



ST. JOSEPH'S COLLEGE (AUTONOMOUS)

DEVAGIRI

A College with Potential for Excellence

Affiliated to the University of Calicut

Calicut, Kerala – 673008

SUPPLEMENTARY REPORT

2015-16

(For Institutional Re- Accreditation Cycle 3)

Submitted to

**National Assessment and Accreditation Council
(NAAC)**

SUPPLEMENTARY REPORT 2015-16

INTRODUCTION

The Self Study Report in respect of the third cycle of accreditation was uploaded in the college website in December 2015, and the hardcopy of the same was submitted to the NAAC in January 2016. This Supplementary Report sums up the activities, achievements and developments of the institution after the submission of SSR.

- **Name and Address of the College:**

Name : **St. Joseph's College (Autonomous), Devagiri**

Address : **Medical College P.O.
Kozhikode – 673008, Kerala**

Website : www.devagiricollege.org

- **For communication:**

| Designation | Name | Telephone Number | Mobile | Email |
|--|------------------------|------------------|------------|--------------------------|
| Principal | Dr. Sibichen M. Thomas | 04952355828 | 9387476646 | sibithomasm@yahoo.co.in |
| | | 0495 2359528 | | |
| Vice Principal | Fr. Anto N. J. | 04952355901 | 9605254544 | antodevagiri79@gmail.com |
| | | 04952355134 | | |
| Steering Committee Co-ordinator | Dr. Baby M. K. | 04952380716 | 9847422340 | babymkdevagiri@gmail.com |

CRITERION I: CURRICULAR ASPECT

1.1. Curriculum Design and Development

The College responded to the newly obtained autonomy by restructuring and revamping its PG syllabus with effect from 2016 admission. The syllabus revision was preceded by workshops at the department level attended by faculty and external experts. The feedback of the alumni and the requirements of the industry were also taken into account. With the objective of updating the contents and fine-tuning the courses to the syllabi of the NET/JRF examinations, various Boards of Studies have revised the syllabi to the extent of approximately 20% of the existing ones.

The institution introduced indirect grading system with seven point scale for evaluation for the PG programmes. With a view to improving the efficiency of the evaluation system the College introduced viva voce examinations in even semesters instead of a single course viva voce at the end of the programme. Some of the Boards of Studies have introduced viva voce examinations in every semester.

1.2. Curriculum Enrichment

With a view to ensuring the optimum utilisation of the institutional facilities, various science departments have introduced new / additional practical sessions and new electives into the curriculum.

CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1. Student Enrolment and Profile

The College subscribed to admission module of the campus automation software and admissions to all the UG and PG programmes for 2015-16 and 2016-17 were processed online. To ensure wider publicity to the admission process the College conducted press conference and published the notification and prospectus on the College website. The College admission committee with Principal as the chairman and Dr. Joy Joseph as the convener could complete the admission process efficiently and classes were commenced nearly one month ahead of other affiliated colleges of the parent university.

Number of Students in Different Streams (2015-16)

| Particulars | Number of Programmes | Number of Students |
|-----------------------------|----------------------|--------------------|
| Science | | |
| Under Graduate | 8 | 909 |
| Post Graduate | 6 | 156 |
| Doctorial Research | 5 | |
| Arts | | |
| Under Graduate | 4 | 472 |
| Post Graduate | 3 | 118 |
| Doctorial Research | 1 | |
| Commerce | | |
| Under Graduate | 2 | 302 |
| Post Graduate | 1 | 39 |
| Doctorial Research | - | - |
| Any Other (MSW, BBA) | | |
| Under Graduate | 1 | 91 |
| Post Graduate | 1 | 39 |
| Doctorial Research | - | - |
| Total | - | 2126 |

The IQAC conducted an analysis of the profile of the newly admitted students and the following results were obtained.

Profile of Students Admitted During 2015-16

| UNDER GRADUATE PROGRAMMES | | | | | | | |
|----------------------------------|----------|----------|-----------|-----------|------------|---------------|--------------|
| Programme | M | F | SC | ST | OBC | Others | Total |
| BA English | 12 | 29 | 8 | - | 12 | 21 | 41 |
| BA Economics | 26 | 35 | 12 | - | 14 | 35 | 61 |
| BSc Mathematics | 11 | 39 | 10 | - | 14 | 26 | 50 |
| Physics | 16 | 31 | 8 | - | 5 | 34 | 47 |
| BSc Chemistry | 16 | 32 | 10 | 1 | 11 | 26 | 48 |
| BSc Botany | 10 | 27 | 6 | 1 | 9 | 21 | 37 |
| BSc Zoology | 11 | 26 | 7 | 1 | 17 | 12 | 37 |
| BCom (Finance) | 23 | 41 | 9 | 4 | 13 | 38 | 64 |
| BSc Psychology | 4 | 20 | 5 | - | 12 | 7 | 24 |
| BSc Computer Science | 14 | 15 | - | - | 18 | 11 | 29 |
| BCA | 17 | 7 | 1 | - | 13 | 10 | 24 |
| BBA | 18 | 13 | 1 | - | 19 | 11 | 31 |
| B.Com (Computer Appli.) | 21 | 19 | 3 | - | 21 | 16 | 40 |
| BA Functional English | 4 | 20 | - | - | 16 | 8 | 24 |
| BA Mass communication | 16 | 24 | - | - | 22 | 18 | 40 |

| POST GRADUATE PROGRAMMES | | | | | | | |
|---------------------------------|------------|------------|------------|-----------|------------|---------------|--------------|
| Programme | M | F | SC | ST | OBC | Others | Total |
| MA English | 3 | 17 | 3 | 1 | 3 | 13 | 20 |
| MA Economics | 4 | 15 | 3 | - | 8 | 8 | 19 |
| MA Malayalam | 7 | 12 | 1 | 1 | 12 | 5 | 19 |
| MSc Mathematics | - | 19 | 4 | - | 2 | 13 | 19 |
| MSc Physics | - | 12 | 2 | - | 1 | 9 | 12 |
| MSc Chemistry | - | 12 | 2 | - | 3 | 7 | 12 |
| MSc Botany | 4 | 5 | 1 | - | 3 | 5 | 9 |
| MSc Zoology | - | 12 | 2 | 1 | 4 | 5 | 12 |
| MSc Statistics | 1 | 11 | - | - | 5 | 7 | 12 |
| M.Com | 8 | 12 | 3 | 1 | 4 | 12 | 20 |
| MSW | 8 | 12 | 1 | - | 7 | 12 | 20 |
| Total | 254 | 517 | 102 | 11 | 268 | 390 | 771 |

Female - Male Ratio

| Year | Ratio |
|-------------|--------------|
| 2015-16 | 2.04 : 1 |

Demand Ratio of UG Programmes (2015-16)

| Programmes | No. of Applicants | No. of students admitted | Demand ratio |
|-----------------------|--------------------------|---------------------------------|---------------------|
| BA Economics | 1152 | 61 | 18.88 |
| BA English | 1787 | 41 | 43.58 |
| B.Sc Mathematics | 1427 | 50 | 28.54 |
| B.Sc Physics | 1891 | 46 | 41.10 |
| B.Sc Chemistry | 2085 | 48 | 43.43 |
| B.Sc Botany | 1068 | 35 | 30.51 |
| B.Sc Zoology | 1739 | 35 | 49.68 |
| B.Com (Finance) | 1541 | 64 | 24.07 |
| BCA | 647 | 24 | 26.95 |
| B.Sc Computer Science | 393 | 29 | 16.37 |
| BBA | 1094 | 31 | 35.29 |
| B.Com CA | 1204 | 38 | 31.68 |
| B.Sc Psychology | 673 | 24 | 28.04 |
| BA Functional English | 414 | 23 | 18 |
| BA Mass Communication | 434 | 38 | 11.42 |

Demand ratio of PG Programmes (2015-16)

| Programmes | No. of Applications | No. of students admitted | Demand ratio |
|-------------------|----------------------------|---------------------------------|---------------------|
| MA Economics | 101 | 19 | 5.31 |
| MA English | 215 | 19 | 11.31 |
| M.Sc Mathematics | 144 | 19 | 7.57 |
| M.Sc Physics | 152 | 12 | 12.66 |
| M.Sc Chemistry | 145 | 12 | 12.08 |
| M.Sc Botany | 149 | 9 | 16.55 |
| M.Sc Zoology | 165 | 12 | 13.75 |
| M.Com | 73 | 19 | 3.82 |
| MSW | 71 | 19 | 3.73 |
| M.Sc Statistics | 62 | 11 | 5.63 |
| M.A. Malayalam | 66 | 19 | 3.47 |

2.3. Teaching-Learning Process

Academic calendar was prepared by the IQAC and approved by the College Council and the same was published on the college website. The faculty were asked to prepare and submit teaching plan to ensure timely completion of the topics. With a view to supplementing the class room learning a number of prominent experts/academicians were invited to interact with the students.

List of Prominent Experts who Interacted with the Students (2015-16)

| Name | Designation |
|----------------------|--|
| ECONOMICS | |
| Ms. Shamin Sebastian | Deputy Collector, Kozhikode |
| C.R. Neelakantan | Famous Social Activist |
| Mr. G. Chandramouli | Managing Director, Kannur International Airport |
| Prof. Kunhikannan | Dean and Visiting professor, Department of Sociology, Malayalam University |
| Dr. Manjula K. | Associate Professor, Department of Economics, MA College, Kothamangalam |
| Mr. Arun Kumar T. A. | Assistant Professor, Department of Economics, Govt. College, Kattappana |
| Mr. Jasir C. | Convener, Anti-Eviction Forum, Calicut Airport |

| COMMERCE | |
|-------------------------|--|
| CA Mohan R. Levi | Finance Director, Ellucian Higher Education Systems |
| Dr. B. Johnanson | Asso. Prof. DCMS, Calicut |
| Dr. Rajesh S.P. | Asso. Prof. Chinmaya Institute of Technology, Kannur |
| Dr. T. Mallikarjunappa | Professor, Manglore University |
| Adv. A. V. Vamanakumar | JCI International Trainer, Cochin |
| Mr. Kishore Jaleel | Facilitator of Campus Connect, Rajagiri Centre for Business studies |
| Mr. M. Nishad Gopuram | Director, TIME, Kozhikode |
| CA Ramakrishnan V. | Chartered Accountant |
| Adv. Dinesh A. | Director, Jobsecura Finishing School |
| PHYSICS | |
| Dr. M. K. Ravi Varma | HoD, Department of Physics, NIT, Calicut |
| Dr. Jacob Philip | Professor, Amal Jyothi College of Engineering |
| Dr. Kishore Sridharan | DST INSPIRE Faculty, NIT, Surathkal |
| Dr. Nandakumar | Professor, M G University, Kottayam |
| Dr. Reji Philip | Associate Professor, RRI – Bangalore |
| Dr. Jayant Gangully | Regional Science Centre, Calicut and sky watch |
| Dr Abraham T. Mathew | Dean, NIT Calicut |
| Dr M. K. Satheesh Kumar | Professor - Department of Electronics & Communication Engineering, Manipal University |
| Dr Jeevan Job Thomas | Popular writer and motivator |
| Chemistry | |
| Prof. Thomas Mathew | Senior Scientist (Member of Nobel Prize winning group), Loker Hydrocarbon Research Institute, University of Southern California |
| Dr. Suresh Das | Vice President, KSCSTE, Trivandrum |
| Dr. R. Damodaran | Professor, IIT Madras |
| Dr. G. Vijay Nair | Organic Chemistry Section, National Institute of Interdisciplinary Science and Technology (NIIST), CSIR. Trivandrum |
| Prof. Raveendran P. | Asso. Prof., Department of Chemistry, University of Calicut |
| Dr. Nishanth K.G | Materials Science and Technology Division, CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram |

| | |
|---------------------------|---|
| Prof. Muraleedharan K. M. | Department of Chemistry, IIT Madras, Chennai |
| Dr. P.S. Harikumar | Scientist F & Head, Water Quality Division, Centre for Water Resources Development and Management, Kozhikode. |
| Prof. Rani Joseph | Emeritus Professor, Department of Polymer Science and Rubber Technology, Cochin University of Science and Technology, Cochin, Kerala, India |
| Mini P Balakrishnan | Head, Department of Physics, Providence Women's College, Kozhikode |
| BOTANY | |
| Dr. V. S. Ramachandran | Professor (Rtd.), Department of Botany, Bharathiar University Coimbatore |
| Dr. Sharad Kamble | Department of Botany, Goa University, Goa |
| Dr. Sunoj kumar. P | Department of Botany, University of Calicut, Calicut University P.O, Malappuram District, Kerala |
| Dr. A.K. Pradeep | Department of Botany, University of Calicut, Calicut University P.O, Malappuram District, Kerala |
| Dr. G. Gnanasekaran, | Botanical Survey of India (BSI), Southern Regional Centre (SRC), TNAU Campus, Lawley Road, Coimbatore |
| Dr. Santhosh Nampy | Director, Directorate of Research, College Development Council University of Calicut, Kerala |
| ZOOLOGY | |
| Dr. N. T. Sajan | Dy. Conservator of Forests, Social Forestry Extension Division , Mathottam |
| Dr. T.P. Rajagopal | Professor, Dept. of Pulmonary Medicine, Calicut Medical College |
| P.P. Muhammed Musthafa | MD, Metro International Cardiac Centre, Calicut |
| Dr. P. V. Narayanan | Principal, Medical College, Calicut |
| ENGLISH | |
| Mr. Rafeeq Ahmed | Famous Lyricist and Poet, Kerala State Film Award Winner |
| Mr. Veerankutty | Renowned Malayalam poet, Associate Professor in Dept. of Malayalam Govt. College Madappally |
| COMPUTER SCIENCE | |
| Mr Haris N.P. | CEO, Baabte System Solutions , |
| Prof. Dilbagh Singh Broca | XLRI - Xavier School of Management , Jamshedpur |
| Dr. Sebastian M. P. | Chairperson, Information Technology & Systems, IIM Calicut |
| Dr. Lajish V.L. | Asst. Prof., Department of Computer Science, University of Calicut |
| Dr. Ragagopalan Anayath | System Analyst, NIT Calicut |

| PSYCHOLOGY | |
|----------------------------|--|
| Dr. C. Jayan | Head, Department of Psychology, University of Calicut |
| Dr . Sandeesh | Clinical Psychologist. Govt. Mental Hospital, Calicut |
| MASS COMMUNICATION | |
| Mr. Benny Kurian | Junior Chamber International Certified Head Trainer |
| Mr. C. Krishnakumar | Programme Producer, Akashavani |
| Dr. Lissy Manjooran | Head of the Department of English, Malabar Christian College |
| BUSINESS MANAGEMENT | |
| Mr. N. Prasanth I.A.S | District Collector, Calicut |
| Mr. Puneet Jain | Director, ShreeHans Group |
| Mr. T.N.M Jawad | CEO, TNM Online Solutions |
| Mr. Radhakrishnan K.G. | Director, WebNamaste |
| Dr. M. K. Muneer | Honourable Minister of Social Welfare and Justice |
| Adv. M. Veerankutty | Chairman, Minority Rights Commission |
| Dr. T.P Ashraf | Director, KSSM |
| Dr. P. Mohan | Pro Vice Chancellor, Calicut University |
| Mrs. KC Rosakutty | Chairperson, Kerala State Women's Commission |
| Mr. Imamul Hassan | Winner , Sarvodaya Award for Social Service |
| MALAYALAM | |
| K. P. Ramanunni | Short Story writer, Novelist |
| T. K. Santhosh | Director |
| V. E. Balakrishnan | Course Director, Calicut Press Club |
| T. D. Ramakrishnan | Novelist |
| Indumenon | Novelist |
| P K Paarakadavu | Short Story Writer |
| M. M. Basheer | Writer |
| Shihabudeen Poythumkadavu | Short Story Writer |
| Rishikesh | <i>Swathandramalayalam</i> Computing Software Engineer |
| Praveen Kumar | <i>Swathandramalayalam</i> Computing Software Engineer |

2.4. Teacher Quality

Faculty Members Appointed During 2015-16

| Permanent Teachers (Aided) | | |
|----------------------------|----------------------|----------------------|
| Department | Name of faculty | Qualification |
| Botany | Dr. Binu Thomas | MSc., M.Phil., Ph.D. |
| Physics | Dr. Shinto P. Mathew | M.Sc., Ph.D., PDF |
| | Dr. Nijesh K. James | M.Sc., Ph.D., PDF |
| Chemistry | Dr. Aneesh P. | M.Sc , Ph.D. |
| | Dr. Jomon Mathew | M.Sc , Ph.D. PDF |

Details of Faculty in Respect of Qualification as on 1st July 2016

| Highest Qualification | Associate Professor | | Assistant Professor | | Total |
|----------------------------|---------------------|--------|---------------------|--------|-------|
| | Male | Female | Male | Female | |
| Permanent Teachers (Aided) | | | | | |
| PhD | 24 | - | 11 | 7 | 42 |
| M. Phil | 3 | - | 4 | 2 | 9 |
| PG | 2 | - | 10 | 8 | 20 |
| Management-Paid Teachers | | | | | |
| PhD | - | - | - | - | - |
| M. Phil | - | - | 1 | 2 | 3 |
| PG | - | - | 8 | 24 | 32 |
| Guest Faculty | | | | | |
| PhD | - | - | 1 | 1 | 2 |
| M. Phil | - | - | 2 | - | 2 |
| PG | - | - | 2 | 7 | 9 |
| Total | 29 | - | 39 | 51 | 119 |

2.4.10 Details of Participation in Staff Development Programmes

| Faculty / Staff Development Programmes | Number of faculty benefitted |
|---|------------------------------|
| Refresher courses | 4 |
| Orientation programmes | 6 |
| Workshops | 12 |
| Orientation programmes organized by college | 102 |

2.6. Student Performance and Learning Outcomes

Programme-wise Pass Percentage and Completion Rate of UG programmes (2015-16)

| Programme | Students Appeared | Pass % | Distinction (Nos.) |
|----------------------------|-------------------|--------|--------------------|
| BA Economics | 56 | 85.7 | 25 |
| BA English | 32 | 93.8 | 25 |
| B.Sc Mathematics | 48 | 93.8 | 38 |
| B.Sc Physics | 46 | 93.5 | 34 |
| B.Sc Chemistry | 42 | 90.5 | 31 |
| B.Sc Botany | 32 | 93.8 | 29 |
| B.Sc Zoology | 32 | 87.5 | 23 |
| B.Com Finance | 60 | 91.7 | 44 |
| BCA | 24 | 95.8 | 10 |
| B.Sc Computer Science | 23 | 91.3 | 11 |
| BBA | 28 | 68 | 8 |
| B.Com Computer Application | 36 | 75 | 13 |

Programme-wise Pass Percentage and Completion Rate of PG programmes (2014-15)

| Programme | Students Appeared | Pass % | Distinction (Nos.) |
|------------------|-------------------|--------|--------------------|
| MA Economics | 18 | 94 | 5 |
| MA English | 20 | 80 | 8 |
| M.Sc Mathematics | 21 | 86 | 8 |
| M.Sc Physics | 11 | 90 | 4 |
| M.Sc Chemistry | 12 | 91 | 7 |
| M.Sc Botany | 11 | 91 | 6 |
| M.Sc Zoology | 10 | 70 | 7 |
| M.Com | 19 | 90 | 13 |
| MSW | 18 | 61 | 0 |
| M.Sc Statistics | 9 | 89 | 0 |

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1.5. Collaborative Research

- **Dr. Sabu K. Thomas**, Associate Professor in the P.G. & Research Department of Zoology has begun a collaborative research with **Dr. Ilkka Aulis Hanski**, Metapopulation Research Group, Department of Biological and Environmental Sciences, University of Helsinki, Finland.

3.1.8. National Conferences/Seminars/Workshops Organised by the College

National Seminars/ Conferences/Workshops Conducted by the College (2015-2016)

| Seminars/ Conferences/ Workshops | Resource Persons | Date |
|---|--|------------------------|
| COMMERCE | | |
| UGC Sponsored National Seminar on <i>IFRS in India : Opportunities and Challenges</i> | <ul style="list-style-type: none"> ▪ CA Mohan R Levi, Finance Director, Ellucian Higher Education Systems ▪ Dr. B Johnson, Asso. Prof. DCMS, Calicut ▪ CA Ramakrishnan V, Chartered Accountant ▪ Dr. Rajesh S P, Asso. Prof. Chinmaya Institute of Technology, Kannur ▪ Dr. T Mallikarjunappa, Professor, Manglore University | 3 & 4 March, 2016 |
| ECONOMICS | | |
| UGC Sponsored National Seminar on <i>Displacement for Development</i> | <ul style="list-style-type: none"> ▪ CR Neelakantan, Renowned Social Activist ▪ Mr. G Chandramouli, Managing Director, Kannur International Airport ▪ Prof. T P Kunhikannan, Malayalam University ▪ Dr. Manjula K, Asso. Professor, M A College, Kothamangalam ▪ Mr. Arun Kumar TA, Asst. Professor, Govt. College, Kattappana ▪ Mr. Jasir C, Convener, Anti Eviction Forum. Calicut Airport | 28 March, 2016 |
| PHYSICS | | |
| UGC Sponsored National Seminar on <i>Frontiers of Materials Science (NASFOMS)</i> | <ul style="list-style-type: none"> ▪ Dr M K Ravi Varma, HOD Physics, NIT Calicut ▪ Dr Jacob Philip, Amal Jyothi College of Engineering, ▪ Dr Kishore Sridharan, NIT Surathkal ▪ Dr Nandakumar, M G university ▪ Dr Reji Philip, RRI Bangalore | 24 & 25 February, 2016 |
| CHEMISTRY | | |
| UGC Sponsored National Seminar on <i>Green Strategies and Technologies</i> | <ul style="list-style-type: none"> ▪ Dr. G. Vijay Nair Organic Chemistry Section, National Institute of Interdisciplinary Science and Technology (NIIST) CSIR. Trivandrum ▪ Prof. Raveendran P., Associate Professor, Department of Chemistry, University of Calicut ▪ Prof. Rani Joseph, Emeritus Professor, Department of Polymer Science and | 7 & 8 February 2016 |

| | | |
|--|---|---------------------|
| | <p>Rubber Technology, Cochin University of Science and Technology</p> <ul style="list-style-type: none"> ▪ Dr. P. S. Harikumar, Scientist F & Head, Water Quality Division, Centre for Water Resources Development and Management, Kozhikode. ▪ Prof. Muraleedharan K. M., Department of Chemistry, IIT Madras ▪ Dr. Nishanth K.G.; Materials Science and Technology Division, CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), | |
| BOTANY | | |
| UGC Sponsored national workshop on <i>Botanical Nomenclature</i> | <ul style="list-style-type: none"> ▪ Dr. V. S. Ramachandran, Professor (Rtd.) Department of Botany, Bharathiar University Coimbatore ▪ Dr. Sharad Kamble, Department of Botany, Goa University ▪ Dr. Sunoj Kumar. P., Department of Botany, University of Calicut ▪ Dr. A.K. Pradeep, Department of Botany, University of Calicut ▪ Dr. G. Gnanasekaran, Botanical Survey of India (BSI), Southern Regional Centre (SRC), Coimbatore ▪ Dr. Santhosh Nampy, Director, Directorate of Research & College Development Council, University of Calicut | 09 to 11 March 2016 |
| UGC assisted National Seminar on <i>Autonomy and Quality Assurance</i> | <ul style="list-style-type: none"> ▪ Dr. M. Sabu, Director, IQAC, University of Calicut ▪ Mr. B. S. Ponmudiraj, Regional Co-ordinator, NAAC ▪ Dr. Joe G. M. Jesudurai, Professor, Loyola College (Autonomous), Chennai | 27 February 2016 |

Major/Minor Projects Sanctioned since 2015-16

| Invigilator | Title | Agency and Period | Amount (Rs.) |
|-----------------------------------|---|-----------------------|--------------|
| Dr. Tania Francis | Preparation and Characterisation of HDPE/ Nanochitosan/ Nanohydroxyapatite Bio Composites | SRS- KSCSTE 2016-2019 | 25,25,400/- |
| Dr. Manoj Mathews | Infrastructure Strengthening of Post Graduate and Research Department of Chemistry, St. Joseph's College Devagiri Calicut | SARD 2016-2019 | 26,01,024/- |
| Dr. Jose John Mallikasseri | Exploration of Silylene and Silene Chemistry and Applications in Catalysis: In Silico Approach | UGC 2016-2017 | 4,00,000/- |
| Dr. Saumya Varghese | Design of Phosphate, Silicate and Arsenate Potentioselective Electrode Based on Flotation and Preconcentration Of Hydrophobic Multi Component Ion Associates of Heteropoly Molybdate and Cationic Base. | UGC 2016-2017 | 4,90,000/- |

3.3. Research Facilities

Major Equipments Procured Since 2015-16

| Sl. No | Description | Value (Rs.) |
|--------|--|-------------|
| 1. | UV Visible Spectrophotometer | 3,82,500 |
| 2. | Rotary Evaporator | 3,75,000 |
| 3. | Gaussian 09 Multiprocessors 32 bit for Windows | 1,44,900/- |
| 4. | Server Lenovo | 2,24,500/- |

3.4. Research Publications and Awards

Research Publications

| Sl. No. | Bibliography | Impact factor | Journal ISSN No | National / International |
|---------|---|---------------|-----------------|--------------------------|
| 1. | K.M. Prabhu Kumar, Indira Balachandran, V.B. Sreekumar, K.S. Ramya, Satheesh George , &K.J. Dantas and Suma Arun Dev. 2015. <i>Gymnostachyumwarrieranum</i> (Acanthaceae), a new species from the Western Ghats of India, based on morphological | .359 | 0075-5974 | International |

| | | | | |
|----|--|-------|--|---------------|
| | and molecular data. Kew Bulletin. 70(2). | | | |
| 2. | Robi A.J., Satheesh George and K.V. Tushar. 2015. Litseaudayanii (Lauraceae) – A new species from Southern Western Ghats, India. Phytotaxa. 222(1)-0044-0050. | 1.318 | 1179-3155 | International |
| 3. | Sadheeshna Kumari S., Geetha S.P., Satheesh George and Indira Balachandran. 2015. Characterisation of Baliospermumsolanifolium (Burm.) Suresh. Genotypes for Morphological Traits and Propagation Efficiency. Devagiri Journal of Science. 1(1)-61-69. | | 2454-2091 | International |
| 4. | Manudev K.M. & Santhosh Nampy 2016. Lectotypification of <i>Arisaemaconsanguineum</i> Schott (Araceae). <i>Candollea</i> 71: 23-26. | | ISSN : 0373-2967 – Online ISSN : 2235-3658 | International |
| 5. | Syam Radh S., Santhosh Nampy & Manudev K.M. 2016. A synopsis of the genus Amischotolype (Commelinaceae) in India with one new record, A. monosperma (C.B. Clarke) I.M. Turner from Andaman & Nicobar Islands and lectotypification of A. hookeri (Hassk.) H. Hara. International Journal of Advanced Research (2016), Volume 4, Issue 4, 427-434. | | ISSN 2320-5407 | International |
| 6. | Manudev, K.M. & Santhosh Nampy 2016. Neotypification of <i>Arisaemamurrayi</i> (J. Graham) Hook. (= <i>Arum murrayi</i> J. Graham) (Araceae) <i>Taiwania</i> 61(1): 58-60. | | ISSN 0372-333X | International |
| 7. | Joseph, S.M., Manudev, K.M. , Alfred Joe & S. Nampy 2016. <i>Commelinaafricana</i> L. subsp. <i>zanzibarica</i> Faden, a new record of an African species of Commelinaceae from Asia. <i>Rheedea</i> 25(2): 153-155. | | ISSN 097 1-2313 | International |
| 8. | Udayan, P.S., Robi, A.J., Manudev, K.M. & Sujana Pal, P. 2016. <i>Cuscutakrishnae</i> (Convolvulaceae), a new species from Southern Western Ghats, Kerala, India. <i>Webbia</i> http://dx.doi.org/10.1080/00837792.2015.1119408 | | ISSN- 0974-1992 | |
| 9. | Dutta, S. & Manudev K.M. 2015. (111) Proposal to amend Recommendation 40A.3. <i>Taxon</i> 64(6): 1341. | 3.3 | ISSN 0040-0262 (Print); ISSN: 1996-8175 | |

| | | | | |
|-----|---|--|---|---------------|
| | | | (Online) | |
| 10. | Manudev, K.M. & SanthoshNampy 2015. <i>Arisaemapeltatum</i> (Araceae): an endemic cobra lily recollected after type collection from southern Western Ghats, with notes on its taxonomic status. <i>ENVIS News Letter</i> 20(1): 4. | | ISSN-0974-1992 | |
| 11. | Manudev K.M., A.J. Robi&SanthoshNampy 2015. <i>Eriocaulonbiappendiculatum</i> , a new species of Eriocaulaceae from southern Western Ghats, India. <i>Edinburgh Journal of Botany</i> 72 (2): 219–223. | | ISSN 0960-4286 (print) ESSN 1474-0036 (online) | |
| 12. | Manudev K.M., SanthoshNampy& P.G. Arunkumar 2015. <i>Arisaemaciliatum</i> H.Li var. <i>liubaense</i> Gusman& Gowda (Araceae), a new record of India. <i>Pleione</i> 9(1): 226 - 230. | | ISSN 0973-9467 | |
| 13. | Binu Thomas, Chinchu Krishna, M., Anish Babu, V.B. and Antony V.T. 2016. Antidiabetic herbal formulations which are prepared from the leaves of some potential medicinal plants. <i>South Ind. J. Biol. Sci.</i> , 2(1); 9-13 | | ISSN: 2454-4787 | National |
| 14. | Murugeswaran, R., Rajendran, A., Binu Thomas and Venkatesan, K. 2016. Potential Plants of Southern Western Ghats of Coimbatore District, Tamil Nadu, India with special reference to Indian system of medicine. <i>Int. J. Biopharmaceut.</i> , 7(1): 24 - 34. | | ISSN: 0976-1047 | International |
| 15. | RenjiniHaridas, Manorama, S., Sindhu, S. And Binu Thomas 2016. Potential bioactive components of <i>Malaxis rheedei</i> SW. (Orchidaceae). <i>Int. J. Exp. Pharmacol.</i> , 6(1): 11-15. | | ISSN: 2248-9169 | International |
| 16. | Renjini Haridas, Manorama, S. and Binu Thomas 2016. Phytochemical characterization of potential bioactive compounds from medicinal orchid: <i>Malaxis Rheedei</i> SW. <i>Int. J. Pharmacol. Screen. Methods</i> , 6(2): 53-56. | | ISSN: 2249-7749 | International |
| 17. | Chithra, K.N., Chinju Shaji and Binu Thomas 2016. Evaluation of major phytochemical constituents of two edible fruit yielding species of Annonaceae: <i>Annona muricata</i> L. and <i>Annona</i> | | ISSN: 2320 -3862 | International |

| | | | | |
|-----|--|--|-------------------|---------------|
| | <i>reticulata</i> L. <i>J. Med. Plants Stud.</i> 4(4): 198-202 | | | |
| 18. | Binu Thomas and Nobin Mathew 2015. Ethnomedicines used against diarrhoea and dysentery by <i>Kattunayakkan</i> tribe of Nilambur, Malappuram District, Kerala. <i>mRNA</i> 4 (8&9): 11-16 | | ISSN: 2319-2747 | International |
| 19. | Binu Thomas and Rajendran, A. 2015. Exotic Chasmophytes of Southern Western Ghats of Coimbatore District, Tamil Nadu, India. <i>mRNA</i> 4(6&7): 20-26. | | ISSN: 2319-2747 | International |
| 20. | Binu Thomas and Nobin Mathew 2015. Therapeutic ferns utilized by tribe <i>Muthuvas</i> of Mannavan Shola Forest (Anamudi Shola National Park) of Idukki District, Kerala. <i>mRNA</i> 4(6&7): 03-08 | | ISSN: 2319-2747 | National |
| 21. | Binu Thomas and Rajendran, A. 2015. Medico-potential chasmophytes of Kanuvai hills, Southern Western Ghats of Coimbatore, Tamil Nadu, India. <i>Catholicate Journal of Studies and Research</i> , 4(1&2): 68-74. | | 2249-7544 | National |
| 22. | Robiya Mol and Binu Thomas 2015. Some Medico-Potential Climbers of Kottayam District, Kerala, India. <i>Int. J. Phyto. Pharm. Res.</i> , 5(4): 397-401. | | ISSN: 2249-7544 | International |
| 23. | Sharon Lizbeth Peter and Binu Thomas 2015. Some Medicinal Grasses in Thalappilly Taluk of Thrissur District, Kerala, India. <i>American J. Biol. Pharm. Res.</i> , 2(3): 135-138 | | ISSN: 2348-2184 | International |
| 24. | Chinchu Krishna, M. And Binu Thomas 2015. Ethnobotanical observations on tribe <i>Muthuvasin</i> Machiplavu area of Adimali region, Idukki District, Kerala, India. <i>Int. J. Pharmacotherapy</i> , 5(2): 95 - 100 | | ISSN: 2249-7765 | International |
| 25. | Divya, M.S. and Binu Thomas 2015. Potential ornamental Convolvulacean Members of Kottayam District, Kerala, India. <i>European J. Environ. Ecol.</i> , 2(3): 156-161. | | ISSN: 2393-9672 | International |
| 26. | Neethu Augustin and Binu Thomas . 2015. Medico-potential Ferns of Angamaly Region, Ernakulam District, | | ISSN: 2248 - 9142 | International |

| | | | | |
|-----|---|-------------|-------------------|---------------|
| | Kerala, India. <i>Int. J. Curr. Pharm. Clinical Res.</i> , 5(4): 207-211. | | | |
| 27. | Aparna Prasad and Binu Thomas 2015. Potential ornamental plants from Meenachil Taluk of Kottayam District, Kerala, India. <i>European J. Environ. Ecol.</i> , 2(1): 29-46 | | ISSN: 2393-9672 | International |
| 28. | Anish Babu, V.B., Antony, V.T. and Binu Thomas 2015. Ethno-pharmacological potentialities of some ornamental plants in the family Bignoniaceae. <i>J. Med. Plants Stud.</i> , 3(5): 141-143 | ISRA - 3.95 | ISSN: 2320 - 3862 | International |
| 29. | Jaya Vijayan, Ramachandran, V.S. and Binu Thomas 2015. Role of Botanic Garden for Conservation of Some fern species. <i>Life Science Archives (LSA)</i> 1(1): 138 - 141. | | ISSN: 2454-1354 | International |
| 30. | Omalsree, M., Prabhu Kumar, K.M., Sabu, M., Sunojkumar, P., Binu Thomas , Rajendran, A. and Sreenivas, V.K. 2015. A new species of <i>Striga</i> section Polypleurae (Orobanchaceae) from Southern Western Ghats of India. <i>Phytotaxa</i> 212(2): 163-168. | | ISSN: 1179-3163 | International |
| 31. | Haritha R. Nair, Binu Thomas , Anish Babu, V.B. and Antony, V.T. 2015. The role of selected sacred groves in the biodiversity conservation of Kottayam district, Kerala, India. <i>Plant Sciences Feed</i> , 5 (1): 1-15. | 0.565 | ISSN: 2231-1971 | National |
| 32. | Renjini Haridas, Thangapandian, V. and Binu Thomas 2015. Ethnomedicinal knowledge of tribe-Kattunayakansin Nilambur forests of Malappuram District, Kerala, India. <i>Int. J. Phytotherapy</i> 5 (2): 76-85. | | ISSN: 2249-7722 | International |
| 33. | Jikku Maria Joseph and Binu Thomas 2015. Chasmo phyticpteridophytes in Urumbikkara Hills of Idukki District, Kerala, India. <i>Int. J. Res. Rev.</i> 2(2) 41-45. | | ISSN: 2349-9788 | International |
| 34. | Jikku Maria Joseph, Binu Thomas , Rajendran, A. and Prabhu Kumar, K.M. 2015. Medicinal Chasmophytes of | | ISSN: 2248-9185 | International |

| | | | | |
|-----|--|-------|------------------|---------------|
| | Urumbikkara Hills, Idukki District, Kerala, India. <i>Asian J. Pharm. Sci. Tech.</i> 5(1) 11-17. | | | |
| 35. | Jikku Maria Joseph, Binu Thomas and Rajendran, A.2015. Diversity of chasmophytes in Urumbikkara hills of Idukki District, Kerala, India. <i>Europ. J. Environ. Ecol.</i> , 2(1): 29-37 | | ISSN: 2393-9672 | International |
| 36. | Chithra, K.N., Siji, K.P. and Binu Thomas . 2015. Phosphate Solubilizing Bacteria (PSB) and its priming effect on the germination and growth of <i>Abelmoschus esculentus</i> Linn. - A case study. <i>J. Sci.Bot.</i> 5(2): 71 - 76. | | ISSN: 2277-3290 | National |
| 37. | Tania Francis , "Separation of alcohol mixtures using pervaporation through Poly vinyl alcohol/chitosan Blends", Devagiri Journal of Science, 1(1), 2015, 24-29. | | ISSN - 2454-2091 | International |
| 38. | Swapna V.P, Saranya.E.P, Nithya AB, Sabu Thomas, Ranimol Stephen* , Properties of Polysulfone/Halloysite Nanocomposite Membranes: Prepared by Phase Inversion Method, Macromolecular Symposia, 2016 (Accepted) | .913 | ISSN – 1022-1360 | International |
| 39. | Swapna V.P, Ranimol Stephen* , Selvin Thomas P, Suresh K.I., Saranya V, Rahana M.P, Thermal Properties of Poly(vinyl alcohol)(PVA)/Halloysite Nanotubes Reinforced Nanocomposites, <i>International Journal of Plastics Technology</i> , 2015, DOI: 10.1007/s12588-015-9106-3. | | ISSN – 0972-656X | International |
| 40. | Divya Susan Philips, Sivaramapanicker Sreejith, Tingchao He, Nishanth Venugopal Menon, Palapuravan Anees, Jomon Mathew , Sreedharan Sajikumar, Yuejun Kang, Mihaiela Corina Stuparu, Handong Sun, Yanli Zhao and Ayyappanpillai Ajayaghosh; A Three-Photon Active Organic Fluorophore for Deep Tissue Ratiometric Imaging of Intracellular Divalent Zinc: <i>Chemistry–An Asian Journal</i> , 2016, DOI: 10.1002/asia.201600170 | 4.59 | ISSN : 18614728 | International |
| 41. | Jomon Mathew , Yumiko Nakajima, Yoong-Kee Choe, Yasuko Urabe, Wataru Ando, Kazuhiko Sato, Shigeru Shimada; Olefin | 6.567 | ISSN 13597345 | International |

| | | | | |
|-----|--|-------|---|-------------------|
| | Hydrosilylation Catalyzed by Cationic Nickel(II) Allyl Complexes: Non-Innocent Allyl Ligand-Assisted Mechanism: Chemical Communications 2016, 52, 6723. | | | |
| 42. | Anjali A and Thomachan K T – “ <i>A long run relationship between gold price and inflation – Evidence from the Indian experience</i> ”. International Journal of Research- Granthaalayah. Vol3 (Iss6) June 2015. | | ISSN 2350- 0530(OO ISSN2394 -3629(P) | Internati onal |
| 43. | Anjali A and Thomachan K T – “Gold price and exchange rate – An analysis of long run relationship”. International Journal of Engineering Sciences & Management research 2(6) June 2015. | | ISSN2349 -6193. | Internati onal |
| 44. | T Mohamed Nishad and K T Thomachan – “ <i>An Empirical Relation Between Indian Capital Market & Banking sector</i> ”. International Journal of Research Science & Management, 2(11) November 2015, | 2.138 | ISSN:234 9-5197 | Internati onal |
| 45. | T Mohamed Nishad and K T Thomachan - “ <i>How Volatile is Indian Stock Market? A Study Based on Selected Sectoral Indices</i> ”. International Journal of Research – GRANHAALAYAH, Vol 3(Iss 12): December2015 | 2.035 | ISSN- 23500530 (O) ISSN 2394- 3629(P). | Internati onal |
| 46. | Umasankar Meesala, S. P. Mathew and S. N. Kaul, Novel positive exchange bias effect in compacted Ni ₃ Al/NiO core/shell nanoparticles. Journal of Alloys and Compounds, 685, 112 (2016) | 3 | ISSN: 0925-8388 | Internati onal |
| 47. | M. Eckshtain-Levi, E. Capua, S. Refaely-Abramson, S. Sarkar, Y. Gavrilov, Shinto P. Mathew , Y. Paltiel, Y. Levy, L. Kronik and Ron Naaman Cold Denaturation induces inversion of dipole and spin transfer in chiral peptide monolayers. , Nature Communications, 7, 10744 (2016) A | 11.33 | ISSN : 2041-1723 | Internati onal |
| 48. | V. Kiran, Shinto P. Mathew , S. R. Cohen, I. H. Delgado, J. Lacour and Ron Naaman,Helicenes – A new class of organic spin filter. Advanced Materials, 28, 1957 (2016) | 18.96 | ISSN: 1521-4095 | Internati onal |
| 49. | P. C. Mondal, N. K. Uriel, Shinto P. Mathew , F. Tassinari, C. Fontanesi and Ron Naaman,Chiral conductive polymers as spin filters., Advanced Materials, 27, 1968 (2015) | 18.96 | ISSN: 1521-4095 | Internati onal |

| | | | | |
|-----|--|------|-------------------------------|---------------|
| 50. | Nijesh Kunnamkuzhakkal James , Tim Comyn, David Hall, Laurent Daniel, Annette Kleppe, Sybrand Van Der Zwaag, Wilhelm Albert Groen: Analysis of the state of poling of lead zirconate titanate (PZT) particles in a Zn-ionomer composite; Journal of Ferroelectrics, vol. 493, pp 139-150 | 2.07 | ISSN: 0015-0193 | International |
| 51. | Reena, G. (2015) . Personal effectiveness as dependent variable in multiple regression analysis upon Organizational culture, Quality of work life and Job attitude . PRATIBIMBA.15 (1). | | ISSN 0972-5466 | National |
| 52. | Deepa Mary , Manikandan K, & Smrithi,M Personality and meaning in life of university students, International journal of social science and interdisciplinary research, vol 4(11), November 2015, | | ISSN 2277-3630 | International |
| 53. | Thomas K. Sabu and SathiandranNithya 2016: Comparison of the arboreal dung beetles (coleoptera: scarabaeidae: scarabaeinae) of the wet and dry forests of the Western Ghats, India. The Coleopterists Bulletin, 70(1): 1–5. 2016 | .575 | 1938-4394 | International |
| 54. | Sathiandran, N., S.K. Thomas & A.T. Flemming (2015). An illustrated checklist of dung beetles (Coleoptera: Scarabaeinae) from the Periyar Tiger Reserve, Kerala, India. Journal of Threatened Taxa 7(15):8250–8258; http://dx.doi.org/10.11609/jott.2466.7.15.8250-8258 | | 0974-7907 | National |
| 55. | Nithya Sathiandran, Sabu K. Thomas and AlbinT.Flemming 2015 : Forest vegetation types related variation in the diversity and community structure of dung beetles (Coleoptera: Scarabaeidae: Scarabaeinae) in the moist south Western Ghats. ENTOMON 40 (4): 199-208 (2015) | | 0377-9335 | National |
| 56. | Ajitha K. V and Boby Jose (2015) Seasonal Abundance of Waterfowls, Belongs to Various Ecological Groups in MuriyadKole Wetland, Thrissur, Kerala, International Journal of Science and Research (IJSR) | | ISSN (Online): 4 (12);1232-36 | International |
| 57. | Dr. Baby Chacko , Some properties of almost perfectly continuous functions in topological spaces, International | | ISSN 1312-7594 | international |

| | | | | |
|-----|---|-------|---------------------|-------------------|
| | Mathematical Forum Vol. 10, no.3, 2015 pp 143-156 | | | |
| 58. | Dr. Baby Chacko , Somewhat r-continuous and somewhat r-open functions, International Journal of Pure and Applied Mathematics Vol.100, no. 4, 2015, pp 507-524 | | ISSN 1311-8080 | internati onal |
| 59. | Dr. Baby Chacko , On minimal regular open sets and maps in topological spaces, Journal of Computer and Mathematical Sciences Vol.6(4), 2015, pp 182-192 | | ISSN 0976-5727 | internati onal |
| 60. | Dr. T.K.Muraleedharan , Some remarks on spectral synthesis sets, Ukrainian mathematical journal, 67(10)(1611-1617),2016 | 0.236 | 0041-5995 | internati onal |
| 61. | Mr. Jaison Joseph , Some remarks on spectral synthesis sets, Ukrainian mathematical journal, 67(10)(1611-1617),2016 | 0.236 | 0041-5995 | internati onal |
| 62. | Dr. Anjaly Jose , Invertibility of the Related Spaces of a Fuzzy Topological Space, Thai Journal of Mathematics, 13(2), 277-289 (2015). | | 1686-0209 | internati onal |
| 63. | Dr. C. V. Abraham , Subverting the Stereotypes: A Reading of Jaishree Misra's Ancient Promises. IOSR International Journal of Science and Humanities. Vol.20. Issue 7. July 2015. 16-19. | | ISSN: 2279-0845. | internati onal |
| 64. | Dr. C. V. Abraham , The War of the Sexes: Dimensions of Rape and Adultery in Anita Nairs Mistress. Indian Journal of Postcolonial Literatures. Vol 15. Issue 1. June 2015.102-108. | | ISSN 0974-7370. | National |
| 65. | Dr. C. V. Abraham , Love, Sex and Marriage: Demystification through Counter Discourse. Literaria: An International Journal of New Literature Across the World. Vol.5. Issue 1-2. Jan-Dec 2015. | | ISSN: 2229-4600. | Internati onal |
| 66. | Saritha KC , Geethanjaliyile Mystic Kavi – Tagore,Bharatha Pathrika,Vol.6,Issue 4-5, April-May2015,TVM-38. | | ISSN 2277-5471 | National |
| 67. | Saritha KC , Sabarmathidooreyanu- Oru Dhvani Padam,Explorations,Bharatheeya soundarya Sasthram Samkalika Vayanakal,Vol.5,Lakam.4, ,Oct 2015.Dept of Malayalam Devamatha College Kuravilagad,Kottayam33 | | ISSN 2229-4783 | National |
| 68. | Saritha KC , Aathmabeli : Edasserykavithakalil, Bharatha | | ISSN 2277-5471 | National |

| | | | | |
|-----|---|--|-----------------|----------|
| | Pathrika, Vol.6, Issue 11-12, Nov-Dec 2015, TVM-38. Vol 3, No 1 | | | |
| 69. | Saritha KC, Dhwanipadam 1128 il Crime 27 il, Malabar Reserch Manuel, April 2015, Dept of Malayalam. Malabar Christian College, Kozhikode. | | ISSN 2320-947X | National |
| 70. | Saritha KC , Edasserikavithakalile Beli ,Sahithyalokam Supplyment, vol.44, Lakam.1, Feb 2016, Kerala sahithya academy Thrichur, Kelala Sarkkar samskarika vakuppu. | | ISSN 2319-3263, | National |
| 71. | Reshma MK , Padmanabhan Kathakalile Rasnubhoothi, Malabar Research Manuel, November 2015, Dept of Malayalam .Malabar Christian College, Kozhikode. Vol 3, No 2 | | ISSN 2320-947X | National |
| 72. | Reshma MK , Viruda dwandagalude Abhimugeekaranam Madavikuttiyude Kathakalil, Sahithyalokam Supplyment, vol.44, Lakam.1, Feb 2016, Kerala sahithya academy Thrichur, Kelala Sarkkar samskarika vakuppu. | | ISSN 2319-3263 | National |
| 73. | Soumya TK , Paristhithi Darshanam Surendrante Novelukalil, Sahithyalokam Supplyment, vol. 44, Lakam.1 , Feb 2016, Kerala sahithya academy Thrichur, Kelala Sarkkar samskarika vakuppu. | | ISSN 2319-3263 | National |

SEMINAR / CONFERENCE PROCEEDINGS

- Anju K Sasidharan, **Manoj Mathews** and Quan Li; Synthesis and characterization of nematic liquid crystal from a bent-core molecular structure, Proceedings of *National Seminar on Polymers and Composites*, 9-10 September, 2015, Nirmalgiri College, Koothuparamba, Kannur.
- **Manoj Mathews**, Ammathnadu S. Achalkumar and Quan Li, Self-assembled ID semiconductors: Liquid Crystalline columnar Phase, chapter 7, in book Anisotropic nanomaterials preparation, properties and applications, Springer International Publishing, Switzerland, 2015, ISBN 978-3-319-18292-6 (Print), 978-3-319-18293-3
- **Vineesh P.J.** (2015): Diversity and succession of staphylinidae beetles in cattle dung in Govindapuram, Kozhikode district, Kerala, India. In Biodiversity and Evaluation: Proceedings of the International Conference on Perspectives and Paradigm shifts. Bijoy nandan et al. eds.) held from 2 to 3 of December 2015. ISBN 978-93-80095-70-7

- **Jisha Jacob**, A study of impact of pollution on fishes in Chaliyar river- A Preliminary study. Proceedings of International conference on environmental stress and aquatic animal health (ESA AH-2016). Pp: 30-34. Govt. College for Women, Trivandrum. ISBN: 978-93-5258-826-8.
- **Asha Mathew**: "Financial Inclusion in Rural India : Experiences & Experiments" , UGC National Seminar Proceedings, Research & Publication Division, Govt. College, Kodencherry, 2015, ISBN-061-15-167-06.
- **Thomachan K T** – "Hypothesis Testing- Basic Principles and Procedures". Proceedings, Research Methodology in Social Science. Published by PG Department of economics, Nirmalagiri College, 2015 ISBN 978-81- 931227-3-0.
- **Thomachan K T** and Anish Sebastian: "Financial Development and Economic Growth in India - A Cointegration Analysis" Education, Innovation and Entrepreneurship- A Development Perspective. C K G Memorial Government College., March 2015, ISBN 978-81-928395-1-6
- **Manudev, K.M.** & Santhosh Nampy 2015. A taxonomic revision of the genus Arisaema (Araceae) in India. Silver Jubilee Conference of IAAT and Council Meeting of IAPT International Seminar on Advancements in Angiosperm Systematics and Conservation. 19- 21 November. Department of Botany, University of Calicut, Kerala.
- **Thomachan K T** and **Anish Sebastian** "Financial Development and Economic Growth in India – A Co integration Analysis". Education, Innovation and Entrepreneurship – A Developmental Perspective, C.K.G.M. Govt. College Perambra, March 2015. ISBN 9788192839516
- **Jasmine VM**, Presented a paper titled "Investors attitude and preference towards Stock Market" in the National Workshop on "Research Methodology & SPSS organised by PG Department of commerce and management studies, Sreekrishnapuram V T Bhattathiripad College, Mannampetta, Palakkad on 17th to 19th November 2015. ISBN: 978-81-8411-567-3
- **Shobha CV**, A paper Presented and published on the topic Pradhanmantri Jan-dhan Yojana - An Innovative step towards financial inclusion in the UGC sponsored National Workshop on Research Methodology & SPSS organised by post Graduate department of commerce and management studies, Sreekrishnapuram V.T. Bhattathiripad college, Mannampatta, Palakkad (a handbook of commerce) sonali Publication on 17th to 19th November 2015. ISBN: 978-81-8411-567-3

BOOKS AND CHAPTERS IN BOOKS OF THE FACULTY

- **Binoy Varakil**, My Unlucky Girl and other poems, Authors Press Publications, Kozhikode, 2015 ISBN- 9781517436753
- **Binoy Varakil**, Stone Rivers (Poems), Create Space, Amazon, USA, 2015, ISBN- 1512138967
- **Binoy Varakil**, Birds and a Girl (Poems), Create Space, Amazon, USA, 2015, ISBN- 1477406247
- **Binoy Varakil**, A Sparrow, Squirrel and an Old Tree, Create Space, Amazon, USA, 2015 ISBN-151222331
- **Binoy Varakil**, Here is Light, Create Space, Amazon, USA, 2015 ISBN-1512312568
- **Binoy Varakil**, The River that carries Gold, Create Space, Amazon, USA, 2015 ISBN-1514311097
- **Binoy Varakil**, Mountains, Rivers and Soldiers, Penguin Random House, USA, 2015 ISBN-1514131935
- **Binu Thomas**, and A. Rajendran. 2016. Chasmophytes: A Floristic Appraisal. LAP Lambert Academic Publishing, Germany. ISBN: 978-3-659-79994-5
- K. E. George, Rani Joseph, M. Ushamani, **Tania Francis**, Neena George, Ajalesh B Nair, Engineering Chemistry : Theory and Practice, Educational Publishers and Distributors, India, , 2015 ISBN 81-87198 -23-0
- **Binu Thomas** and Rajendran, A. 2015. Medico-potential chasmophytes of Madukkarai Hills, Southern Western Ghats of Coimbatore, Tamil Nadu, India. In: Rajendran, A. and Aravindhan, V. (Ed.), Biodiversity Conservation Aspects and Prospects. LAP LAMBERT Academic Publishing, Germany. pp. 169 – 177 ISBN: 978-3-659-69584-1
- **Binu Thomas** and Rajendran, A. 2015. Chasmophytes: A potential source of medicine. In: Parimelazhagan, T. (Ed.), Modern methods in phytomedicine. Daya Publishing House, New Delhi, India. pp. 321 – 343 ISBN: 978-93-5124-66-3-3
- **Manoj Mathews**, Ammathnadu S. Achalkumar, and Quan Li, Self-assembled 1D Semiconductors: Liquid Crystalline Columnar Phase, Chapter 7, In book Anisotropic Nanomaterials Preparation, Properties, and Applications, Springer International

Publishing, Switzerland, 2015, DOI: [10.1007/978-3-319-18293-3_7](https://doi.org/10.1007/978-3-319-18293-3_7). ISBN: 978-3-319-18292-6 (Print) 978-3-319-18293-3 (Online).

Details of faculty served as Resource Persons/ Experts/ Chairpersons (2015-16)

| | Regional | National | International |
|------------------------|----------|----------|---------------|
| Paper presented | - | 27 | 12 |
| Resource Person | 6 | 16 | - |
| Chairperson | - | 3 | - |
| Attended | 9 | 87 | 3 |

Awards and Achievements of the Faculty & Students (2015-16)

1. **Manudev K.M., IAPT award** for the best paper presentation in the XXIV Annual Conference of Indian Association for Angiosperm taxonomy (IAAT) held at Department of Botany, University of Calicut, Kerala, on 19-21 November 2015.
2. **Dr. S. Nagesh and Mr. Dennis Joseph** received Best Paper award by International Journal of English and Literature (IJEL) 2015.
3. **Ms. Swapna V.P.**, Research Scholar, won Best Poster Award (ISCA Best Poster Award) in Material Science section in the 103rd Indian Science Congress held at University of Mysore, 3-7 January 2016.
4. **U.S. Aswin, R. Arjun Vinayak, P.M. Theertha Ramesh, H. Haritha, K. Arjun**, Excellence Award in National Robotics Championship held at IIT Mumbai – the only team from an Arts and Science college selected for the event.
5. **Ms. Deepa S.** MSc Zoology student, received the Best Paper Award at the International Conference on *Environmental Stress and Aquatic Animal Health*, 24th February, 2016.

Discoveries by the Faculty (2015-16)

▪ Species discovered New to Science

1. *Ceropegia Nampyana* Manudev *et al.* (*International Journal of Advanced Research*, 2015)
2. *Cuscuta krishnae* Robi *et al.* (*Webia*, 2016)
3. *Eriocaulon biappendiculatum* Manudev *et al.* (*Edinburgh Journal of Botany*, 2015)

▪ **Species Reported New to India**

1. *Amischotolype monosperma* (C.B.Clarke) I.M. Turner – (*International Journal of Advanced Research*, 2015)
2. *Commelina africana* L. subsp. *zanzibarica* Faden (*Rheedea*, 2015)
3. *Arisaema ciliatum* H.Li – (*Pleione*, 2015)

3.4.4. PhD Awarded under faculty

- Ms. Deepa K Baby - Chemistry
- Ms. Maya Devi J. – English

3.6. Extension Activities and Social Responsibility

- **Visit to the Tribal Colony:** The Department of Business Management conducted a visit to the tribal colony of Puthadi Village, Waynad, on 15 August 2015 and refurbished a kindergarten to highlight the importance of education in rural areas. Thirty students and six teachers of the Department visited the colony at a time when the colony was affected by monkey fever.
- **Chennai Relief:** The College Union 2015-16 with the support of the staff and students raised Rs. 1,25,000/- towards Chennai Flood Relief Fund.
- **Vayojana Dinam:** A rally was organized by the students of the college with the intention of making students aware of the needs and problems of the aged on 1 October 2015.
- **Christmas in Orphanage:** The students visited the orphanage named *Gurukulam* at Peruvayal in Calicut and celebrated Christmas with the inmates.
- **Hair Donation Camp:** A Hair Donation camp in association with “For You” Educational Charitable Trust, Kannur. was organized on 15 February 2016 in which 34 girl-students donated their hair for making wigs for cancer patients. Dr. P.V. Narayanan, Principal, Medical College Calicut was the chief guest of the programme.
- **Blood Donation Camp:** A Blood-Donation Camp was organised by the Department of Social Work with All Kerala Blood Donors’ Forum and Govt. Women and Child Hospital, Kottapparambu, Calicut on 21 March 2016.
- **Universal Children’s Day:** Universal Children’s day was celebrated by the Department of Social Work at Savio Higher Secondary School in collaboration with Child Line,

Calicut on 23 November 2015. An awareness class on child rights and abuse, drawing competition and elocution competition for high school students were organised

- **World aids day:** An awareness generation programme in collaboration with OISCA International and KASACS was organised on 1 December 2015 at Calicut railway station. A rally, distribution of red ribbons and brochures and an awareness class for railway workers were the highlights of the programme
- **Tobacco Free Campaign:** The Social Work Department organised a tobacco free campaign in Calicut Moffusil Bustand on 11 March 2016 in collaboration with the Govt Beach Hospital and National Tobacco Control Programme (NTCP). Awareness classes, distribution of badges and one to one campaign were conducted.
- **Organic Farming Promotion Programme:** Promotion of organic farming programme was organised for Kudumbashree units of 8 ward in the Peruvayal Panchayath on 12 April 2016. An awareness class on the importance of organic farming, bio fertilizers, collection of seeds with the support of agricultural department and sowing seeds were conducted.
- **Any Body Can Donate (ABCD):** ABCD was a campaign organised by the students of the Department of Economics to give awareness to the students on the need of donating organs after death.
- **Organic Cultivation:** The NSS units of the College ventured into Organic Vegetable Cultivation on the Campus for propagating organic farming. The sale proceeds are utilized for helping the Pain& Palliative Care Institute, Medical College, Calicut. The earnings raised were utilized for donating 9 wheel chairs to the Palliative care Institute, Medical College, Calicut.

3.7 Collaboration

- MOU with Malabar Botanical Garden and Institute for Plant Sciences, Calicut
- MOU with Regional Science Centre and Planetarium, Calicut
- MOU with Zoological Survey of India, Calicut
- MOU with Indian Institute of Spices Research, Calicut

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1. Physical Facilities

Additions to Infra-Structure Facilities (2015-16)

| Facility | Number |
|------------------|--------|
| Class rooms (UG) | 7 |
| Class rooms (PG) | 2 |
| Faculty rooms | 1 |
| Conference Hall | 1 |
| Toilets | 15 |
| Office room | 1 |
| Guest room | 1 |

Other additions to the facilities:

- WiFi connectivity has been extended to the entire campus
- The whole campus has been brought under CCTV surveillance
- LED Televisions were installed to display college news
- Access to safe drinking water has been enhanced by installing 10 more Water Purifiers
- Parking facility for both the staff and students has been extended.
- New Cafeteria
- With a view to enhancing facilities in the boy's Hostel, a new kitchen, separate sections for toilets and laundry have been constructed.
- More classrooms have been provided with LCD projectors
- A new reprographic machine and Printers were also procured.
- The existing PTA Hall with 200 seating capacity and one of the conference halls have been air-conditioned.
- Eight class rooms and a faculty room have been renovated by laying floor tiles.

4.2.8. Amount spent on Books and Journals

Books added to the Library

| No. of New Books | No of Printed Journals | Total Amount (Rs.) |
|------------------|------------------------|--------------------|
| 2073 | 125 | 8,03,550 |

CRITERION V: STUDENTS SUPPORT AND PROGRESSION

Details of Assistance from Students Welfare Fund (2015-2016)

| | |
|--|------------|
| Total amount collected during the year | Rs. 99,650 |
| No of Beneficiaries | 59 |
| Total amount disbursed | Rs. 87,725 |

Financial Assistance to Students from the Government or National Agencies

| Name of the Scholarship | No. | Amount |
|--|-----|-----------|
| Inspire | 10 | 8,00,000 |
| Higher Education | 187 | 45,50,000 |
| Prathiba Scholarship | 30 | 7,96,000 |
| Central Sector Scholarship | 6 | 96,000 |
| Post Matric Scholarship | 30 | 90,000 |
| State Merit Scholarship | 17 | 22,100 |
| District Merit Scholarship (DMS) | 13 | 16,250 |
| Suvarna Jubilee Merit Scholarship (SJMS) | 23 | 2,30,000 |
| C H Muhammed Koya Scholarship | 19 | 76,000 |
| Hindi Scholarship | 3 | 18,000 |
| Blind/PH Scholarship (BPHFC) | 5 | |
| Snehapoorvam Scholarship | 9 | 90,000 |
| CH MohammedKoya Girls Scholarship | 6 | 42,000 |
| University Merit Scholarship | 1 | 1,800 |
| Indira Gandhi Single Girl Scholarship | 12 | 3,72,000 |
| University Rank holders Scholarship | 5 | 1,55,000 |
| Rajive Gandhi National Scholarship | 1 | 30,000 |
| Prime Ministers Scholarship | 1 | 27,000 |

The details of UGC-NET/JRF Result (2015-16)

| Programme | NET | JRF |
|--------------|-----------|----------|
| Economics | 1 | 2 |
| Mathematics | 0 | 1 |
| Botany | 3 | 0 |
| Commerce | 2 | 0 |
| Social Work | 2 | 0 |
| Malayalam | 3 | 0 |
| Total | 11 | 3 |

University Ranks/ Positions (2015-16)

| Name of the student | Programme | Position |
|-----------------------|-------------------|----------|
| Ms. Anroopa Jacob | M.A. English | II |
| Ms. Manju A Nair | M.A. English | III |
| Ms. Gayathri Varma U | B.A English | I |
| Ms. Divya Rajeev | B.A English | II |
| Ms. Sindhu P. | MA Economics | I |
| Ms. Irfana P.P. | MA Economics | II |
| Mr. Nikhil Santhosh | MA Economics | III |
| Ms. Priya K. | B.Sc Mathematics | I |
| Ms. Ashlin Varkey | B.Sc Mathematics | II |
| Ms. Teena Mary Thomas | M.Sc. Mathematics | II |
| Ms. Bashitha V.B. | M.Sc. Chemistry | III |
| Ms. Chaithra M | B.Sc Botany | II |
| Ms. Amrutha Ravi T. | M.Sc. Zoology | I |

5.3. Student Participation and Activities

Fine Arts

The college was the runner up in both Zonal and University Arts Festival in 2015-16.

Prizes won in the University and National Level Arts Fests

| | I Position | II Position | III Position |
|-------------------------|------------|-------------|--------------|
| University Level | 15 | 18 | 5 |
| South Zone | 0 | 1 | 3 |
| National | 0 | 0 | 1 |

Ms. Athira K Krishnan Participated in 9th South Asian Fest 2016 conducted in Baba Saheb Bhimrao Ambedkar University Lucknow, 25 to 29 February 2016.

Sports

Vaishak S R of VI Semester (Zoology) **represented India** in the Paralimbs Indo – Sri Lankan Invitation Volleyball tournament held in Sri Lanka from 7th to 12th January 2016.

Medals Won during 2015-16

| Sl No | Category | Medals |
|--------------|----------------------------|---------------|
| 1 | National | 01 |
| 2 | Kerala State | 26 |
| 3 | Inter University | 04 |
| 4 | Calicut University | 47 |
| 5 | A Zone /Kozhikode District | 54 |
| | Total | 132 |

Major Sports Events Organized by the College (2015-16)

- Calicut University Athletic Meet
- All Kerala Inter Collegiate Basketball Tournament
- All Kerala Inter Club Cricket Tournament
- Devagiri Alumni Football Tournament
- Inter Department Tournaments
- Yoga: One month Yoga course for the staff and students
- Athletic Alumni Gathering

List of College Union Office Bearers (2015-16)

| | |
|-------------------------|--------------------------|
| The Chairman | Jishnu PV |
| The Vice Chairperson | Babina Raj |
| The General Secretary | Sanu Polly |
| The Joint Secretary | Basima Shana |
| The UUC | Midhun M K, Nevin Mathew |
| The Fine Arts Secretary | Adarsh M K |
| The Magazine Editor | Vishnu Ramachandran |
| The General Captain | Murshad |

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.3 Faculty Empowerment Strategy

The IQAC organised an orientation programme for the teaching staff by Dr. Sivaji Chakravorti, Director, NIT, Calicut on 23 February 2016.

6.4. Financial Management and Resource Mobilisation.

Abridged income and expenditure statement
ST.JOSEPH'S COLLEGE DEVAGIRI, CALICUT-673008
Annual Financial Statement for the year ending on 31-03-2016

| Sl. No. | Particulars | Receipts | Expenditure |
|---------|----------------------------------|--------------|--------------|
| 1 | Fees | 15111570.00 | 2003090.00 |
| 2 | Special Fees PD A/C | 1549433.00 | 844907.00 |
| 3 | University Fund | 434650.00 | 634650.00 |
| 4 | Salary | 98346669.00 | 98379057.00 |
| 5 | Others | 26098436.00 | 718340.00 |
| 6 | Scholarship | 230790.00 | 331487.00 |
| 7 | State Govt. Grant | 3911953.00 | 4193221.00 |
| 8 | NCC/NSS | 171525.00 | 171525.00 |
| 9 | University Exam Remuneration | 265953.00 | 547221.00 |
| 10 | Projects | 3552816.00 | 38000050.00 |
| 11 | UGC Grant | 9795833.00 | 11172990.00 |
| | | 159469628.00 | 156996538.00 |
| | Opening Balance as on 01.04.2015 | 13168248.00 | |
| | Closing Balance as on 31.03.2016 | | 15641338.00 |
| | | 172637876.00 | 172637876.00 |

6.5. Internal Quality Assurance System

The IQAC had 15 meetings during the academic year 2015-16. It also had several meetings with the department coordinators and took the lead in preparing the institution for the third cycle of accreditation. The IQAC took initiative to conduct the annual academic audit and the report was compiled and submitted to the principal for perusal.

CRITERION VII: INNOVATION AND BEST PRACTICES

7.1. Environment Consciousness

With a view to tap sources of renewable energy a new 10 KV solar power unit has been installed taking the institution's solar power capacity to 20 KV.

Organic Vegetable cultivation was an initiative of the NSS to sensitize the students on the adversities of the use of chemical fertilizers and pesticides.

Replacement of 35 bulbs and tubes with energy saving LED lamps has further reduced the energy consumption on the campus.