



Holy Cross College (Autonomous)
Affiliated to Bharathidasan University
Nationally Accredited (4th Cycle) with A++ Grade (CGPA 3.75/4) by NAAC
College with Potential for Excellence
Tiruchirappalli - 620 002, Tamilnadu, India.

School of Physical Sciences



PG and Research Department of Chemistry

CURRICULUM (2022-2027)

2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
<ul style="list-style-type: none"> • New Courses - 7 <ul style="list-style-type: none"> ➤ Introduction of Beauty Care, Health Care, Nutraceuticals as NME courses & Nutricosmetics as MSBE. ➤ Introduction of new lab course "Computer Applications in Chemistry" ➤ Introduction of "Renewable Energy sources" as Major Elective course • Add-on Courses <ul style="list-style-type: none"> ➤ Certificate course in "Solid waste management"- I UG ➤ PG Diploma in "Environmental Pollution Analysis" • Industrial Training for UG and PG Students. • Revision of PG syllabus • Introduction of " Home Care Products" as certificate course • 21 staff Enrolls in swayam courses • Industrial relations paper handled by visiting faculty 	<ul style="list-style-type: none"> • New Courses - 5 <ul style="list-style-type: none"> ➤ Introduction of "Nutrition and Dietetics" and "Basic Chemistry Software" as Elective courses • Add-on Courses <ul style="list-style-type: none"> ➤ Diploma in "Solid waste management" -II UG ➤ Certificate course in "Energy storage devices"-I UG • 20 SWAYAM Courses will be completed by the staff • Courses related to Entrepreneurship development 	<ul style="list-style-type: none"> • New Courses - 4 <ul style="list-style-type: none"> ➤ Introduction of "Food Preservation Techniques" as Major skill based Elective course • Add-on Courses <ul style="list-style-type: none"> ➤ Advanced Diploma in "Solid waste management" -III UG ➤ Diploma in "Energy storage devices" -II UG ➤ certificate course on "Green and Nano"-I UG • 20 SWAYAM Courses will be completed by the staff 	<ul style="list-style-type: none"> • New Courses - 4 <ul style="list-style-type: none"> ➤ Introduction of "Agricultural chemistry" and Environmental Chemistry as Major Elective course ➤ • Add-on Courses <ul style="list-style-type: none"> ➤ Advance Diploma in "Energy storage devices"-III UG ➤ Diploma course on "Green and Nano"-II UG • 20 SWAYAM Courses will be completed by the staff 	<ul style="list-style-type: none"> • New Courses - 3 <ul style="list-style-type: none"> ➤ Introduction of "Clinical chemistry" and Pharmaceutical Chemistry as Major Elective course • Add-on Courses <ul style="list-style-type: none"> ➤ Advance Diploma in "Green and Nano"-III UG • 20 SWAYAM Courses will be completed by the staff



Teaching and Learning (2022-2027)

2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
<ul style="list-style-type: none"> • E-content <ul style="list-style-type: none"> ➤ 120 modules in Chemistry Paper-I • Teaching techniques <ul style="list-style-type: none"> ➤ Lecture Method ➤ Powerpoint presentation ➤ ICT based Tools ➤ Flipped classroom ➤ Teaching with models ➤ Hands on activities • Assignment <ul style="list-style-type: none"> ➤ Assignment on Field visit/ industrial visit. • Remedial Coaching for slow learners <ul style="list-style-type: none"> ➤ Regular coaching after the class hours ➤ Dividing in groups and training given by the high achievers to the slow learners ➤ Frequent tests based on previous year semester question papers ➤ Open book tests ➤ Home based tests • Reducing the slow learners to 50% 	<ul style="list-style-type: none"> • E-content <ul style="list-style-type: none"> • 150 modules in Fundamental concepts in Chemistry • Teaching techniques <ul style="list-style-type: none"> • Lecture Method • Powerpoint presentation • ICT based Tools • Flipped classroom • Teaching with models • Hands on activities • Zig Zag • Problem Solving • Creative Active learning • Assignment <ul style="list-style-type: none"> ➤ Assignment on Field visit/ industrial visit. • Remedial Coaching for slow learners <ul style="list-style-type: none"> ➤ Regular coaching after the class hours ➤ Dividing in groups and training given by the high achievers to the slow learners • Frequent tests based on previous year semester question papers • Open book tests • Home based tests • Reducing the slow 	<ul style="list-style-type: none"> • E-content <ul style="list-style-type: none"> ➤ 120 modules in Chemistry Paper-II ➤ 150 modules in Analytical Chemistry • Teaching techniques <ul style="list-style-type: none"> ➤ Lecture Method ➤ PowerPoint presentation ➤ ICT based Tools ➤ Flipped classroom ➤ Teaching with models ➤ Hands on activities ➤ Gamification ➤ Think pair share ➤ Scaffold Learning • Assignment <ul style="list-style-type: none"> ➤ Assignment on Field visit/ industrial visit. • Remedial Coaching for slow learners <ul style="list-style-type: none"> ➤ Regular coaching after the class hours ➤ Dividing in groups and training given by the high achievers to the slow learners ➤ Frequent tests based on previous year semester question papers ➤ Open book tests ➤ Home based tests 	<ul style="list-style-type: none"> • E-content <ul style="list-style-type: none"> ➤ 150 modules in Inorganic and Physical Chemistry ➤ 150 modules in Organic Chemistry • Teaching techniques <ul style="list-style-type: none"> ➤ Lecture Method ➤ Powerpoint presentation ➤ ICT based Tools ➤ Flipped classroom ➤ Teaching with models ➤ Hands on activities ➤ Thinking based Learning ➤ Peer Discussion • Assignment <ul style="list-style-type: none"> ➤ Assignment on Field visit/ industrial visit. • Remedial Coaching for slow learners <ul style="list-style-type: none"> ➤ Regular coaching after the class hours ➤ Dividing in groups and training given by the high achievers to the slow learners ➤ Frequent tests based on previous year semester question papers ➤ Frequent tests based on previous year semester question papers 	<ul style="list-style-type: none"> • E-content <ul style="list-style-type: none"> ➤ 150 modules in Inorganic Chemistry ➤ 150 modules in Physical Chemistry • Teaching techniques <ul style="list-style-type: none"> ➤ Lecture Method ➤ Powerpoint presentation ➤ ICT based Tools ➤ Flipped classroom ➤ Teaching with models ➤ Hands on activities ➤ Field Research Journals ➤ Project based learning Assignment <ul style="list-style-type: none"> ➤ Assignment on Field visit/ industrial visit. Remedial Coaching for slow learners <ul style="list-style-type: none"> ➤ Regular coaching after the class hours ➤ Dividing in groups and training given by the high achievers to the slow learners ➤ Frequent tests based on previous year semester question papers ➤ Open book tests ➤ Home based tests ➤ Reducing the slow learners to 20%



<ul style="list-style-type: none"> • Training for high achievers ➤ Case study-based assignments ➤ Individual project ➤ Participation in conferences, seminars, intercollegiate competition and symposium. ➤ Encourage to crack NET/SET/Gate/IIT-JAM, UPSC and banking examinations ➤ Increasing the high achievers to 5% • Question Bank Question bank for III & IV semester papers • Making PG student to get University I Rank • Maintaining the University, I Rank for UG • <p>Entrepreneurship training through EDU</p>	<p>learners to 40%</p> <ul style="list-style-type: none"> • Training for high achievers • Case study-based assignments • Individual project • Participation in conferences, seminars, intercollegiate competition and symposium. • Encourage to crack NET/SET/Gate/IIT-JAM, UPSC and banking examinations • Increasing the high achievers to 10% • Question Bank • Question bank for V&VI semester papers • Making PG student to get University I Rank • Maintaining the University I Rank for UG <p>Entrepreneurship training through EDU</p>	<ul style="list-style-type: none"> • Reducing the slow learners to 30% • Training for high achievers ➤ Case study-based assignments ➤ Individual project ➤ Participation in conferences, seminars, intercollegiate competition and symposium. ➤ Encourage to crack NET/SET/Gate/IIT-JAM, UPSC and banking examinations ➤ Increasing the high achievers to 15% • Question Bank Revision of Question bank for I & II semester papers • Making PG student to get University I Rank • Maintaining the University I Rank for UG <p>Entrepreneurship training through EDU</p>	<ul style="list-style-type: none"> ➤ Open book tests ➤ Home based tests ➤ Reducing the slow learners to 20% • Training for high achievers ➤ Case study-based assignments ➤ Individual project ➤ Participation in conferences, seminars, intercollegiate competition and symposium. ➤ Encourage to crack NET/SET/Gate/IIT-JAM, UPSC and banking examinations ➤ Increasing the high achievers to 20% • Question Bank Revision of Question bank for III&IV semester papers\ • Making PG student to get University I Rank • Maintaining the University I Rank for UG <p>Entrepreneurship training through EDU</p>	<ul style="list-style-type: none"> • Training for high achievers ➤ Case study-based assignments ➤ Individual project ➤ Participation in conferences, seminars, intercollegiate competition and symposium. ➤ Encourage to crack NET/SET/Gate/IIT-JAM, UPSC and banking examination ➤ Increasing the high achievers to 25% • Question Bank Revision of Question bank for V&VI semester papers • Making PG student to get University I Rank • Maintaining the University I Rank for UG <p>Entrepreneurship training through EDU</p>
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Research (2022-2027)

2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
<p>Project</p> <ul style="list-style-type: none"> UG Individual project-8 Paper publication -8 Paper Publication from PG project=5 Summer internships/projects in research institutes for PG students <p>Guideship and Ph.D. completed</p> <ul style="list-style-type: none"> Staff applying for guideship=4 Ph. D. completed=3 <p>Publications:</p> <ul style="list-style-type: none"> Publications 20 in Scopus/web of Science/UGC indexed Journals. Publication of Lab manual for PG students Staff as reviewers in journals Filing of patents =2 <p>Collaboration:</p> <p>Collaboration with Madurai Kamaraj University to conduct International Conference</p>	<p>Project</p> <ul style="list-style-type: none"> UG Individual project-10 Paper publication -10 Paper Publication from PG project=6 Summer internships/projects in research institutes for PG students <p>Guideship and Ph.D. completed</p> <ul style="list-style-type: none"> Staff applying for guideship=2 <p>Publications:</p> <ul style="list-style-type: none"> Publications 21 in Scopus/web of Science/UGC indexed Journals. Staff as reviewers in journals Filing of patents =3 <p>MoU:</p> <ul style="list-style-type: none"> Signing a MoU with University of Malaya Field visits/internships/projects with the MoU 	<p>Project</p> <ul style="list-style-type: none"> UG Individual project-12 Paper publication -12 Paper Publication from PG project=8 Summer internships/projects in research institutes for PG students <p>Guideship:</p> <ul style="list-style-type: none"> Staff applying for guideship=2 <p>Publications:</p> <ul style="list-style-type: none"> Publications 22 in Scopus/web of Science/UGC indexed Journals. Staff as reviewers in journals Filing of patents =2 <p>MoU:</p> <ul style="list-style-type: none"> Signing a MoU with Shell Industries Field 	<p>Project</p> <ul style="list-style-type: none"> UG Individual project-14 Paper publication -14 Paper Publication from PG project=10 Summer internships/projects in research institutes for PG students <p>Publications:</p> <ul style="list-style-type: none"> Publications 23 in Scopus/web of Science/UGC indexed Journals. Staff as reviewers in journals Filing of patents =2 <p>MoU:</p> <p>Field visits/internships/projects with the MoU signed institutes</p> <p>Staff Project = 3 (MK+AT+CR)</p>	<p>Project</p> <ul style="list-style-type: none"> UG Individual project-16 Paper publication -16 Paper Publication from PG project=15 Summer internships/projects in research institutes for PG students <p>Publications:</p> <ul style="list-style-type: none"> Publications 25 in Scopus/web of Science/UGC indexed Journals. Staff as reviewers in journals Filing of patents =3 <p>MoU:</p> <p>Field visits/internships/projects with the MoU signed institutes</p> <p>Staff Project =4(LC+JF+JR+PP)</p> <p>CONSULTANCY</p>



<p>MoU:</p> <ul style="list-style-type: none"> • Signing a MoU with Green Trends • Field visits/internships/projects with the MoU signed institutes <p>Staff Project =4(LR+LC+JF+JR)</p> <p>CONSULTANCY /EXTENSION ACTIVITIES</p> <ul style="list-style-type: none"> • Preparation and sale of home care products • Revenue for college=10% • NET/SLET coaching 	<p>signed institutes</p> <p>Staff Project =4(SV+MS+JP+AI)</p> <p>CONSULTANCY / EXTENSION ACTIVITIES</p> <ul style="list-style-type: none"> • Preparation and sale of home care products • Water analysis • Revenue for college=12% • NET/SLET coaching 	<p>visits/internships/projects with the MoU signed institutes</p> <p>Staff Project =4(SB+RK+AG+VP)</p> <p>CONSULTANCY / EXTENSION ACTIVITIES</p> <ul style="list-style-type: none"> • Preparation and sale of home care products • Water and phytochemical analysis • Revenue for college=13% • NET/SLET coaching 	<p>CONSULTANCY / EXTENSION ACTIVITIES</p> <ul style="list-style-type: none"> • Preparation and sale of home care products • Water, phytochemical analysis • Soil analysis • Revenue for college=14% • NET/SLET coaching 	<p>/EXTENSION ACTIVITIES</p> <ul style="list-style-type: none"> • Preparation and sale of home care products • Water, phytochemical and soil analysis • Revenue for college=15% • NET/SLET coaching
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SEMINAR/CONFERENCE/WORKSHOPS/TRAINING PROGRAMMES

2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
<ol style="list-style-type: none">1. To organize International conference on 23rd and 24th August in collaboration with Madurai Kamaraj University2. To organize International Scientist Meet3. Workshop for teaching staff of other colleges4. To organize workshop for non-teaching staff on “Chemistry Laboratory Safety Techniques”5. To conduct Hands-on-training on “Computer Applications in Chemistry”6. To conduct inter collegiate competition-CHEMSFEST7. To conduct inter-departmental competition in commemoration of National Science Day8. To give practical training to school students from adopted villages9. To Conduct Exhibition for school children in commemoration of centenary celebration10. Workshop on ideate, innovate and inspire	<ol style="list-style-type: none">1. To organize International conference in collaboration with foreign university – Funded conference2. To organize one day seminar.3. To conduct Training programme on Soft Skill for III UG students.4. To conduct Interdepartmental Competitions.5. To conduct exhibition.6. To conduct ‘International Scientist Meet’.7. To conduct National Level Faculty Development Programme8. To encourage PG and UG students to actively participate in Seminars/Conferences/Workshops and to present papers.9. Workshop on Bigidea	<ol style="list-style-type: none">1. To organize National conference.2. To conduct Inter collegiate competition.3. To conduct Chem Expo4. To conduct ‘International Scientist Meet’.5. To conduct National Level Faculty Development Programme	<ol style="list-style-type: none">1. To organize State Level Seminar.2. To conduct Inter collegiate competition at the National level3. To conduct Chem Expo4. To conduct Development Programme5. ‘International Scientist Meet’.6. To conduct National Level Faculty	<ol style="list-style-type: none">1. To organize conference in collaboration with foreign university2. To organize one day seminar.3. To conduct Training programme on Soft Skill for III UG students.4. To conduct Interdepartmental Competitions.5. To conduct exhibition.6. To conduct ‘International Scientist Meet’.7. To conduct National Level Faculty Development Programme8. To encourage PG and UG students to actively participate in Seminars/Conferences/Workshops and to present papers.9. Workshop on Big idea



Placement and Alumna

2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
<p>Placement:</p> <ul style="list-style-type: none"> Number of students : UG-5 PG-6 To increase number of placements Carrier guidance programs will be organized <p>Number of Alumnae: 1200</p> <p>Non-Financial Alumnae contribution- Alumnae as Resource persons in Conferences, Seminars and Scientist meet.</p> <p>Financial contribution</p> <ul style="list-style-type: none"> Fund will be provided for the fee payment of poor students by the alumnae.- 2 Financial contribution- Fund provided for the education of children of non-teaching staff by the alumnae.-1 Book bank funded by Alumnae. 	<p>Placement:</p> <ul style="list-style-type: none"> Number of students : UG-8 PG-7 To increase number of placements Lecture series on skill development will be arranged. <p>Number of Alumnae: 1300</p> <p>Non-Financial Alumnae contribution Alumnae as Resource persons in Conferences, Seminars and Scientist meet.</p> <p>Financial contribution</p> <ul style="list-style-type: none"> Fund will be provided for the fee payment of poor students by the alumnae. Book bank funded by Alumnae. 	<p>Placement:</p> <ul style="list-style-type: none"> Number of students : UG-10 PG-8 To increase number of placements Lecture series on skill development will be arranged. <p>Number of Alumnae: 1400</p> <p>Non-Financial Alumnae contribution Alumnae as Resource persons in Conferences, Seminars and Scientist meet.</p> <p>Financial contribution</p> <ul style="list-style-type: none"> Fund will be provided for the fee payment of poor students by the alumnae. 	<p>Placement:</p> <ul style="list-style-type: none"> Number of students : UG-15 PG-10 <p>Number of Alumnae: 1500</p> <p>Non-Financial Alumnae contribution Alumnae as Resource persons in Conferences, Seminars and Scientist meet.</p> <p>Financial contribution</p> <ul style="list-style-type: none"> Fund will be provided for the fee payment of poor students by the alumnae. 	<p>Placement:</p> <ul style="list-style-type: none"> Number of students : UG-20 PG-12 <p>Number of Alumnae: 1600</p> <p>Non-Financial Alumnae contribution Alumnae as Resource persons in Conferences, Seminars and Scientist meet.</p> <p>Financial contribution</p> <ul style="list-style-type: none"> Fund will be provided for the fee payment of poor students by the alumnae.



Best Practices

2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
<ul style="list-style-type: none"> • Mobilizing fund from the teaching faculty every month for the economically weaker students –HCC Chem Financial support scheme • Lending of loan books • Conducting International Scientist Meet • Green Chemistry Practicals • Non-Financial Alumnae contribution - Alumnae as Resource persons in Conferences, Seminars and Scientist meet. • Chem Expo • ChemFest • Awareness programme on National pollution control day • Training the students to become Entrepreneurs • Staff Prayer 	<ul style="list-style-type: none"> • HCC Chem Financial support scheme • Lending of loan books • Conducting International Scientist Meet • Green Chemistry Practicals • Reduce and Reuse – chemical management • e documentation of all chemicals • Non-Financial Alumnae contribution - Alumnae as Resource persons in Conferences, Seminars and Scientist meet. • Chem Expo • ChemFest • Training the students to become Entrepreneurs • Staff Prayer 	<ul style="list-style-type: none"> • HCC Chem Financial support scheme • Lending of loan books • Conducting International Scientist Meet • Green Chemistry Practicals • Non-Financial Alumnae contribution - Alumnae as Resource persons in Conferences, Seminars and Scientist meet. • Chem Expo • ChemFest • Training the students to become Entrepreneurs • Staff Prayer 	<ul style="list-style-type: none"> • HCC Chem Financial support scheme • Lending of loan books • Conducting International Scientist Meet • Green Chemistry Practicals • Non-Financial Alumnae contribution - Alumnae as Resource persons in Conferences, Seminars and Scientist meet. • Chem Expo • ChemFest • Training the students to become Entrepreneurs • Staff Prayer 	<ul style="list-style-type: none"> • HCC Chem Financial support scheme • Lending of loan books • Conducting International Scientist Meet • Green Chemistry Practicals • Non-Financial Alumnae contribution - Alumnae as Resource persons in Conferences, Seminars and Scientist meet. • Chem Expo • ChemFest • Training the students to become Entrepreneurs • Staff Prayer



PG & RESEARCH DEPARTMENT OF PHYSICS

FIVE YEAR PLAN FROM 2022 TO 2027

CURRICULUM

YEARS	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
SYLLABUS REVISION	<ul style="list-style-type: none">• Revision of III UG syllabi under school system• Syllabi modification for II UG based on LOCF	<ul style="list-style-type: none">• Complete revision of I PG syllabi• Syllabi modification for III UG based on LOCF• Introducing experiments based on computational physics for PG students	<ul style="list-style-type: none">• Complete revision of II PG. syllabi• Syllabi modification for I PG based on LOCF	<ul style="list-style-type: none">• Syllabi modification for II PG based on LOCF	<ul style="list-style-type: none">• Introducing experiments based on computational physics for UG students
INNOVATIVE COURSE	MSBE – Problem solving in Physics	Major Elective - Astrophysics	Major Elective: Molecular modelling	Major Elective- Bio Medical Instrumentation Techniques	Major Core : Lab cum Theory – Computational Methods



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ADD ON COURSE	<ul style="list-style-type: none">Repairing and maintenance of Household appliances (Certificate course)	<ul style="list-style-type: none">Repairing and maintenance of Household appliances (Diploma course)Python Programming for Electronic devices(Certificate)	<ul style="list-style-type: none">Repairing and maintenance of Household appliances (Advanced Diploma course)Python Programming for Electronic devices(Diploma)	<ul style="list-style-type: none">Python Programming for Electronic devices (Advanced Diploma)	<ul style="list-style-type: none">Energy management and Audit (Certificate)
SWAYAM FOR TEACHERS	18	18	18	18	18



TEACHING – LEARNING EVALUATION

YEARS	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Teaching Methodology	<ul style="list-style-type: none"> Design Thinking TED talks 	<ul style="list-style-type: none"> Micro teaching Mini teaching Demonstrative teaching 	<ul style="list-style-type: none"> Effective teaching via social media platform: youtube/ Instagram/ Blogs/Vlogs 	<ul style="list-style-type: none"> Education 4.0 Introducing advanced technology and tools in classroom teaching 	<ul style="list-style-type: none"> Use of Artificial intelligence and Virtual Reality
Question Bank	Question Bank for II UG	Question Bank for III UG	Question Bank for I PG Revision of UG question Bank	Question Bank for II PG Revision of UG question Bank	Revision of UG&PG question bank
Remedial Coaching Methodology - Slow Learners	<ul style="list-style-type: none"> Peer group discussions & Remedial test Reduce to 50% 	<ul style="list-style-type: none"> Question preparation by students & Remedial test Reduce to 40% 	<ul style="list-style-type: none"> Assignments / Seminar & Remedial test Reduce to 30% 	<ul style="list-style-type: none"> Special classes by Faculty & Remedial test Reduce to 20% 	<ul style="list-style-type: none"> Student mentors, Group discussion & Remedial test Reduce to 10%
Remedial Coaching - High Achievers	<ul style="list-style-type: none"> Flipped classroom Encouraging students to do paper presentation 	<ul style="list-style-type: none"> Peer Group formation to Solve Problems 	<ul style="list-style-type: none"> Awareness on different PG programmes available at National and International Level Training to clear the entrance exams for higher studies 	<ul style="list-style-type: none"> Encouraging students to pursue their Internship at National Institute 	<ul style="list-style-type: none"> Enhance their scientific writing skills for Research
	<ul style="list-style-type: none"> Increase by 	<ul style="list-style-type: none"> Increase by 	<ul style="list-style-type: none"> Increase by 	<ul style="list-style-type: none"> Increase by 50% 	<ul style="list-style-type: none"> Increase by 60%



	20%	30%	<ul style="list-style-type: none"> • Increase by 40% 		
E Content	<ul style="list-style-type: none"> • Multimedia Resources • 5 Courses 	<ul style="list-style-type: none"> • Assessment through Gamification • 7 Courses 	<ul style="list-style-type: none"> • To make the students learn the concepts using AI and Virtual reality • 10 Courses 	<ul style="list-style-type: none"> • Equation a Day • 12 Courses 	<ul style="list-style-type: none"> • A problem a Day • 15 Courses



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RESEARCH AND CONSULTANCY

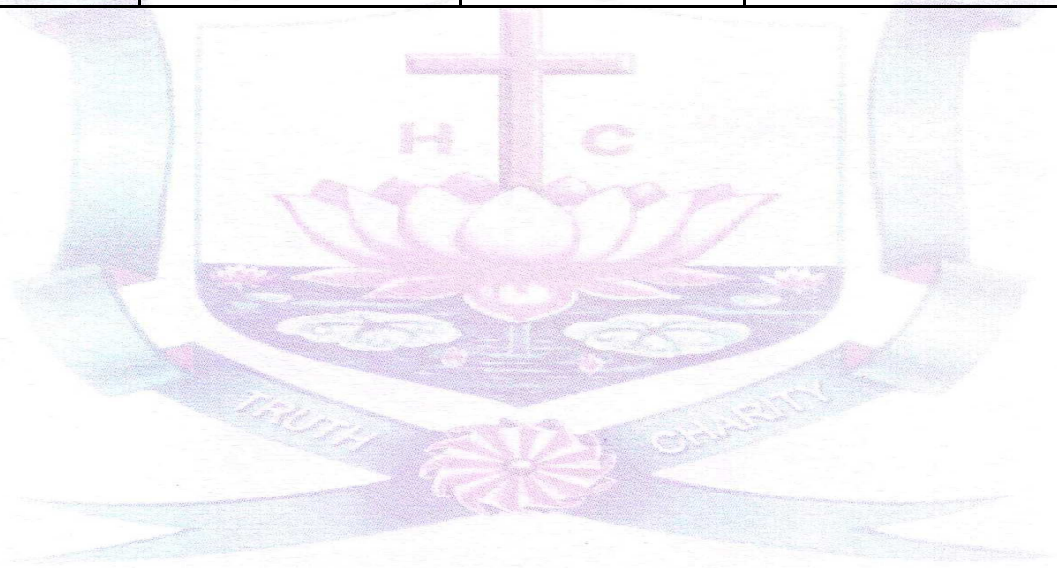
Year	2022-23	2023-24	2024-25	2025-26	2026-27
Major and Minor research projects	3 (SERB, TNSCST, TANSICHE)	4 (SERB, TNSCST, TANSICHE)	5 (SERB, TNSCST, TANSICHE)	6 (SERB, TNSCST, TANSICHE)	7 (SERB, TNSCST, TANSICHE)
UG / PG projects	10% 50%	15% 60%	20% 70%	25% 80%	30% 90%
Publication-International/ National	10 / 4	12 / 6	14 / 8	16 / 10	18 / 12
Ph.D. completed / pursuing / registered	1 3+5 1+4	1+1 2+6 2+3	1 3+9 1+4	1+2 3+11 5	2 3+12 6
Ph.D. Guideship	1	4	3	1	1
Collaboration	Colleges within Trichy	Colleges outside Trichy	Bharathidasan University	Private University	National Institute of Technology
MoU	Astro Club, Trichy	Hitachi, Robotic center	NDT, BHEL	Eminent research Institutes	Electricity generation unit in Sugar Factory



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Consultancy	10% IIT JAM coaching	20% IIT JAM coaching	30 % IIT JAM coaching	40 % IIT JAM coaching	50% IIT JAM coaching
UG/PG students Internship at Research Institute	2 (HBCSE, IIA, TIFR)	3 (IIA, IISER, TIFR, JNCASR)	4 (IIA, IISER, TIFR, JNCASR)	5 (IIA, IISER, TIFR, JNCASR)	6 (IIA, IISER, TIFR, JNCASR)





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SEMINAR / CONFERENCE / WORKSHOP / TRAINING PROGRAMMES

YEAR	PROGRAMME	TITLE	FUNDING AGENCIES	BENEFICIARIES
2022-2023	International Conference	<ul style="list-style-type: none">• Nanophotonics• HYPHY (Intercollegiate)	UGC/SERB/ TNSCST	UG, PG Students, Research Scholars
2023-2024	Seminar Conducted by Students	<ul style="list-style-type: none">• Materials Science• HYPHY	CSIR/Star College	UG, PG Students & Research Scholars
2024-2025	Conference Series	Applied Physics <ul style="list-style-type: none">• Medical Physics• Astrophysics• Geophysics• Biophysics• Agro-physics• Acoustics• Thermal Physics	UGC/SERB/ CSIR/MNRE/ Ministry of small scale Industries	UG, PG Students, Research Scholars & Faculty
	Interdepartmental/ School - combined Conference/Seminar (Computer science+ Data Science)	<ul style="list-style-type: none">• Artificial Intelligence• Machine Learning• Robotics• Paper/Poster presentation competition <ul style="list-style-type: none">• HYPHY		



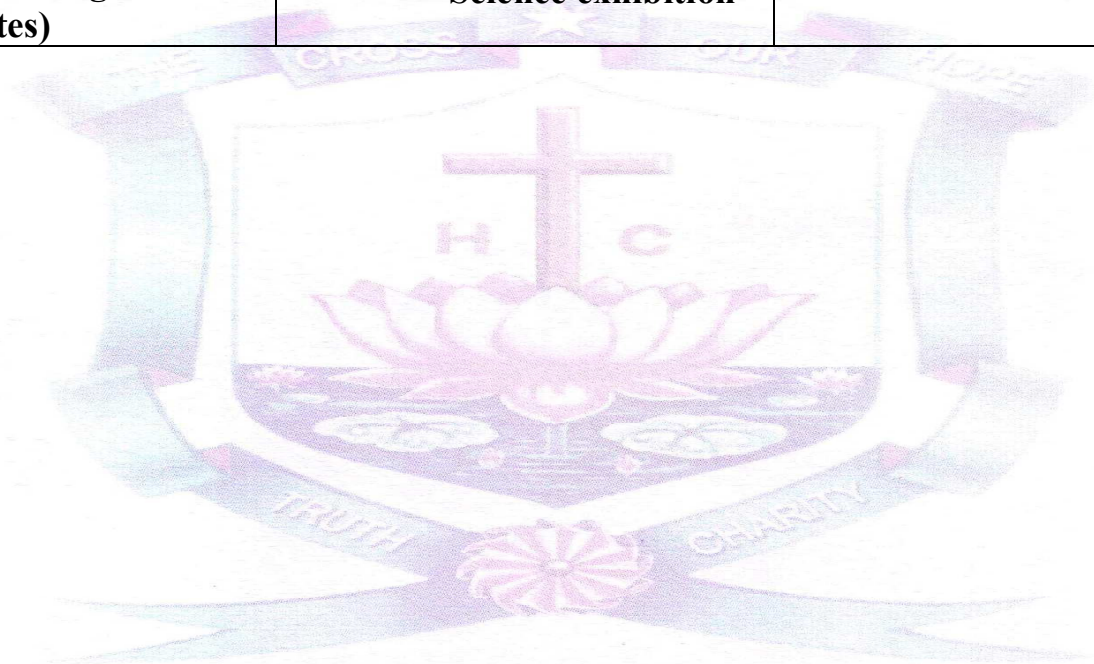
2025-2026	Workshop / Summer / Winter School	<ul style="list-style-type: none">• Computational Methods• Material Sciences• Physics in machine learning• Advances in Physics Concepts to application• Recent advances in condensed matter and high energy physics• HYPHY	UGC/SERB/CSIR/ DST	PG Students, Research Scholars & Faculty
	Hands on Training	<ul style="list-style-type: none">• Characterization techniques for research scholars and PG students.• Instrumentation Techniques software (Structural, Optical)• Trouble shooting		Research scholars and PG students.
2026-2027	National Seminar by Visiting faculty & Visiting Student programme	<ul style="list-style-type: none">• Laser Spectroscopy• Neutrino Physics	CSIR/Star College	UG and PG students & Faculty



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		<ul style="list-style-type: none">• Surface Plasmon Photonics• Cosmology• Nanotechnology		
	Collaborative conference with other colleges (other states)	<ul style="list-style-type: none">• HYPHY• Science exhibition		





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ALUMNAE / PLACEMENT DETAILS

YEAR	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Number of Alumnae participating in department alumnae meeting	100	120	130	140	150
Number of Alumnae in whatsapp group	250	300	400	500	600
Alumnae Contribution	Department Association Meetings (Resource Person)	Financial assistance for lending Library	Financial support for Students	Department Conference & Seminar (Fund and Resource person)	Prize for the best outgoing student



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BEST PRACTICES

- MAGPHY (Department Magazine)
- NGPE
- Coaching classes- Competitive Exams (SET/NET/IIT JAM)
- Intercollegiate - HYPHY
- RAY OF HOPE
- Industrial visit/Field visit
- Outreach Programmes- Lab exposure for 10th and 12th standard students from rural areas.
- Work space Hub for prototyping of products based on Physics Concepts (IIC)
- Paper Publication - PG Students Newsletter yearly
- Interdisciplinary Projects – SBE
- Internships in Reputed institution
- Physics Exhibition
- Commemoration of renowned Physics Scientists

Dr. (Ms) HORNE IONA AVERAL
M.Sc.,M.Phil.,MD(Acu).,FBSS.,Ph.D.,
IQAC COORDINATOR
Associate Professor in Zoology
Holy Cross College,Tiruchirappalli-2.