

PSG COLLEGE OF ARTS & SCIENCE

Coimbatore – 641 014

QUANTITATIVE & QUALITATIVE DATA FOR STAR COLLEGE SCHEME

1. Name of the College : **PSG College of Arts & Science
Civil Aerodrome Post,
Coimbatore- 641014,
Tamil Nadu, India**
2. Status : **Autonomous**
3. Women’s College or Co-educational : **Co-education**
4. Urban/Rural : **Rural**
5. No. of departments supported : **4 Departments
(Botany, Zoology, Chemistry & Physics)**
6. NAAC Ranking : **‘A’ Grade (with a CGPA of 3.62)in 2014**
7. **Details of extramural funding received in the last 3 years (UGC, DBT, DST; duration, period and amount)**

S. No	Faculty	Funding Agency	Amount Sanctioned (in Rs.)	Project Title
1	Dr R Rajendran Microbiology	DST – SSTP, Govt. of India	47,58,000	Development and Demonstration on Bioremediation of Indigo Dye containing Textile effluent using microbial biofilm with adapted microorganisms
2	Dr. R. Rajendran Microbiology	DBT, Govt. of India	54,00,000	Economic Utilization of Cotton Wastes from Textile Mills for Bioethanol Production through Microbial Fermentation
3	Dr S R Madhan Shankar Biotechnology	Tamil Nadu State Council for Science and	15,000	Awareness Programme on Environment for School Children

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		Technology		
4	Dr V Mohanasundaram Economics	Coconut Development Board, Ministry of Agriculture, Government of India, Kochi	1,95,200	Statistical Survey for Concurrent Estimation of Coconut Production in Tamilnadu
5	Dr Lalitha Ramaswamy Nutrition	Coconut Development Board, Ministry of Agriculture, Government of India, Kochi	14,76,200	Formulation of health mixes with coconut milk powder and coconut flour, their shelf life and effect on growth and immune status
6	Dr. A. Michael Microbiology	ICMR	9,06,141	Development of a biosensor based assay using chicken egg yolk antibodies for rapid diagnosis of rotavirus infection
7	Dr. R. Rajendran Microbiology	University Grants Commission, New Delhi	10,00,000	<i>In vitro</i> Evaluation of Antimicrobial Activity of Selected Indigenous Medicinal Plants of Coimbatore District and its Documentation for Use As Herbal Remedies
8	Dr Anguraj A Mathematics	University Grants Commission, New Delhi	3,35,000	<i>Existance of solutions of random implusive dynamical systems</i>
9	Dr Michael A Microbiology	University Grants Commission, New Delhi	7,44,000	<i>Preparation of chicken egg yolk antibiotic as a consmeceuticil composition to control pityraisis simplex capillitii (dandruff)</i>
10	Mr. Chandrasekar Visual Communication	DRDO, Govt. of India	6,30,000	Development of Instructional Videos for Computerized Pilot

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				Selection System
11	Dr.C.Balakrishnamurthy Psychology	Indian Council of Social Science Research	4,73,000	Preparation of Career Guidance Protocol for High School Students Based on their Brain Dominance, Personality Traits and Academic Achievement
12	Dr. R. Rajendran Microbiology	DBT, CREST Award	3,50,000	Production of Antimicrobial Cotton Textile with Bioscouring and Medicinal Plant Extracts
13	Dr. B. Kirubashini Commerce	University Grants Commission, New Delhi	10,00,000	Service Quality In Higher Educatio - A Service Provider And Service Recipient Perspective
14	Dr. K. Shankthi Environmental Sciences	University Grants Commission, New Delhi	16,72,500	An approach to green chemistry – Conversion of low cost renewable resources into biopolymer (Polyhydroxyalkonates) by <i>Bacillus subtilis</i> : Production, and Degration.
15	Dr. R. Rajendran Microbiology	University Grants Commission, New Delhi	3,00,000	Design and Enhancement of Bioremediation Potential of Microbial Consortium through Remotion
16	Dr. C. S. Shobana Microbiology	Science & Engineering Research Board (SRB)	23,65,000	<i>Aspertillus flavus</i> from keratitis: Role of extracellular enzymes & aflatoxins as virulence factors and antifungal susceptibilities
17	Dr. S. Ravi Tamil	Central Institute of Classical Tamil	2,50,000	<i>Sanka Ilakkiyap Pinpulaattil Konkunattup Perunkarkalap Panpattuc Sinnankal Mattrum Natukarkal Parriya Ayyu</i>

Ongoing - Minor Research Projects

Sl. No.	Name of the staff & Department	Title of the Minor Research Project	Amount Allocated (Rs.)
1	Dr B Ramesh Biochemistry	In-Vitro Evaluation of Antioxidant And Antihyperglycemic Activities of Acacia Catechu Willd Leaves Extract	1,80,000

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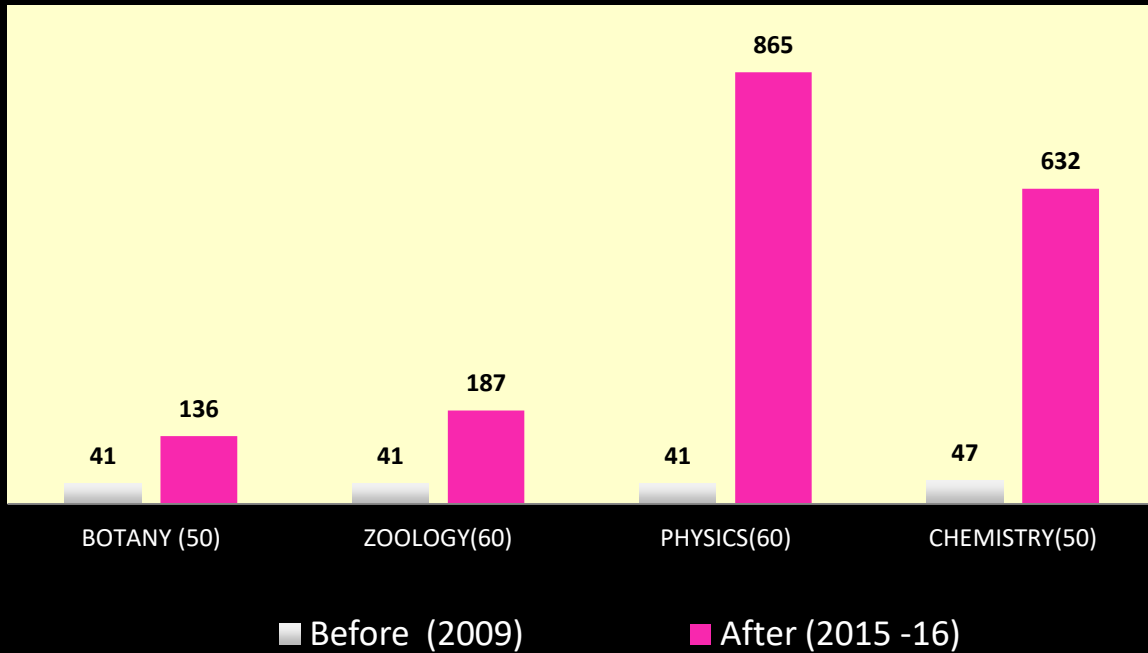
Sl. No.	Name of the staff & Department	Title of the Minor Research Project	Amount Allocated (Rs.)
2	Mrs M Umarani Management Sciences	Challenges and Opportunities for Life Insurance Providers in Rural Areas – Perception of People in Coimbatore District	1,10,000
3	Mrs V Sripriya Management Sciences	Compatibility of Emotional Intelligence and spiritual Intelligence with Quality Work Life : A Study of Women Academician on Colleges in Coimbatore City	1,00,000
4	Dr M Amaravathi Management Sciences	Stress Management and Job Performance : A Study of Women Doctors in Coimbatore City	1,35,000
5	Dr N Shanmugapriya Botany	Biodiesel Production from Waste Cooking Oil using Lipase Enzyme	4,47,000
6	Dr J Anuja Botany	Biodiversity Assessment of Fresh Water Algae With Reference to the Physiochemical Parameters of selected Wetlands in and around Coimbatore District	3,90,000
7	Mrs M Sangeetha Zoology	Cytogenetic, Molecular and biochemical Analysis in Direct exposure of Hexavalent Chromium, CR(VI) in Lether Tanning Industry Workers, South India	4,93,000
8	Dr M Murugesan Botany	Systematics and Conservation of Endemic, Endangered, Rare / Threatened and IUCN red Listed Medicinal Plants in Western Ghats of Coimbatore District, Tamilnadu, India	3,60,000
9	Dr R Sathishkumar Botany	Phytoremediation for Dermatological Problems	4,55,000
10	Mrs M Latha Maheswari Mathematics with CA	On Fractional Integro – Differential Equations with Interval Impulses Using Resolvent Operators	2,15,000
11	Mrs K Banupriya Mathematics with CA	Existence Results of New Class of Impulsive Stochastic Functional Differential Equations with Multiple Delays	2,15,000
12	Dr L Uthira	Comprehension evaluation of Nutrition & Health status of selected Female athletes	2,47,500
13	Mrs M Thamarai Selvi	Effect of nutri dense pack on academic performance and imparting changeability	4,60,000

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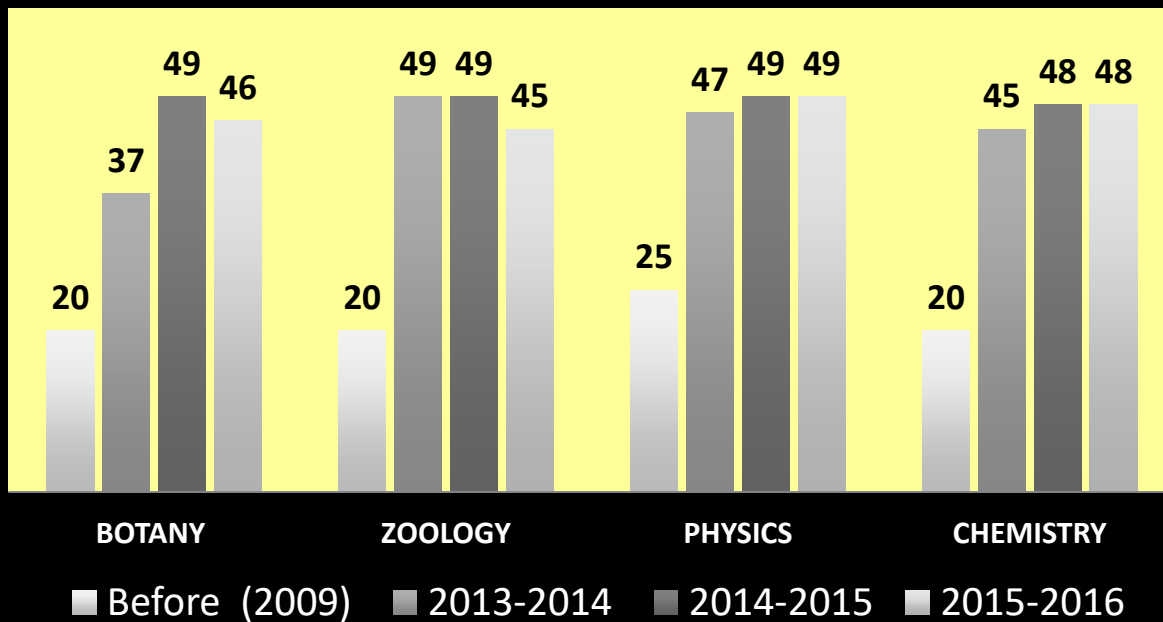
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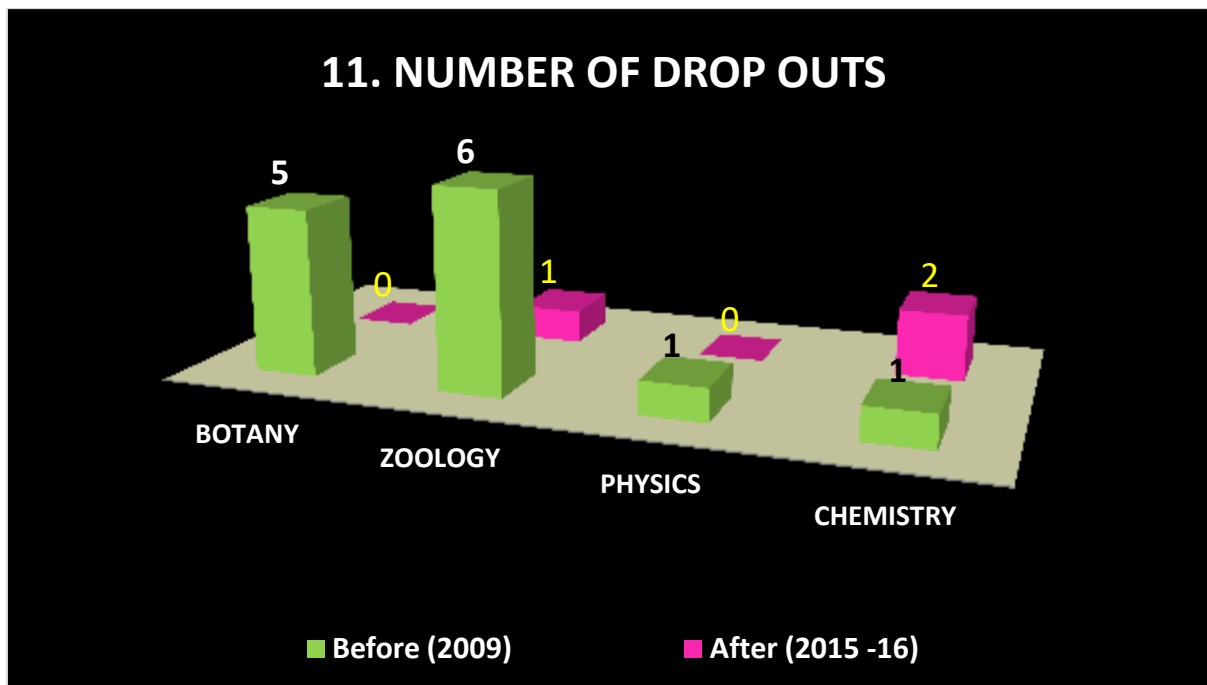
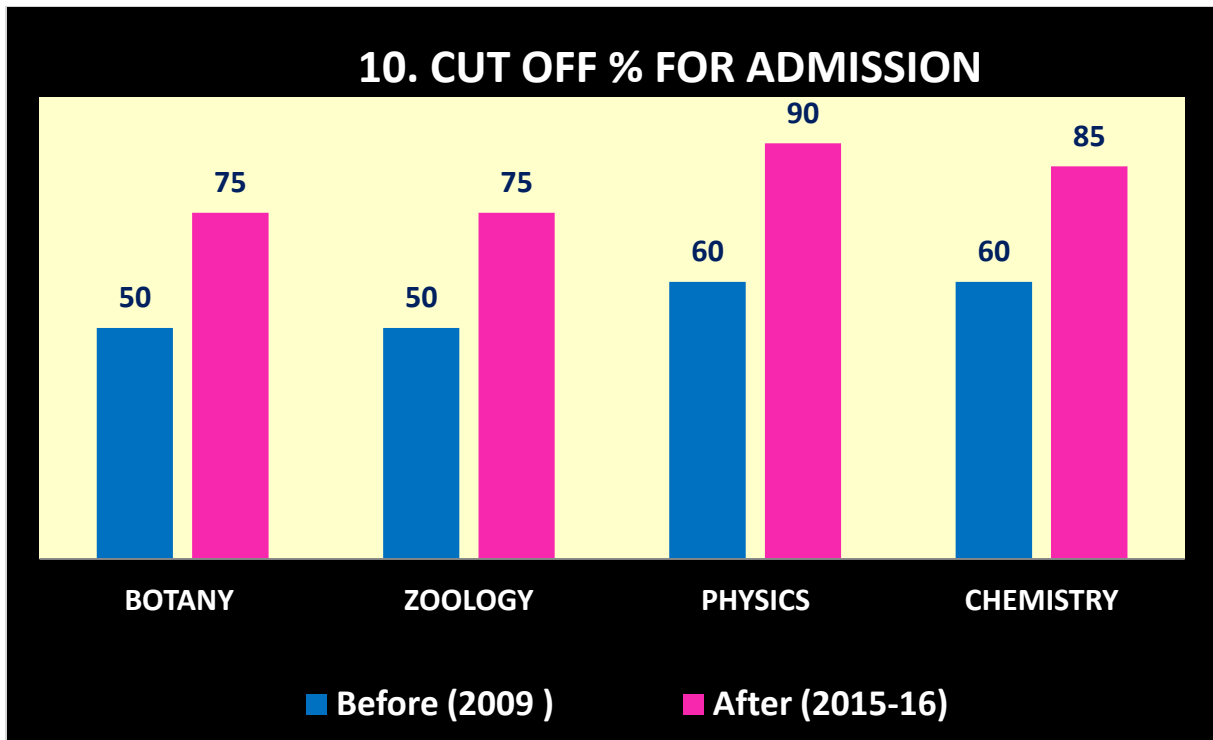
Sl. No.	Name of the staff & Department	Title of the Minor Research Project	Amount Allocated (Rs.)
		on snacking pattern of adolescent	
14	Dr Victor Arokiadoss Biochemistry	Evaluation of SIRT3 Biomaker before and after exercise regmen in Depressoin induced Animal Model	3,34,000
15	Dr R Ravikumar Economics	Farm Productivity Resource use Efficiency and Employment Structure under Percision Farming An Econometric Analysis in Tamilnadu	2,40,000
16	Mrs N Krishnaveni Microbiology	Microarray Analysis of algae for cellulose Hemicellulose and lignin content and study on algae as promising supplement for paper Pulp	2,50,000
17	Dr R Sathya Commerce	Impact of Television Advertisement on Children	2,50,000
18	Dr S Kalpana Commerce	A Study on Customer Response Towardses Social Netetworking Sites	2,40,000
19	Mrs M Kanimozhi Costume Design	Synthesis of Nano Partilles With Plant Extract as Core Material For Mosquito Repellent Finesh on Cotton Fabric	2,00,000

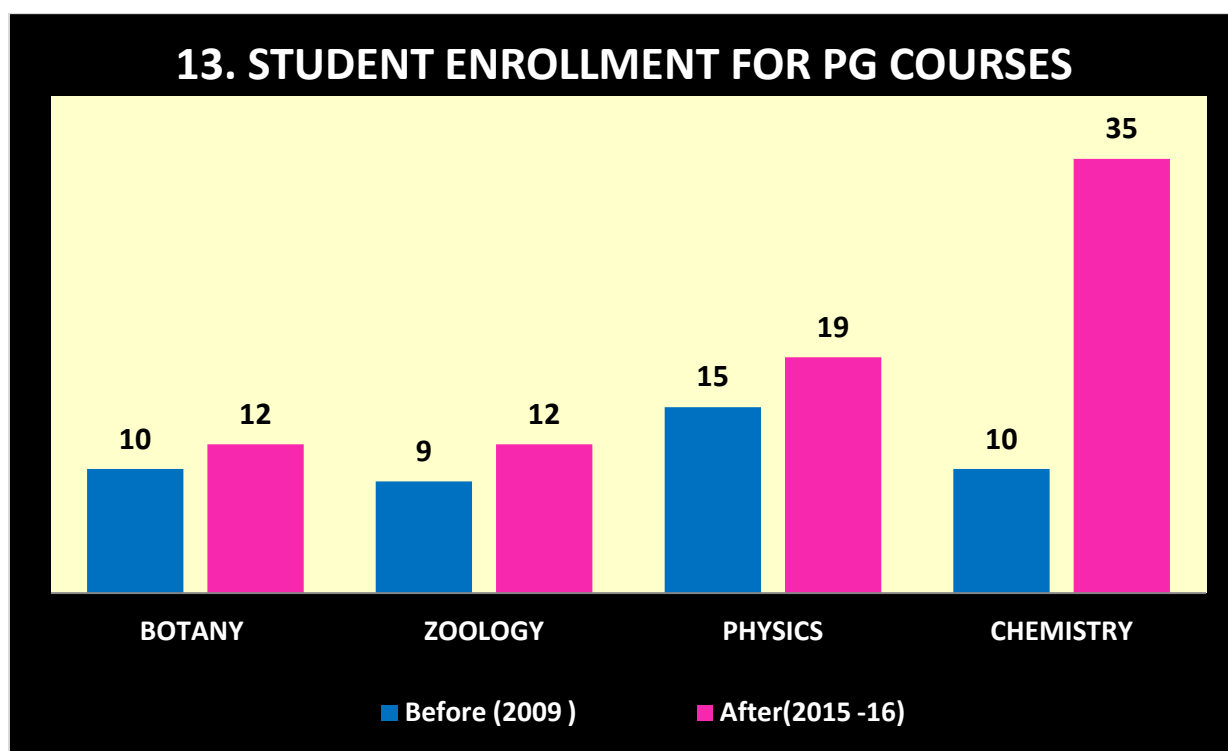
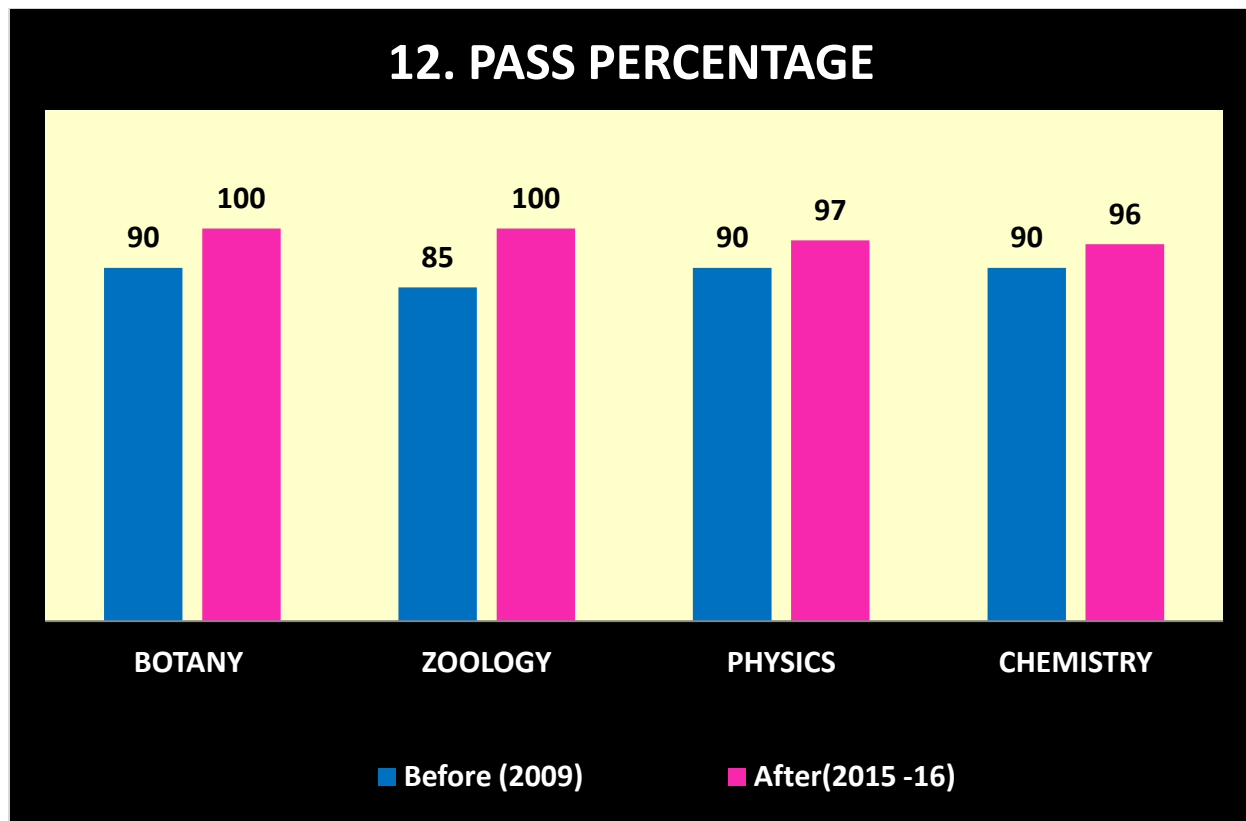
8. NUMBER OF APPLICANTS



9. NUMBER OF STUDENTS ADMITTED







14. List of new practicals introduced for UG students in different departments supported under star college scheme

Department of Botany

The following Biotechnology practicals were introduced in the curriculum of Botany

- Production of citric acid from *Aspergillus niger* and quantification.
- Production of wine from grapes using Yeast
- Production of Penicillin from *Penicillium chrysogenum*
- Extraction of Agar-agar & Carrageenan from Sea weeds.
- Extraction of Sodium alginate from macroalgae.
- Grafting, cutting practices for Horticultural plants.
- Extraction and estimation of nitrogen and crude protein using Micro kjeldhal method.
- Extraction and estimation of crude lipid content using soxlet apparatus.
- Separation of proteins by polyacrylamide disc gel electrophoresis
- Seed germination profile using Seed germinator equipment.
- Leaf Area analysis in plants grown in different environmental conditions.
- Callus induction in different explants.
- Soil analysis by Flame photometry .

Department of Chemistry

An additional practical namely “Applied Chemistry Practical” has been introduced in the 2014-15 Board of Studies. The students admitted in this academic year enjoyed the benefit and now they are in III year.

14CHU13 Applied Chemistry Practical (50 Hours) Semester-III&IV

Objectives

- To develop knowledge in the field of quantitative analysis
- To inculcate knowledge in qualitative organic analysis
- To apply several methods in organic preparations

Pharmaceutical preparations

- Preparation of aspirin
- Preparation of paracetamol
- Preparation of sulphanilamide

Isolation and Extraction

- Isolation of casein from milk
- Isolation of ascorbic acid from lemon

Estimations

- Estimation of calcium from calcium tablet
- Estimation of iron from iron tablet
- Estimation of glycine
- Estimation of formaldehyde
- Estimation of Nickel (**Colorimetry**)
- Estimation of Ferric iron (**Colorimetry**)
- Estimation of sodium and potassium (**Flame photometry**)
- Estimation of dissolved oxygen

Oil analysis

- Saponification value of oil
- Iodine value of oil.
- Acid value of oil

Colorimetry

Preparation utility products

- Preparation of candles
- Preparation of phenoyl
- Preparation of soap powder
- Preparation of agarbathi

Identification of adulterants in food samples

References:

1. V.Venkateswaran, R.Veerarwamy and A.R.Kulandaivelu, Basic Principles of Practical Chemistry, S Chand and sons, New Delhi, 2011.
2. B.K. Sharma, Industrial Chemistry, Goel Publications House, Meerut, 1995.

Department of Physics

The following new practicals were introduced in the Board of Studies 2014-2015

i. I B.Sc Year

- (a) Searle's Viscometer – Viscosity of the given liquid
- (b) Melde's Experiment – Relative density of solid and liquid

ii. II B.Sc Year

- (a) Carry Foster Bridge – Specific Resistance
- (b) Comparison of emf – Ballistic Galvanometer

iii. III B.Sc Year

- (a) Ballistic Galvanometer – Absolute Mutual Inductance
- (b) CRO – Study of waveforms- Lissajous figures- Determination of frequency
- (c) Potentiometer – emf of a thermocouple
- (d) Hartley oscillator – Solid state
- (e) Thermistor characteristics

Department of Zoology

- DNA isolation from human blood samples
- Demonstration of gel electrophoresis
- Double immunodiffusion of antigens/antibody
- Immunoelectrophoresis of human serum
- Separation of lymphocytes using centrifuge

15. MINOR PROJECTS IMPLEMENTED

Name of the Students & Supervisor	Title of the Project
Department of Botany	
E Kirutheka Supervisor :Dr.S.Rajeswari	<i>In-silico</i> studies on phytochemicals from medicinal plants against nuclear binding domain (NBD) protein for cystic fibrosis
G Vaishnavi Supervisor : Dr.S.Rajeswari	Binding Efficiency of Phytochemicals From Medicinal Plants Towards The Mutated Collagen Vii
K. L. Deepika Supervisor: Dr.N.Shanmugapriya	Herbal remediation for common cough, cold and fever prevailing in sadivayal village, Coimbatore district
T.Dhanush Supervisor: Dr.N.Shanmugapriya	Rural medicinal practices for common disease found in Karadimadai village, Coimbatore
A.Divyalakshmi Supervisor: Dr.N.Shanmugapriya	Phytoremediation for anemia and hypertension practiced in the area of Sadivayal

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Department of Physics	
Kavipriya S., Menaka K.R., Shenthamarai S.J., Preethi R., Ruba Priyadharshni. Supervisor: Dr. Veeravazhuthi., V.	Study of a simple box type solar cooker
Bharaneedharan S., Kalaiselvan N., Kiruthika E., Menaka K., Rahul R. Supervisor: Dr. Bhoopathi., G.	Optical and structural analysis of Ag and Gold nanoparticles
Anbarasan V., Gayathri P., Sharmila P., Sridhar G., Suguna D. Supervisor: Dr. Sathyanarayanamoorthi.,V.	Construction and study of Solar Owen
Amirtha A., Saravanakumar S., Seema S., Sushmitha S., Swathi S. Supervisor: Dr. Elango., M	Construction and study of solar concentrator
Dhivya N., Nivetha S., Preethi S.C., Sharvasree S., Supervisor: Dr. Rajkumar., M.	Demonstration for teaching and studying Physics
Dhayalini R., Mythili A., Sathanandhi E., Srimathi G. Supervisor: Dr. Elangovan., T.	Salt water battery and thermistor based temperature controller

16. Faculty Improvement Activities

Department of Botany

Sl. No	Faculty	Topic	Impact of the programme
1	Dr.S.Rajeswari	Seminar on “Environment Audit of Infrastructure, Extension Activity and Institutional Social Responsibility” on 30.10.2015	<p>Highlight of the programme includes</p> <ul style="list-style-type: none"> • Biodiversity audit • Audit of flora, plant perspective, native sp, associated fauna, maintenance cost, nutrient recycling and sp. Composition. • Energy management & Energy Audit • Quantitative estimation of campus flora, green treasures, carbon stock of trees and carbon calculators
2	Dr.S.Arvinth	Green educators Network- a conclave for College Teachers : India habitat Centre and Centre for Science and Environment, New Delhi from 28.01.16 to 29.01.16	<ul style="list-style-type: none"> • Redefining the curriculum for Environmental Studies programme at the Nation level
3.	Dr. R.Prabakaran & Dr. R.Sathish Kumar	National Seminar on “Scope of Big Data in Genomic Sequencing and Diagnostic imaging on 19.03.2016	<ul style="list-style-type: none"> • Computing knowledge to develop more tools, database and Software • To Interlink the biological concepts • To maintain the data and big data.

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Department of Chemistry

Sl. No	Faculty	Topic	Impact of the programme
1.	Dr.R.Venkateswaran Dr.K.M.Govindaraju	Seminar on “Approach of Green Chemistry in Pharma, Chemical and Material Science Sectors – A Prospective at PSG College of Pharmacy, Coimbatore 30.10.2015 & 31.10.2015	<ul style="list-style-type: none"> • Exposure in the field of Green Chemistry in Pharma, Chemical and Material Science Sectors. • Green synthesis of nano particles was demonstrated to the students (to Science Skill students)
2.	Dr.R.Venkateswaran Dr.K.M.Govindaraju	Six day Staff Enrich Programme jointly organized by ANJAC-LDC at Sivakasi, Virudhunagar from 16.11.2015 to 21.11.2015	<ul style="list-style-type: none"> • Faculty members trained students for the preparation of IIT-JEE.
3.	Dr.G.Rathika	Workshop on NANO SYNTHESIS by Nano Science and Technology Centre, Pondichery University. 3.3.2016 to 5.3.2016	<ul style="list-style-type: none"> • Green synthesis of nano particles was demonstrated to the students (to Science Skill students)
4.	Dr.R.Venkateswaran	ANJAC Chemistry Faculty Enrichment Programme organised by ANJAC - Sivakasi. 6.6.2016 to 11.6.2016	<ul style="list-style-type: none"> • Exposure can be utilized to teach the students for various examinations

Department of Physics

Sl. No	Faculty	Topic	Impact of the programme
1.	Dr. M. Elango & Mr.G.Vijayakumar	Training programme at Inter university center for Astronomy and Astrophysics Pune from 08.01.2016 to 14.01.2016	<ul style="list-style-type: none">• Purchased Newtonian Reflection type Telescope and demonstrated for students.• Planning to introduce new experiments on astrophysics in forthcoming academic year.
2.	Dr. Vishnu Shankar	International conference on Nanomaterials on 23.11.2015	<ul style="list-style-type: none">• Presented a research article on Biocompatibility study of titanium coated amorphous carbon coatings.

17. Outreach activities conducted and their impact / follow-up

Sl. No.	Host Departments	Programme	Date	Adopted Tribal village / Schools
1	Botany & Social Work	Mushroom cultivation for Tribal women	16.02.2016	Kundri Village, Erode.
2	Chemistry & Social Work	The preparation of Candle, Soap oil and phenoyl for tribal Women	16.02.2016	Kundri Village, Erode.
3		Science Facts to School Students	16.02.2016	Panchayat Union Middle School, Kundri, Erode.
4	Physics	Science Awareness program for school students to impart Basic science courses through demonstration of experiments	20.10.2015	Shree Padmavathi Ammal High School, CBE -14

18. Out-standing achievements by faculty & students

Sl. No	Name of the Student/ Faculty	Achievement
Department of Botany		
1	Dr.S.Rajeswari & Dr.V.Priya	Best Poster presentation award in National Biodiversity Authority & NABARD Sponsored National Conference on “Intellectual Property Rights in Biodiversity and Biotechnology” organized by the A.V.V.M. Sri Pushpam College, Thanjavur held from 15.09.2015 to 16.09.2015
2	Vinitha R & Supraja N	Best Poster Presentation award(second prize) in National Seminar on Research Trends in Plant Sciences and its societal Impact” was organized by Department of Botany, PSGR Krishnammal College for Women, on 05.01.2016 & 06.01.2016
3	i) B. Vilasini A. Divya lakshmi ii)G.Abinaya M.Balakrishnan B.Vilasini E.Kirutheka G.Vaishnavi K.Muthuselvan R.Balachandran T.Kalaivani & Manoranjitham	I place in Jungle Jewels II place in Science Skit in DBT 30 years celebration STAR ANWESHA at PSG CAS

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Department of Chemistry		
1	Chandrika. P & Malarvizhi. S Shanker. T. M & Arun Bala. S	I place in Fun-Chem III place in Chem-Hunt in National level symposium on “Innovative Catalysis” at National Institute of Technology, Trichy on 11.9.2015 & 12.9. 2015
2	i) K.Barani Priya, K.S.Viba, U. Pavithra, R. Kaviya and P.Sandhiya ii) S. Gokulnath, R. Vignesh iii) P. Nivin Krishnan	I Place in Skit I Place in ChemPuzzle I Place in paper presentation An intercollegiate student meets at neighboring Star College Kongunadu Arts and Science College, Coimbatore held on 6.1.2016
3	G. Pravin Krishnaa & A. Manoj	I place in Chem Puzzle in An intercollegiate students meet at Gobi Arts and Science College, Gobichettipalayam on 29.1. 2016
4	Gokulnath and Vignesh	I place in model making contest held at Maharani Lakshmi Ammani College for Women, Bengaluru on 12.2. 2016
5	S. Gokul nath and P. Nivin Krishnan	1st Prize in quiz at Vellore Institute of Technology, Vellore on 29.2.2016

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6	i) Shyamala.T, AthiraRavi, HariKrishnan. V ii) S. Gokul nath	2nd place in Chem Charades 1st Place in Chem Model held at Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Coimbatore - 20 on 19.3.2016
Department of Physics		
1	Ms. Swathi S.	II PRIZE. Participated in All India essay competition conducted by Department of Atomic Energy, Government of India
2	Ms. Pavithra	Selected for Project Oriented Chemistry Education Programme (POCE - 2016) @ JNCASR Bangalore
3	Ms. Swathi S	Secured I RANK Entrance exam conducted by NIT Trichy
4	Ms Preethi	Secured I RANK Entrance exam conducted for M.Sc Medical Physics

19. NUMBER OF WORKSHOPS HELD FOR TEACHERS AND STUDENTS

Sl. No.	Name of the Workshops/ Training courses	Date	No. of beneficiaries	
			Staff	Students
Department of Botany				
1	Workshop on Remote Sensing and Geographical Information System	19.06.2015 & 20.06.2015	13	132
2	Workshop on Plant Tissue Sectioning and Analysis given to Biotechnology students	14.12.2015 & 15.12.2015	2	60
3	National Level Workshop on Taxonomical Techniques & Traditional Seeds Exhibition	08.01.2016	1	8
4	Aptitude Skills Workshop	12.01.2016	8	35
5	Workshop on Cytological Techniques	13.01.2016	1	49
6	Hands on Training – Basics of Bioinformatics.	23.01.2016	8	40
7	Workshop on Water Quality Analysis	28.01.2016-29.01.2016 & 08.02.2016.	4	93
8	Workshop on Terrarium techniques	12.02.2016	1	6
9	Hands on Training in Renewable Energy, Biogas and Chulha.	23.03.2016	2	46

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Sl. No.	Name of the Workshops/ Training courses	Date	No. of beneficiaries	
			Staff	Students
Department of Chemistry				
1.	Chem-Blast	06.10.2015	12	47
2.	CHEM-LEARN	09.01. 2016	12	55
3.	Workshop on the preparation of candle, phenoyl and soap oil	03.03.2016 & 04.03.2016	12	55
4.	Hands on training programme on Water and soil analysis	04.03.2016 & 05.03.2016	2	29
Department of Zoology				
1	A training on Estuarine Habitat & Bird Watching	08.01.2015 & 09.01.2015	2	43
2	Seminar on Role of Search Engines for Biologists	20.01.2015		47
3	Hands on Training on Laboratory Safety and Preparation of Reagents	07.02.2015		35
4	Seminar on conservation of Museum objects	24.02.2015	12	75
5	Workshop on Next generation sequencing data	02.03.2015		47

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Sl. No.	Name of the Workshops/ Training courses	Date	No. of beneficiaries	
			Staff	Students
	analysis.			
6	DST-SERB sponsored National conference on Recent Advances in Individual Biotechnological Skills Development	30.03.2015 & 31.03.2015	3	28
7	Hands –on Training in Terrarium	12.02.2016		2
8	Hands on training in Microbial Techniques”	17.02.2016		47
9	Workshop in Bioinformatics	22.02.2016		48
10	National Workshop on Intellectual Property Rights at Bharathiar University	03.03.2016		5
Department of Physics				
1	Hands on Training program at Solar Physical observatory, Kodaikanal	25.9.2015 & 26.9.2015	4	44

20. GUEST LECTURES

Sl. No	Scientist	Topic	Date	No. of beneficiaries
Department of Botany				
1	Dr. K.Palanisamy, Scientist F, Forest Genetic Resource Division, Institute of Forest Genetics and Tree Breeding, Forest Campus, R.S.Puram,Coimbatore	Forest Genetic Resources – Conservation and Management	16.09.2015	130
2	Dr.M.Murugesan, Scientist B, Botanical Survey of India, Shillong	Chemotaxonomy – a Tool for Identification of plants	25.09.2015	35
3	Mr.N.Ramachandran, National Awardee Teachers-2014 Physical Education Teacher, Government Boys Higher Secondary School, Kallakurichi Dist., Villupurum	Sports for healthy life	29.09.2015	139

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Department of Chemistry				
1	Dr. Jayanthasri Balakrishnan, Associate Professor of English, PSG CAS	Challenges faced by the Youth	5.10.2015	47
2	Dr. K. Shanthi, Associate Professor , Environmental Science, PSG CAS	Disaster Management	29.12.2015	47
3	Mr. D. Gunasekaran, Associate Professor, Department of Mathematics, PSG CAS	Quantitative Aptitude	14.03.2016	53
4	Dr. J. P. Raja Pandiyan, Post Doctoral researcher, State Key Laboratory of Physical Chemistry, Xiamen University, China.	Opportunities at Abroad	15.2.2016	47
Department of Zoology				
1	Mr Sivakumkar, Librarian, PSG CAS	Role of Library and Information Technology in student life.	11.02.2015	137

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Department of Physics				
1	Dr.Sa.Ka Narayanadass, Prof & Head (Retd), Department of Physics, Bharathiar University	Nobel Laureates in Physical Sciences	27.1.2016	162

21. Visits and Training in Industries and Institutes

Sl. No.	Venue of the Industries & Institutes	Date	Participants	
			Staff	Students
Department of Botany				
1	Training Programme in Organic Farming at the Myrada Krishi Vigyan Kendra, Gobichettipalyam	30.9.2015	2	49
2	Institutional Visit to Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI), Pacha Palode, Thiruvananthapuram, Kerala.	28.09.2015 to 01.10.2015	2	34
3	Centre for Indian Medical Heritage (CIMH) Arya vaidhya Pharmacy, Kanjikode	19.03.2016	2	15

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Department of Chemistry				
1	Industrial visit on to Sakthi Sugars, Appakoodal	19.03.2016	2	42
Department of Zoology				
1	Institutional Visit to Cocoon Post-Harvesting Centre, Vadavalli	20.02.2016	4	36
2	Visit to Semen Bank, Tamil Nadu Animal Husbandry Research Centre & Hospital, Town Hall, Coimbatore	03.03.2016	2	35
Department of Physics				
1	Bryant park, Green Valley, Pine Forest and Devils Kitchen at Kodaikanal	25.9.2015 & 26.9.2015	4	44
2	Visweswarayya Museum, IISc Bengaluru and HAL	4.1.2016 to 6.1.2016	2	46

22. RESOURCES GENERATED

Lab manuals:

- Basics in Bioinformatics – A Practical guide
- Lab manual for School Students

23. FEEDBACK MECHANISM ADOPTED BY THE COLLEGE

Feedback covering all aspects of the program is received through a structured questionnaire and consolidated.

The inputs from the feedback are incorporated in to the subsequent programmes for further refinement.

Feedback mechanism:

Feedback for all the programmes were collected from the participants based on the following aspects

- Understanding the theory
- Learning the subject
- Comprehension of the concepts
- Arousing the students curiosity towards science
- Stimulating the students to take up Higher Education in science and research
- Clarification of doubts
- Enhancement of the practical skill
- Motivation level to pursue higher studies

24. Special innovative approach adopted by the college in improving the UG education

1. CERTIFICATE COURSE IN SCIENCE SKILLS

Certificate Course in Science Skills is an innovative approach making the students to learn basic skills in other subjects during the academic year 2014-15. The

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Departments under the Star College Scheme are assigned to select five students from their Departments to attend this programme. The training date falls only on Saturdays so that regular classes are not affected. In this training period students had an exposure in handling new equipments, listening Guest lectures, making of bouquet solving analytical problems in easy methods and so on. The schedules of the training programmes are as follows:

S.No.	Date	Conducting Departments
1	12.12.2015	Physics
2	19.12.2015	Chemistry
3	09.01.2016	Botany
4	23.01.2016	Zoology
5	30.01.2016	Mathematics
6	13.02.2016	Statistics
7	20.02.2016	Nutrition, Dietetics and Food Service Management
8	27.02.2016	Biochemistry
9	05.03.2016	Electronics
10	12.03.2016	Biotechnology
11	19.03.2016	Microbiology
12	26.03.2016	Computer Science

2. HANDS ON COURSE ON BOTANICAL SENSOR USING EMBEDDED SYSTEMS

A “Hand on Course on Botanical Sensor Development Using Embedded Systems” is a unique programme given to I B.Sc., Botany students (46 Nos.) for two days (17.03.2016 & 18.03.16). This is an innovative approach adopted by the

Department of Botany in order to give an exposure in using the sensors in biological field. Mr.B.Dinesh, R & D Engineer, GEM Enterprises is an expert in designing and manufacturing Sensors and Bio-sensors. He trained the students in designing their own Bio-sensors to measure nature of the soil, air, water, sunlight and environment.

Electrical parameters of the Ecosystem with effect to the change in Climate, able to create Sensor modules for measuring moisture, light intensity, temperature to understand the basics of embedded system and apply it in the field of Botany to create measuring, monitoring gadgets to be used in the field of agriculture and to be able to develop advanced electronic equipment's for Botanical Research & Agriculture.

25. QUALITATIVE IMPROVEMENTS DUE TO DBT SUPPORT

Summary about the usefulness of the Scheme:

- ❖ The Programme has made tremendous impact upon the mind of our students and has created an interest to pursue higher studies.

- ❖ Our students now have the advantage of learning more by way of new experiments with instruments purchased under this scheme.
- ❖ The students have a chance to visit and explore/share their knowledge in different institutions all over India.
- ❖ This programme paves way to learn the basics of science with interdisciplinary aspects.
- ❖ The students get an opportunity to visit industries which enhance their practical knowledge and induce the spirit of applying the concepts.
- ❖ The guest lectures are highly useful and an eye-opener for the students to know about the various windows available for their higher studies and research.
- ❖ The students get an opportunity to create awareness to the public through extension/outreach activities.
- ❖ This scheme also provides a chance for the staff members to update their knowledge in current aspects through participating/conducting several interdisciplinary programmes.
- ❖ This scheme has created a huge awareness among students regarding the importance of basic research in science.
- ❖ The students also got an opportunity to develop their soft skills.
- ❖ The various programmes conducted through the scheme have sensitized students to take up entrepreneurship as one of the career options.

To sum up the activities conducted by the STAR departments have greatly benefited the students, faculty members, laboratory and supporting staff not only from our college but also the neighbouring colleges and schools. The community at large stands to benefit from the activities of the scheme conducted by various departments.

26. SUGGESTIONS & FEEDBACK FOR IMPROVING THE SCHEME

- The scheme is highly useful for UG students to enlighten their knowledge and skills. It can also be extended up to their higher studies and research level.
- The deserving scholars in the interdisciplinary area may be motivated with financial support.
- Due to the support rendered by the DBT the Departments are acquiring 100% admission for the past few years. The fund may be extended for PG students.
- We are really grateful to the DBT for envisaging such a wonderful scheme and request the continuation of the scheme for all the upcoming years.

PSG COLLEGE OF ARTS & SCIENCE

Coimbatore – 641 014

COLLEGE LOGO



PSG COLLEGE OF ARTS & SCIENCE

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STAR ANWESHA '16

30 years of DBT Celebration – Chief guest **Dr.Suman Govil**, Advisor - DBT



CERTIFICATE COURSE –BONSAI TECHNIQUE



**OUT REACH ACTIVITY- PRODUCTION OF MUSHROOM TO TRIBAL
COMMUNITY**



HANDS ON TRAINING ON THE CONSTRUCTION OF AQUARIUM TANK



HANDS ON TRAINING IN BEE KEEPING (APICULTURE)



A STUDY ON ESTUARINE HABITAT & BIRD WATCHING



EXTENTION ACTIVITY TO SCHOOL STUDENTS



NEWTONIAN TYPE TELESCOPE WAS EXPLAINED BY OUR STUDENTS



CHEM-BLAST



SCIENCE SKILLS



PSG COLLEGE OF ARTS & SCIENCE

Coimbatore – 641 014



Dr.S.Rajeswari

Member Secretary

Star College Scheme – DBT

PSG College of Arts & Science

Civil Aerodrome, Coimbatore

TamilNadu, India.