda to boost immunity. A total of 76 people attended the session. At the end of session all the attended people got a detailed idea about the importance of Ayurveda in Immunity and also got a message of how to interact with AIDS affected people. The Resource person explained the session was very informative.



Figure 44: Talk On "Immunity Via Ayurveda"



Figure 45: Attendance Sheet of Program

RESEARCH TYPE PROJECT EXPERIMENT

Department of Biochemistry provided guidance to two students from National Higher Secondary School, Kolathur, to perform their Research type project experiment. Mrs.Jaseela KP, faculty of Biochemistry department guided the students for performing phytochemical analysis. The students used the PG biochemistry lab from 27th October to 31st October 2022. The faculties helped the students to prepare the reports of their experiment.

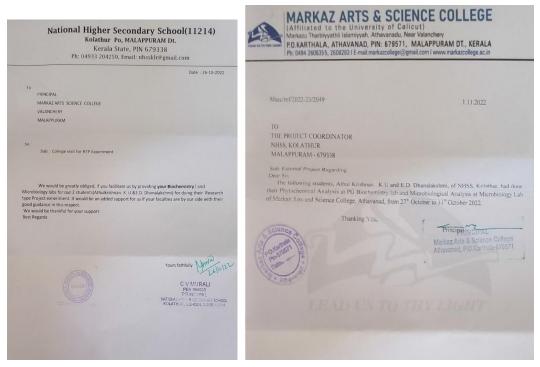


Figure 46: Letter Regarding Research Type Project



Figure 47: Students from National HSS at PG Lab

EXTRA CURRICULAR ACTIVITIES

1) MEHENDI COMPETITION

Fine Arts Club of Markaz Arts and Science College conducted Mehendi Competition on 7th July 2022.Safeeda T A and Afeefa T C of 2nd year B.Sc. Biochemistry actively participated in the program.



Figure 48: Mehendi Competition

2) HONORING OF PG BIOCHEMISTRY UNIVERSITY TOPPERS (2019-21 BATCH)

Management had organized a program at Markaz Auditorium on 14th July 2022 at 2pm to honor the M.Sc.Biochemistry Calicut University toppers of 2019-2021 batch. Due to Covid issues the position list published late and hence the programme was organized late. The students were appreciated by giving momentos. On this occasion management presented a momento to the PG Department of Biochemistry for moulding their students into University toppers.



Figure 50: Honoring PG University Toppers (2019-2021 Batch)

3) INDEPENDENCE DAY CELEBRATION

Independence day celebration was organized by KALOPSIA MARKAZA(FINE ARTS CLUB 2K22) on 11.08.2022 at MMC hall. MadhaSouhardhaganam (single) and patriotic song (group) were the competition items. Sahadha V K of 2nd MSc Biochemistry participated in MadhaSouhardhaganam and bagged 3rd prize.



Figure 51: Independence Day Celebration

4) AZADI KA AMRIT MAHOTSAV

Markaz Arts and Science College in association with Central Bureau of Communication, Ministry of Information and Broadcasting,Govt. Of India,organized Integrated communication and Outreach Programme for celebrating 75 years of India's Independence AZADI KA AMRIT MAHOTSAV. Various programmes like seminars, photo exhibition, poster making competitions, cultural programmes were conducted and our students actively participated in the program. As a part of the program, POSTER MAKING COMPETITION (THEME: INDEPENDENCE) was conducted and Nazma Shamli of 2nd year B.Sc. Biochemistry got second prize.



Figure 52: AZADI KA AMRIT MAHOTSAV Celebration

5) ONAM CELEBRATION

Markaz Arts & Science College celebrated Onam program named "**'THAKATHOM**'' on the college premises amidst much fanfare involving staff and students on 1st September 2022. Department wise competitions were organized for events like pookalam making, Onapattu, uriyadi, lemon and spoon , bottle filling, vadamvali, onappattu, balloon pottickal, musicalchair,chakkil ottam,glasspyramid, uriyadi,biscuit bite etc. Students of 3rd & 2nd year UG and 2nd year PG Biochemistry actively participated in all the competitions. Biochemistry department secured third place in pookalam competition. Department level celebration was also conducted namely "**UPPERI**". The main attraction of the celebration was the traditional 'Onasadya' by the students to the department faculties. The day was a memorable one.







Figure 53: Onam Celebration

6) ISHQE RASOOL MADHHUNNABI GANAMALSARAM

KALOPSIA MARKAZA (Fine Arts Club 2K22) and Arabic Department coordinately conducted ISHQE RASOOL MADHHUNNABI GANAMALSARAM on 11th October 2022. Madhuhganam single and group were the competition items. of 2nd year B.Sc. Biochemistry students - Sufaina, Jahana Shereen,Safa Minnath- participated in Madhuhganam single event competition. Nazma Shamli, Safa Minnath,Suhaira T, Jahana Shereen,Fathimath Shamla,Lubaba and Shahana of 2nd year B.Sc. Biochemistry participated in group item and bagged 2nd position.



Figure 54: Madhhunnabi Ganamalsaram Competition

7) FACE PAINTING COMPETITION

As a part of mental health week, Department of Psychology conducted a face painting competition (theme: happiness) on 12th October 2022. Ayisha Farsana, Rahana Sherin ,Mohammed Munnaver and Muhammad Shefin of 3rd year B.Sc. and Fasna Shirin and Suhaira TT of 2nd year B.Sc. Biochemistry participated in the competition. Fasna Shirin and SuhairaTT of 2nd year B.Sc. Biochemistry secured first prize.

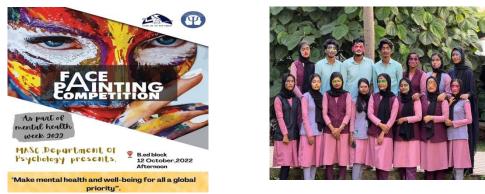


Figure 55: face painting competition and participants

8) SWEETISH MONTH

Mahatma Gandhi National Council For Rural Education and ED CLUB of Markaz Arts and Science College jointly conducted food fest programme-'SWEETISH MONTH' on 25th October 2022 at college premises. All the students of Biochemistry Department actively participated in the program with variety of sweet dishes.



Figure 56: Sweetish Month Celebration

9) POSTER MAKING COMPETITION

In accordance with the Orange The World Campaign, Women Development Cell Markaz Arts and Science College, associated with Kudumabasree Mission Valanchery organized a Poster Making Competition on 13th December 2022, 11.00am, at room number 17. The theme for the program is 'Let Her Fly' on behalf of the theme 'UNiTE! Activism to end violence against women and girls!' presented by Orange The World Campaign. Nasma Shamli A and Safeeda Nasrin of 2nd year B.Sc. Biochemistry and Shibila V and Mohamed Sinan P of first year B.Sc. Biochemistry participated in the competition.

10) UNION INAUGURATION & SWEARING IN CEREMONY

Union inauguration and swearing in ceremony was organized on 14th December 2022 at Markaz Auditorium. Mohamed Shefin of final year B.Sc. Biochemistry was elected as General Captain during college election took oath in the function. After the swearing in ceremony live performance "Royal Muttipattu" was organized by College Union.



Figure 57: Union Inauguration Program

11) INDUCTION PROGRAM FOR FIRST YEARS

A one week Student Induction Programme was organized for the newly joined students of the academic year 2022-23, before regular class starts. This program helped the students to get information about the college, and their academic and student life. On their first day (19th September 2022), department HoD and class advisor gave a general idea about Biochemistry course and gave an outline about rules and regulations of College. After that all students were instructed to assemble in the Markaz Auditorium along with their parents. At the auditorium, college Principal, Dr. C.P.Mohamed Kutty, college Superintendent Mr.Abdul Gafoor and Management representatives addressed the gathering and gave a detailed session about the discipline, rules, anti-ragging matters etc. Parents also clarified their worries. Regular sessions were conducted for one week and the students learned about the institutional policies, processes, practices etc.

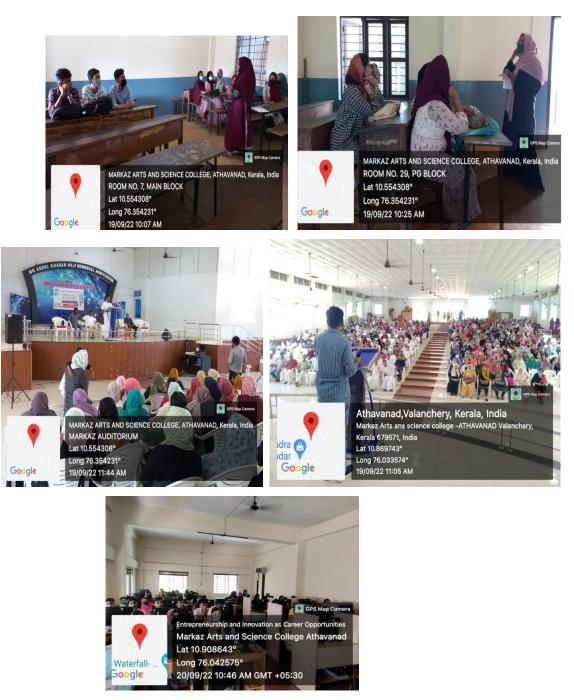


Figure 58: photos of induction program

Second years organized some cultural events named "Odukathe Thudakkam" for the first years on 15th December 2022 at Markaz Auditorium. All the first years were filled with excitement. They performed many cultural programs which was inconceivable. The program was really good and enhanced the feeling of community and motivated juniors.



Figure 59: Cultural Programmes as a part of Induction Program

As a part of Induction Program, 14 students of first year UG visited **MILMA-KOZHIJODE DAIRY** on 3rd March 2023. The faculties of Milma explained some of the processing techniques and the students got an opportunity to know about machines like Silo-milk collecting containers, HMST- horizontal milk storage tank, Homogenizer, pasteuriser, cream separator, Batch mixers, nonaseptic filling machines, continuous freezer,CIP and washing unit etc. Jaseela KP, faculty of Biochemistry accompanied the students.

12)Sahada VK of second year PG Biochemistry won prize in the FIFA World Cup Prediction Competition and was given a Jersey of Argentina on 20th December 2022 at Markaz Ground by Physical Education Trainer



Figure 60: FIFA World Cup Prediction winner appreciation

13) ARTS FEST

Markaz Arts & Science College Union presented college Arts Day "KALAHA" on 22nd & 23rd February 2023. This year Arts Fest competitions (both offstage & onstage) were conducted not by department level; instead the whole students were divided into four groups. This made the event more competitive and sparkling. Students of Biochemistry department actively participated in different events and bagged prizes.



Figure 61: Arts Fest Programmes

14) COLLEGE DAY

The final event of academic year 2022-23- College Day "TARANK"- was conducted on 6th March 2023. The event was very colorful with fabulous performances from Street Academics & Dabzee. The final year students made the event an unforgettable one in their college life. All final year UG and PG Biochemistry students enjoyed the day and made it an outstanding.



Figure 62: College Day Programme

15) HONORING UNIVERISTY TOPPERS OF PG 2020-2022 BATCH

A program was organized at MMC Hall, on 18th March 2023, for honoring Mohammed Al Ghazi and Anisa Nehan of M.Sc. Biochemistry 2020-2022 batch, for securing fourth and ninth position respectively, in Calicut University PG Examination. Honorable Secretary of Markaz Tharbiyathil Islamiyya presented the momento to the winners. He congratulated the winners.



Figure 63: Honoring PG University Toppers (2020-2022) Batch

16) FAREWELL PARTY TO FINAL YEAR UG & PG

A farewell party was organized by juniors to the final year UG & PG students on 20th March 2023, at MMC Hall. All the final years shared their experiences and they thanked their juniors for giving such a fabulous day for them. Department faculties also shared their memories. Final Year UG students gifted a photo collage to the department as a token of love. A delicious lunch was also arranged by juniors.



Figure 64: Farewell Programme

COCURRICULAR ACTIVITIES

 A class on "Entrepreneurship And Innovation As Career Opportunity" organized by ED Club of Markaz Arts And Science College was given to the first year students on 20th September at Computer lab as a part of Induction Program. The Resource Person was Mr.Mohamed Favas PA, Industrial Extension Officer, Kuttipuram.



Figure 65:Class on Entrepreneurship And Innovation As Career Opportunity 2) NSS

The following students of second year B.Sc. Biochemistry – Fasna Shirin K, Fathimath Shamla N, Aslaha Phamli A, Jahana Shereen PT, Suhaira TT& Jameela Sherin M- attended seven days NSS camp "No No" organized at TRK AUPS School, Vykathoor, Valanchery from 24th -30th December 2022.



Figure 66: NSS Camp Brochure and Photo

Mohammed Shemeel P, Muhsina C & Shibila V of first year B.Sc. Biochemistry was selected as NSS Volunteers for the academic year 2023-24.

3) MURSHID MEMORIAL EXCELLENCE AWARD

This award is given to students who show his/her excellence in different field in this college. The competition involves various rounds and many students from different departments participated. Twenty students registered for the competition. Through eliminations after each round, six students reached the final round. Muhammed Sabin of second year B.Sc. Biochemistry reached the final round and bagged the sixth position in the competition. Award distribution ceremony was done by Sri.Abdul Hameed, Retd. Superintendent of Police, on 6th March 2023.



Figure 67: Murshid Memorial Excellence Award Brochure And Winners Photo

4) PROFICIENCY PRIZE DISTRIBUTION

Proficiency prize was awarded to Sahla Suroor of final year DC and Rashida Farsath TK of final year PG on the basis of Calicut University published results by General Secretary of Markaz Tharbiyathil Islamiyya, Mr.Azad.



Figure 68: Proficiency Prize Distribution

5) WOMEN EMPOWERMENT PROGRAMES

Women Development Cell, Markaz Arts and Science College organized an online orientation program on '**REACH Finishing School and Certificate Courses'** for first year PG students on 11th October 2022, at Computer Lab, main block through Google meet. Dr. Raj Muhammed, Senior Trainer, from REACH, explained about REACH Finishing School and different kind of courses they providing to add up the soft skill and hard skill of the students. Students got all information about each courses regarding the fee structure, course duration and placement opportunities.

Abacus Teachers Training was conducted for girl students and locals by B-smart Abacus in association with Women Development Cell, Markaz Arts and Science College Athavanad on 11th November 2022 at Room number 4, Main Block. Mr. Shijith was the Resource Person. Najiya Nasrin TP, Afeefa Sherin CC and Wafa of second year B.Sc.Biochemistry participated in the training program.

All the students of second year B.Sc.Biochemistry attended a seminar on **Gender Awareness** organized by WDC, Markaz Arts and Science College, on 16th December 2022 at MMC Hall. The resource person was Smt. Rabiya, Gender Resource Person, Kudumabasree Mission Valanchery. Students got knowledge about difference between gender and sex, different kind of genders and gender inequalities happening around the world.

On behalf of International Women's Day 2023, Women Development Cell of Markaz Arts and Science College, Athavanad conducted a Gender Awareness class on 7th March 2023 at MMC Hall. Smt. Sumayya C.P., Community Councellor, Valanchery kudumabasree, led the class on various aspects of gender inequalities in our society. first year PG students attended the class and all of them got awareness about gender related issues in the current scenario and an interaction is carried out on how can mitigate these kind of inequalities in our society

6) COACHING FOR ADVANCED LEARNERS

A) EMPLOYABILITY REGISTRATION CAMP

Career Guidance and Placement cell, Markaz Arts and Science College in association with District Employment Exchange And Employability Center Malappuram conducted Employability registration camp on 21/4/2022. Two faculties and 10 students from Biochemistry Department attended the camp and registered their names.

B) SOFT SKILL TRAINING

Advanced learners of final year UG and PG Biochemistry attended SOFT SKILL TRAINING conducted by Career Guidance and Placement cell, Markaz Arts and Science College in association with IQAC on 23/6/2022. The resource person was Sri N.K Balan

Nair. During the entire session Sri N.K Balan Nair discussed the various strength, value and interest in order to make choice regarding the career of the student. The students were enriched in session and had better confidence in choosing the right career.

C) CAREER GUIDANCE SEMINAR

Career Guidance and Placement cell, Markaz Arts and Science College in association with IQAC and University Employment Information and Guidance Bureau, Calicut University organized career guidance seminar by Zakariya.M.V, Career Expert, on 10/8/2022 at 10 am to 3:30 pm. Six students from B.Sc. Biochemistry and 3 students from M.Sc. Biochemistry attended the session.

D) SOFT SKILL TRAINING

District Employment Exchange and Employability Centre, Malappuram in association with Career Guidance and Placement cell, Markaz Arts and Science College organized soft skill training on 31/8/2022 from 9:45 am to 4 pm at MMC Hall. The resource persons were Mr. Balan Nair.N.K, Career expert and Mr. Abdul Latheef.K, University Librarian, Calicut University. 29 Students from BSc Biochemistry and 9 students from MSc Biochemistry attended the training.

E) PSC COACHING

Career Guidance and Placement cell, Markaz Arts and Science College in association with IQAC organized PSC Coaching for students on 11/1/23. 12 students from first year Biochemistry attended the programme. The resource person was Dr.Rajesh. Dr Rajesh addressed the students on career opportunities available and how to choose on their options.

F) TRAINING PROGRAMME

Career Guidance and Placement cell, Markaz Arts and Science College in association with IQAC organized training programme on 28/2/2023 at computer lab from 9:45 am to 3:30 pm. The Resource person was Abdul Latheef, Assistant Librarian, Calicut University campus. 9 students from first year M.Sc. Biochemistry attended the training.

G) HOW TO FACE AN INTERVIEW

Career Guidance and Placement cell, Markaz Arts and Science College in Centre for Gandian studies and Research, University of Calicut conducted a programme"how to face an interview" on 7/3/2023 at 10 am at MMC HALL. The Resource Person was Dr. R.S Paniker, former member, Kerala Public Service Commission.Nine students from first year M.Sc. Biochemistry attended the programme.