

**POST GRADUATE DEPARTMENT OF CHEMISTRY
K A H M UNITY WOMEN'S COLLEGE, MANJERI
ANNUAL REPORT 2021-'22**

STAFF

There are eight permanent teachers, one part time guest lecturer and two non-teaching staff in the department.

Permanent Faculty

Sl. No.	Name	Qualifications	Present position
1	Dr. Muhammed Basheer Ummathur	M.Sc., B.Ed., Ph.D.	Associate Professor and Head
2	Dr. P. Jyothi	M.Sc., Ph.D.	Associate Professor
3	Dr. Deepa K	M.Sc., B.Ed., M.Phil., Ph.D.	Assistant Professor
4	Mrs. Suhada KM	M.Sc.	Assistant Professor
5	Dr. Jamsheena V	M.Sc., Ph.D.	Assistant Professor
6	Dr. Jasna VC	M.Sc., Ph.D.	Assistant Professor
7	Dr. Thasneem P	M.Sc., Ph.D.	Assistant Professor
8	Dr. Shamsheera KO	M.Sc., Ph.D.	Assistant Professor

Guest Faculty

Sl. No.	Name	Duration
1	Ms. Greeshma Carolina Titus	26.11.2021 onwards
2.	Mrs. Najeera PC	06.10.2021 to 11.03.2022

Non-Teaching Staff

Sl. No.	Name
1	Mr. Moideen Kutty AP
2	Mr. Abdul Nasar TM

INVOLVEMENT IN CURRICULUM DESIGN: UNIVERSITY LEVEL

Dr. Muhammed Basheer Ummathur

- Member of the Board of Studies (UG & PG) in B. Sc. & M. Sc. Chemistry of Farook College (Autonomous).
- Chairman of the VI Sem UG-CBCSS Chemistry Practical Examination-Malappuram Zone, University of Calicut, April 2021.
- Chairman of the CV Camp-Malappuram Zone, University of Calicut, April 2021.
- Chairman of IV Sem UG-CBCSS Chemistry Practical Examination, April 2021.
- Chairman of III Sem UG-CBCSS Chemistry CV Camp, November 2020.

- Chairman of IV Sem UG-CBCSS Chemistry CV Camp, April 2021.
- Subject expert in the steering and evaluation committee nominated by the University of Calicut for the placement and promotion of Assistant Professors. Attended the evaluation committee meeting for the following teachers; Mr. Salahudheen VP, Assistant Professor, DGM MES Mampad College on 10th September 2021; Dr. Raj Sankar, Assistant Professor, Sree Kerala Varma College, Thrissur on 11th March 2022.
- Being the Subject Expert nominated by University of Calicut, conducted the inspection for granting provisional affiliation to B. Sc. Chemistry at the following institutions.
Yuvakshetra Institute of Management Studies, Mundur, Palghat on 10th December 2021.
Jayasree Arts & Science College, Pulpally, Wynad on 17th December 2021.
St. Mary's College, Angadippuram, Perinthalmanna on 23rd February 2022.
- Subject expert nominated by the University of Calicut for the selection of Assistant Professors. Attended the interview at the following institutions.
 1. Zamorin's Guruvayoorappan College, Calicut on 25th January 2022.
 2. Sree Narayana College, Cherthala on 28th January 2022 for the selection of Assistant Professors to RSM SNDP Yogam Arts & Science College, Koyilandi.

Dr. P. Jyothi

- Member of the Board of Studies (UG) in B. Sc. Chemistry of University of Calicut.
- Member of the Board of Studies (UG & PG) in B. Sc. & M. Sc. Chemistry of DGM MES Mampad College (Autonomous).

SEMINARS ORGANIZED

International Webinar

PG Department of Chemistry conducted an International Webinar Series on "Exploring the Realm of Chemical Science" on 15th January 2022, 22nd January 2022 and 5th February 2022. Dr. Shamsheera KO was the coordinator of the Programme. The webinar was inaugurated by Dr. C. Saidalavi, Principal, KAHM Unity Women's College, Manjeri. The external Resource persons were

- Mr. Muhammed Haris P U, Pre-doctoral Researcher, BC Material, Leioa, Spain.
- Dr. Muhammed Ajmal C, Research Professor, Center for Nanotubes and Nanostructured Composites, Sungkyunkwan University, South Korea.
- Dr. Pranav K. Gangadharan, Postdoctoral Research Fellow, Tokyo Institute of Technology, Laboratory for Chemistry and Life, Science Institute of Innovative Research, Yokohama, Japan.

PG students, Research Scholars and Faculty members of the Chemistry Department of various colleges attended the webinar.

Regional Webinar

As a part of honoring Mrs. Dilruba Fathima AM, (2019-22 Batch), Grand Masters Asia Book of Record and India Book of Record Award Winner, Department conducted a Regional Webinar on 8th September 2021 in the topic "The Hidden Beauty of Periodic Table". The Resource

person was Dr. Mujeeb Rahman P, Assistant Professor, Dept. of Chemistry, Govt. Arts & Science College, Calicut. Dr. Jamsheena was the Programme coordinator.

RESOURCE PERSON IN SEMINARS/WEBINARS

Muhammed Basheer Ummathur

<i>Sl. No.</i>	<i>Webinar/ Seminar</i>	<i>Theme/Title</i>	<i>Organizing Institution</i>	<i>Period</i>
1.	Webinar	Chemistry in Daily Life	Staff Club, KAHM Unity Women's College, Manjeri	5 th September 2021
2.	Seminar	Chemistry in Daily Life	NSS, KAHM Unity Women's College, Manjeri	27 th December 2021
3.	Seminar	Association Inauguration	Department of Chemistry, Blossom Arts & Science College, Pulikkal.	16 th March 2022

PARTICIPATION IN SEMINARS/WEBINARS

All the staff members participated in the following webinars.

<i>Sl. No.</i>	<i>Webinar/ Seminar</i>	<i>Theme/Title</i>	<i>Organizing Institution</i>	<i>Period</i>
1.	International Webinar	Exploring the Realm of Chemical Science	PG Department of Chemistry, KAHM Unity Women's College, Manjeri	15 th January 2022, 22 nd January 2022 and 5 th February 2022
2.	Webinar	Intellectual Property Rights	IQAC, KAHM Unity Women's College, Manjeri	17 th March 2022

Dr. Muhammed Basheer Ummathur

<i>Sl. No.</i>	<i>Webinar/ Seminar</i>	<i>Theme/Title</i>	<i>Organizing Institution</i>	<i>Period</i>
1.	National Conference	IQAC and NAAC coordinators meet on Environment Management system, Green Campus Audit and Energy Audit to Educational Institutions and Energy Sectors	The Nature Science Foundation, Coimbatore, Tamil Nadu	20 th November 2021
2.	National Conference	National Educational Policy and Quality Benchmarking	WMO IG Arts & Science College, Panamaram, Wayanad	3 rd to 5 th December 2021

Mrs. Suhada KM

<i>Sl. No.</i>	<i>Webinar/ Seminar</i>	<i>Theme/Title</i>	<i>Organizing Institution</i>	<i>Period</i>
1	Seminar	Faculty Induction Programme	IQAC and Kerala Higher education Council	9 th March 2022
2	Seminar	One day Faculty Enrichment Programme on Workplace	IQAC, KAHM Unity Women's College, Manjeri	2 nd March 2022

		Professionalism, Ethics and Team Building		
3	Webinar	Managing References using Zotero-Open Source Reference Management Software	Information Systems Division & Library, Kerala State Council for Science, Technology and Environment	17 th August 2021
4	International Conference	Emerging Frontiers in Chemical Sciences	Farook College (Autonomous)	29 th to 31 st October 2021

Dr. Jamsheena V

<i>Sl. No.</i>	<i>Webinar/Seminar</i>	<i>Theme/Title</i>	<i>Organizing Institution</i>	<i>Period</i>
1	Seminar	Faculty Induction Programme	IQAC and Kerala Higher education Council	9 th March 2022
2	Webinar	Five Days Faculty Enrichment Programme on Spectroscopy of Metal Complexes	Research and PG Department of Chemistry, MES Keveeyam College, Valanchery in association with Chemical Research Society of India (CRSI) under the UGC Paramarsh Scheme	6 th to 10 th September 2021

Dr. Jasna VC

<i>Sl. No.</i>	<i>Webinar/Seminar</i>	<i>Theme/Title</i>	<i>Organizing Institution</i>	<i>Period</i>
1	Seminar	Faculty Induction Programme	IQAC and Kerala Higher education Council	9 th March 2022

Dr. Thasneem P

<i>Sl. No.</i>	<i>Webinar/Seminar</i>	<i>Theme/Title</i>	<i>Organizing Institution</i>	<i>Period</i>
1	Seminar	Faculty Induction Programme	IQAC and Kerala Higher education Council	9 th March 2022

Dr. Shamseera KO

<i>Sl. No.</i>	<i>Webinar/Seminar</i>	<i>Theme/Title</i>	<i>Organizing Institution</i>	<i>Period</i>
1	Seminar	Faculty Induction Programme	IQAC and Kerala Higher education Council	9 th March 2022

Mrs. Najeera PC

<i>Sl. No.</i>	<i>Webinar/Seminar</i>	<i>Theme/Title</i>	<i>Organizing Institution</i>	<i>Period</i>
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1	Seminar	One day Faculty Enrichment Programme on Workplace Professionalism, Ethics and Team Building	IQAC, KAHM Unity Women's College, Manjeri	2 nd March 2022
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MoUs and COLLABORATIONS

The Department has one MoU as detailed below.

- Mr. Syam, Assistant Director, Common Facility Centre, Rubber Board, Payyanad, Malappuram (DT), Kerala.

The Department has collaborations with

- Mr. Muhammed Haris P U, Pre-doctoral Researcher, BC Material, Leioa, Spain.
- Dr. Muhammed Ajmal C, Research Professor, Center for Nanotubes and Nanostructured Composites, Sungkyunkwan University, South Korea.
- Dr. Pranav K. Gangadharan, Postdoctoral Research Fellow, Tokyo Institute of Technology, Laboratory for Chemistry and Life, Science Institute of Innovative Research, Yokohama, Japan.
- Dr. Jithin Raj P, Food Safety Officer, Department of Food Safety, Kozhikode, Govt. of Kerala.

COLLEGE LEVEL ACADEMIC AND CO-CARRICULAR ACTIVITIES

Dr. Muhammed Basher Ummathur

- HoD Chemistry
- Member of the UGC Project Cell
- Member of the College Staff Council
- RUSSA Coordinator
- Member of IQAC

Dr. P. Jyothi

- Member of Staff Club executive Committee

Dr. Deepa K

- Student Welfare Dean

Mrs. Suhada KM

- DQAC Coordinator
- Science Club Coordinator

Dr. Jasna VC

- NSS Programme Officer

Dr. Thasneem P

- Music Club Coordinator

EXTENSION ACTIVITIES

1. World Environment Day Celebrations

The Department in association with Science Club conducted World Environment Day Celebrations on 6th June 2021. Dr. P. Jyothi was the Coordinator of the Programme. **Mrs. Premalatha S**, *Environmental Engineer, Kerala State Pollution Control Board, Head Office, Thiruvananthapuram* was the Resource person and delivered a talk on “Waste Management and Ecosystem Restoration”.

2. National Science Day Celebrations

The Department conducted National Science Day Celebrations on 14th March 2022. Mrs. Suhada KM was the Coordinator of the Programme. PPT presentation competition was carried on the topic “Effects of Raman Effect”. 1st Prize: Keerthana, 4th Sem B. Sc. Chemistry; 2nd Prize: Ahila, 4th Sem B. Sc. Chemistry; 3rd Prize: Fahira, 4th Sem B. Sc. Chemistry.

3. Community Outreach Programme

The Department conducted one Community Outreach Programme on the topic **Trends in Food Frauds and Adulterations in the Market** in Google meet on 24th February 2022 for the staff, students and parents of our college. The Resource Person was Dr. Jithin Raj P, Food Safety Officer, Department of Food Safety, Kozhikode, Govt. of Kerala Dr. Jasna VC was the coordinator of the programme.

4. World Water Day Celebrations

The Department conducted World Day Celebrations on 22nd March 2022. Mrs. Suhada KM was the Coordinator of the Programme. Group discussion were made on the Importance of Water and Need of Water Harvesting.

Dr. P. Jyothi

- Published the article “Different characters of Water” in Sasthrakeralam (June 2021).
- Valued the answer scripts of various autonomous colleges and conducted Practical Examinations.

Dr. Thasneem P

- Valued the answer scripts of various autonomous colleges.

Mrs. Suhada KM

- Valued the answer scripts of various autonomous colleges.

RESEARCH PUBLICATIONS

Dr. Muhammed Basheer Ummathur

<i>Sl. No.</i>	<i>Name of Paper</i>	<i>Name of Journal</i>	<i>ISSN</i>	<i>Issue, Year, Page</i>
1	3-(2-benzothiazolylazo) thenoyltrifluoro acetone and its Cu(II), Co(II), Ni(II) and Zn(II) complexes;	Rasayan Journal of Chemistry	0974-1496	14(3), 2021, 2111-2115
2	Quality Assessment of Rubber Latex from Different Plane Areas in Nilambur Taluk of Kerala State	JASC: Journal of Applied Science and Computations	1076-5131	8(5), 2021, 25-28

Dr. Shamsheera KO

<i>Sl. No.</i>	<i>Name of Paper</i>	<i>Name of Journal</i>	<i>ISSN</i>	<i>Issue, Year, Page</i>
1	A sustainable method of mitigating acid corrosion of mild steel using jackfruit pectin (JP) as green inhibitor: Theoretical and electrochemical studies	Journal of the Indian Chemical Society	0019-4522	99(1), 2022, 100271
2	Electrochemical and surface characterization of mild steel with corrosion resistant zirconia network fabricated by aqueous sol-gel	Journal of the Indian Chemical Society	0019-4522	98(4), 2021, 100052
3	Electroanalytical and surface studies on the protective action of a coating of PVA@3WGO on mild steel in acidic and saline environment	Results in Surfaces and Interfaces	2468-0230	4(1), 2021, 100018

Mrs. Najeera PC

<i>Sl. No.</i>	<i>Name of Paper</i>	<i>Name of Journal</i>	<i>ISSN</i>	<i>Issue, Year, Page</i>
1	Quality Assessment of Rubber Latex from Different Plane Areas in Nilambur Taluk of Kerala State	JASC: Journal of Applied Science and Computations	1076-5131	8(5), 2021, 25-28

UNIVERSITY EXAMINATION RESULTS

B. Sc. Chemistry 2018-'21

Number of students							Pass %
Appeared	Passed	A+	A	B	C	Failed	
47	40	2	23	14	1	7	85.11

Ms. Shaima TP and Ms. Safna P have got the 4th and 7th Ranks respectively in the University Examination.

M. Sc. Chemistry 2019-'21

Number of students							Pass %
Appeared	Passed	O	A+	A	B	Failed	
14	7	1	6	-	-	7	50.00

CLASS TOPPERS

Batch	Name	CGPA & Grade	% of Marks
UG 2018-'21	Shaima TP	5.77, A+, 4 th Rank	95.40
PG 2019-'21	Merin Sara	4.29, O grade	85.80

STUDENT QUALITY ASSURANCE CELL

Student Quality Assurance Cell (SQAC) is constituted for the efficient implementation of Teaching Learning process. The members include HoD and class leaders of UG and PG classes. The first meeting of the committee was held on 1st June 2021. HoD has made an awareness session to the class leaders of second year UG, third year UG and 2nd year PG classes. The second meeting of the Committee was carried out on 1st December 2021 after nominating the class leaders of first year UG and PG classes. The members of the SQAC were the following.

1.	Dr. Muhammed Basheer Ummathur	:	HoD
2.	Mubeena	:	Class leader, 1 st year UG
3.	Keerthana	:	Class leader, 2 nd year UG
4.	Shaniba	:	Class leader, 3 rd year UG
5.	Shaima TP	:	Class leader, 1 st year PG
6.	Resmin	:	Class leader, 2 nd year PG

TRAINING PROGRAMME ATTENDED BY STUDENTS

<i>Sl. No.</i>	<i>Topic</i>	<i>Students attended</i>	<i>Organizing institution</i>	<i>Period</i>
1	Training Programme on Processing of Rubber Latex	VI Sem UG	Common Facility Centre, Rubber Board, Payyanad	18 th , 19 th and 22 nd November 2021
2	UG Project	VI Sem UG	KINFRA Techno Park, Kakancheri	14 th to 19 th March 2022

TUTORIAL SYSTEM

Batch	Class Tutor
B. Sc	
I & II Sem	Dr. Thasneem P
III & IV Sem	Dr. Jyothi P
V & VI Sem	Dr. Jamsheena V
M. Sc	
I & II Sem	Dr. Deepa K
III & IV Sem	Mrs. Suhada KM

INTER-DEPARTMENTAL ACTIVITIES

OPEN COURSE

The Department offers Environmental Chemistry as the Open Course to the UG students of other departments.

CERTIFICATE COURSE

The Department conducted four certificate courses during this academic year.

1. **Hands on Training in Basic Chemistry Softwares:** The course was conducted for the final year B. Sc. and M. Sc. Chemistry students. 69 students successfully completed the Certificate course. Dr. Shamsheera KO was the coordinator of the course.

2. **Hands on Training in Preparation of Cleansing Agents:** The course was conducted for students in various disciplines. 48 students successfully completed the Certificate course. Dr. Thasneem P was the coordinator of the course.
3. **Hands on Training in Formulation of Rubber Compounding Techniques:** The course was conducted for Final UG students of our college in collaboration with Common Facility Centre, Rubber Board, Payyanad. 47 students successfully completed the Certificate course. Dr. Jasna VC was the coordinator of the course.
4. **Strategies to Prevent Environmental Pollution:** The course was conducted for the Open Course UG students of our college. 43 students successfully completed the Certificate course. Dr. Jasna VC was the coordinator of the course.

INFRASTRUCTURE

Department, Final UG classroom, PG classrooms, store room and Laboratories are now functioning in the new Science block.

SPECIAL ACHIEVEMENTS

- Mrs. Dilruba Fathima AM of 2019-22 batch is included in the Grand Masters Asia Book of Record and India Book of Record for reciting all the 118 elements of the periodic table in the order of their discovery in 32 seconds and 90 milli seconds at the age of 19 years, 3 months and 22 days as confirmed on August 10, 2021.
- Ms. Shaima TP of 2018-21 batch got 4th Rank in B.Sc. Chemistry of University of Calicut.
- Ms. Safna P of 2018-21 batch got 7th Rank in B.Sc. Chemistry of University of Calicut.
- Ms. Krishnapriya and Ms. Raniya of 2019-22 batch qualified JAM examination.
- Ms. Keerthana Sivan of 2020-23 Batch participated in “Kavyadhara” conducted by Manjeri FM on 4th January 2022.

ALUMNI

1. Text Books are given to Class Toppers of 2020-'21 on 10th March 2022. I year B. Sc.: Adila C; II year B. Sc.: Najaha P, III year B. Sc.: Shaima TP, I year M. Sc.: Resmin; II year M. Sc.: Merin Sara.
2. Alumni Lecture series started as a part of the 30th Anniversary Celebrations of the College.
 - Dr. Nabeela Kallayi Syed (2007-10 Batch), Assistant Professor (Adhoc), Govt. Women's College, Malappuram delivered a talk on “What Next? Career Opportunities after Graduation/ Post Graduation in Chemistry” on 25th January 2022 in google meet.
 - Ms. Aysha Bint Syed (2008-11 Batch), M.Sc. Nanotechnology, University College, London delivered a talk on “Make Your Dreams Happen” on 26th February 2022 in google meet.
 - Dr. Jamsheena V (2008-11 Batch), Assistant Professor, Dept. of Chemistry, KAHM Unity Women's College, Manjeri delivered a talk on “Meet Universities” on 20th March 2022 in google meet.

PROGRESSION TO HIGHER EDUCATION (2018-21 Batch)**UG to PG**

Sl. No.	Name of student	Course	Name of institution
1	Dilsha K	M. Sc. Chemistry	Delhi University
2	Shaima TP	M. Sc. Chemistry	NIT, Warangal, Telengana
3	Amna Sana K	M. Sc. Chemistry	Central University of Pondicherry
4	JafnaBinu MP	M. Sc. Hydrochemistry	CUSAT
5	Salva Bishiri M	M. Sc. Polymer Science	CIPET-IPT, Kochi
6	Fathima Shifna	M. Sc. Polymer Science	CIPET, IPT kochi
7	Ayisha Izza	M. Sc. Environmental Science	Kannur University Campus.
8	Asma V	M. Sc. Applied Chemistry	Calicut University Campus
9	Jinu K Saleem	M. Sc. Applied Chemistry	Calicut University Campus
10	Safna MP	M. Sc. Chemistry	DGM MES Mampad College
11	Fathimathul Rinsana OP	M. Sc. Chemistry	DGM MES Mampad College
12	Sneha. C	M. Sc. Chemistry	DGM MES Mampad College
13	Drishya. P	M. Sc. Chemistry	St. Mary's College, Thrissur
14	ShabanaShirin PP	M. Sc. Chemistry	KAHM Unity Women's College, Manjeri
15	Sahma Sirin TP	M. Sc. Chemistry	KAHM Unity Women's College, Manjeri
16	Shaima PT	M. Sc. Chemistry	KAHM Unity Women's College, Manjeri
17	Hisana P	M. Sc. Chemistry	KAHM Unity Women's College, Manjeri
18	Maneesha Nasrin A	M. Sc. Chemistry	MES Kalladi College, Mannarkkad
19	Shahna Sherin K	M. Sc. Chemistry	SNDPYSS College, Perinthalmanna
20	Shamna. K	M. Sc. Chemistry	SNDP YSS College, Perinthalmanna
21	Afeefa Nargees k	M. Sc. Chemistry	Blossom Arts and Science College , Pulikkal
22	Najma Farsana A	M. Sc. Chemistry	Majlis Arts& Science College, Puramannoor

UG to B. Ed

Sl. No.	Name of student	Name of Institution
1	Bayana Hanan M	Farook B.Ed Training College, Kottakkal
2	Ashmiya. P	Jamia Nadwiyya Training College, Edavanna
3	Hiba Rafeeqe M. K	EMEA Training College, Kondotty
4	Fathima Suhdiya P	CUTEC Manjeri

UG to Other courses

Sl. No.	Name of student	Course	Name of institution
1	Hiza. C	M. Sc. Food science and Nutrition	Pondicherry University
2	Safvana P	Mentor	Ma'din Public School, Malappuram
3	Hasna.M	MA Psychology	IGNOU
5.	Anjana Lakshmanan. E	PSC coaching	Ace Academy, Calicut
6.	Shabeeba Farsana	MA Psychology	IGNOU University
7.	Shahanas PP	Medical coding	Transorzesoln
8.	Basila T	MA psychology	IGNOU
9.	Jeslin CK	D.EL .ED	Sullamussalam Teacher Training Institute
10.	Anusree P	D.El.Ed	Sidheequiya Teacher Education Institute