

PG and Research Department of Physics
Minutes of the Meeting of Board of Studies in Physics (PG)

The meeting of the Board of Studies in Physics (PG) was held on Monday, 30th December, 2020 at 7.20 P.M. through Google meet. The following members were present for the meeting.

Members Present

Chairperson Dr. M. Jose

Members Dr. A. Albert Irudayaraj
 Mr. C. Tirupathy
 Mr. M. Aravinthraj
 Dr. S. Kalaiarasi
 Mr. R. Ramesh
 Mr. D. Rajkumar
 Dr. A. Dhayal Raj
 Mr. N. Madhavan
 Dr. S.A. Martin Britto Dhas
 Mr. G. Jayakumar
 Mr. D. Magimai Antoni Raj
 Mr. L. Anandaraj
 Dr. S. John Sundaram

University Nominee Dr. D. Jaikumar
 Head, Department of Physics,
 Voorhees College, Vellore

Subject Expert Dr. J. Suresh
 Principal & Associate Professor,
 Department of Physics,
 The Madura College (Autonomous), Madurai.

Mr. S. Naresh,
HR Representative II, Caterpillar India Pvt. Ltd
Small Drivetrain systems, Hosur.

Student Representatives

1. P. Jeevitha (BP190303)
2. K. Dhilipkumar (BP190321)

Rev. Dr. G.Theophil Anand SDB, Rev. Dr. Gandhi Kallarasan SDB and the meritorious alumni, Mr.M.Selvam did not attend the meeting.

Agenda

To discuss and recommend programme structure, syllabi, regulations for theory, practical and project work for the students admitted from the academic year 2020-2021 and thereafter.

Resolutions

After due deliberations, the following decisions have been made by the board.

- Recommend the existing programme structure, syllabi, regulations for theory, practical and project work for M.Sc. Physics for the academic year 2020-2021 and thereafter.

The following are the suggestions /recommendations of the members of the board of studies which are to be taken up when the revision is due.

1. Dr. D. Jaikumar, the University Nominee came up with the suggestion that Microprocessor paper in the II semester can be shifted to III semester as one of the core papers and Nano science and technology paper can be placed in the II Semester. Dr. A. Albert Irudayaraj said that Microprocessor can remain in the II Semester since that would be very convenient for the students to learn the basics and it would be of great help for the students to do the practicals in the subsequent semesters. After listening to various suggestions proposed by the board members, the board finally decided that the Microprocessor paper can remain in the II semester.
2. Dr. D. Jaikumar, the University Nominee proposed that Mathematical Physics paper can continue to remain as a core paper but it can be divided into two papers which may be dealt in both Semester I and Semester II.

3. Dr.J. Suresh, the subject expert proposed that Solid State Physics and Mathematical Physics paper can be dealt in two semesters instead of having it in a semester. He also expressed his concern that the Microprocessor paper must be included as an Elective paper and Nano science paper has to be made as the core paper. He also added that the C programming and research methodology can be one of the elective papers instead of being a core paper. Further, the subject expert strongly suggested that Non major elective papers can be introduced in the PG courses as well. The University Nominee also insisted having non-major elective papers in the PG curriculum. Moreover, the subject expert suggested that the Electromagnetic theory paper can be introduced in Semester I while Quantum mechanics can be placed in the Semester II.
4. Dr. J. Suresh very much insisted that syllabus for the M. Sc Students should be in accordance with the syllabus proposed by Tamilnadu state council for higher education for the students' sake which was also backed by the University nominee.
5. The student representatives said that the Mathematical Physics paper can be split into two papers since it has a heavy content.
6. Finally, Dr. M. Jose, the chairperson expressed his sincere thanks to all the members of the board for their valuable suggestions and for their availability.

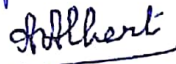
Chairperson

Dr.M.Jose

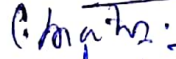


Members

Dr.A.Albert Irudayaraj



Mr. C. Tirupathy



Mr. M. Aravinthraj



Dr. S. Kalaiarasu



Mr. R. Ramesh



Mr. D. Rajkumar



Dr. A. Dhayal Raj



Mr. N. Madhavan



Dr. S.A. Martin Britto Dhas



Mr. G. Jayakumar




Mr. D. Magimai Antoni Raj


Mr. L. Anandaraj 

Dr. S. John Sundaram 


University Nominee

Dr. D. Jaikumar 
Head, Department of Physics,
Voorhees College, Vellore

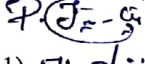
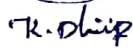
Subject Expert

Dr. J. Suresh 
Principal & Associate Professor,
Department of Physics,
The Madura College (Autonomous), Madurai.

Industrialist

Mr. S. Naresh,
HR Representative II, Caterpillar India Pvt. Ltd
Small Drivetrain systems, Hosur. 

Student Representatives

1. P. Jeevitha (BP190303) 
2. K. Dhilipkumar (BP190321) 

Dr. M Jose Assistant Professor <jose@shcpt.edu>

Minutes of the BoS in PG Physics-Sacred Heart College-reg


4 messages

Sat, Dec 5, 2020 at 9:25 PM

Jose <jose@shcpt.edu>
To: phyhodvcv@gmail.com, jak_3phy@yahoo.co.in

Dear Sir,
Greetings from Sacred Heart College (Autonomous), Tirupattur.
I am indeed very happy and fortunate to have you as the university nominee in the board of studies of Physics in our college. I am extremely grateful for your useful suggestions during the BOS meeting (PG Physics) on 30th November 2020 through google meet. I have attached the minutes with this email and I would be glad if you could approve the minutes and send a reply email at the earliest for me to place it before the Academic council meeting scheduled to be held on 19th december 2020.
Looking forward to your continuous support
Thank you once again.
With regards,

Dr. M. Jose
Dean of Research and
Lead (PG), Department of Physics
Sacred Heart College (Autonomous)
Tirupattur-635601
India
Phone:9944825036

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Mail Delivery Subsystem <mailer-daemon@googlemail.com>
To: jose@shcpt.edu

Sat, Dec 5, 2020 at 9:25 PM

Address not found

Your message wasn't delivered to jak_3phy@yahoo.co.in because the address couldn't be found, or is unable to receive mail.

The response from the remote server was:

554 30 Sorry, your message to jak_3phy@yahoo.co.in cannot be delivered. This mailbox is disabled (554.30).

...rc822; jak_3phy@yahoo.co.in

...e-MTA: dns; mx-apac.mail.gm0.yahoodns.net. (106.10.248.74, the server for
...domain yahoo.co.in.)

Diagnostic-Code: smtp; 554 30 Sorry, your message to jak_3phy@yahoo.co.in cannot be delivered. This mailbox is disabled (554.30).

Last-Attempt-Date: Sat, 05 Dec 2020 07:55:45 -0800 (PST)

----- Forwarded message -----

From: Jose <jose@shctpt.edu>
To: phyhodvcv@gmail.com, jak_3phy@yahoo.co.in
Cc:
Bcc:
Date: Sat, 5 Dec 2020 21:25:21 +0530
Subject: Minutes of the BoS in PG Physics-Sacred Heart College-reg
----- Message truncated -----


Mon, Feb 15, 2021 at 10:58 AM

Jose <jose@shctpt.edu>
To: tsdjaikumar@gmail.com

 With regards,

Dr. M. Jose
Dean of Research and
Head (PG), Department of Physics
Sacred Heart College (Autonomous)
Tirupattur-635601
India
Phone:9944825036

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Mon, Feb 15, 2021 at 4:18 PM

jaikumar D <tsdjaikumar@gmail.com>
To: Jose <jose@shctpt.edu>

Good afternoon,
Dear Members of the Board,
I read the Minutes and approved the suggestions of the meeting and implement the papers.

Thanking You
Dr.D.Jaikumar
HOD of Physics,
Voorhees College,
Vellore-1

[Quoted text hidden]

Dr. D. JAIKUMAR
HOD of Physics,
Voorhees College, Vellore

Dr. M Jose Assistant Professor <jose@shcpt.edu>

Sacred Heart College

Minutes of the BoS in PG Physics-Sacred Heart College-reg

2 messages


Jose <jose@shcpt.edu>
To: principal@maduracollege.edu.in

Sat, Dec 5, 2020 at 9:28 PM

Dear Sir,
Greetings from Sacred Heart College (Autonomous), Tirupattur.
I am indeed very happy and fortunate to have you as the subject expert in the board of studies of Physics in our college. I am extremely grateful for your useful suggestions during the BOS meeting (PG Physics) on 30th November 2020 through google meet. I have attached the minutes with this email and I would be glad if you could approve the minutes and send a reply email at the earliest for me to place it before the Academic council meeting scheduled to be held on 19th december 2020.

Looking forward to your continuous support
Thank you once again.
With regards,

Dr. M. Jose
Dean of Research and
Head (PG), Department of Physics
Sacred Heart College (Autonomous)
Tirupattur-635601
India
Phone:9944825036

 Minutes of the BoS meeting (PG Physics).docx
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Principal MC <principal@maduracollege.edu.in>
To: Jose <jose@shcpt.edu>

Sat, Dec 5, 2020 at 9:39 PM

Dear Dr. Jose
Greetings!
Went through the minutes. I approve of it.

Thanks & Regards

J. Suresh
Principal
[Quoted text hidden]

Dr.J.Suresh
Principal
The Madura College (Autonomous)
Madurai - 625 011

PG and Research Department of Physics
Minutes of the Meeting of Board of Studies in Physics (PG)

The meeting of the Board of Studies in Physics (PG) was held on Friday, 9th April, 2021 at 10.00 A.M. through Google meet. The following members were present for the meeting.

Members Present

Chairperson

Dr. M. Jose

Members

Dr. A. Albert Irudayaraj

Mr. C. Tirupathy

Mr. M. Aravinthraj

Dr. S. Kalaiarasi

Mr. R. Ramesh

Mr. D. Rajkumar

Dr. A. Dhayal Raj

Mr. N. Madhavan

Dr. S.A. Martin Britto Dhas

Rev. Dr. G. Theophil Anand SDB

Mr. G. Jayakumar

Mr. L. Anandaraj

Dr. S. John Sundaram

Rev. Dr. Gandhi Kallarasan SDB

University Nominee

Dr. D. Jaikumar

Head, Department of Physics,

Voorhees College, Vellore

Subject Expert 1

Dr. J. Suresh

Principal & Associate Professor,

Department of Physics,

The Madura College (Autonomous), Madurai.

Subject Expert 2

Dr. A. Basherrudin Mahmud Ahmed

Assistant Professor

School of Physics

Department of Theoretical Physics

Madurai Kamaraj University, Madurai

Meritorious Alumni

Mr. C. Selvam

Assistant Headmaster and PG Assistant in Physics

Government Hr. Sec. School

Palnangkuppam, Tirupattur

Student Representatives

1. P. Jeevitha (BP190303)

2. K. Dhilipkumar (BP190321)

Industry representative Mr. S. Naresh did not attend the meeting.

Agenda:

1. To discuss and recommend programme structure, syllabi for theory, practical papers, and regulations for project work for the students admitted from the academic year 2021-2022 and thereafter.

Business transacted:

1. Dr. J. Suresh, Principal of the Madura College and one of the subject experts wanted to know how much syllabus is included from the syllabus recommended by TANSHE to which the Board chairman replied that 75-85% of the syllabus is taken from TANSHE and syllabi for CSIR-NET and GATE exam were also referred to while framing the syllabus.
2. The external experts Dr. D. Jaikumar, Dr. J. Suresh and Dr. A. Basherrudin Mahmud Ahmed have strongly recommended the introduction of the MOOC/NPTEL courses in the curriculum. After due deliberations, the board recommended such courses and that the students will earn two extra credits for each of the MOOC/NPTEL courses they complete during the M.Sc Physics programme. The courses can either be from Physics or any non-major courses.
3. Dr. Basherrudin Mahmud Ahmed suggested dividing Classical mechanics and statistical mechanics paper into two papers namely Classical Mechanics and Statistical Mechanics & Thermodynamics in line with TANSHE syllabus by highlighting the merits of having two instead of having a single paper. After discussion, it was decided to take it up for discussion in the next revision of the syllabus.
4. The members suggested the inclusion of group of self-study papers instead of one so that the students will have the flexibility in choosing among the group of papers to which the Board chairman assured that he will take up this issue with the CDC.

Resolutions

After due deliberations and incorporating the suggestions/recommendations of the Board members, the following decisions have been made by the board.

Recommend the following programme structure, syllabi for theory, practical papers, and regulations for project work for the students admitted from the academic year 2021-2022 and thereafter

**M.Sc. Physics [CBCS Pattern]
2021-22 Onwards**

SEM	Subject	Title of the Paper	Ins.Hrs	Credits
I	MC	Mathematical Physics-I	5	4
	MC	Classical Mechanics and Statistical Mechanics	5	4
	MC	Quantum Mechanics-I	5	-
	MC	Advanced Physics Practicals	6	-
	MC	Electronic Experiments	4	4
	Elective	1. Electronic Devices and Applications 2. Energy and Environmental Physics 3. Astrophysics	4	4
II	MC	Mathematical Physics-II	5	4
	MC	Electromagnetic Theory	5	4
	MC	Quantum Mechanics-II	6	6
	MC	Advanced Physics Practicals	5	6
	MC	Electronic Experiments	4	4
	Elective	1. Microprocessor 8085 and Microcontroller 8051 2. Geophysics 3. Bio Physics	4	4
	SSP	Ultrasonics and its Applications	-	2*
III	MC	Solid State Physics	5	4
	MC	Atomic and Molecular Spectroscopy	5	4
	MC	C Programming and Research Methodology	5	-
	MC	Modern Physics Practicals	5	-
	MC	Microprocessor and C Programming Experiments	4	4
	Elective	1. Nanoscience and Technology 2. Optical Physics 3. Computational Quantum Mechanics	4	4
	SSP	Shock Waves and High Pressure Physics in Material Science	-	2*
	Core	Project	1	-
IV	MC	Electronic Instrumentation Techniques	5	4
	MC	Nuclear and Particle Physics	5	6
	MC	Modern Physics Practicals	5	6
	MC	Microprocessor and C Programming Experiments	4	5
	MC	Project	4	4
	Elective	1. Modern Optics 2. Reactor Physics 3. Digital Signal Processing	4	4
		Human Rights	2	1
Total			120	90+4*

MC-Main Core
 Certificate course: Analytical instrumentation and Characterization Techniques (2*)
 Internship/Summer research fellowship (1-3*) Total Credits: 90+9*

Project and Viva

There shall be two project reviews. The students shall identify and propose a research problem and present their research plan during the first review which will be conducted during the middle of the III semester. Second project review shall be conducted during the middle of the IV semester wherein the students shall present their findings. All the final year students and all the supervisors shall be available for both the reviews.

Component	Marks
Dissertation	80
Viva-voce	20
Total	100

Candidates should submit a dissertation on or before the date fixed by the office of the controller of examinations. The dissertation shall be evaluated for 80 marks and the viva-voce examination shall be conducted for 20 marks. There shall be two evaluations of the dissertation, one by the supervisor and the other by an external examiner chosen from a panel of examiners recommended by the department. The average of the two marks shall be the mark for the dissertation. The viva-voce examination shall be conducted for 20 marks separately by the respective supervisor and the external examiner. The average of the marks awarded by the two examiners shall be the mark for the viva-voce.

Certificate Course

A certificate course on "Analytical instrumentation and Characterization Technique" is offered in the second semester to provide hands-on training to handle different analytical instruments independently so as to provide them research exposure and to motivate them further towards research. Though this course is designed to suit M.Sc. Physics students, this course shall also be open to M.Sc Chemistry and M.Sc Biochemistry students due to its multidisciplinary dimensions. This course is also open to students from other neighboring colleges as well.

The fee for this course shall be fixed by the department depending on the number of takers and the revenue generated may be utilized to remunerate the resource persons. This course shall have 30 hours duration comprising both theory and practical sessions and will be conducted outside the class hours mostly on holidays. There shall be no Continuous Internal Assessment and Semester End Examination for this course, however the students must have attended minimum 30 hours to get the certificate and the credit for this certificate course is two.

Self-study Papers

The following self-study papers are offered to cater to the needs of bright students.

1. Ultrasonics and its applications and
2. Shock Waves and High Pressure Physics in Material Science

The paper on "Ultrasonics and its applications" is offered in the II semester while the paper on "Shock Waves and High Pressure Physics in Material Science" is offered in the III semester. There shall be no contact hours, however, there shall be an end semester examination and upon successful completion of each paper, the candidates shall be declared to have earned two extra credits.

Internship/Summer research fellowship

Extra credits will be given to those students who undergo internship in industries and summer research fellowship or any other similar summer/winter schools organized by national institutes/universities/colleges either in the online or offline mode. The students shall be allowed to undergo these programmes according to their convenience in single or two slots. This is intended to provide them industry exposure so as to make them more employable/motivate them towards research. However, the credits are split according to the following slab subject to the condition that they submit a report along with a certificate duly signed by a competent authority. Students who wish to take this extra credit may be given a maximum of 15 days free attendance in order to facilitate their learning. This can be taken throughout the duration of the M.Sc programme and the students are advised to complete it before the end of the fourth semester. The research work they carry out during this fellowship period may be further extended for their project work. It is mandatory that the students have to get prior approval of the department.

Number of days	Credits
5 to 15 days	1
16 to 30 days	2
30 to 60 days	3

MOOC/NPTEL courses:

The students will be encouraged to select one or more MOOC/NPTEL courses during the course of the M.Sc Programme. The students will earn two extra credits for each of the courses and the courses can either be from Physics or any non-major courses.

Members Present

Chairperson

Dr. M. Jose

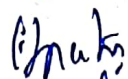


Members

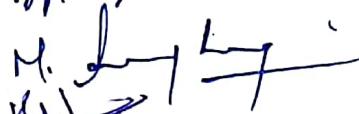
Dr. A. Albert Irudayaraj



Mr. C. Tirupathy




Mr. M. Aravinthraj



Dr. S. Kalaiarasi



Mr. R. Ramesh



Mr. D. Rajkumar



Dr. A. Dhayal Raj



Mr. N. Madhavan *N. Madhavan*

Dr. S.A. Martin Britto Dhas *BK*

Rev. Dr. G. Theophil Anand SDB *Tr*

Mr. G. Jayakumar *G. Jayakumar*

Mr. L. Anandaraj *L. Anandaraj*

Dr. S. John Sundaram *S. John Sundaram*

Rev. Dr. Gandhi Kallarasan SDB

University Nominee

Dr. D. Jaikumar
Head, Department of Physics,
Voorhees College, Vellore *D. Jaikumar*

Subject Expert1

Dr. J. Suresh
Principal & Associate Professor,
Department of Physics,
The Madura College (Autonomous), Madurai. *J. Suresh*

Subject Expert2

Dr. A. Basherrudin Mahmud Ahmed
Assistant Professor
School of Physics
Department of Theoretical Physics
Madurai Kamaraj University

Meritorious Alumni

Mr. C. Selvam *C. Selvam*
Assistant Headmaster and PG Assistant in Physics
Government Hr. Sec. School
Palnangkuppam, Tirupattur

Student Representatives

1. P. Jeevitha (BP190303)
2. K. Dhilipkumar (BP190321) *Dhilip*

PG and Research Department of Physics
Minutes of the standing committee of the Board of Studies in Physics (PG)

The meeting of the standing committee of the Board of Studies in Physics (PG) was held on Thursday, 15th April, 2021 at 12.30 P.M. in the PG Physics lab. The following members were present for the meeting.

Members Present

Chairperson

Dr. M. Jose

Members

Dr. A. Albert Irudayaraj

Mr. C. Tirupathy

Mr. M. Aravinthraj

Dr. S. Kalaiarasi

Mr. R. Ramesh

Mr. D. Rajkumar

Dr. A. Dhayal Raj

Mr. N. Madhavan

Dr. S.A. Martin Britto Dhas

Mr. G. Jayakumar

Mr. L. Anandaraj

Dr. S. John Sundaram

Rev. Dr. G. Theophil Anand SDB and Rev. Dr. Gandhi Kallarasan SDB did not attend the meeting.

Agenda:

1. To discuss and recommend the internal components for the M.Sc Physics programme for the students admitted from the academic year 2021-2022 and thereafter.

Resolutions

After due deliberations, the standing committee of the Board of Studies in Physics (PG) recommend the following internal components for the students admitted from the academic year 2021-2022 and thereafter.

Any One/Two/All of the internal components under each serial number will be chosen by the course teacher in consultation with the Head of the department for all the theory papers.

S.No	Internal components	Marks Allotted
1	Problem solving/MCQ/Quiz/ Open book test	15
2	Poster presentation/E-content preparation/ Seminar/Assignments	15

For practicals the following evaluation method will be followed for the students admitted from the academic year 2021-2022 and thereafter.

S.No	Internal components	Marks Allotted
1	Lab Performance	20
2	Two CIA tests	20
3	Record note	10

Every student shall be evaluated for twenty marks in every practical session and this mark is calculated for 20 marks which is the lab performance mark. In addition to this, the students will have to appear for two CA tests of 100 marks each and this mark is calculated for 20 marks. Ten marks shall be allotted for the record note. The sum of these three marks is the internal mark. There shall be no passing minimum for CA. Improvement of CA will not be permitted.

Members Present

Chairperson Dr. M. Jose



Members

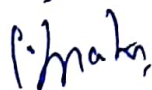
Dr. A. Albert Irudayaraj



Dr. A. Dhayal Raj



Mr. C. Tirupathy



Mr. N. Madhavan



Mr. M. Aravinthraj



Dr. S.A. Martin Britto Dhas



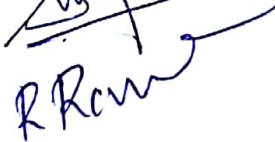
Dr. S. Kalaiarasi



Mr. G. Jayakumar



Mr. R. Ramesh



Mr. L. Anandaraj



Mr. D. Rajkumar



Dr. S. John Sundaram

