From

The Head

Department of Chemistry

To

The Principal

Sir,

Sub: Conducting of Certificate course by the Department of Chemistry-Approval for the course and board of studies-request-reg.

Considering the demand from the students and the industry, the Department of Chemistry would like to conduct a certificate course on *Rubber Products Manufacturing*. The course is being conducted in collaboration with Common Facility Service Centre (CFSC) Manjeri, Department of Industries and Commerce; Govt. of Kerala. A memorandum of understanding is also being planned with CFSC. The course is meant for undergraduate students and is of 30 hours duration.

I request you to kindly grant permission to conduct the course. I also request you to constitute the board of the studies for the above course with the following members.

- Prof. P Santhakumari (Associate Professor, Department of Chemistry, Majlis Arts and Science College, Puramannur)
- Prof. K M Rukkiya (Head, Department of Chemistry, MES Keveeyam College Valanchery)
- Dr C Rajesh (Asst. Professor, Department of Chemistry, MES Keveeyam College Valanchery)
- Shan P R (Assistant Director, Common Facility Service Centre, Manjeri)

Thanking You

Yours faithfully

RUKKINA - ICM

SHAJEP PT
ASSISTANT PROFESSOR
IN CHARGE OF PRINCIPAL
M.E.S KEVEEYAM COLLEGE
AN ANCHERY, PIN 676 552



P.O.Valanchery, Malappuram Dist, Kerala, Pin: 676 552. Phone: 0494-2642670, 0494 2644380

www.meskeveeyamcollege.ac.in principal@meskeveeyamcollege.ac.in Reaccredited with 'A+' Grade by NAAC (3.44 Score)
Aided by Govt. of Kerala and Affiliated to the University of Calicut
ISO 9001:2015 certified institution

Proceedings of the Principal, MES Keveeyam College Valanchery

(Present: Shajid PP)

Proceedings No: Certificate Course/Che/2022-23/01 Dated 31-10-2022

Ref: (1) Letter from Prof. K M Rukkiya (Head, Department of Chemistry)

ORDER

As per reference cited (1) above Prof. K M Rukkiya (Head, Department of Chemistry) has requested permission to conduct a certificate course on *Rubber Products Manufacturing*. The course is meant for indergraduate students and is of 30 hours duration. In the same letter, she has requested to constitute a board of studies for the course with the following members.

- Prof. P Santhakumari (Associate Professor, Department of Chemistry, Majlis Arts and Science College, Puramannur)
- 2. Prof. K M Rukkiya (Head, Department of Chemistry, MES Keveeyam College Valanchery)
- 3. Dr C Rajesh (Asst. Professor, Department of Chemistry, MES Keveeyam College Valanchery)
- 4. Shan P R (Assistant Director, Common Facility Service Centre, Manjeri)

Sanction is hereby accorded to Department of Chemistry to conduct a certificate course on Rubber Processing and Technology. The board of studies for the course is constituted with the members listed above.

Order is issued accordingly.

Shajid PP

Principal

SHAJID PP
ASSISTANT PROFESSOR
IN CHARGE OF PRINCIPAL
M.E.S KEVEEYAM COLLEGE
VALANCHERY, PIN 676 552

Certificate Course on 'Rubber Products Manufacturing'

SYLLABUS

Unit 1: 4 Hours

Introduction to Rubbers (1 hour)

Natural Rubber-History-uses of Natural Rubber - Synthetic Rubbers- uses of Synthetic Rubber

Rubber Latex (1 hour)

Tapping, Preservation-composition and modification of latex, Synthetic rubber latex

Rubber Vulcanisation (2 hour)

Vulcanisation-sulphur vulcanisation – accelerators-activator- other ingredients. Non sulphur vulcanisation – evaluation of vulcanisation

Unit 2: 10 Hours

Testing – latex testing – DRC – TSC- Hands on experience. Cure time – T90 – scorch time – minimum torque – maximum torque . Tensile properties – tensile strength – stress – strain - % of elongation at break. Abrasion resistance –Din abrader – Relative abrasion loss.

Unit 3: 4 Hours

Compounding- latex compounding- ball mill- dry rubber compounding -two roll mill -Hydraulic press - Hands on experience

Unit 4: 7 Hours

Product manufacturing - Dipped goods - press moulding - Hands on experience

Unit 5: 3 Hours

Market study – developing of entrepreneurship culture, marketing of the products – improving skills – leadership - product diversification – profit concept

Unit 6: 2 Hours

Financial support from various agencies – setting up of industry – government regulationsproject report- various financial supporting schemes

SHAJID P P
ASSISTANT PROFESSOR
IN CHARGE OF PRINCIPAL
M.E.S KEVEEYAM COLLEGE
VALANCHERY, PIN 676 552

MES Keveeyam College, 676552

for HoD

Da. Soumini-C



കേരളo केरल KERALA

DR 300344

Memorandum of Understanding

Between





Ist Party: The Principal
MES Keveeyam College Valanchery
Malappuram (Dt), 676552

2nd Party: The Assistant Director
Common Facility Service Centre
(Department of Industries and Commerce, Kerala)
Payyanadu(PO), Manjeri.
Malappuram District, Kerala State, Pin 676122







കേരളം केरल KERALA

DR 300345

This Memorandum of Understanding (MoU) sets for the terms and understanding between the 1st and 2nd party to extend the Laboratory facility of Common Facility Service Centre to the students of the Department of Chemistry of MES Keveeyam College Valanchery, Malappuram (Dt), Kerala, India.

Background

This agreement is signed as per the request of the 1st party to enable the 1st party's institute, i.e., MES Keveeyam College Valanchery, to fulfill the need of the Polymer Processing Laboratory facilities to their students of Department of Chemistry by availing the Physical and Chemical Testing facilities available in 2nd party's institute i.e Common Facility Service Centre, Manjeri(herein after called CFSC). Following terms and conditions are incorporated in this agreement as mutually beneficial.

General Terms and Conditions

Provided by CFSC

COMMON FACILITY SERVICE CENTRE partment of Industries & Commerce Facilities of the Physical and Chemical Testing Laboratory at CFSC Payyanad P.Q.

Offer Skill oriented Certificate Course on Rubber Processing and Technology to the BSc

Polymer Chemistry students of second party

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Provided by MES Keveeyam College Valanchery

- Faculty support from the Department of Chemistry, MES Keveeyam College Valanchery shall be provided for the training activities at CFSC on request from 2nd party.
- Provide Academic resource support in Polymer Chemistry to the 2nd party whenever they requested.
- Written request along with bona-fide is to be forwarded to the 2nd party at least before two working days to avail the instrumental facilities at CFSC.
- · Fees stipulated if any; should be paid in advance as per the government directions time to time.

Other Terms and Conditions

Any misconduct or behaviour from the students or staff of the first party during the period of availing Instrumental Facilities at CFSC will result the cancellation of this agreement without prior notice to the 1st party.

Duration

This MoU shall become effective upon signature by the authorized officials under mentioned and will remain effect for a period of two years. However, as the Head of the Department of Industries of the Industries and & Commerce of Kerala State; the Director of Industries and Commerce, Kerala State has the power to cancel this MoU at any time without notice.

This memorandum is a statement of intent by the parties, intended to encourage mutual cooperation and does not create any rights, obligations or duties for any parties.

This MoU is signed on: 05.05.2023.

Signature:

Name: Dr. Vinod Kumar KP

Designation: Principal.

On behalf of MES Keveeyam College

Valanchery

Name: Shan PR

Designation: Assistant Director

On behalf of CFSC, Manjeri,

(Dept. of Industries and Commerce, Kerala State)

(First Party)

Witness 1

Witness 2: De Soumini-C

(Second Party)

DEPARTMENT OF CHEMISTRY

LIST OF STUDENTS FOR CERTIFICATE COURSE AT CFSC MANJERI

CLASS: 3 rd BSC POLYMER CHEMISTRY

SL.NO	NAME OF THE STUDENT		
1	AFLA MAHJABIN C		
2	BINU RIYAZI K		
3	FATHIMATH SAFVANA K K		
4	FAHMIJA ROSHNI T T		
5	RANA RASHEED K		
6	RUSDA K		
7	SHAMEEMA NASRIN K P		
8	SHAMLIYA P		
9	SHANA CH		
10	SUHANA SHERIN VP		
11	MUHAMMED SALIH K P		
12	MOHAMMMED SAHEER K		
13	VIVEK VARMA P		
14	ARDRA K C		
15	ARYA RAMACHANDRAN K P		
16	ASNA SHERIN		
17	KRISHNA RAMAKRISHNAN K P		
18	RIJULA DINESH		
19	SREELAKSHMI C		
20	BALIH A		
21	SANJAY E K		

MES Keveeyam College, 576557

for HoD Dr. Boumini-C

ASSISTANT PROFESSOR IN CHARGE OF PRINCIPAL M.E.S KEVEEYAM COLLEGE VALANCHERY, PIN 676 552

DEPARTMENT OF CHEMISTRY

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6	RUSDA K		
7	SHAMEEMA NASRIN K P		
8	SHAMLIYA P		
9	SHANA CH		
10	SUHANA SHERIN VP		
11	MUHAMMED SALIH K P		
12	MOHAMMMED SAHEER K		
13	VIVEK VARMA P		
14	ARDRA K C		
15	ARYA RAMACHANDRAN K P		
16	ASNA SHERIN		
17	KRISHNA RAMAKRISHNAN K		
18	RIJULA DINESH		
19	SREELAKSHMI C		
20	BALIH A		
21	SANJAY E K		

for HOD

Do Boumine - C

ASSISTANT PROFESSOR IN CHARGE OF PRINCIPAL M.E.S KEVEEYAM COLLEGE VALANCHERY, PIN 676 552

DEPARTMENT OF CHEMISTRY

LIST OF STUDENTS FOR CERTIFICATE COURSE AT CFSC MANJERI

ATTENDANCE REPORT

CLASS: 3 rd BSC POLYMER CHEMISTRY

SL.NO	NAME OF THE STUDENT	TOTAL HOURS	HOURS ATTENDED
1	AFLA MAHJABIN C	30	30
2	BINU RIYAZI K	30	30
3	FATHIMATH SAFVANA K K	30	30
4	FAHMIJA ROSHNI T T	30	30
5	RANA RASHEED K	30	30
6	RUSDA K	30	30
7	SHAMEEMA NASRIN K P	30	30
8	SHAMLIYA P	30	30
9	SHANA CH	30	30
10	SUHANA SHERIN VP	30	30
11	MUHAMMED SALIH K P	30	25
12	MOHAMMMED SAHEER K	30	30
13	VIVEK VARMA P	30	30
14	ARDRA K C	30	30
15	ARYA RAMACHANDRAN K P	30	30
16	ASNA SHERIN	30	30
17	KRISHNA RAMAKRISHNAN K	30	25
18	RIJULA DINESH	30	30
19	SREELAKSHMI C	30	30
20	BALIH A	30	30
21	SANJAY E K	30	30

SHAJID PT

ASSISTANT PROFESSOR
IN CHARGE OF PRINCIPAL
M.E.S KEVEEYAM COLLEGE
VALANCHERY, PIN 676 552

for HoD

No.: CFSCMJ/187/2023-E (14)



Date: 06-05-2023

COMMON FACILITY SERVICE CENTRE (RUBBER) DEPARTMENT OF INDUSTRIES AND COMMERCE

Payyanad.P.O., Manjeri, Malappuram, Pin - 676122

Ph : 0483-2768507, e-mail : adcfscmanjeri@gmail.com

CERTIFICATE

This is to certify that Ms. Rana Rasheed, Second year B.Sc Chemistry student of M.E.S KEVEEYAM College, Valanchery has undergone 5 days certificate course on Product Manufacturing, Physical & Chemical Testing of Latex and Dry Rubber at this Centre from 02-05-2023 to 06-05-2023 in collaboration with Department of Chemistry, M.E.S KEVEEYAM College, Valanchery. She actively involved in the process of product manufacturing and testing of Latex and Dry

Rubber during the training.









No.: CFSCMJ/187/2023-E (6)



Date: 06-05-2023

COMMON FACILITY SERVICE CENTRE (RUBBER) DEPARTMENT OF INDUSTRIES AND COMMERCE

Payyanad.P.O., Manjeri, Malappuram, Pin - 676122

Ph : 0483-2768507, e-mail : adcfscmanjeri@gmail.com

ERTIFICATE

This is to certify that Ms. Suhana Sherin V.P. Second year B.Sc Chemistry student of M.E.S KEVEEYAM College, Valanchery has undergone 5 days certificate course on Product Manufacturing, Physical & Chemical Testing of Latex and Dry Rubber at this Centre from 02-05-2023 to 06-05-2023 in collaboration with Department of Chemistry, M.E.S KEVEEYAM College, Valanchery.

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She actively involved in the process of

Rubber during the training.

Training Co ordinator

SHAMIDE P SSISTANT PROFESSOF CHARGE OF PRINCIPAL A.E.S KEVEEYAM COLLEGE ALANCHERY, PIN 676 552

anufacturing and testing of Latex and Dry

Assistant Director