HISTORY OF THE CHEMISTRY DEPARTMENT YADAVA COLLEGE, MADURAI- 625014.

The Chemistry Department of Yadava College was established in 1972 and B.Sc Chemistry Courses as introduced in 1979.

I.University Rank Holder:

The Department has an excellent academic record in preparing students (mostly first generation, Tamil medium students of rural area) for their careers. Three of our students have secured University Ranks in B.Sc., Chemistry degree examinations.

S.No	Student Name	Year	Rank
1.	P.Vijendran	1999-2002	Ist Rank april-2002
2.	G.Jeyashree	2003-2006	II nd Rank april-2006
3.	R.Devika	2005-2008	V th Rank april-2008

Faculty members:

The Department have well qualified and experienced faculty who ensures knowledge transfer, infuse ethical and cultural values to transform students into disciplined citizens in order to improve the quality of life.

S.No	Faculty Name	Year
1.	Prof. S. Narayanan	1972-2002
2.	Prof. M. Chithiraikannu	1977-2007
3.	Prof. V. Subramanian	1980-2008
4.	Prof. K. Sethuraman,	1978-2010

Prof. P. Rengan, Head of the Department of Chemistry has been appointed as Principal of this College on 09.08. 2006. and retired from service on 31.7.2010.

S.No	Faculty Name	Year
1.	Ms. A. Krishnaveni, Lecturer	2002-2005
2.	Ms. V. Sakthipraba, Lecturer	2002-2015
3.	Mr. N. Manimaran, Lecturer	2007-2013
4.	Ms. S. Manimekalai, Lecturer	2009-2013
5.	Ms. G. Jeyashree, Lecturer	2010-2011
6.	Mr. M. Rajasekaran, Lecturer	2011-2012

At present, the faculty members of the Chemistry Department are;

S.No	Faculty Name	Year
1.	Dr. A. Krishnaveni, Assistant Professor& Head	2007 october to
		till date
2.	Dr. P. Muthuraman, Assistant Professor	2014 to till
3.	Mr. Mum. Muthukumaran, Lecturer	2014 to till
4.	Ms. K. Manimekalai, Lecturer	2014 to till
5.	Dr. N. Prabakaran, Assistant Professor	2017 to till

II.CURRICULUM:

Computer Applications in Chemistry, Dairy Science, Green Chemistry and Nano Chemistry to make the students face challenges in their careers and higher studies.

1. Update knowledge of the programme by providing special papers in the curriculum like

- 1. Applied Chemistry
- 2. Green and Nano Chemistry
- 3. Computer in Chemistry

2. Instilling confidence in students by offering career oriented course like

- 1. Forensic Chemistry
- 2. Non-Conventional & Renewable source of energy

3. Encouraging self employment by providing courses like

- 1. Diary science
- 2. Food Chemistry
- 3. Medicinal Chemistry
- 4. Certificate course in analytical chemistry

4. Developing values, character and personality of students by providing.

- 1. Value education
- 2. Soft skills

3. Communicative English

5. Experimental learning programmes offered.

- 1. Inorganic Qualitative semi-micro analysis
- 2. Volumetric analysis
- 3. Gravimetric analysis
- 4. Physical Chemistry experiments
- 5. Organic preparation
- 6. Organic analysis
- 7. Organic estimation
- 8. Small Scale Industrial Chemicals (NME Paper)

One certificate course in Analytical Chemistry designed with two paper namely **Instrumental methods of Chemical Analysis** and **Clinical Chemical Analysis** are offered to the students of the College 2015-16.

III.TEACHING LEARNING

The department is equipped with two desk top computers, a laptop an LCD, two OHPs and a digital camera. The faculty members use LCD, OHP, Charts including periodic table, atomic model and molecular model for effective teaching. Seminars and class assignments are given to the students.

In order to develop the knowledge about the modern trends in Chemistry, our faculty attended many refresher courses, orientation programmes, seminars and workshops conducted by various colleges.

Assignments and seminars are regularly given to all students. In addition, students are evaluated through two internal tests, one model test (2018), one internal test and one model test for 2019 and one external examination.

Bridge Course and Entry Level Test

The incoming students are screened by entry level test. From the entry level test result analysis students are classified according to their performance (below average, above average). Bridge course materials are prepared and the classes taken to improve their knowledge. The

department offers remedial programme to slow learners and low achievers and enrichment programme to fast learners and high achievers.

RESEARCH;

A separate research laboratory with modern facilities was commenced in 2008 to facilitate research work. So for, research papers have been published by our faculty members in the reputed Journals. Three faculty members are completed the doctoral programme and two faculty member pursuing the Ph.D. programme.

INFRASTRUCTURE

The Chemistry department is provided with well equipped laboratory which caters to the needs of the students. A separate research laboratory with modern facilities was commenced in 2008 to facilitate research work.

A research laboratory was set up with sophisticated equipments like.

- 1. Centrifuge machine
- 2. Digital Balance
- 3. Hot-Air Oven
- 4. Spectrophotometer
- 5. Water Analyser
- 6. Mechanical shaker
- 7. UV-Vis spectrophotometer
- 8. Cyclic Voltammagram.

Small scale Industrial Chemical Practice:

There is a Unit for the manufacture of small scale house hold chemicals like phenyl, candle, washing and cleaning powder, dhoop (computer sambirani) with skilled faculty members and students which offers free training about the preparation methods of above said articles to the self help groups of nearby villages.

Counseling for academic and personal is given by mentors.

Our faculty members and students have done various extension activities in the nearby villages. Training given to the self – help group for the preparation of house hold materials independently.

STUDENTS

Faulty members train the students in various talents via., quiz competition, model making, paper presentation, essay writing and music composing etc.,

To instill a kind of responsibility, student representation is given in board studies and academic council.

In order to develop the knowledge about the modern trends in Chemistry, our faculty attended many refresher courses, orientation programmes, seminars and workshops conducted by various colleges.

ALUMINI

Most of Alumni of the Department are well settled and working as Professors, Scientists in both national and international, Chemists, Software Engineers, Administrators of State and Central Government.

Best Practice(s) of the Department:

- i. Students are motivated to participate in the seminars, intercollegiate competitions, workshop. Our students won prize every year in the intercollegiate competitions like model making, chemcomposer, Top Notcher, Paper presentation.
- ii. Every day at the lunch hour between (1.30 pm to 2.00) all the students of our department write a test of about one or two questions monitored by respective faculty member. By this practice brilliant students got more marks; weak student got pass marks in internal as well as semester exam.

Future plan of the Department:

- i. To start PG course in chemistry.
- ii. To upgrade our department to a fully fledged research centre from MKU.
- iii. To establish a separate room for the preparation of household chemicals.
- iv. To offer consultancy to the rural people to start small scale industrial chemical preparation work thus help to promote the economic status of the rural people nearby surrounding area of our college.

Strength: A research laboratory was set up with sophisticated equipments like.

- 1. UV-Vis spectrophotometer
- 2. Cyclic Voltammagram
- 3. Spectrophotometer
- 4. Water Analyser
- 5. Hot-Air Oven
- 6. Refrigerator
- 7. Mechanical shaker
- 8. Digital balance
- 9. Centrifuge machine
- 10. Air-Conditioner

Weakness:

i. Even though the chemistry department has been equipped with sophisticated instruments, but PG course not yet started.

Opportunities: Unique training in

- i. Operating sophisticated instruments
- ii. Water analysis (Quality of drinking water)
- iii. Clinical Chemical Analysis

Challenges: Entering the job on a time where it is highly competitive.
