


**MINUTES OF THE 20th MEETING OF THE BOARD OF STUDIES OF THE
CHEMISTRY DEPARTMENT HELD ON 24th June, 2023**

The meeting of the Board of Studies of the Chemistry Department was held on 24th June 2023 at 10 am in the Department Library.

In the beginning, the Chairperson introduced and welcomed the members. The Chairperson acknowledged and appreciated the significant contributions of the outgoing members. The following agendas were taken up for discussion.

Minute No	Minutes
1.	<p><i>Confirmation of the Minutes of the 19th BoS meeting held on 13th August 2022</i> The Chairperson Dr. R. Ragel Mabel Saroja read the minutes of the BoS meeting and it was confirmed.</p>
2.	<p><i>Action Taken Report on the Minutes of the 19th BoS meeting</i> The Chairperson Dr. R. Ragel Mabel Saroja presented the following action taken during the previous BoS</p> <ul style="list-style-type: none"> • To increase the percentage of course outcome, selected modules are modified. • Questions are ensured that they are in the understanding level by the students. <p>The members of BoS carefully perused the presented action by the Chairperson and expressed their satisfaction and appreciation.</p>
3.	<p><i>Review of Academic and Administrative Audit (AAA) Report</i> The Chairperson Dr. R. Ragel Mabel Saroja presented the AAA report criteria-wise and the members of BoS carefully reviewed the report and appreciated the following.</p> <ul style="list-style-type: none"> • Awards given to the high impact publication for staff and research scholars.



Dr. D. HENRY RAJA
 PRINCIPAL
 SCOTT CHRISTIAN COLLEGE (AUTONOMOUS)
 NAGERCOIL - 629 003


Dr. R. RAGEL MABEL SAROJA, Ph.D.
 HEAD
 Department of Chemistry & Research Centre
 Scott Christian College (Autonomous)
 Nagercoil - 629 003.

	<ul style="list-style-type: none"> Awards given to the best paper presentation for the PG students and research scholars. 																		
4.	<p>Review of Feedback Report on curriculum obtained from 1) Students 2) Teachers 3) Employers 4) Alumni</p> <p>The Chairperson presented the Feedback Report obtained from 1) Students 2) Teachers 3) Employers 4) Alumni on the curriculum of B.Sc. and M.Sc Chemistry from the academic year 2022-2023.</p> <p>The members of BoS carefully reviewed the Feedback Report received from the stake holders and proposed the following actions to be taken in the curriculum.</p> <ul style="list-style-type: none"> Remedial classes should be conducted regularly for the slow learners. Advanced learners should be identified and motivated for the competitive examinations. 																		
5.	<p>Introduction of new courses from the academic year 2023-24</p> <p>As per the suggestion of Dr. A. Siva and Dr. T.S. Abbs Fenn Regie the following changes were done in both UG and PG programme.</p> <p>Dr.R.Ragel Mabel Saroja proposed the introduction of the following new courses in the curriculum of B.Sc./M.Sc. Chemistry from the academic year 2023-'24.</p> <p>1. Name of the Course with local/regional/national/global relevance</p> <table border="1"> <thead> <tr> <th>Name of the Course</th> <th>Code</th> <th>Relevance to local, national, regional and global development needs</th> </tr> </thead> <tbody> <tr> <td>1.Foundation Course -Basic concepts of chemistry</td> <td>-</td> <td>Global</td> </tr> <tr> <td>2.Skill Enhancement Course –Food Chemistry</td> <td>-</td> <td>Global</td> </tr> <tr> <td>3. Electrochemistry</td> <td>-</td> <td>Global</td> </tr> <tr> <td>4. Generic Elective-I</td> <td>-</td> <td>Global</td> </tr> <tr> <td>5. Generic Elective- II</td> <td>-</td> <td>Global</td> </tr> </tbody> </table>	Name of the Course	Code	Relevance to local, national, regional and global development needs	1.Foundation Course -Basic concepts of chemistry	-	Global	2.Skill Enhancement Course –Food Chemistry	-	Global	3. Electrochemistry	-	Global	4. Generic Elective-I	-	Global	5. Generic Elective- II	-	Global
Name of the Course	Code	Relevance to local, national, regional and global development needs																	
1.Foundation Course -Basic concepts of chemistry	-	Global																	
2.Skill Enhancement Course –Food Chemistry	-	Global																	
3. Electrochemistry	-	Global																	
4. Generic Elective-I	-	Global																	
5. Generic Elective- II	-	Global																	


D.

Dr.D. HENRY RAJA
PRINCIPAL I/c
SCOTT CHRISTIAN COLLEGE (AUTONOMOUS)
NAGERCOIL-629 003


Dr. R. RAGEL MABEL SAROJA, Ph.D.
HEAD
Department of Chemistry & Research Centre
Scott Christian College (Autonomous)
Nagercoil - 629 003.

Suggestions and recommendations for changes in UG/PG Chemistry syllabus 2023-24

As per the recommendation of **Dr. T.S. Abbs Fenn Regie** we have introduced basic concepts of Chemistry for the fresher's of UG students in the Foundation Course. To create awareness for the adulteration in foods and bevarages which is the need of the hour he insisted us to give Food Chemistry as the skill enhancement course

As per the suggestion of **Dr.A.Siva** we have introduced Electrochemistry and Nano chemistry as elective papers in the PG Programme. Advanced topics in Reaction Mechanism and Stereochemistry were introduced in the Core papers. Since experimental learning is more effective he suggested to give equal importance to both theory and practicals .

6.Revision of syllabus of existing courses from the academic year 2023-2024

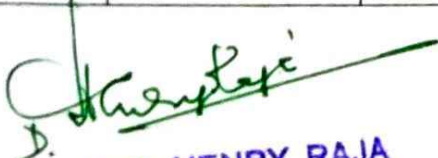
Name of the course	Course Code	Core/Elective/Value added	% Of content added or replaced
B.Sc Chemistry			
General Chemistry		Core	60%
Inorganic Practical -I		Core	80%
Generic Elective-I		Elective	80%
Generic Elective- II		Elective Practical	80%
M.Sc Chemistry			
Organic Chemistry-I		Core	80%
Inorganic Chemistry-I		Core	90%
Organic Chemistry Practical-I		Core	50%
Inorganic Chemistry Practical-I		Core	50%

S. No.	Semester	Name of the paper	Observations/Suggestions/recommendations	% of changes
1.	I	Core paper I – General Chemistry	General Chemistry Unit I: History of atoms and Interpretation of H-spectrum have been added Unit II: Modern periodic table has been added. Unit III: Periodic table and periodic properties have been replaced by Structure and Bonding -I Unit-IV: Analytical Chemistry has been replaced by Structure and Bonding-II Unit V: Bonding in organic compounds has been replaced by Basic concepts in Organic Chemistry and Electronic effects	70% changed

Dr. D. Henry Raja
Dr.D. HENRY RAJA
 PRINCIPAL I/c
 SCOTT CHRISTIAN COLLEGE (AUTONOMOUS)
 NAGERCOIL - 629 003

Dr. R. Ragel Mabel Saroja
Dr. R. RAGEL MABEL SAROJA, Ph.D.
 HEAD
 Department of Chemistry & Research Centre
 Scott Christian College (Autonomous)
 Nagercoil - 629 003.

2.	I	Core paper II – Inorganic Practical -I	Quantitative Inorganic Estimation and inorganic preparations All experiments have been replaced by new experiments	100% changed
3.	I	SECI - Food Chemistry	Unit-I Food Adulteration Unit-II Food Poison Unit-III Food Additives Unit-IV Beverages Unit-V Edible Oils	New Course 100% changed
4.	I	Foundation Course	Unit-I Structure of atom and Periodic classification of Elements and Properties Unit-II Chemical Bonding Unit-III Nomenclature and Isomerism in Organic Compounds Unit-IV States of Matter Unit-V Introduction to Spectroscopy	New Course 100% changed
5	I	Generic Elective -I	Unit I: Hydrogen compounds and Ozone has been replaced by chemical bonding and nuclear chemistry Unit II: Biochemistry has been replaced by Industrial chemistry Unit III: Nuclear Chemistry has been replaced by Fundamental concepts in organic chemistry Unit-IV: Applied chemistry has been replaced by drugs and speciality chemicals Unit V: Pharmaceutical chemistry has been replaced by Analytical Chemistry	100% changed
6	I	Generic Elective -II	Volumetric Analysis All single titrations have been replaced by double titrations	100% changed
7.	I	Core Paper I - Organic Chemistry-I	Unit I :Methods of Determination of Reaction Mechanism has been introduced Unit II: Aromatic and Aliphatic Electrophilic Substitution has been added Unit III: Aromatic and Aliphatic Nucleophilic Substitution has been introduced Unit IV:Module 4.1 is added Unit V: Stereochemistry-II is introduced	80% replaced
8.	I	Core Paper II – Inorganic Chemistry-I	Unit-I stereochemistry is replaced with structure of clusters. Unit II: Instead of coordination chemistry solid state chemistry-I has been introduced.	95% replaced


Dr.D. HENRY RAJA
 PRINCIPAL I/c
 SCOTT CHRISTIAN COLLEGE (AUTONOMOUS)
 NAGERCOIL - 629 003


Dr. R. RAGEL MABEL SAROJA, Ph.D.
 HEAD
 Department of Chemistry & Research Centre
 Scott Christian College (Autonomous)
 Nagercoil - 629 003.

			<p>Unit III: Instead of complexes, solid state chemistry-II is added.</p> <p>Unit IV: various diffraction and microscopic techniques has been added.</p> <p>Unit V: Band theory and defects in solids is introduced.</p>	
9	I	Core III Organic Chemistry Practical-I	<p>Qualitative Analysis of Organic Mixtures</p> <p>Separation of Organic Mixtures</p> <p>Elemental Analysis</p> <p>Identification of Functional group</p> <p>Preparation of Derivatives</p> <p>Determination of physical constants</p>	50% changed
10	I	Core IV Inorganic chemistry Practical-I	<p>Analysis of mixture of cations</p> <p>Unit -I</p> <p>Analysis of a mixture of four cations containing two common cations and two rare cations</p> <p>Unit-II</p> <p>1. Estimation of Zinc, Nickel, Magnesium and Calcium</p> <p>2. Estimation of mixture of metal ions- PH control, masking and demasking agents.</p> <p>3. Determination of Calcium and Lead in a mixture(PH control)</p> <p>4. Determination of Manganese in the presence of Iron</p> <p>5. Determination of Nickel in the presence of Iron</p>	50% changed
11	I	EC I – Nano Materials and NanoTechnology	<p>Medicinal Chemistry has been changed to Nano materials and Nano technologies</p> <p>Unit I: Introduction of Nano materials and Nano technologies</p> <p>Unit II: Synthetic Methods</p> <p>Unit III: Mechanical properties of Nanomaterials</p> <p>Unit-IV: Electrical properties of Nano materials</p> <p>Unit V: Nano composites</p>	New Course 100% Changed
12	I	EC-II Electrochemistry	<p>Unit I: Ionics</p> <p>Unit II: Electrode-Electrolyte Interface</p> <p>Unit III: Electrode of Elementary Electrode Reactions</p>	New Course

D. Henry Raja

Dr.D. HENRY RAJA
PRINCIPAL I/c
SCOTT CHRISTIAN COLLEGE (AUTONOMOUS)
NAGERCOIL-629 003

Ragel Mabel Saroja
Dr. R. RAGEL MABEL SAROJA, Ph.D.
HEAD

Department of Chemistry & Research Centre
Scott Christian College (Autonomous)
Nagercoil - 629 003.

			Unit-IV: Electroics of multi electron system Unit V: Concentration polarization, Batteries and Fuel Cells	100% Changed
--	--	--	---	-----------------

7. Introduction of field projects/internships/student projects from the academic year 2023-24

Resolved to introduce internship for the PG students from the academic year 2023-24

Resolved to introduce two value added courses in the UG and PG curriculum

UG Programme- Enterprenership in Chemistry

PG Programme –Role of Chemistry in industry

Dr.D. HENRY RAJA
PRINCIPAL i/c
SCOTT CHRISTIAN COLLEGE (AUTONOMOUS)
NAGERCOIL - 629 003

Dr. R. RIGEL MABEL SAROJA, Ph.D.
HEAD

Department of Chemistr. & Research Centre
Scott Christian College (Autonomous)
Nagercoil - 629 003.

Scott Christian College(Autonomous), Nagercoil

Department of Chemistry & Research Centre

BOARD OF STUDIES: UG & PG

Date & Time: 24-06-2023 & 10.00 am

Chair Person: Dr. R.Ragel Mabel Saroja

Members:

1. Dr. G.Allen Gnana Raj
2. Dr. I.Starlet Thanjam
3. Dr J.Prema Kumari
4. Dr.S.Begila David
5. Dr. A.Malar Retna
6. Dr. T.Sumitha Celin
7. Dr. A. Yardily
8. Dr. A Jeena Pearl
9. Dr..C.Anuba
10. Dr. R.D.Femitha
11. Dr.G.R.Bella
12. Dr.R.S.Jeba Jeevitha
13. Dr.G.S.Prabha Littis Malar

Members of Board of Studies 2023-24

1. **Dr. J. Helen Ratna Monica,**
Associate Professor of Chemistry,
The American College(Autonomous)
Madurai-625002.
Mobile.No.9443407575
ihmonica@yahoo.com



Dr.D. HENRY RAJA
PRINCIPAL i/c
SCOTT CHRISTIAN COLLEGE (AUTONOMOUS)
NAGERCOIL-629 003


Dr. R. RAGEL MABEL SAROJA, Ph.D.
HEAD

Department of Chemistry & Research Centre
Scott Christian College (Autonomous)
Nagercoil - 629 003.