

IQAC ANNUAL REPORT 2017-2018



INTERNAL QUALITY ASSURANCE CELL SACRED HEART COLLEGE (AUTONOMOUS)
THEVARA, KOCHI - 682013

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INTERNAL QUALITY ASSURANCE CELL (IQAC)

Vision Statement

The Internal Quality Assurance Cell (IQAC) of Sacred Heart College, Thevara addresses and monitors the quality parameters of the college and ensures that the standards of excellence reflected in the vision and mission of the college are met and sustained.

Mission Statement

To ensure and sustain quality, integrity and output.

Cultivate, enhance and disseminate knowledge by facilitating the required resources in time to excel in academic and professional pursuits.

Objectives and Functions of IQAC

- Coordinate quality-related activities by developing an organized methodology of documentation and internal communication.
- Integrating the activities of the College to ensure adoption and dissemination of good practices.
- Spearheading the conduct of internal and external Academic Audits of departments to promote quality, accountability and transparency.
- Creating and maintaining a system of feedback on processes and policies of the College from stakeholders.
- Initiating and coordinating the process of restructuring the syllabus to create a progressive curriculum that is in tune with the demands of the time.
- Preparing the Annual Quality Assurance Report (AQAR) as per NAAC guidelines.

IQAC 2017-2018



Rev. Dr. Johnson X Palackappillil CMI, Principal

Rev. Dr. Jose John Thuravackal CMI, Vice-Principal

Dr. Joseph T Moolayil, IQAC Co-ordinator

Dr. K. M. Johnson, IQAC Joint Co-ordinator

Dr. Jeenu Kurien, IQAC Convener

Mr. Benny Varghese, Department of Sociology

Dr. Giby Kuriakose, Department of Botany

Dr. Joseph George, Department of Commerce

Dr. Mathew George, Department of Physics

Dr. Mathew Jose K, Department of Commerce

Ms. Ragaam P. M., Department of Zoology

Dr. Rajesh M., Department of English

Dr. Ramakrishnan S., Department of Chemistry

Mrs. Regitha M. R., Department of Computer Science

Dr. Sebastian V. S., Department of Chemistry

Ms. Shanthi Mathai, SH School of Communications

Dr. Siby Zacharias, Department of Economics

Mr. Biju V. V., Librarian

Mr. Sreejith M. G., IQAC Program Officer

Mr. Harikrishnan J, College Student's Union Chairman

ANNUAL REPORT HIGHLIGHTS				
UG Programmes				
PG Programmes	14			
Ph.D. Programmes	14			
UG Students	1981			
PG Students	397			
Ph.D. Scholars	58			
Teaching Staff	135			
Non-teaching Staff	55			
Teaching Staff with Ph.D.	47			
STUDENT PROGRESSION				
Students qualified competitive exams like NET/GATE	21			
Students got placement	47			
FACULTY PUBLICATIONS				
Publications in National and International Journals	28			
Books Published	14			
FACULTY PARTICIPATION IN CONFERENCES	AND SYMPOSIA			
Faculty Attended Seminars and Workshops	66			
FACULTY PARTICIPATION IN REFRESHER COURSES AND SHORT-TERM COURSES	OURSES, ORIENTATION			
Refresher Courses	05			
Orientation courses	13			
Faculty Development Programmes	48			
FACULTY RESEARCH PROJECTS AWARDED				
Major	2			
Minor	2			
IQAC QUALITY INITIATIVES	TO THE STATE OF THE			
Induction Programme for Newly recruited Teachers	03-10 July 2017			
Orientation Programme for UG Students	20 June 2017			
Orientation Programme for PG Students	04 July 2017			
Number of training programmes organized for teaching and non-teaching staff	13			
Submission of AQAR Report for 2017-2018	01 April 2018			

NIRF RANKING - 2018

RANK - 41



INDIA TODAY & THE WEEK NATIONAL LEVEL RANKINGS

TODAY RANKING Arts - 27 Science - 25 Commerce - 26







Arts - 40
Science - 24
RANKING Commerce - 27

PROGRAMMES ORGANIZED BY THE DEPARTMENTS

- The Department of Botany, under the leadership of Botany Association organized a spectacular exhibition - "Cornucopia" on 30th January, 2018, in which handmade products, indigenous food items, vegetable seedlings, flowers, medicinal plants, mushroom cultivation were exhibited.
- Department of Physics along with Indian Institute of Science Education and Research (IISER),
 Pune and the British Council organized four-day Research-Based Pedagogy Training (RBPT)
 workshop for graduate and postgraduate science teachers across India from 11th to 14th
 October 2017. The workshop was completely fundedby IISER Pune, MHRD, DBT and British
 Council.
- All the departments of our college have organized vibrant programs like Flora Fest, Chemifest, Fruitepedia, Zero Day, Fusion, Zoofest, Thandav, Boom etc. with full involvement of faculty and students promoting overall student development.
- Department of Sociology conducted a seminar on "Sociology of Divorce". Fr. Abraham Kallarackal memorial seminar was also conducted.
- The PG Department of Sociology had organized a seminar on Gender relations on 5th January with special emphasis on 'The Male Perspective on Gender identity'.
- Department of Economics organized Fr. Zacharias Payikat Endowment lecture on the 'Impact of Demonetization on EconomicGrowth with Special Reference to Kerala'. The department also organized a talk on "Goods and Services Tax: How it works and what is its Impact on Indian Economy".
- First and Second MSc Students of Environmental Science participated in the Human Chain in Mangalavanam, Kochi on 5th & 16th of August, 2017 and a meeting against felling of 182 trees for the development of the Southern Railway.
- The Department of English offered a Certificate Course in Business English. Three students from
 Japan registered for the program and all three completed the program successfully. The classes
 were conducted with the help of student tutors under the mentorship of Sri. Bijo N. Mathew.
- The Department of English has launched another academic seminar in memory of its former member, late Ms. Subhi Treesa. This year's seminarwas on the theme 'Post-feminism and the

- Impure Politics of Resistance'. All the clubs organized many programs benefiting the student community.
- INSPIRE- Inspire Camp was held from Jan 9th 13th 2018. Over 200 high-school students participated in the Internship Camp. Tourism Club activities started with a visit to the Home of Destitutes at Perumanoor on 6th July 2017. Students interacted with the members and also conducted cultural activities. A total of 65 studentsparticipated in the program.
- In connection with World Ozone Day, Sacred Heart College, Thevara in collaboration with Kerala State Council for Science, Technology and Environment (KSCSTE) organized various programs which include poster making competition, quiz competition, signature campaign, public rally etc. on 25th and 26th of September 2017.
- BhoomitraSena Club, SH College, organized a class on paper bag making at the food chemistry lab on 21st December 2017. In connection with world wetlands day, Bhoomithrasena club and EVS department organized a seminar and poster competition in Feb 2018.
- Speakers' Forum under the leadership of Dr. Abi T G and team, organized the prestigious
 Sargapatham 2K17 on 26th and 27th September 2017.
- Under theleadership of SADAS, this year the Students Awareness Program (SAP) was conducted
 in association with Malayala Manorama's Balajanasakhyam in which students took classes in
 schools in and around Ernakulam.
- The quiz club members frequently participated in quizzes across the state and brought laurels
 to the college. Notable win include the team comprising of Ajin Babu, Bejoy Sebastian and
 Siddharth PK. They secured the First Prize at the General Quiz held at Naipunnya International
 Academy, Renewal Center, Kaloor on 20th January 2018. In August 2017,
- SWASTI under the sponsorship of Eastern group organized a one hour interactive session with the celebrity entrepreneur Poornima Indrajith.
- On 30th November, SWASTI in coordination with the Sustainable Menstruation Kerala Collective
 & Red cycle, conducted an awareness event AARTHAVAYAANAM on promoting sustainable menstruation.
- FIRST-AID AWARENESS was an event initiated by SWASTI and NSS. A PowerPoint presentation

- educating the students on important first-aid techniques was organised by the doctors from Lakeshore hospital and Rotary club volunteers.
- Sample Survey and Analysis Wing (SAW) conducted a workshop on Statistical analysis using Excel
 R for BSc computer applications students on 5th January 2018. National statistics day was observed on 29th June 2017.
- In collaboration with CNRM, Primrose nature club organized inter-college seminar, quiz competition and poster designing competition in connection during the world wild life week celebration on 6th October.
- Dance club conducted an inter-department Dance competition.
- AICUF organized a tribal exposure camp at Attapaadi. The students were able to know more about the lives of the different tribes and the problems that they face.
- The club also supplied around 40 bottles of blood this year to the nearby hospitals on request.

STUDENTS' ACHIEVEMENT

- It was a proud moment for the college to secure 2nd positionin MG university youth festival (2016 - 17). Congrats to all participants, volunteers and teachers behind the scene.
- SH students won top prizes in the programmes conducted by IIM Kozhikode, NIT Trichy, ISAT
 Kalamasery, Bharath Matha as well as St. Teresas college Ernakulam and bagged the overall
 champion in the youth meet conducted by Marian College.
- Ms. Anitta John and Ms. Athira C.U. of Botany department have cleared NET-JRF. Two students cleared GATE and three others were awarded with KSCSTE scholarships. Mr. Jithin of Botany department was awarded Ph.D.
- The following students of the Department of Commerce have cleared the National Eligibility Test and few of them have secured junior research fellowship (JRF). Athul Kuriakose, Neema Mary (2nd M.Com) and Blessy Babu (1st M.Com) made it to the JRF holders list and Aswini (2nd M.Com), Tittu Elizabeth Biju and Merlin Ann George of M.Phil have cleared NET. The department's team has won the 1st prize for its stall UMANG (unfolding means attaining newer greens) at Albertian International students expo 2018 held at St. Albert's college Ernakulam.
- Merin Jose and Vrinda Narayanan P from the Department of Physics cleared National level exams. Both are doing their Ph.D at IIT Madras and IISER Pune respectively. Gayathree M Vinodh of Physics department cleared the JAM exam. At present she is doing her integrated M.Sc PhD at IISER Trivandrum. Ajin Joy of same deptartment cleared JAM exam and is doing his M.Sc at NIT Jaipur.
- Two students of department of Zoology cleared JRF.

FACULTY ACHIEVEMENTS

- Faculty members have acted as resource persons in various scientific and technical committees and workshops.
- Dr. Giby was awarded with 'Paristhithi Sahithya Puraskaram' constituted by Sahyadri Natural History Society, Thiruvananthapuram for the book 'Vismruthiyilakunna Vrikshangal'.
- Dr. Mathew Jose K. secured the DEWANG MEHTA National Educational Award for best Professor in commerce during this academic year.
- The guideship of Dr. Joseph George and Dr. Remya Ramachandran was approved by M.G. University.
- Fr. Tomy Palatty is attending a one-month orientation program at Ranchi from 5th February 2018 onwards.
- Dr. T.P. Thomas was elected as chairman of Cochin Stock Brokers Ltd a leading public Ltd.
 Companyin Ernakulam.
- Mr. Jeet Kurian Mattam and Mr. Sunil K.V attended orientation program in Kerala University, Trivandrum.
- Dr. Sumod S.G of the Department of Physics received 'Kerala State Young Scientist Award-2017'. He also set up a new research lab in the Department in collaboration with ISRO through a research grant of Rs. 30 Lakhs.
- Dr. Pius Augustine, Department of Physics received Best Poster presentation award in the 9th International Conference on Materials for Advanced Technologies (ICMAT 2017) held at Singapore.
- Ms. Raagam P M, Department of Zoology, attended Refresher Course at CIFT.

EXTENSION & OUTREACH

- Heartian Harvest, our Bio-market, was a big success in its second year too. Our college took
 initiative in cultivating vegetables in one cent area. Tomatoes, lady's finger, brinjal, chilly etc.
 were cultivated jointly by nature club and final year botany students.
- A one-day organic fair was conducted.
- Seven community medical camps were arranged as part of service learning. The Fort Kochi beach was cleaned.
- On the occasion of National Energy Conservation day on 14th December, a rally was conducted
 to spread the message of energy conservation. Two awareness lectures (one at Pandit
 Karuppan Hall, Thevara and the other at Snehatheeram Resident's Association) concerning
 energy efficiency were given by Dr. Mathew George under the Urjakiran program by Kerala
 State Government.
- The 3rd year UG students of Sociology department visited St. Thomas Home for Destitute, Perumanoor on 18th June 2017. The students did manual labor such as cleaning the home. Students also volunteered the Eye Camp conducted by the same organization on 23rd June 2017.
- The 1st year UG students, as a part of their Social Outreach program, conducted a visit to the Government Home for Destitute atThevara Ferry on 17th December 2017.
- As part of Extension activity of Economics department, Faculty and students of the department visited RAKSHA Centre – a Vocational Rehabilitation Centre for mentally challenged (supported by Tata Social Welfare Trust Mumbai) on 19th January.

SI. No.	Title of paper	Name of the author/s	Name of journal	Year of publicati	ISSN number
1	Against the Rising Tide: Climate Change and Post-Capitalism in Kim Stanley Robinson's New York 2140		GNOSIS: An International Refereed Journal of English Language and Literature	2018	2394 - 0131
2	Between Two Worlds: Anglo-Indian Stereotypes And Malayalam Cinema	Dr. Rajesh James	International Journal of Anglo Indian Studies	2018	1327 - 1652
3	Mapping the Margins: Interview with Meena Kandaswamy	Dr. Rajesh James	ARIEL	2018	1920 - 1222
4	A new species of and a new transfer from the millipede genus Polydrepanum Carl, 1932 (Polydesmida, Paradoxosomatidae, Polydrepanini)	Sankaran, PM; Sebastian, PA	Zootaxa	2018	1175 - 5326
5	A new species of the jumping spider genus Icius Simon, 1876 from India (Aranei: Salticidae: C hrysillini).	Dhruv A. Prajapati, Jobi J. Malamel, Ambalaparmbil V. Sudhikumar, Pothalil A. Sebastian	Arthropoda Selecta	2018	1360 - 06X
6	A new synonym in the subfamily Thrigmopoeinae Pocock, 1900 (Araneae, Theraphosidae)	Sankaran, PM; Sebastian, PA	ZooKeys	2018	1313 - 2989
7	A review of the wasp mimicking spider genus Coenoptychus Simon, 1885 (Araneae: Corinnidae: Castianeirinae).	Jmmy Paul, Pradeep M. Sankaran, Pothalil A. Sebastian, Mathew M.J.	Zootaxa	2018	1175 - 5334
8	First record of Africactenus Hyatt, 1954 and redescriptions of two poorly known species of Ctenus Walckenaer, 1805 (Araneae, Ctenidae, Cteninae) from India	Sankaran, PM; Sebastian, PA	Zootaxa	2018	1175- 5326
9	First record of the spider genus Wolongia Zhu, Kim Song, 1997 from India with the description of a new species (Araneae, Tetragnathidae).	Jobi J. Malamel, Karunnappilli Shamsudheen Nafin, Pradeep M. Sankaran, Pothalil A. Sebastian	Zootaxa	2018	1175- 5334

SI. No.	Title of paper	Name of the author/s	Name of journal	Year of publicati on	ISSN number
10	First report of mating plug fomation in Argyrodes flavascens O. Pickard Cambridge 1880 (Araneae: Theridiidae)	Jobi J. Malamel , Pothalil A. Sebastian	Rivista Arachnologica Italiana	2018	2421 - 2091
11	New species of gnaphosid spiders (Araneae: Gnaphosidae) from the Western Ghats of India	Pradeep M. Sankaran, Pothalil A. Sebastian	Journal of Natural History	2018	222-933
12	On the taxonomic status of Leucauge granulata (Walckenaer, 1841); Leucauge argentata (Cambridge, 1869), Leucauge bengalensis Gravely, 1921, and Leucauge tuberculata Wang, 1991: A case of synonymy (Araneae: Tetragnathidae)	Malamel J.J. , Sebastian P.A.	Journal of Asia- Pacific Biodiversity	2018	2287 - 884X
13	Phonognatha vicitra Sherriffs, 1928-a taxonomic misidentification of the orb- weaving spider Acusilas coccineus Simon, 1895 (Araneae, Araneidae).	Pradeep M. Sankaran, Pothalil A. Sebastian	Zootaxa	2018	1175 - 5334
14	Predatory efficacy of dominant spiders on insect pests in Kuttanad rice agroecosystem, Kerala, India	Jobi J. Malamel, A.V. Sudhikumar, Pothalil A. Sebastian	Rivista Arachnologica Italiana	2018	2421 - 2091
15	Redescription of Castianeira zetes Simon, 1897 (Araneae, Corinnidae, Castianeirinae	Pradeep M. Sankaran, Jobi J. Malamel, Mathew M. J. &P. A. Sebastian	Zootaxa	, 2018	1175 - 5334
16	Influence of Change in Floral Traits on Behaviour of Flower Visitors and Rate of Visitation.	Sreedevi, C S and Giby Kuriakose	Heartian journal of pure and applied sciences	2017	2277 - 1662.
17	Protonated N-alkyl-2-nitroanilines undergo intramolecular oxidation of the alkyl chain upon collisional activation	Paulose, J; Cyriac, J; Mathai, G; Giblin, D; Gross, ML	Int. J. Mass Spectrom.	2017	1387 - 3806
18	Charge Transfer Transition: Investigation of the Effect of Solvents on Electronic Spectra of N-Alkyl/N-Alkylphenyl Derivatives of p- Nitroaniline	P. L. Maria Linsha, Rasmi Karamel, S. Ramakrishnan, M. George	Chemical Sci. Transactions.	2017	2278 - 3318
19	Identifying Government's Role towards Developing Sustainable Strategies in Tourism Industry.	Radhika, PC; Johnson, J	Pac. Bus. Rev. Int.	2017	0974- 438X

SI. No.		Name of the author/s	Name of journal	Year of publicati	ISSN number
20	Incorporating Homomorphic Encryption with Hybrid Numerical Authentication for Blind Computer Users	Shailesh, S; Ilyas, HM	IEEE	2017	978-1- 5090- 6106-8
21	Optimization of Handoff Delay and Location Prediction of Mobile Station using GPS Integrated SIM Module in Cellular Networks	Regitha, MR; Sivan, S; Antony, N; Paul, V	IEEE	2017	978-1- 5090- 6106-8
22	Identifying Government's Role towards Developing Sustainable Strategies in Tourism Industry	Dr. Radhika P. C.	Pacific Business International	2017	0974- 438X
23	Structural Equation Modelling of Role of government in sustainable development of tourism-A study in resident's Perspective	Dr. Radhika P. C.	Indian Journal of Commerce and Management Studies	2017	2249- 0310
24	Eco Tourism initiatives in Kerala-A Study with Special reference to Thekkady	Dr. Radhika P. C.	International Journal of Management and Social Science Research Review	2017	2349- 6746
25	Investment in Gold and Real Estate – A Study of Investor Preference in Kerala	Abraham, S. & Kumar, A.	Published in International Journal of Management and Social Science Research Review (IJMSRR),	2017	2349- 6738,
26	Quality Issues in Sea Food Exports to South Africa,	Raju K V and Ancy V P	Ingredients South Asia, January 16-31.	2017	
27	Casting caste dalit identity, Papilio Buddha, and Malayalam cinema	Venkatesan S., James R.	Economic and Political Weekly	2017	2349- 8846
28	Deterministic Electron Spin	K.V. Didimos	Annales de la Fondation	2017	2E+06

SI. No.	Title of paper	Name of the author/s	Name of journal	Year of publicati	ISSN number
			Louis de Broglie		
29	Stabilization heat treatment and functional response of 0.65[Pb(Mg1/3Nb2/3)O3]-0.35[PbTiO3] ceramics	Pius Augustine, Shibnath Samanta, Martando Rath, Muralidhar Miryala, K. Sethupathi, Masato Murakami, M.S. Ramachandra Rao	Materials Research Bulletin	2017	0025- 5408
30	Enhanced functional response of high temperature stabilized (1-x)PMN-xPT ceramics.	Pius Augustine, Martando Rath, M.S. Ramachandra Rao	Ceramics International	2017	0272- 8842
31	A new species of Paratus Simon, 1898 (Araneae: Liocranidae, Paratinae) from India	Pradeep M. Sankaran, Jobi J. Malamel, Mathew M. J. & P. A. Sebastian	Zootaxa	2017	1175- 5334
32	Anaxibia folia spec. nova new litter- dwelling dictynid spider from India (Araneae: Dictynidae: Dictyninae)	Sankaran, PM; Sebastian, PA	Zootaxa	2017	1175- 5326
33	Diversity of Ants in Kuttanad region of Kerala, India	Rabeesh TP, Sumesh S, Karmaly KA and Shanas S	Journal of Entomology and Zoology Studies	2017	2320- 7078
34	First description of the male of the type species Meotipa picturata Simon, 1895 and description of a new Meotipa species (Araneae, Theridiidae) from India.	Prashanthakumara S. Murthappa, Jobi J. Malamel, Dhruv A. Prajapati, Pothalil A. Sebastian, Mididoddi Venkateshwarlu	Zootaxa	2017	1175- 5334
35	On the genus Tylorida Simon, 1894 with the first record of the genus Atelidea Simon, 1895 from India (Araneae: Tetragnathidae, Leucauginae).	Pradeep M. Sankaran, Jobi J. Malamel, Mathew M. J. & P. A. Sebastian	Zootaxa	2017	1175 - 5334
36	On the new monotypic wolf spider genus Ovia gen. nov. (Araneae: Lycosidae, Lycosinae)	Pradeep M. Sankaran, Jobi J. Malamel, Pothalil A. Sebastian	Zootaxa	2017	1175 - 5334

TRAINING PROGRAMMES ORGANIZED FOR TEACHING & NON-TEACHING STAFF

IQAC and various departments of the college organized 13 professional training programmes for the teaching and non-teaching staff. 11 Training programmes including IQAC workshop on OBE and NAAC reaccreditation process were organized for the teaching staff while two programmes were organized for the nonteaching staff. The list of the programmes and report of the selected programmes are given below.

SI. No.	Title of the Program	Date
1.	FIP for Newly Recruited Faculty	03-07-2017 to 10-07-2017
2.	Training on Micro-scale Experiments in Chemistry	14-08-2017 to 19-08-2017
3.	Training programme in Vermicomposting	17-08-2017
4.	Research Based Pedagogy training	11-10-2017 to 14-10-2017
5.	Workshop on Practical Machine Learning Using Python	27-11-2017
6.	Orientation Programme on Trauma & Emergency Care	04-12-2017
7.	FDP on Sustainable Energy Storage and Conversion	15-01-2018 to 16-01-2018
8.	FDP on Outcome Based Education and Drafting of POs and PSOs	24-01-2018 to 25-01-2018
9.	Training on Mental Health Fitness	16-02-2018
10.	FDP on Equity and Inclusiveness	09-04-2018
11.	Training on Research Paper Writing	15-05-2018 to 19-05-2018
12.	Orientation on Word Processing & EXCEL	20-06-2017
13.	Training on Administrative software	21-05-2018

FACULTY ORIENTATION & INDUCTION PROGRAM. IE 2017

The IQAC of the college organized a Faculty Orientation & Induction Programme, 2017 for the newly joined faculty members. 9 New Faculty members belonging to different disciplines attended the six-day orientation programme. During the orientation, attendees were introduced to the Vision, Mission of the College along with information concerning the academic structure and working of an autonomous college. The orientation was led by Rev. Fr. Johnson X Palackappillil CMI (*Principal*) and Dr. Joseph T Moolayil (*IQAC Co-ordinator*). Experienced resource persons led the induction programme in each planned sessions.

During the orientation, the participants had the opportunity to interact with each other and discussed topics and developed a good bond within themselves.

The sessions included:

- College Vision & Mission
- Classroom Management
- The story about Sacred Heart College
- Preparation of Course Plan, setting the POs & COs
- Examination system, Principles of Curriculum and Syllabus
- A workshop on Moodle software and other online teaching methods

The programme was organized with an overall introduction to the activities of the college for faculty members as well as for students.

Dr. Thomas Abraham led a theme centered interaction session for the participants.

The six-day orientation was structured in such a way that it facilitated the participants with information regarding the academics as well as about the college as a whole.



TRAINING ON MICRO-SCALE EXPERIMENTS IN CHEMISTRY

The objective of the workshop is to impart training in microscale experiments in chemistry for students and teachers, with an aim to introduce an innovative practical method for UG programme.

Resource Person: Dr. S. Murugan (Retired Professor, ST Hindu College, Nagarcoil)

Fr. Prasant Palackkappillil CMI inaugurated the workshop. In the inaugural address Fr. Principal appreciated the efforts of the department to introduce greener methods in chemistry in tune with the green policy of the college. In the first day of the workshop Prof. S. Murugan introduced the microscale method of titration – Two burtte titration. The experimental demonstration was held in the laboratory.

Second day of the workshop started with a review of the first day practicals and evaluation of the results. The results showed close agreement with the results obtained from the conventional titration method. The resource person Dr. Murugan explained the microscale methods for qualitative inorganic analysis. The demonstration was particularly focused on the intergroup separation of cations in which the second group precipitation is done with sodium sulphide. The resource person demonstrated the microscale methods in organic analysis in the third day of the workshop. The participants individually performed all the experiments in the laboratory. The faulty members were trained effectively so that the qualitative organic analysis can be implemented in the UG syllabus.

In the fourth day of the workshop microscale methods for the quantitative separation were discussed. Solvent extraction method was particularly demonstrated. Extensive review of the experimental methods were done in the last day. The results wre compared with conventional techniques. It was observed that the microscale qualitative analysis saves time and chemicals, without compromising the accuracy of results.



TRAINING PROGRAMME ON VERMICOMPOSTING

The department of Zoology organized a training programme on vermicomposting. The faculty members of Zoology, Botany and Environmental Science departments have attended the training programme. The resource person for the training programme was Mr. Biju (Manager, Social Services, Ponnurunni). Vice-Principal of the College Dr. Jose John Thuravackal CMI inaugurated the training programme on vermicomposting. Fr. Vice Principal suggested that such programmes are beneficial for the faculty members to enrich their practical knowledge in composting methods. The teachers can train the students.



Vermicompost (vermi-compost) is the product of the decomposition process using various species of worms, usually red wigglers, white worms, and other earthworms, to create a mixture of decomposing vegetable or food waste, bedding materials, and vermicast. The resource person Mr. Biju explained the procedure of vermicomposting and then demonstrated the procedures at various points in the college. Four vermicomposting pots are installed in the lawn in front of the Sociology department of the college. The participants use the dry leaves (litter) in the college campus for the process. The worms and pots were bought from Welfare Society, Ponnurunni, Ernakulam. The variety of worms used are *Eisenia foetida*. The whole process takes about three months to completely harvest. The compost and Vermiwash is sold among the students and teachers. This is considered to be a monetary benefits for the department activities and inculcate social values among the students.

RESEARCH CASED PEDAGOGY TRAINING

The department of physics organized STEM Teacher Training Workshop to Develop Research Based Pedagogical Tools for teachers. The workshop was organized from 11 to 14 October 2017.

The inaugural function of the workshop was held in Fr. Melesius hall. Principal Rev. Fr. Johnson X Palackappillil CMI delivered the welcome address. Fr. Principal appreciated the department and the coordinator Dr. Pius for successfully organizing the workshop. Dr. Apurva Barve of IISER Pune delivered the opening remarks. He remarked that pedagogic research is research into the processes and practices of learning, teaching assessment, which may involve systematic



empirical research as well contributions to pedagogic theory. Mr. Barker, Director of South India, South Asia region of British Council remarked that developing research based pedagogical tools is a symbol of academic growth.

Dr. Georgekutty Joseph, HoD Physics proposed vote of thanks. Dr. Gareth Price demonstrated the roadmap of the workshop. In his presentation, Dr. Gareth explained the characteristics and applications of research based pedagogical tools.

WORKSHOP ON PRACTICAL MACHINE LEARNING USING PYTHON

Python" on 27 November 2017. At 10am, the Principal, Fr. Prasant Palackappillil CMI has inaugurated the workshop in the Chavara IT Centre. Department HoD, Dr. Regitha welcomed the principal, faculty members, participants and supporting students. Mr. Shailesh gave details about introduction to Machine learning and how data science is related to machine learning concepts, types of machine learning and introduction to python. Mr. Shailesh has explained the case study with practical session. Participants did the python programs for creating model using python, found the accuracy. He finished the class by giving the introduction of deep learning and neural networks. In the valedictory function, all participants have expressed sincere gratitude towards the department and the resource person handled the sessions.

ORIENTATION PROGRAMME ON TRAUMA & EMERGENCY CARE

Sacred Heart College organized an orientation programme on trauma and emergency care. Faculty members of the college attended the programme. The orientation course was organized jointly by Kochi

City Police, VPS Lakeshore and Rotary Cochin. It was a three hour programme by a team of 8 doctors and trainers. The session was called Samaritan where hands on training of 20 different life saving skills were taught. The first session was an audiovisual talk where various lifesaving skills were demonstrated. The programme was very important as it gives awareness of basic life-saving skills.



WORKSHOP ON SUSTAINABLE ENERGY STORAGE AND CONVERSION

The Department of Chemistry, Sacred Heart College, Thevara in association with Prof. K.V. Thomas Endowment Trust, Agency for Non-conventional Energy and Rural Technology (ANERT) and Kerala State Council for Science, Technology and Environment (KSCSTE) organized a two-day workshop on "sustainable energy storage and conversion".



The workshop was conducted on 15th (Monday) and 16th (Tuesday) January, 2018. The objective of this workshop was to provide a forum for experts, researchers and students to discuss the recent advances in fuel cells, solar energy conversion devices, energy storage devices such as batteries and super capacitors and the impact of functional/nanomaterials on energy conversion and storage efficiencies. It also aimed at helping the post-graduate students to narrow-down their research

interests in to the vast and intriguing fields of energy storage and conversion.

The resource persons for the seminar were Dr. Vijayamohanan K Pillai, Dr. M. M. Shaijumon, IISER, Thiruvananthapuram, Dr. Anil Verma from IIT Delhi and Dr. Suraj Soman, DST-Inspire Faculty, NIIST, Thiruvannthapuram.

FDP ON OUTCOME BASED IDUCATION (OBE) & DRAFTING OF PO AND PSO

The Internal Quality Assurance Cell of Sacred Heart College (Autonomous), Thevara, Kochi organised a workshop on Outcome Based Education (OBE) & drafting of POs and PSOs for teachers on 24-25 January 2018. The two day workshop was inaugurated by Principal Rev. Fr. Johnson X Palackappillil CMI. He remarked that the syllabus and course plans should be modified in tune with the OBE.

The technical sessions of the orientation programme were handled by experts from **IPSR solution Limited**., which is a well-known firm provides training for OBE and drafting of Program Specific Outcomes (PSO) and Course Outcomes (CO).

In the first technical session **Dr. Mendez Jacob, Managing director and CEO of the IPSR solutions limited** introduced the basics of OBE and emphasized the importance of OBE in a quality academic process.

Dr. Sunil Job K. A., Academic Consultant of IPSR solution Limited delivered the technical sessions on drafting of POs, PSOs and Course Outcomes. He demonstrated the mapping of COs with POs and PSOs. The mapping was done on the basis of rubrics framework. There were practical sessions on how to write Programme Outcomes, Programme Specific Outcomes, Course Outcomes, tagging course outcomes, Taxonomy of learning, attainment of COs, PSOs and POs, Tagging of Questions with COs and Taxonomy Table. 95 teachers participated in the programme.



HANDS-ON TRAINING ON MICROSCALE PHYSICAL CHEMISTRY EXPERIMENTS

The IQAC of the Sacred Heart College organized an orientation programme on mental health fitness. The program was held on 16 February 2018 in the Marian Hall. The objective of the programme was to provide the faculty members a knowledge on mental health fitness and to raise the happiness index of the college to a higher level. The resource person for the program was Fr. Dr. Varghese Puthussery CMI.

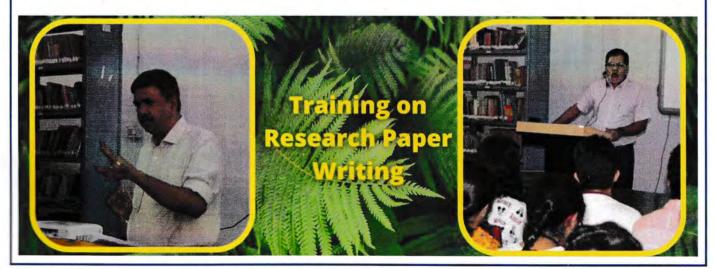
FACULTY ENRICHMENT PROGRAMME ON EQUITY AND INCLUSIVENESS

IQAC of SH College organized a faculty enrichment programme on the theme equity and inclusiveness. The programmes was held on 09 April 2018 in the Melesius hall. The resource person for the programme was Principal, Rev. Dr. Johnson X Palackappillil CMI. The objective of the programme was to inculcate the values of equity and inclusiveness in the faculty members.



TRAINING ON RESEARCH PAPER WRITING

The Department of English and Prajna foundation Kochi jointly organized training program for the faculty and research scholars. The theme of the training programme was Research Paper writing. Principal Rev. Dr. Johnson X Palackappillil CMI inaugurated the training programme. In his inaugural address, Fr. Principal emphasized the importance of research paper writing in the academic research. The first two days of the training was led by Prof. P. P. Raveendran, School of Letters, M. G. University Kottayam. The next two days of the workshop was led by Mr. K. J. Jacob. He extended the training to new dimensions of academic writing and editing. He explained the writing of a compelling body of a text.



TRAINING PROGRAMME ON VORD PROCESSING & EXCEL

IQAC of Sacred Heart College, Thevara organized a training program on word processing and EXCEL for the non-teaching staff on 20 June 2017 in the Chavara IT Centre. The program was aimed at enriching the administrative staff with useful software knowledge.

The resource person for the program was Mr. Sebastian Panakal. The resource person is an experienced trainer of various IT tools and e-teaching. The program started with a silent prayer. He introduced the resource person and spoke



about the context of conducting the program. In the technical session Mr. Sebastian explained about the various existing word processing software such as Google docs, Microsoft word pad etc. The second part of the session dealt with the application of MS-EXCEL. The utilities of EXCEL were demonstrated by the Mr. Saju. The participants were asked to prepare sample documents in word and excel format.

TRAINING PROGRAMME ON ADMINISTRATIVE SOFTWARE

IQAC of Sacred Heart College organized training programme on administrative software for the non-teaching staff. The objective of the program was to familiarize the staff about the operation of the administrative software. The college has an automated administrative process. The role of administrative staff has become more significant in handling the office process with the introduction of the software. The IQAC organized the training program in the light of the automation process.

Technical expert of the software Mr. Shifas A A led the training programme. He introduced all the fields in the software and explained various drop-down menu. Then the participants were given a hands-on experience in entering all the necessary data by a mock process. Superintendent Mr. K. J. Joseph proposed the vote of thanks.

FACULTY DEVELOPMENT PROGRAMMES ATTENDED BY FACULTY MEMBERS

Faculty members attended various faculty development programmes like refresher courses, orientation programmes, workshops and short term courses. The list of faulty members and the details of faculty development programme they attended are enlisted below.

SI. No.	Name of Teacher	of Teacher Title of the Program Duration		
NO.			Duration	
1.	June Cyriac	ASMS Conference on Mass Spectroscopy, Indianapolis, USA	04-06-2017 to 08-06-2017	
2.	Biju V. V.	Orientation Programme, University of Calicut	07-06-2017 to 04-07-2017	
3.	Dr. Abi T. G.	Orientation Programme, Kannur University, Kannur	28-06-2017 to 25-07-2017	
4.	Fr. Dr. Sebastian John	FIP for Newly Recruited Faculty organized by IQAC, SH College, Kochi	03-07-2017 to 10-07-2017	
5.	Dr. Sudha S.	FIP for Newly Recruited Faculty organized by IQAC, SH College, Kochi	03-07-2017 to 10-07-2017	
6.	Dr. Remya R.	FIP for Newly Recruited Faculty organized by IQAC, SH College, Kochi	03-07-2017 to 10-07-2017	
7.	Athira Binod	FIP for Newly Recruited Faculty organized by IQAC, SH College, Kochi	03-07-2017 to 10-07-2017	
8.	Neethu S Kumar	FIP for Newly Recruited Faculty organized by IQAC, SH College, Kochi	03-07-2017 to 10-07-2017	
9.	Shanthi Mathai	FIP for Newly Recruited Faculty organized by IQAC, SH College, Kochi	03-07-2017 to 10-07-2017	
10.	Lekshmi S Nair	FIP for Newly Recruited Faculty organized by IQAC, SH College, Kochi	03-07-2017 to 10-07-2017	
11.	Anisha Anilkumar	FIP for Newly Recruited Faculty organized by IQAC, SH College, Kochi	03-07-2017 to 10-07-2017	
12.	Elsa Jacob	FIP for Newly Recruited Faculty organized by IQAC, SH College, Kochi	03-07-2017 to 10-07-2017	
13.	Jobin Tharian	Orientation Programme, Savitribai Phule Pune University, Pune	03-08-2017 to 30-08-2017	
14.	Vinil K. V.	Orientation Programme, Savitribai Phule Pune University, Pune	03-08-2017 to 30-08-2017	
15.	June Cyriac	Orientation Programme, University of Kerala, Trivandrum	04-08-2017 to 31-08-2017	
16.	Dr. Abi T. G.	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017	

SI. No.	Name of Teacher	Title f the Program	Duration
17.	Dr. K. B. Jose	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
18.	Dr. Thommachan Xavier	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
19.	Dr. V. S. Sebastian	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
20.	Dr. M. George	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
21.	Dr. Jorphin Joseph	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
22.	Dr. Franklin J.	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
23.	Dr. Jinu George	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
24.	Dr. Grace Thomas	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
25.	Dr. Ignatious Abraham	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
26.	Midhun Dominic C. D.	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
27.	Senju Devassykutty	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
28.	Dr. June Cyriac	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
29.	Dr. Ramakrishnan S	Workshop on Microscale Experiments in Chemistry, SH College Thevara	14-08-2017 to 19-08-2017
30.	Regitha M R	FDP on High Performance Computing & Data Science, RSET Kakkanadu	17-08-2017 to 22-08-2017
31.	Tressa Shybe	FDP on High Performance Computing & Data Science, RSET Kakkanadu	17-08-2017 to 22-08-2017
32.	Dr. Giby Kuriakose	General Orientation Programme, Savitribai Phule Pune University, Pune	01-09-2017 to 28-09-2017
33.	Dr. Jimmy Sebastian	General Orientation Programme, Savitribai Phule Pune University, Pune	01-09-2017 to 28-09-2017
34.	Sibi K. I.	Refresher Course in Human Rights, University of Hyderabad, Hyderabad	08-09-2017 to 28-09-2017
35.	Dr. Jimmy Sebastian	STEM Teacher Training Workshop on Research Based Pedagogical Tools, SH College, Kochi	11-10-2017 to 14-10-2017
36.	Dr. Sumod S. G.	STEM Teacher Training Workshop on Research Based Pedagogical Tools, SH College, Kochi	11-10-2017 to 14-10-2017
37.	Sanu Varghese	FDP on Data Analysis in Social Science Research, Govt. College, Attingal	24-10-2017 to 28-10-2017

SI. No.	Name of Teacher	Title of the Program	Duration
38.	Sajoy P B	FDP on Data Analysis in Social Science Research, Govt. College, Attingal	24-10-2017 to 28-10-2017
39.	Sibi K. I.	Short Term Course in Students Counselling and Mentoring, University of Kerala, Trivandrum	30-10-2017 to 04-11-2017
40.	Bijo N. Mathew	Orientation Programme, University of Kerala, Trivandrum	02-11-2017 to 29-11-2017
41.	Sanu Varghese	FDP on Business Research and Data Analysis for Social Science, Sri Ramakrishna College, Coimbatore	20-11-2017 to 02-12-2017
42.	James V George	FDP on Business Research and Data Analysis for Social Science, Sri Ramakrishna College, Coimbatore	20-11-2017 to 02-12-2017
43.	Dr. Sumod S. G.	Orientation Programme, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	23-11-2017 to 20-12-2017
44.	Raagam P. M.	ICAR Sponsored Winter School, CIFT Kochi	01-12-2017 to 21-12-2017
45.	Dr. Ignatious Abraham	Orientation Programme, University of Rajasthan, Jaipur	04-12-2017 to 30-12-2017
46.	Sabu Thomas	Orientation Programme, University of Jammu, Jammu	04-12-2017 to 31-12-2017
47.	Sanil Jose	National Conference on Technology and Innovations in Math Education, RSET Kochi	07-12-2017 to 10-12-2017
48.	Riya Baby	National Conference on Technology and Innovations in Math Education, RSET Kochi	07-12-2017 to 10-12-2017
49.	Jeet Kurien Mattam	National Conference on Technology and Innovations in Math Education, RSET Kochi	07-12-2017 to 10-12-2017
50.	Dr. Jorphin Joseph	Refresher Course on Foundations of Physical Chemistry and its Applications, IWSA Navi Mumbai	15-12-2017 to 30-12-2017
51.	Dr. Abi T. G.	Refresher Course on Environmental Sciences and Geological Sciences, Pondicherry University, Pondicherry	02-01-2018 to 22-01-2018
52.	Sanil Jose	Orientation Programme, University of Kerala, Trivandrum	04-01-2018 to 31-01-2018
53.	Dr. Tom C. Thomas	Refresher Course in English Language, Literature and Culture, JNU New Delhi	08-01-2018 to 02-02-2018
54.	Dr. Ramakrishnan S.	Refresher Course in Environmental Sciences, University of Kerala, Trivandrum	09-01-2018 to 29-01-2018
55.	Pius Augustine	Workshop on intertwining strands in physics and mathematics, IISER Pune	19-01-2018 to 23-01-2018
56.	Dr. Grace Thomas	ICAR Sponsored winter school, CMFRI Kochi	23-01-2018 to 12-02-2018

SI. No.	Name of Teacher	Title of the Program	Duration
57.	Midhun Dominic C. D.	ICAR Sponsored winter school, CMFRI Kochi	23-01-2018 to 12-02-2018
58.	Syamlal M. S.	National Training cum Workshop, Central Institute of Indian Languages, Mysuru	12-02-2018 to 16-02-2018
59.	Senju Devassykutty	Orientation Programme, Kannur University, Kannur	21-02-2018 to 20-03-2018
60.	Sabu Thomas	Peak Performance Training, Bangalore	03-05-2018 to 13-05-2018
61.	Aravind R. Nair	Workshop on Research Paper Writing, Prajna Foundation Kochi & SH College Thevara	15-05-2018 to 19-05-2018
62.	Bijo N Mathew	Workshop on Research Paper Writing, Prajna Foundation Kochi & SH College Thevara	15-05-2018 to 19-05-2018
63.	Dr. Rajesh M.	Workshop on Research Paper Writing, Prajna Foundation Kochi & SH College Thevara	15-05-2018 to 19-05-2018
64.	Fr. Sabu Thomas	Workshop on Research Paper Writing, Prajna Foundation Kochi & SH College Thevara	15-05-2018 to 19-05-2018
65.	Sanjose A. Thomas	Workshop on Research Paper Writing, Prajna Foundation Kochi & SH College Thevara	15-05-2018 to 19-05-2018
66.	Sibi K. I.	Workshop on Research Paper Writing, Prajna Foundation Kochi & SH College Thevara	15-05-2018 to 19-05-2018
67.	Sunil K. V.	Workshop on Research Paper Writing, Prajna Foundation Kochi & SH College Thevara	15-05-2018 to 19-05-2018
68.	Dr. Mathew M J	Workshop on Research Paper Writing, Prajna Foundation Kochi & SH College Thevara	15-05-2018 to 19-05-2018
69.	Rajesh James	Workshop on Research Paper Writing, Prajna Foundation Kochi & SH College Thevara	15-05-2018 to 19-05-2018

FINANCIAL ASSISTANCE PROVIDED TO FACULTY MEMBERS

The college provides financial support to faculty members for attending conferences, presenting research paper in conferences and taking membership in professional bodies. In the academic year 2017-18, fifty three faculty members were given assistance for participation in conferences in India and abroad. Two faculty members were also given assistance towards professional body membership. An amount of Rs. 2.68 lakhs was provided to teachers for the same.

GLIMPSES OF CLUB ACTIVITIES



Tribal exposure camp by AICUF



Karkkidaka Kanji by Nature Club





Dance club activities



Energy Conservation Rally by NCC and Physics Department

REPORT PREPARED BY IQAC, SH COLEGE, THEVARA