## SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

Board of Studies Meeting on 14/10/2014 @ 11.00 am.

Venue: Department

#### **Members Present:**

- 1. Joseph John
- 2. Jinu George
- 3. Senju Devassykutty
- 4. Aasha Mathew
- 5. K. B. Jose
- 6. Thommachan Xavier
- 7. Ignatious Abraham
- 8. Franklin J.
- 9. V. S. Sebastian
- 10. Abi T. G.
- 11. Ramakrishnan S.
- 12. M. George
- 13. Midhun Dominic C. D.
- 14. Joseph T. Moolayil
- 15. June Cyriac
- 16. Grace Thomas

The meeting started at 03.00 pm and was attended by 16 members. The following decisions were taken:

- 1. Approved the MG University syllabus for the UG batch 2014-17.
- 2. Approved the MG University syllabus for the PG batch 2014-16
- Approved the mark system and final grading for UG and PG programme from 2014-15 academic year onwards.
- 4. The internal-external ratio is fixed as 1:3 for both UG and PG.
- 5. Approved the exam pattern and modes in the UG regulation.

- The meeting recommended the following for the consideration of the academic council.
- 7. The meeting resolved to implement Choice Based Credit Semester System (CBCSS) for B. Sc. Chemistry programme. It was also decided to introduce elective system for M.Sc. Chemistry and M.Sc. Pharmaceutical Chemistry programmes. New syllabus shall be drafted based on the above decisions.
- 8. The meeting resolved to enrich the contents of the courses for developing varied skills in students, making them enterprising and employable. It was also decided to address the cross-cutting issues like gender, environment and sustainability, human values, professional ethics in the suitable syllabus contents.
  - a) To include internship for skill development for UG students.
  - Separate credit shall be given for the visit to a leading research centre as part of curriculum for both PG and UG programmes.
  - c) The meeting decided to prepare the draft of the revised syllabus for UG and submit in the next meeting.

The meeting ended by 4.15 pm.

Dr. Joseph John

Chairman

**Board of Studies** 

Sacred Heart College (Autonomous)
Theyara, Kochi-682 013

# SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

Board of Studies Meeting on 16/03/2015 @ 02.15 am.

Venue: Staff Room

#### **Members Present:**

- Krishna Kumar I. M. (Industry)
- 2. Franklin J.
- 3. Dr. Jude Martin Mendez, Associate Prof., St. Alberts' College, Ekm.
- 4. Dr. Joseph T. Moolayil
- 5. Dr. V. S. Sebastian
- 6. Dr. Jose K. B.
- 7. Ignatious Abraham
- 8. Midhun Dominic C. D.
- 9. Aasha Mathew
- 10. Abi T. G.
- 11. Senju Devassykutty
- 12. June Cyriac
- 13. Jinu George
- 14. Dr. Grace Thomas
- 15. M. George
- 16. Thommachan Xavier

The meeting started at 2.15 pm in the Dept. and was attended by 16 members.

The meeting verified the revised syllabus for UG Programme and approved to submit in the Academic Council. In the final draft of the syllabus, the total credit, including additional core course on Environment Science is 620. For complementary course the total credit is 14. There is an extra credit course on social work with one credit which is mandatory and another extra credit course- Club activities (Credit -1) which is desirable. Those students who are doing internship programme can acquire one additional extra credit, which is not mandatory.

The meeting approved the following changes in the draft B.Sc. Chemistry-2015 syllabus.

- a) A new elective course titled "Advances in Chemistry" has been introduced in semester 6.
- b) The semester 1 core course "Theoretical and Inorganic Chemistry I" has been thoroughly revised by introducing a module of quantum chemistry.
- c) "Physical Chemistry-I and Physical Chemistry-II courses of Semester 5 and Physical Chemistry-IV Course of Semester 6 has been revised.
- d) The following complementary courses have been revised.

Advanced Physical Chemistry – I

Semester 3 (Physics)

Inorganic & Bio-inorganic Chemistry

Semester 3 (Botany & Zoology)

Advanced Bio-Organic Chemistry

Semester 4 (Botany & Zoology)

The meeting approved the syllabus and decided to submit in the coming Academic Council meeting for final approval.

The meeting ended by 04.00 pm.

Dr. Joseph John Chairman

Board of Studies

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Sacred Heart Com

### SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

## Minutes of the Board of Studies of Chemistry Held on 03/12/2015/ at

#### **Members Present:**

- 1. Dr. Joseph John, Chairman
- 2. Dr. Jude Martin Mendez, St. Alberts' College, Ekm.
- 3. Dr. Joseph T. Moolayil, S. H. College, Thevara
- 4. Dr. V. S. Sebastain, S. H. College, Thevara
- 5. Dr. M. George, S. H. College, Thevara
- 6. Dr. Jinu George, S. H. College, Thevara
- 7. Dr. RamaKrishnan S., S. H. College, Thevara
- 8. Midhun Dominic C. D., S. H. College, Thevara
- 9. Dr. Grace Thomas
- 10. Dr. Kochu Baby Manjooran S., BPCL
- 11. Dr. KrishnaKumar I. M.
- 12. Dr. Jorphin Joseph
- 13. June Cyriac

The following modifications were discussed and accepted.

- Pattern of questions for external examination –modified.
  - 13 (10) 20 Marks
  - 8 (5) 25 Marks
  - 4 (2) 30 Marks
- Credits for Project changed.
- The meeting resolved to spare three months after semester 4 examinations exclusively for MSc projects in reputed national institutions.

## **Organic Chemistry**

- Sem 1- Basic Organic Chemistry Revised
- Sem 2- Organic reaction Mechanism Revised
- Sem 3- 1. Organic Synthesis Revised
- Spectroscopic Methods in Chemistry
- Sem 4 Advanced Organic Chemistry Reorganised additions

#### **Physical Chemistry**

- The papers are renamed as Physical chemistry I, II, III and IV respectively in the four semesters.
- The contents of Classical Thermodynamics are reduced from 27 hrs to 19 hrs removing the repetition of degree Syllabus.
- A 12 hrs. topic, Green Chemistry was removed from paper III as the contents are covered in the Organic Chemistry paper in IV<sup>th</sup> semester.
- New experiments on Electrochemistry and those using UV-Vis Spectrometer are included in the Practical.

#### **Theoretical Chemistry**

- Sem 1. Introductory part of Quantum Mechanics retained with slightly modified topics of Group Theory.
- Sem 2 New Topic introduced Applications of Quantum Mechanical Principles in Spectroscopy.
  - A new set of Computational Chemistry experiments related to Organic Chemistry and Physical Chemistry is introduced in the first year in Physical/Computational Chemistry practicals.

### **Inorganic Chemistry**

- Sem 1- Topics like Organometallic Polymers eliminated.
   Nuclear Chemistry content was increased with suitable addition.
- Sem 2- No significant changes in the contents.
- Sem 3- No significant changes in the contents.
- Sem 4 Advanced Inorganic Chemistry paper has been modified with addition.

### **Practicals**

- Sem 1+2 added Separation of Metal Ions by Chromatographic Methods
- Sem 3+4 Inorganic Chemistry practicals have been enriched by adding Preparation of Metal Nano Particles.
- Sem 3 & 4 Organic Chemistry practicals have been modified.

## Applied Chemistry - Pharmaceutical Chemistry

Syllabi have been rigorously modified and advanced topics are included. The contents of Bio-Chemistry are retained almost the same.

As part of value addition, Computational Chemistry and Drug Design and Docking and Drug Design are to be introduced as new value-added courses.

Dr. Joseph John

Board of Studies Jr. Johnson X Fall Charles

Sacred Heart College (Autonomous) Theyara, Kochi-582 013

#### SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

### Board of Studies Meeting on 22/07/17

#### **Members Present:**

- 1. Dr. Joseph John
- 2. Dr. Jose K. B.
- 3. Dr. Joseph T. Moolayil
- 4. Dr. Thommachan Xavier
- 5. Dr. V. S. Sebastian
- 6. Dr. M. George
- 7. Dr. Grace Thomas
- 8. Dr. Jinu George
- 9. Dr. Ignatious Abraham
- 10. Midhun Dominic C. D.
- 11. Dr. RamaKrishnan S.
- 12. Senju DevassyKutty
- 13. June Cyriac
- 14. Franklin J.

The following decisions are taken during the meeting:

Question bank for S6 elective should be prepared and end semester examination should be conducted by taking the questions from question bank 2015-18 batch.

Students who have carried out internship during the vacation after S4 semester can submit their report as B.Sc. Project.

### Decided to revise the syllabus for 2019 admission.

Common Course like Environmental Science can be included in the Core Syllabus. Other common courses like human rights, constitution etc. are difficult to be included in the core syllabus. Hence it has to be discussed in the academic council or higher body to make a suitable decision common to all.

Decided to introduce Molecular Modelling and Molecular Design as a value-added course.

### For 2018 Admission

# Co-ordinators for U G Syllabus Revision

Inorganic

- Dr. Joseph John

(Core) S5, S6

Organic

- Dr. V. S. Sebastian

(Core) S3, S4, S5, S6)

Physical

- Dr. K. B. Jose,

(Core) S5, S6

Physical

- Dr. Thommachan Xavier (Complementary S3, S4 Physics)

Theoretical

- M. George (S1, S2 Core)

Complementary

- S1, S2 - Dr. Ignatious

Complementary

- S3, S4 Ferole Bot - Dr. Franklin

Elective

- Dr. Grace Thomas (Core) S6

Dr. Joseph John Chairman

**Board of Studies** 

Dr. Johnson X Palackapp.....

Sacred Heart College (Autonomous) Theyara, Kochi-682 013

## SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

### Board of Studies Meeting Held on 18/07/18

#### **Members Present:**

- 1. Dr. Joseph John
- 2. Dr. Jude Martin Mendez
- 3. Dr. Jose K. B.
- 4. Dr. Joseph T. Moolayil
- 5. Dr. Jorphin Joseph
- 6. Dr. Jinu George
- 7. Dr. Ignatious Abraham
- 8. June Cyriac
- 9. Dr. RamaKrishnan S.
- 10. Dr. Abi T. G.
- 11. Dr. Thommachan Xavier
- 12. Senju Devassykutty
- 13. Dr. V. S. Sebastian

### The following decisions are taken during the meeting:

- A new course in Environmental Chemistry is introduced in Semester V with some Changes. (Sem V)
- Green Chemistry content can be enriched by including Nanotechnology and its environmental impacts naming it as "Environment Aspects of Nanotechnology".
- Supplement Unit 4 Air, Water, Soil Pollution taking a few more additions if needed.
- Nuclear Chemistry: Sem II Content & Sem V contents of Environmental Studies should not be same. Hence substitute Nuclear Chemistry topic in Sem II (9hrs) with portions that we excluded from "advanced paper". Or any relevant topic either from Inorganic /Physical /theoretical paper.
- Suggestion: Acids & Bases, SHAAB principle.

- Delete Acid Base concept from Inorg. Sem V, Add this to Sem II (Core) for 4 hrs, and also Non aqueous Solvents of 4 hours (from Sem VI (Inorganic chemistry)
- Based on the above modifications, core chemistry Semester 1 Course "Theoretical and Inorganic Chemistry-I" and Semester 2 Course "Theoretical and Inorganic Chemistry -II" have been modified.
- Sem VI Coordination Chemistry hours to be increased from 18 to 27. Enrich Coordination Chemistry taking few topics from University Syllabus.
- Inorganic Chemistry Course of Semester VI has been thoroughly modified.
- Two new elective courses "Applied Inorganic Chemistry" and "Medicinal Chemistry" have been introduced in semester VI.
- Physical Chemistry -I course has been revised and introduced in Semester V.
- Physical Chemistry –II course has been revised and introduced in Semester VI.
- Physical Chemistry III has been revised.
- Physical Chemistry –IV course in Semester 6 has been modified.
- Volumetric Analysis practicals of first year core and complementary courses have been changed to microscale analysis by introducing double-burette titration method.
- Organic Chemistry practicals of second year core and complementary courses have been modified by introducing methods.
- CADD Modelling and Simulation to be introduced as the new value-added course.

Committees suggested for modification of syllabus:

Organic

VSS, JTM

Inorganic

RKS, SD

Physical

IGA

Organic Chemistry – include topics on a real time practical manner.

Chairman, Board of Studies Principal

Sacred Heart College (Autonomone) Theyara, Kochi-682 013

# SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

# BoS Meeting held on 15.03.2019

### **Members Present**

- 1. Dr. K. B. Jose
- 2. Dr. Kochu Baby Manooran
- 3. Dr. Reji Varghese
- 4. Shri. Joson Padayatty
- 5. Dr. Joseph T. Moolayil
- 6. Dr. V. S. Sebastian
- 7. Dr. Jorphin Joseph
- 8. Dr. RamaKrishnan S.
- 9. Midhun Dominic C. D.
- 10. Dr. Franklin J
- 11. Dr. June Cyriac
- 12. Senju DevasyKutty
- 13. Grace Thomas
- 14. Dr. Thommachan Xavier
- 15. Dr. June George
  - Experts expressed their concern over the lack of skill development in the present syllabus which can enable students to pursue a practical based system.
  - Classifications are made on the Environmental Studies portions.
  - To make the syllabus more relevant, it is better to add some practical aspects
    of Chemistry rather than topics on Human Rights.
  - Suggestions were made to include portions like nuclear waste hazard, its disposal, PAH elimination methodology, toxic molecules in food etc.
  - Add on Course on Toxic Materials in Food may be formulated in future which may increase the employability of students. Other suggestions for add on course are:
    - a. Drinking water standards

- b. Lab Waste Management
- c. Effluent Water Treatment etc.

### Suggestions for

- Lecture series of some domains for advance learners by experts from outside.
- More emphasis to qualitative & quantitative lab problem solving.
- Instrumentation techniques may be extended up to advanced instruments.
- MSc Syllabus may be revised by a team of faculty based on subjects changed may be made in practicals as well.

## Resolutions of the meeting

- Resolved to restructure the BSc syllabus in the OBE format to project the outcome
  of each course and of the entire programme.
- 2. Resolved to start a 30 hour add on course in Food Chemistry in the current year.
- 3. Resolved to revise the PG syllabus incorporating practical application.

Dr. Jose K. B.

Chairman, Board of Studies

Dr. Johnson K Palackappinil
Principal