



**INTERNAL QUALITY ASSURANCE CELL**

**(IQAC)**

**REPORT**

**2014-2015**



## Contents

<u>Title</u>	<u>Page No.</u>
I. Introduction .....	3
II. Department wise Bridge course for the fresh undergraduates .....	
III. Walk with a Scholar (WWS) programme implemented in the college .....	
IV. Student Support Programme(SSP)	
V. Skill Enhancement Computer Training programme for girl students.....	
VI. Mobile Computing Lab .....	
VII. Smart Lab	
VIII. 'Astra', a project to develop the skills in computing.....	
IX. International Year of Crystallography Celebration .....	
X. New B Voc Programmes introduced in the college.....	



## **INTERNAL QUALITY ASSURANCE CELL ( IQAC )**

Sullamussalam Science College

The Internal Quality Assurance Cell is functioning in the college since 2005 . Activities of IQAC encompasses all academic and administrative activities of the college with following objectives.

### **OBJECTIVES**

- Instil a sense of quality consciousness in all stake-holders
- Formulate strategies for all-round development of the college
- Develop and prescribe the quality standards in the delivery of the academic and non-academic programmes
- Promote the innovative methods of teaching and learning
- Formulate internal mechanism for quality checks
- Incorporate stake-holders' input in governance
- Inculcate value system in students
- Suggest measures for improvement

IQAC activities during the period 2014-15 focussed on seven broader areas , viz. Academics with emphasis on Skill based education, Digital Campus, Innovation, Research, Green initiatives, Industry Collaboration and Infrastructure . Long and short term plans in various identified areas were framed and following activities were conducted in tune with the mission and vision of the college.

### **1. Department wise Bridge course for the fresh undergraduates:**

A commencement workshop for all first year students is being organised every year by each major department at the beginning of the Programme from 2007 onwards. The one-week programme conducted every year during the commencement of the degree programme consists of interactive sessions focused on the taste of different departments. The programme comprised of different sessions like Talk by an eminent scholars, Presentations on the overview of the Discipline with focus on the UG curriculum, Group learning



Tutorials, Conceptual Discussions, Reading Sessions, Lectures and Tutorials on the Campus- Industry Linkages, Experimental approaches and Experimental Tools- an Introduction, Familiarization of Learning Resources, Evaluation sessions and Feedback etc. The bridge course for the year 2014-15 conducted during 12-14 July 2014.



**B.VOC BROADCASTING & JOURNALISM 2014-17  
BRIDGE COURSE SCHEDULE**

DATE	RESOURCE PERSON	TOPIC
12.11.2014 Wednesday	Mr. ABINSHAD (Professional Trainer, CIGI)	Learning Skills
	NISAR PATTUVAM (Professional Trainer, CIGI)	Team Building
13.11.2014 Thursday	ANSHAD KOLATHUR (Professional Trainer, CIGI)	Self Awareness
	RASHID KASARAGODE (Professional Trainer)	Problem Solving
14.11.2014 Friday	ASHRAF CK (Professional Trainer, CIGI)	Public Speaking
	NISAR PATTUVAM (Professional Trainer)	Confidence Building





## **2. Walk with a Scholar (WWS) programme implemented in the college:**

Walk with a Scholar (WWS) is a programme introduced by Kerala State Higher Education Council (KSHEC) as part of their 'New Initiatives in Higher Education'. WWS scheme proposes to arrange specialized mentoring programs for students in Under Graduate Programs in Arts, Science and Commerce, and to provide guidance for their future. The scheme introduces the idea of mentoring and builds on the concept of mentor as a 'Guide' and 'Friend'.

The mentoring scheme should be planned to identify the opportunities available for the scholars, the areas suitable for them, and the manner in which the scholar should proceed before them and evolve ways by which they can be acquired. In this year, it is implemented first time in aided colleges. As part of the programme, the college council selected Dr. Mohemmed Shanid N A as the college level coordinator of the programme. The council selected six internal mentors one from each aided department for the programme.

A meeting was convened for the co-ordinators of WWS and IQAC by the authority at Govt. Women's College, Vazhuthacaud, Thiruvananthapuram on 07-08-2014. The co-ordinators attended the workshop.

A one day workshop was conducted for the internal mentors of WWS by the authority at St. Joseph's College, Devagiri, Calicut on 16th October 2014. Six internal mentors and the co-coordinator attended the workshop.

The programme was launched in the college with the enrolment procedure. It included orientation programme for the first year students as the first step. Then applications were invited from the interested students. Applicants were directed to attach a write up on 'Invent yourself' with the application. Based on the applications, interviews were conducted for each applicant and selected 30 scholars (mentees) from nearly 60 applicants.



There is a provision to avail the expertise of the persons outside the campus, named external mentoring, for the effectiveness of the programme. We conducted special programmes as part of external mentoring for the mentees by utilizing the external mentors. A list of the programmes conducted is given below.

### **External mentoring sessions**

1. A career guidance class was organised for the mentees of Computer Science on 16-1-2015. Mr. Jamaludheen Malikkunnu, Trainer and guide, CIGI-Calicut was the Resource person.
2. A special programme was arranged on 19-1-2015 for all the mentees to create awareness among them about the merits and demerits of higher education outside Kerala after graduation. Mr. Ahammed Saju, UGC Liaison Officer (New Delhi), University of Calicut was the Resource Person.
3. A programme titled 'To Improve Fluency' was conducted for the mentees on 22-1-2015. Mr. Muhammed Ashraf, Official Trainer, TAJ international Language Institute, Calicut handled the session.
4. A career guidance class was organised for the mentees of Economics on 25-1-2015. Mr. Jamaludheen Malikkunnu, Trainer and guide, CIGI-Calicut was the Resource person.
5. A research orientation session on 28-01-2015 was conducted by Ahammed Raseen Nanakkal, Research Scholar, Department of Physics, University of Calicut. The necessity of pursuing research was highlighted in the session.
6. An institution visit was conducted for the mentees of Physics on 26-2-2015. Mentees with the mentor and co-ordinator visited Centre for Materials for Electronics Technology (C-MET), Thrissur. There, the scholars visited the research laboratories and interacted with the scientists and research scholars. Recent research going on in materials for electronics related applications was the major theme of discussion. They revealed the strategies to develop super capacitors, Dielectric actuators, and thin films for electronics applications. The scholars also visited the X-ray Diffractometer



facility available at C-MET. Some of the scholars were highly motivated to build a research career in physics by this programme. Dr. S N Sankaranarayanan Potty Scientist, C-MET, Dr. G Sudarsanakumar, Director-SPAP, MG university, Kottayam and Mr. Prabeesh, Research Scholar, C-MET handled the external mentoring sessions during the visit.

7. For the sake of mentees of Mathematics, computer Science Economics and Physics, WWS team conducted a one day workshop on 'Fundamentals of Mathematics' as part of external mentoring on 11-03-2015 at college seminar hall. Eminent faculty members handled different sessions during the programme.

The first session 'On Complex number system' was handled by Dr. Rajendran, PSMO College, Tirurangadi. The second session was handled by Dr. Harish, TMG College, Tirur on the topic 'Fundamental theorem of Calculus.

The third session was handled by Dr. Muraleedharan T K, St. Josephs College, Devagiri on the topic ' Vectors and linear algebra'. The concluding session of the workshop was an interaction on the theme 'awareness /motivation'. The former principal of the college Prof. P P Abdul Haque led the session.

### **Internal mentoring sessions**

Internal mentoring sessions of the programme were conducted strictly according to the norms and based on the themes mentioned in the supplied documents of WWS. It helped a lot to understand each and every mentee as a person and as a scholar. These sessions were effectively utilised to develop a personal relationship with each scholar and upto some extent the scholars were sharing their personal grievances with mentors. It is a realisation of the extended outcome of internal mentoring. Most of the external mentoring sessions were carried out outside class room and informal towards mentees. So this enabled them to reveal the actual situations of their learning environment. Accordingly we, the internal mentors acted upon the problems, advised them, suggested solutions and through these procedures, challenging task like uplifting the confidence level of the mentees were accomplished.





### **3. Student Support Programme(SSP):**

The Scholar Support Programme (SSP) is a new quality initiative aims to overcome the academic weakness of students who belong to the bottom of the merit hierarchy at the time of admissions. The programme implemented in the college with the financial assistance from the Department of Higher Education, Govt. of Kerala. This compensatory programme aims at imparting additional support to students in curricular areas of weakness.

The students are selected and enrolled according to the guidance given by the Directorate of Collegiate Education , Tiruvanathapuram. Fifty students were selected students from various Departments for five courses , namely English, Economics, Mathematics, Statistics and Computer Science. Timely assistance in terms of tutorials, additional lectures, interactive sessions , question banks and study materials were given to the selected scholars in the under graduate programme. Twenty sessions each with duration of one hour have been undertaken in each topic. The sessions also included previous question paper discussion and they are given the materials including the previous years' question paper and answer key book issued by SSP. As a part of the implementation of the programme, study materials, stationary kit and refreshments were issued and TA was disbursed to students during the course of the programme.

The fund allotted for the programme was Rs 59000.00 and is utilized under various heads including remuneration for the teachers handled the classes, study materials for students, coordinator charge, travel expenses etc. A significant number of students are benefitted from this special training on their needy subject. The IQAC of the college played the role of a monitoring cell for SSP.





#### **4. Skill Enhancement Computer Training programme for girl students:**

Kerala state IT Mission Sponsored “Skill Enhancement Computer Training and Women Resource Centre” exclusively for Women in the College from June 2012 onwards to support women students for interacting Kerala state IT Mission Sponsored “Skill Enhancement Computer Training and Women Resource Centre” exclusively for Women in the College from June 2012 onwards to support women students for interacting in continuously changing world and facing emerging situations with confidence. It also aims to establish exclusive ICT infrastructure and trained resources for imparting differentiated skill up-gradation programmes for women students. The resource centre provides all necessary assistance and support to the students in the college to enhance/upgrade this skill levels to suit the requirements of the ICT and BPO industry. The skill up-gradation primarily consists of soft skills and technical skills. It is a 120 hour training program on computer operational skills, personality development, communication skills and behavioral skills conducted by the Kerala State IT Mission (KSITM), Government of Kerala and Sullamussalam Science College Areacode ,Ugrapuram(P.O),Malappuram for Women students in the college. The course has a syllabus and it is maintained by KSITM.

An agreement has been signed up with the Kerala State IT Mission (KSITM), Government of Kerala and Sullamussalam Science College Areacode ,Ugrapuram(P.O),Malappuram. The centre started it’s working from June 2012. As part of this, IT Mission organized a training section and five faculties from the college attended the program from May 21/05/2012 to 25/05/2012 in the college. The centre has 25 computers with internet facilities (1 Server), one printer, and one scanner. The classes were handled by the 5 trainers. Women students of the college were attended the classes according to the schedule prepared by the nodal officer. The classes were arranged during holidays and non class timings (Morning 8.30 to 9.30, evening 3.30 to 4.30).

Women students from various departments of the college were joined the course and batches were formed with a minimum number of 25 students for the smooth functioning,



smooth evaluation and individual attention for each student of the course. Attendance of students and trainers were maintained and reports were sent to the IT mission for the purpose of course monitoring and fund transfer. Each batch requires a minimum of 6 months for completion. Four batches were run parallel and nearly 200 students benefited by the course within one year.. Students have to undergo an evaluation process based on the syllabus at the end of the course. Eight batches were run every year from 2012 to 2015. Nearly 600 Women students of the college benefited from this. Successful candidate got certificate from the IT Mission after the successful evaluation and monitoring by the resource centre. The resource centre forward the list of students to the IT mission and IT Mission distribute certificates to the students through the Women Resource Centre.

The list of trained faculties are given below

1. Ms.Swapna Mol George(Nodal Officer, Assistant Professor, Dept Of CS)
2. Mr.Ashrafali T.P.O(Trainer, Associate Professor, Dept Of CS)
3. Ms. Reshma Majeed(Trainer, Assistant Professor, Dept Of English)
4. Dr. Fazeela K(Trainer, Assistant Professor, Dept Of Maths)
5. Dr.Shamla K. A(Trainer, Assistant Professor, Dept Of Hindi)

The Certificate format is given below.







### **5. Monitoring Cells for Students Support Services:**

As an effort to ensure the effective functioning of various student support services, separate monitoring cells are formed for Hostel, Canteen, Gymnasium and Sport facilities . Monitoring committee for the hostel will examine the functioning of the hostel and make necessary recommendations for improvement in facilities and practices. Monitoring cell for the Canteen has to suggest suitable measures to provide nutritious food and refreshments in hygienic environment to the students at affordable prices so as to participate in the daily academic activities actively. Similarly in order to check the effective utilisation of Gymnasium and Sports Infrastructure for the benefit of the health and fitness of the students, a monitoring cell of sports facilities is formed.

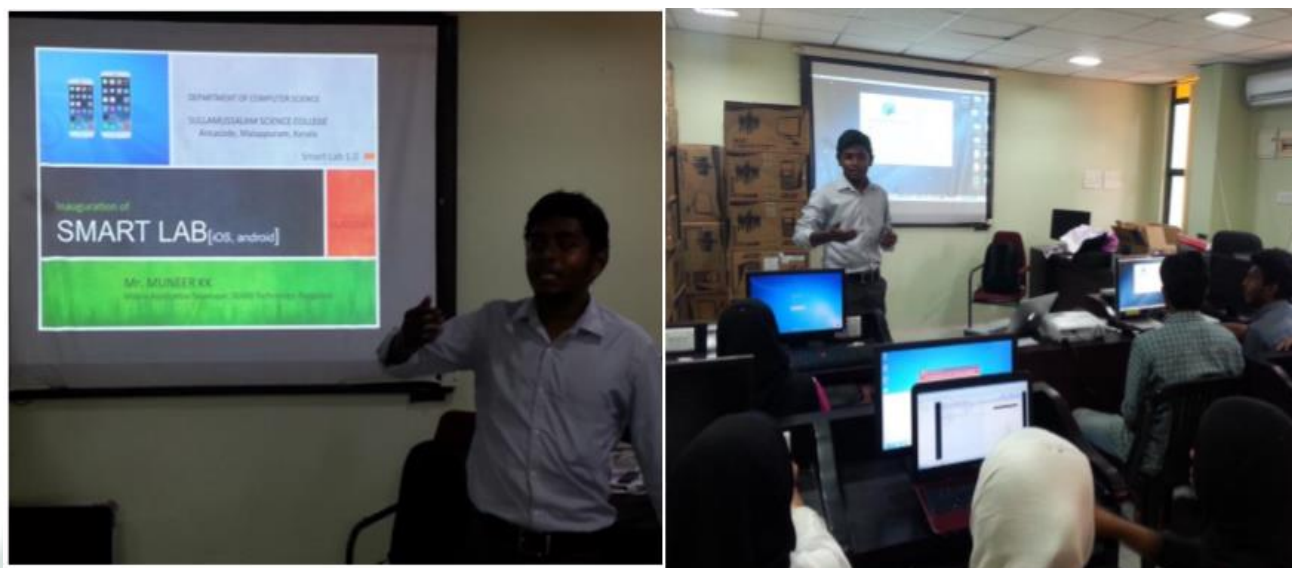
### **6. Mobile Computing Lab:**

A one day workshop has been arranged to the students to extend the programming concept for iphone application development and related technologies. Mr. Muneer KK, a professional Apple developer from Bangalore handled the sessions on 15 february 2014. Four teams of Final year BSc students successfully completed their degree projects by





developing Iphone mobile application. That was the great follow up and success of this workshop.



## **7. Smart Lab:**

Smart Lab is the group of technology loving people in campus joined their hands to share and explore the advancements in technology, innovation and computing. The club used to sit in circle and discuss various developments happening in information technology. The club has been formed in the campus during the year 2014 with support of Department of Computer science. Mr. Muneer and Habeeb P was taking care of the activities of the club.

- Smart Lab organized a work shop on “**Windows Phone Application Development**”, students from various departments participated in this program. Experts from Startup village Cochi lead the sessions.



- **Arduino Projects:** Smart Lab successfully completed four projects using arduino microcontroller.
  1. Motion sensing remote car based on arduino and android.
  2. Obstacle detection and avoidance robot.
  3. Mobile controlled notice board.
  4. SMS controlled home automation system.



- **Google Cardboard:** Smart Lab developed and demonstrated the google cardboard. Google cardboard is a fold-out cardboard smartphone mount that, when combined with lenses, a magnet, a piece of hook-and-loop fastener and a rubber band and held against the face, afford a virtual reality experience.



## Smart Lab

Sullamussalam Science College | Areacode | www.sscollge.ac.in

Inviting you to participate the global event

**Hour of Code**

12/12/2014, 2.00 PM @ Computer Lab



- Exhibition series:** Smart lab organized an exhibition series on smart devices which developed by students from 3<sup>rd</sup> to 6<sup>th</sup> of February 2015. The concept of Internet of Things and Robotics has been demonstrated to the audience by the Smart Lab members. A small talk on each device and its background technical secret explained and projected to the screen with practical examples. The Programme has been inaugurated by the Principal of College, Dr. Muhammed Ilyas.
- Apple iPhone application Development Workshop:** A one day workshop has been arranged to the students to extend the programming concept for iphone application development and related technologies. Mr. Muneer KK, a professional Apple developer from Bangalore handled the sessions on 15 february 2014. Four teams of Final year BSc students successfully completed their degree projects by developing Iphone mobile application. That was the great followup and success of this workshop.





### കമ്പ്യൂട്ടർ വിദ്യാഭ്യാസ വാരാചരണം

## അരിക്കോട് സുല്യമുസ്സലാം സയൻസ് കോളജിൽ 'ഹവർ ഓഫ് കോഡ്'

**അരിക്കോട്:** ലോക കമ്പ്യൂട്ടർ വിദ്യാഭ്യാസ വാരാചരണത്തിന്റെ ഭാഗമായി സുല്യമുസ്സലാം സയൻസ് കോളജിലെ വിദ്യാർത്ഥികൾ 'ഹവർ ഓഫ് കോഡ്' പരിപാടിയിൽ പങ്കാളികളായി. കമ്പ്യൂട്ടർ വിദ്യാഭ്യാസം കൂടുതൽ ജനകീയമാക്കുക എന്ന ലക്ഷ്യത്തോടെ നടത്തുന്ന പരിപാടിയിൽ കോളജിലെ 50 കുട്ടികൾ പങ്കെടുക്കുകയും വിജയികൾക്ക് സർട്ടിഫിക്കറ്റുകൾ ഓൺലൈനായി ഉടൻ നൽകുകയും ചെയ്തു. സർട്ടിഫിക്കറ്റ് വിതരണം പ്രിൻസിപ്പൽ പ്രഫ. മുഹമ്മദ് ഇല്യാസ് നിർവഹിച്ചു. കോളജിലെ സ്മാർട്ട് ലാബിന്റെ ആഭിമുഖ്യത്തിൽ നടന്ന 'ഹവർ ഓഫ് കോഡിൽ' വിദ്യാർത്ഥികളോടൊപ്പം

അധ്യാപകരും പങ്കെടുത്തു. ഫേസ്ബുക്ക്, ട്വിറ്റർ, മൈക്രോസോഫ്റ്റ്, ഓൺലൈൻ, ഗൂഗിൾ തുടങ്ങിയ ബഹുരാഷ്ട്ര ഐ.ടി കമ്പനികളുടെ മേധാവികളും അമേരിക്കൻ പ്രസിഡൻ്റ് ഒബാമയടക്കമുള്ള നേതാക്കളുമാണ് ഹവർ ഓഫ് കോഡിന്റെ വക്താക്കൾ എന്നതും ഇതിനെ ശ്രദ്ധേയമാക്കുന്നതായി കോളജ് അധികൃതർ അറിയിച്ചു.

കോളജ് സ്മാർട്ട് ലാബ് കോഓർഡിനേറ്റർ പി. ഹബീബ്, അസി. പ്രഫസർ വി.കെ. മുനീർ, സെയ്ത് ചുങ്കത്ത്, ടെക്നിക്കൽ അസിസ്റ്റൻ്റ് രാമറായ അലീർ അജ് വദ്, നസീബ് എന്നിവർ നേതൃത്വം നൽകി.

### 8. Astra', a project to develop the skills in computing:

The aim of the project Astra is to redefine the service to the women students of the college by supporting them for their livelihood, even after they left the college. It provides them a technology workspace for IT and ITES in the college premises with the optimum use of college infrastructure. The workspace is an independent entity with college as an umbrella body. The project was launched by the College with the help of Kerala Startup



Mission and College Alumni for Women and Social Empowerment. The Number of women workforce is few in the Malabar area. So creating such a workspace on the campus will help women find a workspace near their home. Parents would also not be wary of the workspace as it is in the college premises. The Alumni who are running well established IT firms in and outside India have promised to outsource their work for the proposed company. MoU has been signed already. Initially the facilities available in the college such as space and computers will be used. The start-up fund for the project will be met by the college and the students who successfully complete the training programme and selected to run the company.

Butterfly Portal, Dubai, Nucore Software Solutions, Rapposol Ventures Pvt Ltd are the major companies running by Alumni. Along with that outside companies associated with this venture are Meshilogic -India | KSA, Infinite Open Source Solutions and Infinite Open Source Solutions

We have already started providing professional training to the candidates by involving professional IT training group like baabtra.com for empowering women to work in a professional way. The project is named as Astra and it was inaugurated by Hon. Chief Minister Oommen Chandy.









secondary schools participated. Open forum led by a panel of teachers was effective in generating the relevance of crystallography in various areas of science and Technology . Dr. N.A . Muhamed Shanid moderated the programme.



### **10. New B Voc Programmes introduced in the college:**

Adding one more feather to its cap, Sullamussalam Science College started two B Voc degree programmes – B. Voc in Broadcasting & Journalism and Software Technology - during the academic year 2014-15. Sanctioned by the University Grants Commission (UGC), this newly designed, novel graduate programme - Bachelor of Vocation programme – was a part of Commission’s effort to promote skill development based higher education, incorporating specific job rule under the National Skill Qualification Frame work (NSQF).



UGC has invited proposal from colleges and universities in the state for starting the B Voc programmes. Applications of 96 were accepted by the UGC based on the history of the institution, their academic performance and their area of expertise. Sullamussalam Science College was the first college in the district to start a Vocational Degree programme.

Similar to conventional degree programmes, B Voc follows the pattern of three year credit and semester system. Unlike other graduate programmes, this will give multiple entry and exit options. Students who are completing the first year will be getting a diploma, and an advanced diploma after the second year and a degree certificate on completion of the entire three year programme.

UGC has allotted 1.85 Cr rupees towards the expenses of the course, including salary, procurement of equipment and setting up of labs. The college had set up a state-of-the-art computer lab and media studio for the practical training of the students. In addition to this, we have established linkages with IT and media firms and even signed MoUs with some of our industry partners for the conduct of the programme.

### **11. Income Tax E-filing Training:**

Staff club organized a one day training program in the college for the permanent staff members to familiarize tax calculation and income tax e-filing since it is mandatory for all employees to file income tax return every year. Dr.Shafi, Assistant Professor, Dept. Commerce, NIT Calicut handled the sessions on 3 July 2014. 20 teaching and 8 non teaching staff members attended the training.