CHRISTIAN COLLEGE CHENGANNUR

[ACCREDITED WITH B⁺ BY NAAC]

ANNUAL QUALITY ASSURANCE REPORT (AQAR) OF THE IQAC FOR THE YEAR 2008-09

Introduction

Christian College, Chengannur is one of the oldest and prestigious Arts and Science College owned and managed by The Malankara Mar Thoma Syrian Church and affiliated to the University of Kerala. It is a NAAC accredited B+ college. Founded in the year 1964, Christian College towers high as a center of excellence in education on a hilltop with pristine beauty.

The motto of the college is "Our Utmost for the Highest". The college always had its focus on academic excellence and formation of character and emphasis on spread of universal secular spiritual truth so as to produce intellectually well-trained, morally upright, socially conscious and technology savvy youngsters. The college now has grown into a full fledged temple of learning with graduate courses in Physics, Mathematics, Chemistry, Botany, Zoology, Economics, History, English and Post Graduate courses in Physics, Economics, English, and Analytical Chemistry.

The College was active in various academic, research and extra curricular activities during the academic year 2008-09. Several seminars, lectures and conferences were conducted during the report year. This year five young faculty members joined college giving an extra tinge of youthful vigor to the college community. Also two faculty members who were on leave rejoined the college this year. The research activity in the college is also got resurgence in light of the implementation of the FIST grant received by the Department of Physics from Ministry of Science and Technology, Government of India. At present faculty members of different departments are actively engaged in research and many research projects and currently ongoing. Many teachers attended and presented papers in National and International conferences. All the subject associations and various clubs and associations were active in arranging various programmes during last year. The NCC and NSS conducted various social activities reaching to the lower strata of the society.

PART A

PLAN OF ACTION FOR THE YEAR 2008-09

Christian College Chengannur has been accredited with B+ grade by the National Assessment and Accreditation Council (NAAC) in the year 2005. Based on the guidelines of the NAAC, the College has constituted an Internal Quality Assurance Cell (IQAC). The IQAC is envisaged as an internal nodal agency to evaluate, promote and consolidate all the activities of the College. The committee chalked out long term and short term action plans for ensuring continuous improvement in the entire operations of the institution. The IQAC motivated and monitored various academic and non-academic activities during the year 2008-2009 in light of the long term and short term plan formulated. The IQAC committee discussed the action plan for the year at the beginning of the academic year based on the short term plans envisaged by the last year IQAC committee. In consultation with all the committees in the college a schedule was prepared for convening the Planning Board, Academic Committee, Research and Analysis Committee, Computer Education Committee, Library Advisory Committee, Career Guidance and Placement Cell. The recommendations of all the committees were consolidated into short term and long term work plans.

The constitution of the IQAC is detailed below:

Members of IQAC

Dr. Jacob George : Principal & Chairman

Dr. Ajith Verghese George : Coordinator

Sri. Hysen Thomas : Joint Coordinator

Smt. T. Annamma OommenHead, Department of EnglishSri. Thomas AlexHead, Department of Botany

Sri. Lalu Varghese : Department of Economics
Smt. Molice Thomas : Department of Chemistry

Sri. E. Daniel : Head, Department of Mathematics

Smt. Ruby Mathew : Head, Department of Physical Education

Dr. Johnson Baby : Department of Zoology Sri. Alex T. George : Office Superintendent

Sri. Nidhi Alex M. Ninan : Librarian

Prof. M. K. Thomas : Management Representative

The plan evolved by the committee for the academic, co-curricular and research activities for the year 2008-09 is listed below:

- ♦ Fresh initiatives for improving the academic performance of students.
- Encourage students to utilize library facilities.
- Revamping the athletics and games by encouraging students and giving incentives to them.
- ♦ Initiate steps to appoint regular teachers in place of guest lectures and to fill vacant posts of non teaching staff.
- ♦ Inspire the faculty to undertake more research projects and publish research findings in peer reviewed national and international journals
- ♦ Instigate teachers to participate in national/international seminars, conferences and workshops
- ◆ Encourage the different departments to conduct national and regional seminars by using the possible grants from University Grants Commission and Kerala State Council for Science Technology and Environment.
- Procuring sophisticated research instruments for the Department of Physics using FIST grant.
- Seminars and lectures by career guidance and placement cell.
- ♦ Completion of women's hostel construction.
- Renovation of the existing old building outside the main campus and to convert it to a men's hostel to accommodate staff and postgraduate students.
- ◆ To continue with the initiatives towards converting the College campus to an eco friendly one.

Based on these plans various activities and programmes were conducted in the proposed year. The committee evaluated the progress on a regular basis. Comments and recommendations for further improvement in quality were issued at various stages.

ACHIEVED OUTCOME IN A NUTSHELL

- The concept of academic planning introduced by the IQAC has been widely appreciated and welcomed by the students and staff members. The various departments identified their strength and weakness following this planned approach. Following the general directions of IQAC, each department worked out their plan of action for the year. IQAC carefully monitored the activities of all the departments and committees and provided all support for further enhancement of the quality. The faculty members and nonteaching staff were offering voluntary services in guidance, counseling and placement, community services, social activities and related matters. The attendance of the students is constantly monitored and follow-up meeting with parents were organized in the case of students with lower attendance. The internal examination marks were intimated to the parents.
- ➤ The sustained encouragement and guidance of IQAC has also resulted in the increased participation of students in extra curricular activities like debate, quiz, sports, elocutions, community development programmes etc which are organized by the college.
- The students were encouraged to use the Library facilities. A Best reader award for students is constituted for motivating students in this regard. The teaching and non teaching faculties were also encouraged to use the facilities available in the library.
- > The sports and Games received rejuvenation this year by conducting the Annual Sports meet. All the students were put into 4 separate houses and different games and sports events were organized on house basis. A large number of students actively participated in that event.
- Regular teachers were appointed in place of guest lectures and vacant posts of non teaching staff were filled.
- The efforts of IQAC to inspire the faculty members to undertake more research projects and publish research articles in peer reviewed journals has reaped good results.

Five faculty members applied for minor research project to University Grants Commission for conducting research work, Three faculty members got minor projects from the University Grants Commission. The department of Physics is continuing with the implementation of the FIST project worth 24 Lakhs received from the Department of Science and technology, New Delhi. The participation of Teachers in National / International conferences also increased as a result of the continuous effort by IQAC

- National and Regional seminars were conducted successfully and proceedings were published. Four teachers participated and presented papers in National/ International conferences.
- ➤ The Department of Physics received Rs. 18 1akhs {FIST GRANT} as first installment from the Ministry of Science and Technology, Government of India for upgrading the postgraduate teaching and research facilities. Using the grant the department procured UV-Vis-NIR Spectrophotometer, LCR Meter, setup for laser optical experiments, High Precision Michelson interferometer facilities. An amount of Rs.1 lakhs was used for purchase of books on advanced physics and 4 lakhs for a full-fledged computer lab with networking facilities.
- In consonance with the increased job opportunities available in the private sector and the severe competition amoung the job aspirants for finding jobs; the need for improvement of soft skills is important. In this regard the Career Guidance and Placement Cell of this college functioned effectively and actively. The placement cell organized several campus interviews and 10 students got placement in various companies, banks and other firms. Several programmes like personality development, how to face interview board etc were conducted this year.
- ➤ The construction of the women's Hostel using the financial assistance received from University Grants Commission is nearing completion.
- An existing old building outside the main campus is renovated and converted in to a men's hostel for staff and postgraduate students. Many teaching and non teaching members as well as students are already using this facility.

The students are motivated to keep the campus ecofriendly. Seminars were organized related to these topics. This has reflected in the general cleanness of the campus and reduction in the quantity of plastic waste in the campus.

PART B

1. Activities Reflecting the Goals and Objectives of the Institution

All the activities of the college are deigned in tune with the motto of the college "Our Utmost for the Highest". Since its inception this college existed as a beacon of light for aspiring students in chengannur area which is surrounded by a population, the majority of which is poor.

Some of the policies/objectives followed by the institution:

- ➤ Admission and Appointment polices are so formulated that merit is never overlooked.
- ➤ Computer training, Communicative English classes and personality development programmes were offered to students.
- ➤ No capitation fee other than University/Government fee is collected.
- > Sports facilities like multi gymnasium are offered to students free of cost.
- > Strengthening of healthy practices.

2. New Academic Programmes Initiated [UG and PG].

Affiliation of the University of Kerala and Sanction of the state Government is necessary for starting new courses. Even though the college applied for new courses, due to the restrictions imposed by the Government, no new courses were sanctioned during the academic year.

The college offers eight undergraduate courses (Mathematics, Physics, Chemistry, Zoology, Botany, Economics, History and English) and four postgraduate courses (Physics, Analytical Chemistry, Economics and English). Various add-on certificate courses in computer science are also offered by the computer division of the college.

Certificate courses on Office Automation, Internet and Numerical Applications were conducted by the computer division of the College for UG and PG students

3. Innovations in Curricular Design and Transaction.

The University of Kerala has a rigid approach regarding the Curriculum design. The Board of Studies of the concerned subject and the academic council is preparing the syllabus for the different courses for the entire University. However, while designing new syllabus, the Council usually requests for comments on the draft syllabus from experts of colleges. Faculty members of this college viz, Sri. S. Rajagopal, Sri. Mathew Varghese, Sri. Ajith Verghese George, Dr. Rajan David, Sri. Thomas Alex and Sri. Thomas Mathew contributed during the curriculum design and transaction. The seminar on advanced topics by professional and eminent experts, organized by each department provided new vistas of knowledge transaction and fields of research.

4. Inter Disciplinary Programmes Started

The thin film coating and high temperature furnace facilities of the Research Lab of the Department of Physics are used by many students of the Department of Chemistry of this College. Many students and faculty members from nearby colleges also utilize these instruments for sample preparations.

5. Examination Reforms Implemented.

The College has an Examination committee consisting of senior faculty members. In addition to this, every department has its own examination committee under the leadership of the respective heads of the department. This committee works in conjunction with the College Examination committee. In the reported year the committee planned and implemented a two tier examination system - a series of tests organized by the concerned department and terminal examinations by the college. Examination Results were monitored and detailed progress report of the students were sent to the parents by post. Class wise PTA meetings were organized for all the classes in which the general progress and behavior of the students were discussed. Feedbacks collected from the parents were also evaluated. This resulted in the improvement of the overall performance of the students.

6. Candidates qualified NET/ GATE/SLET etc.

Post graduate students are advised to appear for NET, GATE, SLET examinations seriously. Five students had qualified the State Eligibility Test [SET] conducted by the Government of Kerala.

7. Initiative Towards Faculty Development Programme

Two faculty members of the college has granted FIP scheme of the University Grants Commission during the XI plan. Sri. A. Abraham [Physics] and Smt. Jisha John [Economics] continuing their research utilizing the FIP scheme. Sri. Hysen Thomas [Physics] and Sri. John George Athyal [English] is doing part time research. Dr. Desy P. Koruth, and Sri. Hysen Thomas participated in National seminars/Conferences.

8. Total Number of Seminars/ workshops conducted.

Seminars organized in the college may be grouped into four categories.

- a. National seminars conducted with the help of funding agencies.
- b. Seminars organized on regional level by departments.
- c. Lecturer programmes
- d. Student seminars.

National seminars conducted during 2007-08

1. The Department of Chemistry organized a three-day National seminar on Recent Trends in Organic Chemistry (RETROC 2009) during January 16-18, 2009 jointly sponsored by University Grants Commission and KSCSTE, Government of Kerala. Dr. V. N. Ragasekharan Pillai, Vice Chancellor of Indira Gandhi National Open University, New-Delhi inaugurated the National Seminar. The meeting presided over by His Grace Rt. Rev. Dr. Zacharias Mar Theophilus Suffragan Metropolitan. Dr. A. Ajayaghosh (Bhatnagar Awardee, NIIST, Trivandrum), Dr. Siby Varghese (Scientist, Rubber Institute, Kottayam), Dr. K. N. Rajasekharan (Head, Department of Chemistry, University of Kerala, Trivandrum), Dr. George Thomas (Bhatnagar Awardee, NIIST, Trivandrum), Dr. Santhosh Kumar K. (Scientist, RGCB, Trivandrum) delivered invited talks. In addition to the invited talks, teachers and researchers from different parts of the country presented 28 research papers.

- Proceedings containing the invited talks and research papers presented were released during the inaugural ceremony. Dr. Desy P. Koruthu served as the Convener.
- 2. The Department of Zoology organized a two-day National seminar on Emerging Bio Informatics on 7th and 8th August 2008 sponsored by the University Trends in Grants Commission. Rev. George Mathew, Secretary of the Chengannur-Mavelikkara Diocese of the Malankara Mar Thoma Syrian Church, inaugurated the seminar. Dr. Ignatius Kunjumon (Department of Bio Informatics, SNGIST, North Cyril (St. Xavier's Paravur), Dr. Johnson College, Thumba), Dr. Oommen V. Oommen (Head, Department of Zoology, University of Kerala, Trivandrum), Dr. G. Gopakumar (Department of Bio Informatics, University of Kerala, Trivandrum) delivered invited talks. Teachers and researchers also presented 8 research papers. Proceedings of the National seminar were also published.

Seminars Organized on State Level by Departments

3. A state level seminar on 'Eco-cultural Perspectives of Contemporary Literature' was conducted by the Department of English on 6th October 2008. Rev. K. S. Mathew, Sabha Secretary, Malankara Mar Thoma Syrian Church inaugurated the seminar. Dr. Alexander Jacob IPS (Director, Police Training Academy, Thrissur) and Dr. Chandrika Balan (All Saints College, Trivandrum) were the chief resource persons.

Seminars Organized on Regional Level by Departments

- 4. The Department of Economics organized an intercollegiate seminar on 'Global economic Crisis' on 4th November, 2008.
 - His Grace Rt. Rev. Dr. Zacharias Mar Theophilus Suffragan Metropolitan inaugurated the seminar. Mr. E. Madhavan, General Manager, Reserve Bank of India, Kochi was the resource person.
- 5. The Department of Chemistry organized an intercollegiate seminar on 'Computational Chemistry' sponsored by the Academy of Chemistry Teachers (ACT) on 16.10.2008. Dr. U. C. Abdul Jaleel, Malabar Christian College, Calicut delivered the main lecture. Students and teachers from various colleges attended the seminar.

- 6. Department of Mathematics conducted a talk on 'The History of Mathematics' on 17th November 2008. Prof. Mathew C. John, Head, Department of Mathematics, Mar Thoma College, Tiruvalla was the resource person.
- 7. A one-day seminar on 'Chandrayan Mission' was organized by the Department of Physics on 26th November 2008. Dr. Samuel Mathew, Department of Physics, Mar Thoma College led the seminar. A video documentary presentation 'Chandrayan Mission', its objectives and India's future man missions to outer space followed the meeting.
- 8. A seminar on 'Plant Taxonomy and Nomenclature' was organized by the Department of Botany on 28th November 2008. Dr. K. C. Koshy, Senior Scientist, TBGRI, Palode delivered the lecture.
- 9. The Department of History organized a seminar on 'Socio-Economic Analysis of the Indian Society' on 19th February 2009. Dr. Varghese George, Member, Kerala State Debt Relief Commission led the seminar.
- 10. A talk on 'Functional Foods and their Role in Prevention of Diseases' was also organized by the Department of Chemistry on 31st December 2008. Dr. Mathew C. Chandy, Principal Scientist, Quality Assurance Laboratory, Kollam gave the talk.
- 11. A talk on 'The Relevance of History' was also organized by the Department of History on 29th September 2008. Prof. P.T. Chacko, Mar Thoma College, Tiruvalla gave the talk.
- 12. A lecture on 'Ethical Issues in Globalization was organized by the Department of Economics on 14th August 2008. Rev. Dr. Abraham Skaria was the main resource person.
- 13. The Depatment of Mathematics organized a seminar on "Algebric and Transcendental Numbers" on 17th February 2009. Dr. Regi T., Government College, Chittoor was the resource person.
- 14. A seminar on "Grading and Restructuring Under Graduate Education' for the teachers was organized by the college on 17th March 2009 sponsored by the Kerala State Council for Higher Education. Prof. P. Babu inaugurated the seminar. Dr. P. K. Padmakumar and Dr. J. Vijayan were the key resource persons.

15. A workshop on Wetland Biodiversity Conservation was conducted on 18th March, 2009 jointly by the Department of Botany, Department of Zoology, N.S.S. and Nature Club sponsored by the Biodiversity Board, Government of Kerala. Dr. M. G. Sanal Kumar and Dr. R. S. Balamurali.

Other programs organized during 2008-09

- 1. His Grace Dr. Zacharias Mar Theophilus Suffragan Metropolitan celebrated Holy Communion Service at 8:30 a.m. on the New Year Day (Ist January 2009) at the college chapel. All the Staff members and interested students participated.
- 2. Rev. George Mathew, Governing Council Member distributed the Kerala state Suvarna Jubilee Scholarship of Rs. 10,000/- each sanctioned by the Government to 19 first year degree students on 8th January 2009.
- 3. November 25, 2008 was observed as Library Day and Communal Harmony Day. Quiz, Essay, Best reader competitions were conducted in connection with the Library Day and Merit certificates and prizes were distributed to the winners. Grand Master Dr. G. S. Pradeep (Aswamedham fame) delivered a talk on Communal Harmony. All the students and staff members took National Integration pledge.
- 4. Intercollegiate paper presentation on the topic 'Economic Crisis and its Impact on Kerala Economy' and Quiz competitions were conducted by the Department of Economics on 4th February 2009. Cash awards were distributed for the winners.
- 5. Christmas Carol service was held on 4th December 2008 under the leadership of college choir. Rt. Rev. Abraham Mar Paulos Episcopa gave the Christmas Message. Final year B. A. English students secured first place in the Carol singing competition held in connection with the Christmas carol.
- 6. The Tourism club and Nature club conducted a nature study camp from 12-14 February 2009 at the Eravikulam National Park and Wild Life Sanctuary, Munnar. 25 student members and 3 faculty members participated in the nature study camp. The forest department of the Government of Kerala sponsored the camp. The Tourism club, Nature Club and NSS organized a lecture on 'Conservation of Nature' on 22nd January 2009. Mr. C. R. Neelakandan, renowned Environmental activist, delivered the lecture. A poster display was also arranged to give awareness to

- conserve Nature. Prof. Thomas Alex and Prof. Thomas P. Thomas served as the Conveners of the Nature Club and Tourism Club respectively.
- 7. A medical camp was organized on 19th February 2009. A medical team including three doctors of St. Thomas Mission Hospital, Kattanam led the camp.
- 8. A debate was arranged by the Women's Cell on 19th February 2009 on the subject "Whether the Concept of Women hood Respected in the Modern Media Culture"
- A Quiz programme on Indian History, culture and contemporary developments was organized by History Department on 31st October 2008 in connection with the Kerala Day Celebrations.
- 10. Final year B. A. English students published a manuscript magazine viz., 'Visage'.
- 11. A campus cleaning programme was conducted in connection with Gandhi Jayanthi.

 All the students and staff members participated with enthusiasm.
- 12. A tour programme was arranged for the teaching staff on 27th February 2009 to Alappuzha Lake waters. 47 teachers participated.

Student Seminars

As per the Syllabus of the University of Kerala every student of the Post graduate course must present a seminar each for each paper in every semester. The seminar presentations of the student will be a one hour programme and the same is attended by all the faculty members of the concerned department. Seminars were evaluated critically by the faculty members and suggestions for improvements were made. Students of the UG level were also given assignments to conduct seminar on selected topics in each papers.

9. Research projects.

List of UGC Projects

Completed:

Sl. No	Title of project	Funding agency & Amount Allocated	Department & Period of Project	Name of PI and Co-PI	
1.	Globalization and Impact on Agriculture: A Case Study of Kerala Economy	UGC Rs. 25,000	Economics 2004-06	Dr. Manju S. Nair	

10. Patents generated if any:

NIL

11. New collaborative research program:

The Department of Physics recently got a major research project on Synthesis of Ultra-Fine Magnetic Particles for Application in High Frequency Magnetic Cores and Magnetic Thin Film Sensors. The project was implemented in consultation and collaboration with Dr. M. R. Anantharaman of the Department of Physics of Cochin University of Science and Technology, Kochi. The Department also has collaborative research agreements with St Berchmans College, Changanacherry in the filed of Pattern formation and crystal growth. There are arrangements for students exchange for Post Graduate research project programme with colleges like St Berchmans College, Changanacherry, St. Thomas College, Kozhencherry, Mar Thoma College, Tiruvalla, Sree Narayana College, Kollam, MSM College, Kayamkulam.

12. Research grants received from various agencies.

Sl. No	Funding agency & Amount Allocated	Name of PI and Co-PI	Department	
1	KSCSTE, Kerala	Dr. Vinoy Thomas	Dhyraiga	
1.	Rs. 3,94,350	Mr. Hysen Thomas	Physics	
2	UGC	Dr. Jacob George	DI .	
2	2 Rs. 52,500		Physics	
2	UGC	Mr. Hysen Thomas	Dlanda	
3	Rs. 67,500	Dr. Jacob George	Physics	

13. Details of research scholars and research activities

Mr. John George Athyal, Department of English presented a research paper on "Effectiveness of Group Investigation and Simulation Models in Teaching of English" in the National Conference on Language and Literature held at Karunya University, Coimbatore during 28th and 29th November 2008 and was published in the Conference Proceedings. Mr. Nidhi Alex M. Ninan, Librarian presented a research paper entitled

"Conventional to Modern Libraries: A Change – Roles and Responsibilities of Information Professionals in Aided College Libraries in Kerala" in the National Conference on Changing Dimensions in Library Resources and Services in the Digital Era held at S. R. M. University, Chennai during April 18 & 19, 2008. Mrs. Ruby Mathew participated in the UGC sponsored five-day national workshop on 'Capacity Building of Women Managers in Higher Education' held at St. Thomas College, Kozhencherry during 17th to 21st November 2008

- 1. Dr. Vinoy Thomas & Hysen Thomas, Department of Physics are continuing their major research project entitled 'Synthesis of Ultra fine Magnetic Particles for Application in High Frequency Magnetic Cores and Magnetic Thin Film Sensors' amounting to Rs. 4,49,350/- sanctioned by the Kerala State Council for Science Technology and Environment (KSCSTE).
- **2.** Dr. Jacob George, Principal is continuing his minor research project entitled 'Pattern Formation in reaction diffusion systems' amounting to Rs. 60,000/sanctioned by the U.G.C.
- **3.** Mr. Hysen Thomas, Department of Physics is continuing his minor research project entitled *'Fabrication of Magneto-Impedance Based Sensors'* amounting to Rs.80,000/- sanctioned by the U.G.C.
- **4.** Dr. Dessy P. Koruthu, Department of Chemistry received a minor research project entitled *'Thermal Studies of Metal Complexes based on cross linked polymer supported legends and their Application in Certain Organic Reactions'* amounting to Rs. 50,000/- from the U.G.C.
- **5.** Mrs. Mariamma Varghese, Department of Mathematics received a minor research project entitled *'Study on Differential Algebraic Equations'* amounting to Rs. 40,000/- from the U.G.C.
- 6. Mr. Nidhi Alex M. Ninan, Librarian received a minor research project entitled "Conventional to ICT Based Libraries" amounting to Rs. 50,000/- from the U.G.C.
- **7.** Mrs. Sophia K. Philip, Department of Chemistry was awarded Ph.D. in Chemistry from the University of Kerala in September 2008 for her thesis entitled "Solution,"

Solid Phase and Microwave Assisted Synthesis of Aminothiamle Precursors and their Cyclisation".

- 8. Mr. Ajith Verghese George, Department of Chemistry was awarded Ph.D. in Chemistry from the University of Kerala in February 2009 for his thesis entitled "Comparative Study of the Hydro Chemistry and Bio Geo Chemistry of Rivers Manimala, Achencovil and Pampa Including the Study of the Impact of Certain Nitrogen Sulphur Hetero Cyclic Compounds".
- **9.** Mrs. Jisha John (Economics) and Mr. A. Abraham (Physics) were selected for Ph.D. studies by the UGC during the XIth plan period.

14. Citation index of faculty members and impact factor

Publication of faculty members in peer reviewed Journals

Following teachers published research papers in accredited national / international journals during the academic year.

- 1. Dr. Ajith Verghese George (Chemistry)
 - "Water Quality Studies of Sasthamkotta Lake of Kerala", *Pollution Research*, 2008, 27(3): 419-424.
 - "Comparative Study on the Bioorganics of Rivers Manimala, Achancovil and Pampa in Pathanamthitta and Alappuzha Districts of Kerala" Acta Cinencia Indica 2008, 34 C (3), 469.
- 2. Dr. Rajan David (Hindi)
 - "Conjugal Love in the Drama's of Jayasankar Prasad", Keral Jyothi, August 2008.
- 3. Dr. Sophia K. Philip (Chemistry)
 - "Synthesis and Cytotoxicity Studies of Thiazole Analogs of the Anti Cancer Marine Alkaloid Dendrodoine", *Indian J. Chem.*, 2008, 47B (7), 1145-1150.
- 4. Dr. Jyothi Kanchan A. S. (Botany)
 - "Studies on Temperature Specificity of Linear Mycellial Growth and Fruitification of Volvariella and Pleurotus on Wheat Grain", *India J. of Botanical Research*, 2008, 4(2), 297-302.
- 5. Mr. Hysen Thomas (Physics)

"Swift Heavy Ion Induced Surface Modification for Tailoring Coercivity in Fe-Ni Based Amorphous Thin Films Alloys", *J. Applied Physics*, 2009, 105 (3), 033910.1 to 033910.7

15. Honours/Awards to the faculty

University and Government Responsibilities

- 1. Prof. Mathew Varghese is serving as the Kerala University senate member. He is also working as the resource person of the Kerala State Higher Education Council for restructuring under graduate education. He was appointed as a member of the zonal vigilance squad for the examinations of the University of Kerala.
- 2. Prof. Lalu Varghese is a member of the Board of Studies (pass) of Economics.
- 3. Prof. E. Daniel is a member of the Board of studies (pass) of Mathematics.

16. Internal resources generated

The general policy of the college is to offer quality of education at affordable rates even to economically backward students. We always try to minimize the financial burden to the students. The day to day expense related to the running of the college is met from the generous contribution of Parent Teacher Association (PTA), Alumni and well wishers. The management also provides financial assistance whenever need arises. The entire amount so received was utilized for enhancing the quality of services offered.

No	Source		Amount		
1	Parent Teacher Association		7,85,000/-		
2	Alumni		12,000/-		
3	Well wishers		1,91,000/-		
4	Management		1,21,000/-		
		Total	11,09,000/-		

17. Details of departments getting SAP, COSIST (ASSIST)/ DST, FIST etc. assistance / recognition.

The Department of Physics was sanctioned Rs. 24 1akhs as financial assistance from the Ministry of Science and Technology, Government of India for upgrading the postgraduate teaching and research facilities. This is a commendable achievement of the Department of Physics. This year the Department received Rs. 18 lakhs as the first allocation. Using the grant the department procured UV-Vis-NIR Spectrophotometer, LCR Meter, full setup for laser optical experiments, High Precision Michelson interferometer facilities. Rs.1 lakh was used for the purchase of books on advanced physics and 4 lakhs for a full-fledged computer lab with networking facilities.

18. Community services.

The community service of the institution may be classified under three heads

- i. Activities of NSS
- ii. Activities of NCC
- iii. Services offered by individual teachers
- iv. Programmes organized by Departments.
- v. College Union

National Service Scheme & Red Ribbon Club

NSS unit of the college organized a one-day legal awareness class for undergraduate students on 31st October 2008. Sri. S. H. Panchapakesan, Hon. Sub Judge, Chengannur inaugurated the seminar. Principal Dr. Jacob George presided over the function. Adv. C. N. Ammanchy (Domestic Laws and Marrige Laws), Public Prosecutor Adv. B. Sajeev (Ragging Laws), Adv. Ashok Ammanchy (Cyber Laws) led different sessions.

In connection with the World Aids Day, the National Service Scheme conducted an awareness programme on 1st December for the students in association with the Y.M.C.A. Chengannur sub region. His Grace Dr. Thomas Mar Athanasius Metropolitan inaugurated the seminar. Rev. Dr. Jacob Johnson, Director, Counseling Department, C.S.I Church, led the session. All the participants took the pledge "AIDS free world.

Let's make it possible". NSS volunteers distributed the red ribbon to all the students and staff of the college.

NSS volunteers actively participated in the campaigning and evaluation process conducted by the Cheriyanad Gramma Panchayat to declare the Panchayat as the first litigation controlled Grama Panchayat in India.

Annual seven-day camp of NSS was held from Dec 19-25, 2008. Sri. Rajan Kannattu, Municipal Chairman, Chengannur Municipality inaugurated the camp. Adv. Mathew T. Thomas, Hon. Minister for Transports, government of Kerala gave the valedictory message. Rt. Rev. Dr. Zacharias Mar Theophilus Suffragan Metropolitan, Manager of the college visited the camp on 22nd December 2008. Sri John George Athyal, and Sr. Biji Abraham the Programme officers gave the leadership.

NSS and Red Ribbon club conducted a blood group detection programme and a directory of blood groups of all the students and staff members is prepared and kept in the college. The students have been donating blood to various hospitals as and when need arises. Twenty one volunteers donated blood this year.

National Cadet Corps

The total strength of the NCC unit is 60. This year 13 cadets appeared for the B certificate examination and 6 appeared for the C certificate examination. A mini camp was conducted for the cadets from 24th to 26th January 2009 in the college. National integration camp was also staged in the college during November 21st to 23rd, 2008. On the Republic Day Rt. Rev. Dr. Zacharias Mar Theophilus Suffragan Metropolitan, Manager of the college hoisted the national flag. Aravind D., final year Physics student served as the Senior Under Officer and Dr. Biju Thomas as the Caretaker.

Services offered by individual teachers

Several teachers worked as resource persons for seminars and other leadership training programmes in various neighboring schools and colleges. Sri. Mathew Varghese of Department of Economics is a senate member of the University of Kerala and is a management consultants. Thomas Alex, Head of the Department of Botany, is serving as the Treasurer of Christian Agency for Rural Development (CARD), a social organization

of the Mar Thoma Church. He is also an executive member of the Krishi Vijyan Kendra of the Government of India located at Thelliyoor, Pathanamthitta District. Dr. Jacob George, principal is serving as the President of the Mallappally Service Cooperative Bank. He is active in various organizations of the church which are engaged in social work at the downtrodden sections of the society. Dr. Desy P. Koruthu of the Department of Chemistry is a Counselor and her services are rendered to the students as well as to the public.

Programmes organized by departments

All the departments are frequently conducting programmes including lecturers on personality development, leadership training and communication skills. The Department of Botany conducted a course on mushroom cultivation to the general public and has cultivated mushrooms in the college campus. Mathematics Department has conducted an outreach programme for the Higher Secondary students of the nearby schools to expose them to basics of Mathematics.

College Union

College Union and Arts club inauguration was held on 14th November 2008. Sri. Rajeev Alunkal renowned film songwriter inaugurated the activities of the college union for the academic year 2008-09. Union Chairman Jinu Lazer Mathew presided over the function. The Arts club was inaugurated on the same day by Sri. Rajan Palluruthy, prominent Film Star. Dr. Jacob George, Principal and Dr. Rajan David (Staff Advisor) offered felicitations. A programme in which Cultural and Traditional arts, Chengannur, sang folk songs followed the meeting.

Arts Festival was conducted on 19th and 20th January 2009. The College Union organized a talk on 'Marunna Malayalee' on 7th November 2008 sponsored by the Kerala University Union. Dr. Sukumar Azhikkode gave the talk.

Campus Chillies Programme of the Kairali T. V. channel was hosted by our College Union on 6th February 2009. Variety dances, one act plays, orchestra, mimicry and various other entertainment programmes of our students were videographed by them. These programmes is subsequently broadcasted by the channel.

Dr. Rajan David served as the Staff Advisor to the College Union and Arts Club..

The 44th College Day celebration of the college was held on 4th March 2009. Rev. Dr. Joe Joseph Kuruvilla was the chief guest. Mr. Jogy Cherian, Treasurer of the college, Mr. Jacob Varghese, Treasurer, Kuwait Alumni chapter, Mr. Jinu Lazar Varghese, College Union Chairman spoke on the occasion. Endowment prizes, Proficiency prizes to students and staff members were distributed on the occasion. Special awards instituted by Kuwait Alumni Association were also distributed to 12 students. Prof. Mathew Varghese served as the convener.

19. Teachers and officers newly recruited

Mr. Koshy Mathai (History), Mr. Aneesh S. (History), Mrs. Bindu John (Malayalam), Miss. Tresa Mary Chacko (Mathematics), and Mrs. Preetha Karanaver (Zoology) were appointed against regular vacancies during the academic year. Sri. Alex Abraham (Department of English) and Sri. Ajin Jacob (Upper Division Clerk) rejoined duty after the expiry of their Leave Without Allowance.

20. Teaching and non teaching staff ratio.

The college has faculty strength of 55 Lecturers. There are 48 permanent lecturers [English - 7, Economics- 7, History-3, Politics -1, Mathematics - 3, Physics - 9, Chemistry - 7, Botany - 4, Zoology - 4, Malayalam-1, Hindi-1, Phy. Education-1] and 7 guest lectures. The total number of non-teaching staff members is 48. The Teaching to Non-teaching staff ratio is 1.46.

21. Improvement in library services.

The central library has **27500 books**, **45** periodicals and their back volumes. The library houses the department books in separate catalogue sessions and few research journals.

Digitalization of library functioning is already underway and is expected to be complete during 2008-09 Attention was given for improving the quality of library services. Students are encouraged to use the library facility. The library committee was convened each month and monitored the effective functioning of the library. Digitalization of records, online centralized search facilities and subscription to INFLIBNET are the next challenges that are to be addressed by the College.

22. New books / journals subscribed and their value.

In addition to the existing stock of books 246 new books were purchased and added to the library during this period. The college received UGC grant of Rs **19,449**/- during this period for the purchase of books. Books of different subjects were purchased as per the decision of the planning board.

List of Journals subscribed and their value.

- 1. National Georaphic (Rs. 2375)
- **2.** Information Technology (Rs. 420)
- **3.** Pramana (Rs. 500)
- **4.** Resonance (Rs. 400)
- **5.** Electronics for You (Rs 500)
- **6.** Current Science (Rs. 750)
- 7. Indian Journal of Agricultural Economics (Rs. 3000)
- **8.** Down to Earth (Rs. 480)
- **9.** Sajosps (Rs 250)

23. Courses in which student assessment of teachers were introduced and the action taken on student feed back

The college is following a system of general feedback collected through printed questioners. The data was consolidated and was used for formulating future plans and making changes in existing practices. The data was made available to all the faculty members and suitable measures for improvements were suggested.

24. Unit cost of education is Rupees

The students need to pay the fees fixed by the University. The fees collected from the students are remitted to the Government. The fee structure for each student in different disciplines is detailed below.

	Class	Amount (Rs)
	I st Year Chemistry/Physics	2,350
	Ist Year Botany/Zoology	2,450
	I st Year Mathematics	2,170
	Ist Year History/ Economics/English	2,070
ate	II nd Year Chemistry/Physics	1,355
Under Graduate	II nd Year Botany/Zoology	1,455
er G	II nd Year Mathematics	1,175
Und	II nd Year History/ Economics/English	1,075
	III rd Year Chemistry/Physics	1,265
	III rd Year Botany/Zoology	1,265
	III rd Year Mathematics	1,085
	III rd Year History/ Economics/English	1,085
	I st Year Analytical Chemistry/Physics	3,500
adna	I st Year Economics/English	2,600
Post Graduate	II nd Year Analytical Chemistry/Physics	2,440
Po	II nd Year Economics/English	1,540

UG students hailing from families having income less than 25,000/- per year and PG students having income less than 50,000/- per year is eligible for fees concession as per the Kumara Pillai Commission report. They have to remit only the caution deposits which will be reimbursed as and when the student leaves the institution. SC/ST students are exempted from the payment of fees. They are getting a lump sum grant and monthly allowance of about Rs. 4000/- per year.

Since Christian College Chengannur is a government aided college, the salary of teaching and non teaching staff is provided by the Government of Kerala. All other expenses related to the operation of the college are provided by the management with the help of parent teacher association, alumni, well wishers etc. The cost of education per student [Including Government and management share] works out to be **31,813/-**

25. Computerization of administration and the process of admissions and examination results, issue of certificates.

Admission process was completely computerized and rank lists for various courses were prepared by a centralized process. Only internal examinations are conducted by the college and the marks for continuous assessment are forwarded to the university. This process is computerized. The final examinations are conducted by the University and the results are published by the University. The mark lists and certificates are also issued by the University.

26. Increase in infra structural facilities.

Most of the plans conceived during the beginning of the year were accomplished. The achievements are listed below.

- 1. The compound wall construction is in progress.
- 2. The UGC has sanctioned an amount Rs. 64 lakhs for the construction of the women's hostel

27. Technology up gradation.

The computerization of admission procedure created an atmosphere for the acceptance of new technologies. The change towards student centered teaching methods has necessitated the incorporation of the use of electronic gadgets in teaching. More and more teachers are using computer for lesson plan and for preparing notes. PowerPoint presentation and use of LCD is gaining more favorable reception among teaching community.

28. Computer and internet access and training to teachers and students.

A new training programme was introduced to give training in the use of computer and internet. The computer centre has two types of courses viz., a course to provide basic information regarding the use of computer and another intended to provide advanced level learning to those who have basic knowledge in computer programming and usage.

29. Financial aid to students

Parent Teacher Association

Financial assistance for weaker section in the form of scholarships is provided by the PTA of the college. Meritorious students and rank holders were awarded with scholarships.

Alumni Association

Merit scholarships were provided by the Alumni association for outstanding students in each subject in the Undergraduate and Postgraduate courses.

Endowment and Scholarships by Management

Fourteen endowments are instituted by the management for giving scholarships to financially backward students as well as top scorers.

Staff Association

The association of teaching staff also provides financial assistance to various students based on need and merit.

30. Activities and support from alumni association.

College has a two tier alumni association. Each department has their own alumni association and all these together constitute the college alumni. The college alumni are controlled by an executive committee. The college alumni meet every year on the Deepavali day. The alumni association has various regional chapters at Philadelphia, Kuwait, Saudi Arabia, Trivandrum. The alumni association supports various activities in the college.

The annual meeting of Alumni Association was held on the Deepavali day of 2008. Rt. Rev. Thomas Mar Timotheos Episcopa, former student of the college inaugurated the meeting. Former students Dr. Jameela Balan, Additional Director of Health services, Dr. Raju Krishnan, former joint Commissioner of Entrance Examinations delivered talks. Sri. Sreekumara Sharma, Malikappuram Melsanthi designate was felicitated during the function. A good number of former teachers and students attended. Rev. Fr. Mathew Varghese worked as the General Secretary of the Alumni Association.

Different chapters of the Alumni are functioning well. Kuwait chapter has given an amount of Rs. 12000/- for giving awards to 12 first year students. The charity wing of the chapter 'Snehasparsham' gave financial help through the college to one needy student for higher studies and to two persons for medical treatment.

31. Activities and support from PTA

The parent teacher association has been always a source of support and inspiration for the college. Class wise PTA meetings organized played a vital role in setting the general discipline on the campus. Proficiency prizes were distributed to students who have secured highest marks in UG and PG classes at the annual general body meeting.

Parent Teacher Association organized a seminar on "Ecological Problems and Global Warming" on 27th January 2009. Prominent environmentalist Prof. P. G. Philip, Mar Thoma College, Tiruvalla delivered the keynote address. The seminar was presided over by the P. T. A. President Mr. K. Thomas Mammen. Principal Dr. Jacob George, Secretaries Prof. M. K. Thomas and Prof. Ajith Verghese George spoke on the occasion.

32. Health services.

The health care of the students is closely monitored and the college administration takes all necessary steps to provide clean water, bathroom and toilet facilities etc to the students. In order to provide hygienic drinking water, water purifiers were provided in all floors of the main building. In association with nearby hospitals several health awareness programmes were organized in the reported year. The students are using the multi gymnasium regularly. A fully furnished restroom is provided for the girl students. The college has arranged councilors for the providing adequate guidance and counseling for needy students.

Hostel Facilities

Women's Hostel is accommodating 24 students. Students of the hostel begin their day with a prayer in the morning. The students are very disciplined, studious and active in all college activities. Rev. Biju C.P.and Rev Jacob John led counseling classes on every first and third Thursdays of each month. A special talk was arranged on 26th March 2009 for the hostellers to enable them to face the challenges connected with hostel life and to help them to face their examinations. Mrs. Daisy Kurien, TMA Counseling

Institute, Amalagiri, Kottayam led the session. The Hostel Day was celebrated in a befitting manner on 25th February 2008. Rev. Jacob John was the chief guest on the occasion.

For the extension of the women's hostel building, University Grants Commission has sanctioned a grant of Rs. 62 lakhs. The construction work commenced 11:00 a.m. on 19th June 2008 by prayer by His Grace Rt. Rev. Dr. Zacharias Mar Theophilus Episcopa. We are expecting the completion of the building by the end of May 2009.

The old canteen building was renovated and converted into Men's hostel and was dedicated on 18th September by Rev. C. P. Biju in the presence of Rev. Thomas K. Mathew and Rev. Jacob John. From next academic year onwards we will be able to accomadate20 students in the Men's Hostel.

33. Performance in sports activities.

Our football team made a good performance this year by reaching the semifinal round of the Kerala university north zone intercollegiate tournaments. Three students of this college were selected to represent the north zone team. Our cricket team reached the semifinal of the intercollegiate tournaments and one student was selected to represent the north zone team. Table tennis, Cross-country and swimming teams also participated in inter collegiate tournaments.

Annual athletic meet was conducted on 9th January 2009 with pop and show. After the march past, competitions were held on house basis. Blue house turned as winners and yellow house as runners up. Anoop Susheel, Ist B.Sc. Physics (yellow house) and Rejani K. P., IInd B.Sc. Zoology (blue house) were the individual champions. Inter house football and cricket tournaments were also conducted during 16.02.09 to 25.02.09. Prof. Ruby Mathew (Physical Education Lecturer), Prof. Mathew Varghese (General Convener) and the teachers who are in charge of the houses deserves appreciation for the pains they have taken for the smooth conduct of the annual meet.

34. Incentive to outstanding sports students.

Sports day celebrations were conducted in which outstanding sports persons were honored. Financial help was given to sports and athletic students coming from BPL families.

35. Student achievements and awards

- 1. Quiz team of the Department of Economics won the second prize in intercollegiate competition conducted by our college.
- 2. Anju Sasidharan and Ambily R. represented the English Department won the second prize in the intercollegiate Quiz competition conducted by Bishop More College, Mavelikkara.
- 3. Gem Cherian, I M. A. English won the first prize in the All Kerala Elocution Competition conducted by Assumption College, Changanacherry.
- 4. Second year Botany students won first prize in the 'Athapookkala Competition' conducted by CARD at Tiruvalla.

The results of BSc/MSc. Degree examination of March-April 2008 is detailed below:

Course	Candidates	First	Second	Third	Total	Percentage
	appeared	Class	Class	Class	passed	of pass
B.Sc. Mathematics	20	16	3	-	19	95.00 %
B.Sc. Physics	32	18	5	1	24	75.00 %
B.Sc. Chemistry	27	6	8	2	16	59.25 %
B.Sc. Botany	31	7	7	11	25	80.64 %
B.Sc. Zoology	29	9	5	3	17	58.62 %
B.A. English	19	3	8	7	18	94.73 %
B.A. History	21	-	-	10	10	47.61 %
B.A. Economics	31	-	1	9	10	32.25 %
M.Sc. Physics	12	11	-	-	11	91.66 %
M.Sc. Anal.	8	5	2		7	87.50 %
Chemistry		S	2	-	,	67.30 %
M.A. Economics	10	2	2	4	8	80.00 %
M.A. English	11	4	6	1	11	100 %

36. Activities of the guidance and counseling unit.

Counseling unit was actively functioning during the current academic year. Counseling classes were arranged for the second year degree arts and science students separately on 19th June 2008. Rev. Abraham Zachariah led the sessions. Rev. C. P. Biju

and Rev. Jacob John, who were in charge of the student's ministry, visited the institution regularly, inspired and motivated the students. Dr. Desy P. Koruthu took pain in arranging such programmes.

37. Placement services provided to students.

A career guidance and placement cell functioned in the college under Sri. Mathew Varghese of the Department of Economics. The programmes of the cell are:

- Training of students for competitive examinations and for facing interviews.
- ➤ Invite organizations for campus interviews.

Constant training and Counseling is given to students for appearing various competitive examinations and campus recruitment drives. A model aptitude test was conducted for the students and the best four were awarded with cash prizes of Rs.1000, Rs.500 and Rs.250. Various seminars on Career opportunities, personality development, facing the interview board etc. were conducted for the students in association with various agencies like NIIT, ICFAI, APTECH, DRONA, Incredible HR etc. Three of our students got placement in Federal Bank Ltd. Through the Campus Recruitment Drive conducted in our college. Job opportunities and campus recruitment drives were advertised or displayed through proper notices and brochures. Prof. Mathew Varghese served as the Convener.

38. Development programmes for non teaching staff

The computer lab has been providing free training in computer basics to non teaching staff. Four of the office staff members are now well versed in computer operations.

39. Healthy practices of the institution.

- Special consideration to economically weaker candidates during admission.
 Five percent of the seats are reserved for them.
- The college gives thrust to research. Active research is going on in all post graduated departments. All the infrastructural facilities are provided free by the management. The college welcomes students from nearby colleges for project work.

- Innovation in curriculum: Even though the curriculum provided by the University is rigid, we incorporate our innovations in its transaction. Our innovative practices include
 - ❖ A general shift from teacher centered teaching to student centered teaching.
 - Computer aided teaching
 - * Remedial and enrichment classes.
 - ❖ Interdisciplinary and multi disciplinary teaching.
 - Lectures on topics like preparation for competitive examinations, how to face interviews.
 - ❖ Parent teacher student interactive sessions.
 - Class wise PTA meetings
 - Seminars by eminent persons
- Daily meditation and Prayer in the chapel for interested students.
- Counseling sessions for needy students

We strive to provide opportunities for not only intellectual development of our students but also to acquire sound skills like team work and leadership, social commitment and service orientation through the activities of NSS, NCC and voluntary groups.

Councils and Meetings

The Governing Council of the college met several times during the year and gave necessary directions regarding general administration and development of the college. Staff Council met regularly to decide on matters relating to administration and academic progress. Teaching Staff meetings and non teaching staff meetings were also conducted regularly and staff members gave valuable suggestions for improving the academic atmosphere. A Staff retreat was conducted on 17th June 2008. Rev. Dr. T. J. Thomas led the retreat. Teaching Staff Association Secretary Prof. K. M. Abraham and Staff Executive committee members, took pain in arranging different programmes effectively. Special thanks are due to them. Office staff members under the leadership of the Office Superintendent Sri. Alex T. George cooperated very well for the smooth conduct of the affairs of the college.

40. Linkages developed with National, International, Academic, Research bodies

The Department of Physics has some linkages with some national and international laboratories and scientists in the area of research. They are listed below:

- 1. Crystal Physics Centre, St. Berhmans College, Changanacherry
- 2. Sol Gel Lab, SPAP, Mahatma Gandhi University, Kottayam
- 3. Magnetics Lab, Cochin University of Science & Technology, Kochi
- 4. St. Thomas College, Kozhencherry
- 5. Mar Thoma College, Tiruvalla
- 6. Istvan Lagzi, Department of Physical Chemistry, Eotovos University, Budapest, Hungary
- 7. Quality Assurance Laboratory, Kollam

41. Any other relevant information's the institutions wishes to add.

The institution situated in one of the highest hills in Chengannur is blessed with scenic beauty. The calm, serene and elegant atmosphere provides an ideal environment for learning. Christian College, Chengannur has a tradition of high academic excellence. Each year, students of this college will be there among the roll of honour of the University bagging ranks. To keep par with the motto of the institution the faculty members are striving hard to achieve perfection and excellence in the field of education and research.

Part C

Detail the plans of the institution for the next year

The plan of the institution for the next year is listed in a nutshell as follows:

- ◆ Construction of women's hostel.
- ♦ National and Regional level seminars
- Seminars and lectures by career guidance and placement cell.
- ♦ Inspire the faculty to undertake more research projects and publish research articles in peer reviewed journals
- Instigate teachers to participate in conferences and refresher courses.
- ♦ Develop the college campus as an eco friendly campus.
- ♦ Renovate the College Auditorium.
- Electrical Rewiring of the College main building and departments.
- ◆ Initiate steps to appoint regular staff in place of guest lectures and vacant posts of administrative staff.
- ◆ Completion of compound wall.

Name and Signature of the Co-coordinator of IQAC Name and Signature of the Chair Person of IQAC