



Avinashilingam Institute for Home Science and Higher Education for Women
 (Deemed to be University under Category A by MHRD, Estd. u/s 3 of UGC Act 1956)
 Re-accredited with A+ Grade by NAAC. Recognised by UGC Under Section 12 B
 Coimbatore - 641 043, Tamil Nadu, India

Minutes of Board of Studies in Chemistry held on 27.09.2021 at 11.30 am

The following members were present:

External Members:

Dr.P.Ramamurthy	Academician
Adjunct Professor, Department of Chemistry IIT Madras	
Mrs.R.Punitha	Industrial Expert
Director, WAFE Auxiliary Chemicals Pvt.Ltd. Coimbatore – 641 107	

Internal Members:

1. Dr.Shubashini K.Sripathi	Chairperson
2. Dr. R. Rajalakshmi	Member
3. Dr. N. Renugadevi	Member
4. Dr. R. Saratha	Member
5. Dr.P.Lalitha	Member
6. Dr.M.Gowri	Member
7. Dr.V.Sharulatha	Member

Invited Members

Dr. A.Prithiba	Faculty member
Dr. M.Amuthaselvi	Faculty member
Dr. Ali Fathima Sabirneeza. A	Faculty member

Ms.Sruthi	(2019 Batch M.Sc. Chemistry)	Alumni Representative
Subhashini P.J	III B.Sc. Chemistry	Student Representative
Tamilselvi	II M.Sc. Chemistry	Student Representative

Agenda and Resolutions

Agenda 1

- (a) Inclusion of Programme Learning Outcomes applicable for Post Graduate students admitted from 2021-2022 & onwards

The Board framed the following **Programme Learning outcomes** applicable for **Post Graduate students** admitted from 2021-2022 & onwards and passed the same with the concurrence of external members

1. Demonstrate holistic core competencies in classical, contemporary and applied chemistry.
2. Inculcate comprehensive domain knowledge relating to essential and advanced learning areas pertaining to chemistry.
3. Ability to demonstrate experimental techniques and methods
4. Capability of handling sophisticated equipment and instruments for identification of materials/chemical analysis and separation
5. Apply appropriate techniques and skills required for identifying chemistry- related problems and issues
6. Comprehensive communication of the concepts, constructs and techniques of the subject of Chemistry
7. Analyze and interpret data using appropriate methodologies to find evidence-based solutions
8. Become a skilful chemist, by acquiring knowledge about ethical standards, rules and regulations pertaining to scientific project
9. Apply domain knowledge analytical and computational skill to solve societal and environmental problems
10. Think critically and innovate new ideas for eco friendly chemistry
11. Suitability to be employable in chemical industry and R & D organizations

- (b) Inclusion of CLO-PLO mapping and matrix for 1st and 2nd semester, applicable for Post Graduate students admitted from 2021-2022 & onwards

The Board approved the CLO-PLO mapping and matrix for 1st and 2nd semester, applicable for **Post Graduate students** admitted from 2021-2022 & onwards

- (c) Revision in the Conceptual Framework of Curriculum and Scheme of Instruction and Examination for Post Graduate Students admitted from 2021-2022 & onwards due to shifting of theory papers from 4th semester to 1st to 3rd semester and offering **only Research Project** during 4th semester

- Members of the board discussed the revision in the Conceptual Framework of Curriculum and Scheme of Instruction and Examination for **Post Graduate Students** admitted from 2021-2022 & onwards due to shifting of theory papers from 4th semester to 1st to 3rd

semester and offering **only Research Project** during 4th semester and unanimously decided to shift the papers accordingly as follows:

Semester I

20 MCHC 23 - Chemistry of Biomolecules (Open Book Course) to be shifted from IV Semester to I Semester “21 MCHC 04 - Chemistry of Biomolecules (Open Book Course)”

Semester II

- 20 MCHC 06 and 20 MCHC 07 - Organic Chemistry II and III from II Semester has been merged as a single paper “21 MCH 07 - Organic Chemistry II”
- 20 MCHC 21 - Inorganic Chemistry II from IV Semester to be shifted to II Semester 21MCHC08 - Inorganic Chemistry II
- 20 MCHC 16 - Inorganic Chemistry Practical – I from III Semester to be shifted to II Semester 21 MCHC 11 - Inorganic Chemistry Practical II
- 20 MCHC 10 - Physical Chemistry Practical-II has renamed as “21 MCHC 10 - Physical Chemistry Practical-I”

Semester III

- 20 MCHC 14 - Polymer Chemistry has been deleted
- 20 MCHC 09 - Physical Chemistry Practical-I from II Semester to be shifted to III Semester and renamed as “21 MCHC 18 - Physical Chemistry Practical-II”
- 20 MCHC 22 - Computers in Chemistry from IV Semester to be shifted to semester III and renamed as 21 MCHC 19 – Computational Chemistry

Semester IV

Assigned Completely for Thesis Work

- **Credits for course papers were revised with core theory papers being assigned 4-5 credits and practical papers assigned 2-3 credits.**
- **The revised curricular structure and scheme of instructions and examination is presented in Table 1 below:**

Table I: Revised Curricular Structure

Part	Subject Code	Name of Paper/Component	2021 Syllabus			2020 Syllabus		
			Hours of Instructions/week		Credit	Hours of Instructions/week		Credits
			Theory	Practical		Theory	Practical	
I	21 MCHC 01	Organic Chemistry I	5		5	5		4
I	21 MCHC 02	Inorganic Chemistry I	5		5	5		4
I	21 MCHC 03	Physical Chemistry I	5		5	5		4
I	21 MCHC 04	Chemistry of Biomolecules (Open Book Course)	3		3	3		3
I	21 MCHC 05	Organic Practical I		5	3		6	3
I	21 MCHC 06	Organic Practical II		5	3		6	2
I	21 MCHC 07	Organic Chemistry II	5		5	4 + 3*		3 + 3*
I	21 MCHC 08	Inorganic Chemistry II	5		5	5		4
I	21 MCHC 09	Physical Chemistry II	5		5	5		4
I	21 MCHC 10	Physical Chemistry Practical -I		5	3	6		3
I	21 MCHC 11	Inorganic Chemistry Practical-I		3	3	4		2
I	21 MCHC 13	Spectroscopy I	4		5	3		3
I	21 MCHC 14	Spectroscopy II	4		5	3		3
I	21 MCHC 15	Research Methodology	3		4	3		2
I	21 MCHC 16	Phytochemical Methods and Medicinal Chemistry	4		4	5		2
I	21 MCHC 17	Inorganic Chemistry Practical -II		5	3	6		3
I	21MCHC 18	Physical Chemistry Practical - II		4	3	5		2
I	21 MCHC19	Computational Chemistry	3		5	3		3
I	21 MCHC 22	Research Project	30		8	18		6

* Organic Chemistry II and Organic Chemistry III

Minimum Credits required for PG Degree: **97+2 (MOOC)**

Part I

Total Number of Core course : 13 (57 Credits)

Total Number of Practical courses : 6 (15 Credits)

Thesis : 1 (8 Credits)

IDC/MDC /Self-study/ Mini Project : 12 Credits

Part II :Mini Project/ Professional Certification/ Internship : 5 Credits

Total Credits : 97

Experts Views

- Title for course paper 21 MCHC 17 titled 'Computers in Chemistry' to be revised as "Computational Chemistry"
- Increasing credits for M.Sc., Course to 97
- Discussion on number of course papers at Ph.D level and evaluation method and credits for the internships
- Discussion on specifications for choosing industries by the students for internship
- Suggestion for the introduction of elective papers

Agenda 2

(a) Inclusion of Programme Learning Outcomes applicable for Undergraduate students admitted from 2021-2022 & onwards

The Board framed the following **Programme Learning Outcomes** applicable for **Under Graduate students** admitted from 2021-2022 & onwards and passed the same with the concurrence of external members

1. Methodical and logical understanding of the fundamental concepts in Chemistry
2. Develop critical thinking ability by solving problems using basic chemistry knowledge, skills and concepts
3. Domain knowledge, skill sets values and ethics
4. Comprehend and develop ethical awareness/reasoning which the course curriculum adequately provides
5. Hands on experience of equipments, instruments used in the chemistry laboratory
6. Application of knowledge gained for use in the chemical industry
7. Demonstrate competence in different chemical laboratories
8. Gain relevant basic and applied knowledge in chemistry for suitability to be employed in chemical industries
9. Develop inquisitiveness by questioning, planning and reporting
10. Motivate and Improve attitude to pursue higher studies
11. Aptitude to inculcate research culture

(b) Inclusion of CLO-PLO mapping and matrix for 1st and 2nd semester, applicable for Under Graduate students admitted from 2021-2022 & onwards.

The Board approved the CLO-PLO mapping and matrix for 1st and 2nd semester, applicable for **UG Graduate students** admitted from 2021-2022 & onward.

- (c) Introduction of course 21BAFU01 **Fundamentals of Research** under Part IV component with 2 credits as **Ability Enhancement Compulsory Course** for all the Under Graduate Students admitted from 2021-2022 & onwards was approved
- (d) Increase in the credits of **NCC from 6 to 24 (credits)** offered as Extra-Curricular Course under Part IV Component applicable for **Under Graduate NCC** students admitted from the academic year 2021-2022 & onwards as per UGC Guidelines was approved.

Agenda 3

Passing the syllabi of **Ph.D. Specialization papers** applicable for **Ph.D. scholars** admitted during **August / September, 2021**

The board passed the following syllabi of specialization **papers** applicable for **Ph.D. scholars** admitted during **August, 2021**

- Electrochemical Energy Storage
- Advanced Coordination Chemistry
- Phytochemical Methods and Molecular Modeling and Pharmacophore Designing

The board also ratified the following Ph.D syllabi which was earlier approved by the circulation to the external BOS members for candidates admitted during January 2021

- 20PHCH03A - Phytochemical Methods
- 20PHCH03B- Advanced Materials Chemistry
- 20PHCH03C - Organic Chemistry
- 20PHCH03D - Green Synthetic Techniques and Nanochemistry
- 20PHCH03E - Nanoparticles and Drug delivery

Agenda 4

List of Subject experts for question paper setting and valuation & subject experts for Screening & Selection Committee

Members of BoS reviewed and revised the list of subject experts for selection committee, Scrutiny Committee, Board of Studies, Question paper setting, paper valuation and Research Committee and the updated list is submitted

Suggestions by Student Representatives

Apart from the major paper and allied paper one paper to be added in every semester which focuses on the application part (agriculture chemistry, drug chemistry, forensic chemistry, food chemistry etc.)

- Additional courses may be added in part-IV component to get exposure to various fields
- Up gradation of English syllabus 1st and 2nd years with basic grammar and communication skills apart from dialogue writing , telephonic conversation etc.,
- More skill oriented workshops to be conducted
- Lending of non-subject and competitive exam books can be considered
- In PG environmental Chemistry may be upgraded with advanced topics, projects and field trips.
- Decrease in number of papers in 3rd semester since in the existing curriculum 11 papers are offered

Members Present

Signature

External Experts

Dr.P.Ramamurthy- Academician

Adjunct Professor, Department of Chemistry IIT Madras



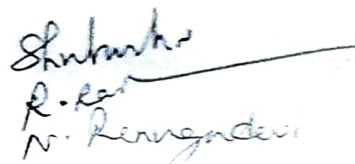
Mrs.R.Punitha- Industrial Expert

Director, WAFE Auxiliary Chemicals Pvt.Ltd.

R.P-11-

Internal Members

1. Dr.Shubashini K.Sripathi, Professor and Head -- Chairperson

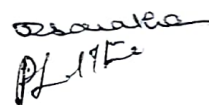


2. Dr. R. Rajalakshmi, Professor

3. Dr. N. Renugadevi , Professor

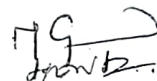
4. Dr. R. Saratha, Professor

5. Dr.P.Lalitha, Professor



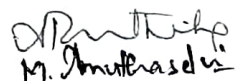
6. Dr.M.Gowri , Asst.Prof. SG

7. Dr.V.Sharulatha, Asst.Prof SS



Invited members

8. Dr. A.Prithiba, Asst.Prof



9. Dr. M.Amuthaselvi, Asst.Prof



10. Dr. Ali Fathima Sabermeeza. Temp. Asst.Prof

Student Representatives

11. Subhashini P.J, Student representative ,

12. Tamilselvi, Student representative

13. Ms.Sruthi, Alumni Representative