



# MILAGRES COLLEGE

Kallianpur – 576 114, Udupi District, Karnataka

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# DEPARTMENT OF CHEMISTRY

**Year: 2018-2019**

✓ **Faculty**

<b>Staff</b>					
Sl.No.	Name of the Staff	Qualification	Status	Designation	Date of Joining the Service
01	Prof. Subramanya Joshi	M. Sc.	Permanent	Associate Professor & HOD	30-06-1983
02	Prof. Joseph Peter Fernnades	M. Sc.	Permanent	Associate Professor	01-07-1984
03.	Rev. Dr (Fr) Prakash Anil Castelino	M Sc. Ph.D	Management	Asst. Professor	01-01-2019
Lab Asst	Mr. Dinakar Poojary	M.A.	Permanent	Lab Asst	

## No. of Students

III B Sc	II B Sc	I B Sc
18	36	47

## ✓ **Action Plan 2018-2019**

1. Bridge course of 15 hrs. duration for I B.Sc. students.
2. Remedial Coaching for the slow learners.
3. Special coaching for the advanced learners for all the B.Sc. students.
4. Seminars for the final B.Sc. students.

5. Use of computers, Internet facilities in the department.
6. Arranging Guest lectures and extension lectures for the B.Sc. students.
7. Arranging University Level Seminar competition in association with Association of Chemistry Teachers of Mangalore University.
8. Arranging special programmes to popularize Chemistry such as science model competition, experiments with principle, Science quiz, etc., for students of neighbouring P.U. College.
9. Arranging visits to chemical factories & Research Centres.

### ✓ **Action Plan Implemented: Activities**

#### **Action plan implemented or Activities Conducted During the Year 2018-2019**

##### ➤ **Curriculum:**

Classes, Laboratory experiments were conducted in accordance with the syllabus prescribed by the Mangalore University-UG course. CBCS syllabus was implemented.

**Programmes under the Mango Tree:** The Students were eagerly waiting and actively participated in all programmes under the Mango tree. Programmes under the mango tree are conducted. The Mango tree at the centre of the campus is a point of shade and centre of talent nurturing activities. Every afternoon during the lunch break for an hour students gather under the mango tree and make speeches, conduct competitions, quiz, etc.

**Value Education classes** were conducted to inculcate social and moral values in science students. Every week one hour duration classes are conducted for all the degree students

**Chemistry Symosium:** Department of Chemistry in association with Chemistry Lectureers of Mangalore University, organized Intercollegiate Chemistry Lecture Competition n 07-09-2018.

**Motivation and opening an horizon:** Seminar and Guest Lecture on Opportunities for Research in Organic Chemistry, Synthetic Chemistry and Pharmacetutical Chemistry by Dr. Antony Melvin Crasto, Senior Scientist, Glenmark Pharmaceutical India Limited, Mumbai on 20-12-2018.

#### **Collage Competitons to Science Students**

Inter-Class Collage competition was held on 21-08-2018 to B Sc. Stidents. Ms. Sharel Fernandes and Ms. Yashaswi of II B Sc secured I place, while Ms. Smitha Pinto and Ms. Rakshitha secured II Place and Mr. rickson and Mr. rakshith secured III place.

## **Drawing competition**

An inter-class drawing competition was held on 23-08-2018 at 3:00 p.m. in the Physics laboratory. Brenda Lobo of II B Sc. Secured I Place, Mehran of I B Com A secured second place and Chaitra of III B Com B secured III Place.

## **Colloquim 2K18**

Late V. Rev. Fr G. D'Cruz memorial inter-collegiate Semianr competition was held on 7<sup>th</sup> September 2018 in association with Physics teachers of Mangalore University, and Association of Chemistry Teachers, mangalore Univeristy. Prof. John Serra, depat of mathematics, St Aloysius College was the cchief guest. Vivekananda College, Puttur emerged victorious in various events, while Mahama Gandhi Cooleege, udupi became runner up.

## **National Science Day Celebration**

The National Science day was celebrated on 01<sup>st</sup> March 2019, to which Retired professor Subramanysa Joshi graced the occasion.

## **Quiz competition**

An inter-class quiz competition was held on 15<sup>th</sup> March 2019. Ms. Rakshitha and Ms. poornima of III BSc secured I place, while the second place was shared between two teams comprising of Mr. Ashraf Ali and Mr. Prathul- II B Sc and ms. Surakshitha and Ms. Kavya- II B Sc.. The Third place was secuered by Mr. Sherwin and Mr, Anush of II B Com B.

## **World Wild life Day celebrations**

Along with BCA studnts elbrate World Wild life day on 06<sup>th</sup> march, 2019 through the brief hstory of World wild life. Stdents presented mime show.

## **Electronic age**

Mr. Prashanth Shetty, Associate Professor, School of Informtion Sciences, MAHE presented a talk on "Electronic Revoultion". After the programme, all the achievers of the year 2018-19 were honoured.

## **➤ Staff Achievements**

Prof. Subramnaya Joshi was nominated as the BOE member of St Aloysius College, Mangalore (Autonomus)

Prof. Joseph Peter Fernandes was appointed as the BOS member of Chemistry (UG) and attended a meeting at Mangala Gangothri. The Committee reviewed the recent question papers of the semester examinations.

Both Prof. Subramanya Joshi and Peter Fernandes assisted the Chemistry Teachers' association in the preparation of text books in Chemistry for V and VI semesters of B Sc.

**Farewell to Prof. Subramanya Joshi:** The department bid farewell to Prof. Subramnaya Joshi, HOD of Chemistry who retired from his service on 31<sup>st</sup> October 2018 after serving for 33 years. The department of Chemistry thanked and remembered Prof. Subramanya Joshi for his service on the occasion of attaining superannuation.

**Prof. Joseph Peter Fernandes, became the HOD of the Department on the reitement of Prof. Subramnaya Joshi.**

**Dr (Fr) Prakash Anil Castelino, M Sc. Ph. D,** the Campus Director of Milagres Institutions was appoinmned as the New staff in the palce of Prof. Subramnaya Joshi.

**Fr (Dr) Prakash Anil Castelino** presented a paper at an International Confernce in Organic Chemistry on the topic “Contributions of Arylpropenones in Pharmaceutical Research and Modern Approach” at Jakartha, Indonesia from March 14 to 16<sup>th</sup> March, 2019.

➤ **Students Achievements: Student's participation in seminars and competitions.**  
**Student's tiny steps**

Students participated in Aurora-2019 conducted by St. Philomena College, Puttur on 02-02-2019. Two students: Miss. Brenda Lobo and Smitha Pinto won I Prize in the Chemistry event (Uthkarsha).

Ms. Smitha Pinto and Mrs. Surakshitha of II B Sc have attended and presented a paper in “Vijnana Kammata” on 06-09-2018 conducted by St Philomena College, Puttur.

Paddy Cultivation Programme: As a social responsibility, Students engged themselves in Paddy Cultivation on 13-07-2019.

**Environment Protecton Day:** All students of Science participated in “**Environment Protection Day**” organized at Milagres Cathedral, kallianpur on 18-08-2019. Most. Rev. Dr Gerald I. Lobo, the Bishop of Udupi and the President of Milagres College, kallianpur presided over the programme.

Students participated in **Vanamahostava, Independence Day celebrations, republic Day.**

Science Students areactive in NCC, NSS, Vidayrthi Darbar and other social responsibility activities.

Amalgamation with sister departments, Under the banner of Science association, the Department of Chemistry was instrumental in organizing a talk on the topic “ Pesticides Residual Effects”.

**Intercollegiate Fest in Chemistry:** The department along with the science association conducted Late Rev. Fr G. L. D'Cruz memorial inter College Chemistry Lecture

competitions on 10th February 2018. Nearly 10 colleges affiliated to the Mangalore University participated in the competitions. Prof. Subramanya Joshi, former President of chemistry teachers' association distributed prices.

The following the students won the prices

I prize - Riya, Vijaya College, Mulki

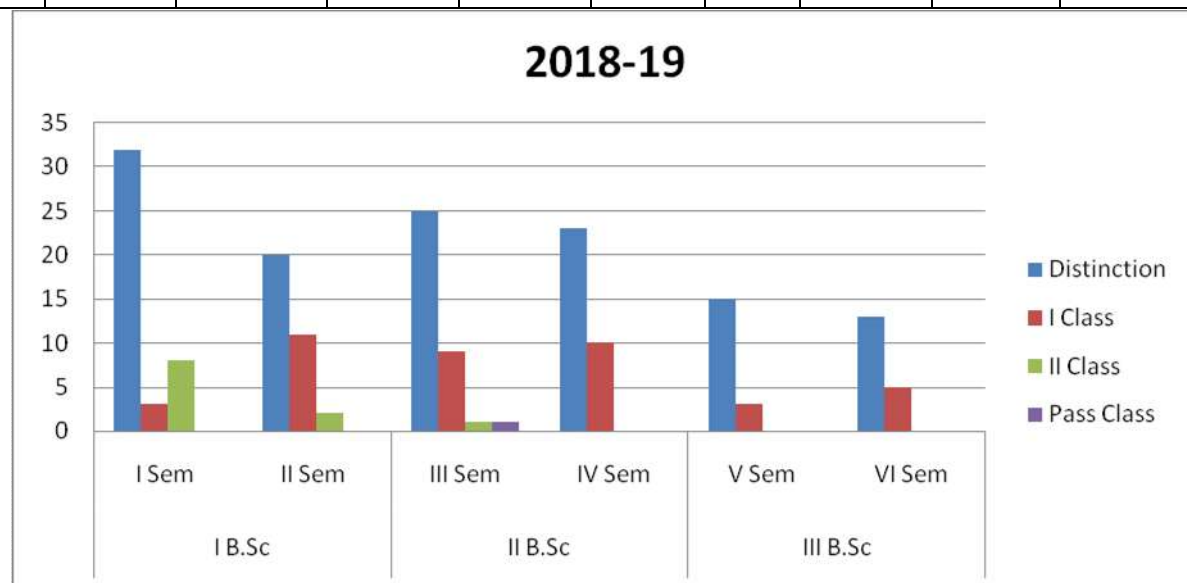
II Prize - Tanushree, PPC, Udupi

III Price : Divyashree, St. Philomena college, Puttur

## ➤ Result Analysis: University Examinations

### 2018-19

CLASS		Total number of Students	No of students appeared	No of students	Percentage	Distinction	I Class	II Class	Pass Class
I B.Sc	I Sem	47	47	43	91.49	32	03	08	0
	II Sem	47	47	33	70.21	20	11	02	0
II B.Sc	III Sem	36	36	36	100	25	09	01	01
	IV Sem	36	36	33	91.66	23	10	0	0
III B.Sc	V Sem	18	18	18	100	15	03	0	0
	VI Sem	18	18	18	100	13	05	0	0



### ✓ **Laboratory**

The department has a full pledged laboratory. The laboratory consists of two required number of equipments/apparatus for the needs of all the students. The laboratory contains safety measures such as fire extinguishers, First aid etc. and is well maintained.

### ✓ **Best Practices**

1. Opportunity and guidance to all the college/high school students to perform experiment of their choice and interest,
2. Special encouragements to the students in using Departmental Library to acquire additional knowledge in the subject.
3. Visit to Schools and teaching them Science.

### ✓ **Planning and Curriculum Delivery**

The assessment of the effective delivery of the curriculum and learning outcome is ensured through bridge course, the periodic interaction with the learners, assignments, class tests, internal assessment tests (mandatory by the University) and university semester examinations.

### ✓ **Lesson plan**

Teachers prepare monthly plan of the syllabus for each semester to complete the syllabus systematically.

### ✓ **Department Meetings:**

We conduct Dept. Meetings to discuss many issues relating to the curriculum. Staff and the Laboratory Asst meet regularly to discuss the curriculum. Regular meetings were conducted to discuss mode of operation of syllabus, Bridge course, remedial courses, activities of the department etc. Every programme was evaluated during the Departmental meetings. After the announcement of the results/class test the performance of each student was evaluated and the remedial measures were taken.

- ✓ Syllabus - Method of Teaching
- ✓ Conducting Bridge Course
- ✓ Identifying slow learners and remedial coaching
- ✓ Discussion on guest lectures
- ✓ Project for the year and visits to farms, industries, fisher folk, banks etc.
- ✓ Conducting Tests and Seminars
- ✓ Review of syllabus done and students' performance in examinations.
- ✓ Use of modern techniques of teaching

- ✓ Preparation for NAAC visit - Documents to be prepared

### ✓ **Departmental Library**

Latest editions are available in all the Disciplines of Chemistry are available in the Department Library to have additional Knowledge. Research journals of Chemistry and Environment and Chemistry Today are also available in the College Library. All the books are used by the students. Mr. Ronald Rajesh Lewis and Mr. Laxman, Alumni of the Department donated a number of books to the Departmental Library.

### ✓ **Bridge Course**

A bridge course of 10 hours for newly admitted students is conducted every year to I B Sc. Students. The main objective of the course is to bridge the gap between subjects studied at Pre-university level and subjects they would be studying in Graduation. The syllabus was framed. It included the introduction to Chemistry, Fundamentals of Chemistry, basic Information of Periodic table, Atomic Structure, IUPAC Nomenclature and volumetric analysis. At the end of Bridge course a test was conducted and the progress was evaluated. These classes help them to understand the syllabus of I degree better.

### ✓ **Internal Tests**

Every year we conduct class test/ internal assessment tests to evaluate the learning ability, skills of the students.

The performance of the learners in university examinations is documented in the register of examinations, class test/ internal assessment test scorings are documented in the office for computation of internal assessment marks.

After the evaluation of the internal assessment & university examinations, advanced learners and slow learners are identified and special efforts are made to encourage them.

### ✓ **Tutorials**

The tutorial work taken by Prof. Joseph peter Fernandes and Prof. Subramnaya Joshi. Two hours of tutorials per week were held. About 20 students were given to each lecturer and the teacher guided the students in both academic as well as co-curricular activities. Timely advice was given to the student/s.



### ✓ **Advanced learners**

Advanced learners are asked to refer more books from the library and collect more information from online and are motivated to present papers and teach their peers. These students were given text books and asked to prepare notes and help the slow learners. They were made to present papers in class and Seminars with power point presentations and on the board by the traditional methods.

### ✓ **Slow Learners: Remedial coaching**

These students were given remedial coaching after class hours. Tests were given to these students. They were made to write assignments. Examination question papers were discussed with them. Students benefited from constant tips and revision along with constant instruction on different issues and concepts.

### ✓ **Teaching Methodology**

Students and staff use modern and Innovative techniques of teaching along with traditional method of chalk and talk.

#### ✓ **Cross Cutting Issues of the Curriculum in the Department of Chemistry**

**Human Values:** Value Education Classes, Communal harmony

**Gender :** Study Constitution, Co-education college, Respect to others, National Festival Celebrations

**Environment and Sustainability:** Eco friendly practices in the Lab, Environment Chemistry, Students participate in NCC, NSS, Paddy cultivation, Chemistry in Daily Life.

**Professional Ethics:** Right usage of knowable to build progressive and development Society, Importance of Higher Education, Lab safety.

#### ✓ **PROGRAMME SPECIFIC OUTCOMES**

The Department gives an awareness about the programme outcomes to have an overall idea about the knowledge, skills, abilities and attitudes that students can acquire during the pursuit of UG courses. In the B. Sc programme Chemistry Courses are part. The specific learning outcomes of various courses are built into the curriculum of each programme is available on the Mangalore **University website** ([www.mangaloreuniversity.ac.in](http://www.mangaloreuniversity.ac.in)). Learning outcomes form an integral part of college vision, mission and objectives.

The Institution communicates the programme and course outcomes to the teachers and students in the following ways:

- Learning Outcomes of Programs and Courses are uploaded on the website of the college.
- Freshers get the required information from the college prospectus, college notice boards and student Handbooks.
- During admission, Students are informed of the courses and their outcomes.
- The outcomes of each programme and the course outcome of each subject are made known to the students by organizing Orientation Programmes.
- The hard copy of the syllabus of each subject with course outcomes is made available in the respective departments for ready reference for the teachers and students.
- Course outcomes are displayed on the departmental notice board.
- Teachers make the students understand the learning outcome of each unit, making the teaching-learning process more fruitful.
- The interactive sessions with successful alumni are organized to guide students to choose programmes to shape their careers.
- Teachers of every department interact with the students about what they are supposed to get at the end of each program.
- Teachers participate in the workshops organized for revising the syllabus of the various subjects under various programmes of the University.
- College puts up the digital flex boards in the prominent area of the college to make the stakeholders aware of the programmes of the college and also highlights students achievements and list the kind of jobs that students can get after completion of the different programs.
- **Programme Specific Outcome for Chemistry are,**
  - Helps Students to develop skills
  - Laboratory Experience
  - Scope for Research and Higher Education: M Sc. Ph. D, Bed etc.
  - Competitive exams preparation
  - Civil service-Entry
  - Development of Scientific temper

## ✓ Attainment of Course Outcome (CO'S), and Programme Specific Outcomes (PSO's)

Students are evaluated based on continuous evaluation based on

- Through the Vision, Mission of the College

***“To transform youth into responsible citizens and competent professionals through quality education and research.”***

- Vision Mission of the Department
- Through their Learning capacity: Slow, average and Advanced Learners
- Exposure to Industry, Field Visits
- Seminars, Projects etc.
- Entrepreneurship awareness.
- Certificate courses and training programmes.
- Experiential learning.
- Coaching for competitive exams (IAS, CET etc.)
- Talent Nurturing programmes in the campus: Soft skill Development
- Course outcomes are measured through the performance of the students in the class, practical, internal evaluations, and external evaluations.

## **Mentor-Mentee**

Every teacher of the department conducts is assigned the responsibility of mentoring a group of students. The teacher interacts personally with the allotted students to know their family background, social and economic status, their emotional problems if any. These mentees meet mentors regularly to seek advice and share their feelings. Mentors give guidance, and advice to the mentees to improve their performance in the studies ,encourage them to participate in extra-curricular activities, prepare them to face the challenges in life and become a successful in life.

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