



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
Sivakasi**

(Affiliated to Madurai Kamaraj University, Reaccredited with "A" Grade by NAAC,
College with Potential for Excellence by UGC & Mentor Institution under UGC PARAMARSH)

NAAC SSR Cycle IV (2015-2020)

1.1. CURRICULUM DESIGN AND DEVELOPMENT

1.1.2. REVISION OF SYLLABUS

**PERCENTAGE OF SYLLABUS REVISION
2020 AND LATER**



THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),

SIVAKASI – 626 123.

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
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DEPARTMENT OF CHEMISTRY

PERCENTAGE OF SYLLABUS REVISION

M.Sc. CHEMISTRY

2020 AND LATER

**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI.**

DEPARTMENT OF CHEMISTRY

M. SC CHEMISTRY – PROGRAMME CODE: MDCH

(For those who have joined in June 2020 and later)

Total Number of Courses having changes	:10
Total Number of Courses	:23
Percentage of Revision	:43%

M. Suresh

Signature of the HOD with Seal

Head of the Department of Chemistry,
S.F.R. College for Women, Sivakasi.

T. Palavesi

PRINCIPAL
The Standard Fireworks Rajaratnam
College for Women,
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DEPARTMENT OF CHEMISTRY
PERCENTAGE OF SYLLABUS REVISION
M.Sc. CHEMISTRY
2020 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
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SIVAKASI-626123

OUTCOME BASED EDUCATION WITH CHOICE BASED CREDIT SYSTEM
DEPARTMENT OF CHEMISTRY
M.Sc. CHEMISTRY
PROGRAMME CODE – MDCH
PROGRAMME SCHEME
(For those who have joined in 2020 and later)

Semester	Course Code	Course Title	Teaching Hours Per Week	Credits	Duration of Exam (Hours)	Marks Allotted		
						Internal	External	Total
I	MDCH11	Core Courses ORGANIC CHEMISTRY-I	5	4	3	40	60	100
	MDCH12	INORGANIC CHEMISTRY - I	5	4	3	40	60	100
	MDCH13	PHYSICAL CHEMISTRY -I	5	4	3	40	60	100
	MDCH1L1	ORGANIC CHEMISTRY PRACTICALS-I	5	3	6	50	50	100
	MDCH1L2	INORGANIC CHEMISTRY PRACTICALS -I	5	3	6	50	50	100
	MDCH1E1/ MDCH1E2	Elective Course I PHARMACEUTICAL CHEMISTRY /CHEMINFORMATICS	5	5	3	40	60	100
		Total	30	23				600
II	MDCH21	Core Courses ORGANIC CHEMISTRY -II	5	4	3	40	60	100
	MDCH22	INORGANIC CHEMISTRY -II	5	4	3	40	60	100
	MDCH23	PHYSICAL CHEMISTRY -II	5	4	3	40	60	100
	MDCH2L1	ORGANIC CHEMISTRY PRACTICALS -II	4	2	6	50	50	100
	MDCH2L2	PHYSICAL CHEMISTRY PRACTICALS -I	5	3	6	50	50	100
	MD2E	Elective Course II (Offered by other Departments)	6	5	3	40	60	100
		Total	30	22				600
III	MDCH31	Core Courses ORGANIC CHEMISTRY -III	5	4	3	40	60	100
	MDCH32	INORGANIC CHEMISTRY -III	5	4	3	40	60	100
	MDCH33	PHYSICAL CHEMISTRY -III	5	4	3	40	60	100
	MDCH3L1	INORGANIC CHEMISTRY PRACTICALS-II	5	3	6	50	50	100
	MDCH3L2	PHYSICAL CHEMISTRY PRACTICALS-II	5	3	6	50	50	100
	MDCH3E1/ MDCH3E2	Elective Course III MATERIALS SCIENCE /NANO CHEMISTRY	5	5	3	40	60	100



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DEPARTMENT OF CHEMISTRY
PERCENTAGE OF SYLLABUS REVISION
M.Sc. CHEMISTRY
2020 AND LATER

Field visit / Lab visit mandatory for the Core course								
			Total	30	23			600
IV	MDCH41	Core Courses ORGANIC CHEMISTRY –IV	6	4	3	40	60	100
	MDCH42	INORGANIC CHEMISTRY –IV	6	4	3	40	60	100
	MDCH43	PHYSICAL CHEMISTRY –IV	6	4	3	40	60	100
	MDCH4E1/ MDCH4E2	Elective Course IV BIOCHEMISTRY/ BIOMEDICAL INSTRUMENTATION	6	5	3	40	60	100
	MDCH4P	PROJECT & VIVA-VOCE	6	5	-	-	100	100
Total			30	22				500

ELECTIVE COURSE OFFERED FOR OTHER MAJOR STUDENTS

Semester	Course Code	Course Title	Teaching Hours Per Week	Credits	Duration of Exam (Hours)	Marks Allotted		
						Internal	External	Total
II	MDCH2E	SAFETY FIREWORKS	6	5	3	40	60	100

T. Palavesi

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NAAC SSR Cycle IV (2015-2020)

1.1. CURRICULUM DESIGN AND DEVELOPMENT

1.1.2. REVISION OF SYLLABUS

**PERCENTAGE OF SYLLABUS REVISION
2017 AND LATER**



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DEPARTMENT OF CHEMISTRY
PERCENTAGE OF SYLLABUS REVISION
M.SC CHEMISTRY
2017 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI.
DEPARTMENT OF CHEMISTRY
M. SC CHEMISTRY – PROGRAMME CODE: HLCH
(For those who have joined in June 2017 and later)

Total Number of Courses having changes :11

Total Number of Courses :23

Percentage of Revision : 48%

Signature of the HOD with Seal
Head of the Department of Chemistry,
S.F.R. College for Women, Sivakasi.

PRINCIPAL
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DEPARTMENT OF CHEMISTRY

PERCENTAGE OF SYLLABUS REVISION

M.SC CHEMISTRY

2017 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN,
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SIVAKASI
DEPARTMENT OF CHEMISTRY
M.Sc. CHEMISTRY- PROGRAMME CODE: HLCH
OUTCOME BASED EDUCATION WITH CHOICE BASED CREDIT SYSTEM
(For those who have joined in 2017 and later)

Sem	Course Code	Course Title	Teaching Hours Per Week	Credits	Duration of Exam. (Hrs.)	Marks Allotted		
						Internal	External	Total
I	HLCH11	ORGANIC CHEMISTRY-I	5	4	3	25	75	100
	HLCH12	INORGANIC CHEMISTRY - I	5	4	3	25	75	100
	HLCH13	PHYSICAL CHEMISTRY –I	5	4	3	25	75	100
	HLCH1L1	ORGANIC CHEMISTRY PRACTICALS-I	5	3	6	40	60	100
	HLCH1L2	INORGANIC CHEMISTRY PRACTICALS -I	5	3	6	40	60	100
	HLCH1E1/ HLCH1E2	ELECTIVE I PHARMACEUTICAL CHEMISTRY/ BIOINFORMATICS	5	5	3	25	75	100
II	HLCH21	ORGANIC CHEMISTRY –II	5	4	3	25	75	100
	HLCH22	INORGANIC CHEMISTRY –II	5	4	3	25	75	100
	HLCH23	PHYSICAL CHEMISTRY –II	5	4	3	25	75	100
	HLCH2L1	ORGANIC CHEMISTRY PRACTICALS -II	4	2	6	40	60	100
	HLCH2L2	PHYSICAL CHEMISTRY PRACTICALS -I	5	3	6	40	60	100
	HL2E	ELECTIVE II- (Offered by other Departments)	6	5	3	25	75	100
III	HLCH31	ORGANIC CHEMISTRY –III	5	4	3	25	75	100
	HLCH32	INORGANIC CHEMISTRY –III	5	4	3	25	75	100
	HLCH33	PHYSICAL CHEMISTRY –III	5	4	3	25	75	100
	HLCH3L1	INORGANIC CHEMISTRY PRACTICALS-II	5	3	6	40	60	100
	HLCH3L2	PHYSICAL CHEMISTRY PRACTICALS-II	5	3	6	40	60	100
	HLCH3E1/ HLCH3E2	ELECTIVE III CSIR- UGC NET PREPARATORY COURSE – CHEMISTRY/ MATERIALS SCIENCE	5	5	2	25	75	100
IV	HLCH41	ORGANIC CHEMISTRY –IV	6	4	3	25	75	100
	HLCH42	INORGANIC CHEMISTRY –IV	6	4	3	25	75	100
	HLCH43	PHYSICAL CHEMISTRY –IV	6	4	3	25	75	100
	HLCH4P	PROJECT & VIVA-VOCE	6	5	3	-	100	100
	HLCH4E1/ HLCH4E2	ELECTIVE IV BIOCHEMISTRY/ BIOMEDICAL INSTRUMENTATION	6	5	3	25	75	100



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DEPARTMENT OF CHEMISTRY
PERCENTAGE OF SYLLABUS REVISION
M.SC CHEMISTRY
2017 AND LATER

ELECTIVE COURSE OFFERED FOR OTHER MAJOR STUDENTS

Semester	Course Code	Course Title	Teaching Hours Per Week	Credits	Duration of Exam (Hours)	Marks Allotted		
						Internal	External	Total
II	HLCH2E	SAFETY FIREWORKS	6	5	3	40	60	100

T. Palavesi
PRINCIPAL
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NAAC SSR Cycle IV (2015-2020)

1.1. CURRICULUM DESIGN AND DEVELOPMENT

1.1.2. REVISION OF SYLLABUS

**PERCENTAGE OF SYLLABUS REVISION
2014 AND LATER**



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DEPARTMENT OF CHEMISTRY

PERCENTAGE OF SYLLABUS REVISION

M.Sc. CHEMISTRY

2014 AND LATER

**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI.**

DEPARTMENT OF CHEMISTRY

M. SC CHEMISTRY – PROGRAMME CODE: 14PCH

(For those who have joined in June 2014 and later)

Total Number of Courses having changes : 2

Total Number of Courses : 20

Percentage of Revision : 10%

M. Sathyanarayana

Signature of the HOD with Seal

Head of the Department of Chemistry,
S.F.R. College for Women, Sivakasi.

T. Palavesi
PRINCIPAL

PRINCIPAL
The Standard Fireworks
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DEPARTMENT OF CHEMISTRY

PERCENTAGE OF SYLLABUS REVISION

M.Sc. CHEMISTRY

2014 AND LATER

**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR
WOMEN, SIVAKASI**

**PG Chemistry – Allotment of Hours and Credits
(For those joined in June 2014 and later)**

Subjects	I Semester	II Semester	III Semester	IV Semester	Total Credits
Core courses					
Paper I	6(5)	6(5)	6(5)	6(5)	-
Paper II	6(4)	6(4)	6(4)	6(5)	-
Paper III	6(4)	6(4)	6(4)	6(4)	-
Lab	6(4)	6(4)	6(4)		-
Project&Viva	-	-	-	6(5)	-
Total	24(17)	24(17)	24(17)	24(19)	70
Electives					
Core Elective	6(5)	-	-	6(5)	
Non-major Electives	-	6(5)	6(5)	-	20
Total	30(22)	30(22)	30(22)	30(24)	90
Total Credits					90

M. Sowthamini
Head of the Department of Chemistry,
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DEPARTMENT OF CHEMISTRY
PERCENTAGE OF SYLLABUS REVISION
M.Sc. CHEMISTRY
2014 AND LATER

**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN,
SIVAKASI
Department of Chemistry (PG Programme) 2014 onwards**

Sem	Course Code	Course Title	Teaching Hours Per Week	Credits	Duration of Exam. (Hrs.)	Marks Allotted		
						Internal	External	Total
Core Courses – Major								
I	14PCH11	Organic Chemistry-I	6	5	3	25	75	100
	14PCH12	Inorganic Chemistry - I	6	4	3	25	75	100
	14PCH13	Physical Chemistry –I	6	4	3	25	75	100
	14PCH1L	Inorganic Qualitative and Quantitative analysis	6	4	6	40	60	100
	14PCH1EA	Elective I	6	5	3	25	75	100
II	14PCH21	Organic Chemistry –II	6	5	3	25	75	100
	14PCH22	Inorganic Chemistry -II	6	4	3	25	75	100
	14PCH23	Physical Chemistry -II	6	4	3	25	75	100
	14PCH2L	Organic Estimation and Analysis	6	4	6	40	60	100
	14PCH2E	Elective II-Safety Fireworks	6	5	3	25	75	100
III	14PCH31	Organic Chemistry –III	6	5	3	25	75	100
	14PCH32	Inorganic Chemistry –III	6	4	3	25	75	100
	14PCH33	Physical Chemistry –III	6	4	3	25	75	100
	14PCH3L	Physical Chemistry Practical	6	4	6	40	60	100
	14PCH3E	Elective III-Materials Science	6	5	3	25	75	100
IV	14PCH41	Organic Chemistry –IV	6	5	3	25	75	100
	14PCH42	Inorganic Chemistry –IV	6	5	3	25	75	100
	14PCH43	Physical Chemistry –IV	6	4	3	25	75	100
	14PCH4EB	Elective IV	6	5	3	25	75	100
	14PCH4P	Project & viva-voce	6	5	3	-	100	100
Electives								
I	14PCH1E1	Pharmaceutical Chemistry	6	5	3	25	75	100
I	14PCH1E2	Bioinformatics	6	5	3	25	75	100
IV	14PCH4E1	Bio Chemistry	6	5	3	25	75	100
IV	14PCH4E2	Biomedical Instrumentation	6	5	3	25	75	100

M. Sulfamane
Head of the Department of Chemistry,
The Standard Fireworks Rajaratnam
College for Women, Sivakasi.

PG CHEM - 5

T. Palavesu
PRINCIPAL
The Standard Fireworks Rajaratnam
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SIVAKASI.