



**KLE Society's**  
**S.S.M.S.ARTS, SCIENCE AND COMMERCE, COLLEGE, ATHANI**

**DEPARTMENTAL PROFILE**

**From 2021-22 to 2024-25**

- 1. Name of the Department : CHEMISTRY**
- 2. Year of Establishment : 1970**
- 3. History of the Department :** Department of Chemistry was established in 1970. Our department has two well equipped laboratories with modern instruments to assist in quality teaching. Our department staff and students have presented several numbers of papers in National/International Seminars/Conferences and also published the papers in proceedings. One of our faculties published 10 articles in international peer reviewed journals. From last three years, our department has organized One day KSTA sponsored National level Conference on "Through the Instruments", 3 certificate courses, 2 extension activities and 2 MoUs. At present more than 185 budding chemists are getting trained in our department with four well experienced teaching staff among them two are Ph.D. degree holders and two are KSET qualified.
- 4. Programme / Course Outcome: B.Sc.**
  - ✓ To enhance the student's academic abilities, personal qualities and transferable skills.
  - ✓ Students attain knowledge and skill in the field of chemistry.
  - ✓ Application of learnt theories and the acquired skills to solve real time problems.
  - ✓ Impart skills required to gather information from resources and to use them.
  - ✓ Understands the complex and evolutionary processes in the manufacture of various chemicals used in the day to day life.
  - ✓ Gain knowledge of Industries like pharmaceuticals, foods, soaps, textiles etc.
  - ✓ Provoking Professional ethics and Responsibilities in delivering his duties.
  - ✓ Understanding of environmental conservation processes and its importance, pollution control, biodiversity and protection of endangered species.
  - ✓ Students will be aware of the various job opportunities available in Private, Public and Government Sectors.
- 5. Objectives of the Department:** To provide a broad foundation in Chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective. To provide students with the skills required to succeed in graduate school, the chemical industry or professional school.
- 6. Department Milestone:** Prof. B.S. Vibhutti was the pioneer faculty of this department. Well experienced and skilled professors served as HOD of Chemistry. It is the matter of pride that the starwads Prof. I.G. Madanashetti, Prof. Gobbanavar, Prof. P.N.Narwade, Dr. V.B.Hiremath, & Prof B.R. Kantikar has served as Principals in the same institute. Prof. B.S. Vibhutti Prof. S.Y. Ambiger, Dr. M.T. Kurani was promoted as Principal of our sister institutions. One of our department alumni Dr. L.A. Shastri is working as Associate Professor in KUD.
- 7. Programme: B.Sc.**

Sl. No	Year	Courses offered	Intake	Admitted
01	2021-22	B.Sc. Chemistry	100	61
02	2022-23	B.Sc. Chemistry	100	56
03	2023-24	B.Sc. Chemistry	100	58
04	2024-25	B.Sc. Chemistry	144	116

**8. New programmes and courses introduced to UG and their intake.**

**Certificate course introduced:**

Programme / Course	Title of the Programme / course	Year of introduction	Intake	Duraton	Outcomes
Certificate Course					
	Food Adulteration	2021-22	30	30	Employability
	Water Analysis	2022-23	30	30	Employability
	Chromatography Techniques	2023-24	30	30	Employability
	Hands on Training of Basic Chemistry Software	2024-25	30	30	Employability

**1. Department library Register maintained : YES**

Our department having its own library in addition to central library. Totally 65 books are in the department library, it is issued to the students regularly and maintain the register. One of our faculties takes care of the department library. These departmental library books are used faculty member also. E-books and e-journals can easily access in the central library or in the department.

**2. Department plan of action**

- Department meeting /Register : Conducted / Maintained
- Calendar of events : Prepared & implemented
- Time table : Prepared
- Teaching plan : Prepared
- Teachers Dairy : Maintained
- Attendances register : Maintained

**3. Teaching methodology adopted by the department :**

Traditional Methods	Modern Methods
✓ Chalk and Talk	✓ Power Point presentation
✓ Charts & Models	✓ Google platform(on-line)
✓ Interactive methods	✓ ICT-LCD Projects
✓ Student Seminars	✓ Zoom app
✓ Group discussion	✓ Google meet
	✓ Teach mint
	✓ Google classroom

#### 4. Details of departmental infrastructure facilities:

Facilities	Numbers
Built up Area	133.15 Sq.m
Laboratories	02
Balance Room	01
Chemical Store Room	01
HOD & Staff Room	01
Departmental Library	140 Books
Computers with internet facility	02
Printer with Xerox and Scanner	01
Mini Quartz Distillation units	02
Models and Charts	16
e-Journals and e-books	INFLIBNET ( N-LIST )
International & National Journals	02
Gas Chamber	01
Refractometer	04
Digital colorimeter	04
Dual channel digital potentiometer	04
Digital balance	03
Digital conductometer	06
Hot air oven	01
Suction pump	02
Centrifuge machine	02
Micro burette	10
Digital Melting Point apparatus	01

#### 5. Achievements of the Teachers

##### a) Participation of faculties in OC/ RC/FDP

Sl.No	Name of the faculty	Title of Programme	Date		Organized by
1	Dr.Jayanna N.D.	Refresher Course	15-12-2023	29-12-2023	University of Delhi
2	Achuthananda K.M	Refresher Course	15-12-2023	29-12-2023	University of Delhi
3	Dr. Prashant A. Magdum	Faculty Development Program	22-05-2023	26-05-2023	Bangalore
4	Kiran. M. Madalagi	Faculty Development Program	19-11-2023	25-11-2023	Bharatidasan University
5	Dr.Jayanna N.D.	Faculty Development Program	28-12-2024	03-01-2025	Manipal University, Jaipur
6	Dr.Jayanna N.D.	Faculty Development Program	09.11.2024	09.11.2024	SSMS College, Athani
7	Prof. Achuthananda K.M.	Faculty Induction program	09.11.2024	09.11.2024	SSMS College, Athani
8	Dr. Prashant Magdum	Faculty Induction	09.11.2024	09.11.2024	SSMS College, Athani

		program			
9	Prof. Kiran Madalgi	Faculty Development Program	09.11.2024	09.11.2024	SSMS College, Athani

**b) Research publications in International Journals :**

Sl. No.	Year	Name of the faculty	Name of the Journal/Publisher	Title of the paper	ISSN Vol. P.No
01	2018	Dr. Jayanna N.D	Letters in Drug Design and Discovery.	Bioactive Isolates of Morus Species as Antibacterial Agents and their in-silico Profiling	1875-628X
02	2018	Dr. Jayanna N.D.	Asian J.Research Chem.	An efficient synthesis of 2-(6-methoxy-2-naphthyl)-1,3-benzoxazole derivatives using IBD/LTA: Reactivity, DFT, Anticancer and Larvicidal activities	0974-4150
03	2021	Dr. Jayanna N.D.	International Journal of Chemical and Biological Sciences	Synthesis, characterization, DFT studies, antibacterial, cytotoxic and molecular docking studies of 3-chloro-1-[(6-nitro-1, 3-benzoxazol-2-yl) amino]-4-phenylazetidin-2-one derivatives.	2664-6773
04	2021	Dr. Jayanna N.D.	Elsevier Material Today Proceedings	Design, Spectral, Thermal, DFT studies, antioxidant and molecular docking studies of pyrazole-based schiff base ligand and its metal (II) complexes.	2214-7853
05	2021	Dr. Jayanna N.D.	Journal of Pharmaceutical Research International	Design, Synthesis, Molecular Docking and Biological Evaluation of Novel 2-[(2-[[5-(Pyridin-4-yl)-1, 3, 4-Oxadiazol-2-yl]Sulfanyl]Ethyl)Sulfanyl]-1,3-Benzoxazole,	2456-9119
06	2022	Dr. Jayanna N.D.	Asian Journal of Chemical Sciences	Structural Characterization, DFT, Molecular Docking and Cytotoxic studies of Metal (II) Complexes derived from Thiosemicarbazide.	2456-7795
07	2022	Dr. Jayanna N.D.	Indian Journal of Natural Sciences	Acute Toxicity Study of Novel Synthetic Benzoxazole Derivatives,	.0976-0997
08	2022	Dr. Jayanna N.D.	Indian Journal of Natural Sciences	Antidepressant Activity of Novel Synthetic Benzoxazole Derivative in Depressive Paradigms of Swiss Albino Mice.	.0976-0997

	2022	Dr. Jayanna N.D.	Indian Journal of Natural Sciences	Acute Toxicity Study of Novel Synthetic Pyridazinone Derivatives	.0976-0997
	2022	Dr. Jayanna N.D.	Indian Journal of Natural Sciences	Hepatoprotective Activity of Novel Pyridazinone Derivative against D-Galactosamine Induced Hepatotoxicity in Rats	.0976-0997
	2023	Dr. Jayanna N.D.	European Chemical Bulletin	Evaluation of Anticonvulsant Activity of Novel Synthetic 1,2,4-Triazole Containing Benzoxazole Derivative	2063-5346
	2024	Dr. Jayanna N.D.	Indian Journal of Advances in Chemical Science	Synthesis, Characterization, Density Functional Theory, Molecular Docking Studies, and Biological Activities of 6,8-dichloro-3-phenyl[1,2,4]triazolo[3,4-b][1,3]benzoxazole Derivatives	2320-0928

**c) Faculty participation and presented papers in Conference/ Seminar  
Total Presented paper: 8**

**d) Faculty as Resource Person**

Sl.No	Name of the faculty	Resource Person as	Conference / seminar/Workshop etc	Year
01	Prof. U. G. Patagar	Rapporteur	One Day National Level Seminar on Chemistry in Every Day Life	2019
02	Dr. Jayanna N.D.	Chief Guest	Ozone Day Celebration	2019
03	Prof. K.M Achuthananda	Chief Guest	Ozone Day Celebration	2019
04	Prof. V. M. Gubache	Jury Panel Member	One Day State Level Seminar	2019
05	Prof. Kiran M Madalagi	Judge	Workshop on "Thermoelectric Materials for Energy Conversion"	2019

**a) Central valuation in RCU**

Sl.No	Name of the faculty	Involved in		Year
		Academic	Administration	
01	Dr. Jayanna N.D.	Central valuation at RCU	Placement Officer	2021-24
02	Shri. Achuthananda K.M.	Central valuation at RCU	NSS Officer	2021-24
03	Dr. Prashant Magdum	Central valuation at RCU	NCC Officer	2021-24
04	Shri. Kiran MAdalagi	Central valuation at RCU	Science Coordinator	2021-24

### 6. Mode of Examination conducted and Evaluation methods:

In the institute I.A. tests were conducted by separate committee formed by the principal of the college and semester exams were conducted as per the RCU norms.

### 7. Remedial Class Report: Students strength, time table. Attendance and outcome

Year / Student Strength	Semesterwise Slow Learners						Outcome
	B.Sc. I	B.Sc. II	B.Sc. III	B.Sc. IV	B.Sc. V	B.Sc. VI	
2020-21 Student Strength	54	35	15	7	13	3	Improvement of results
2021-22 Student Strength	30	26	17	09	08	07	
2022-23 Student Strength	35	28	15	7	7	02	
2023-24 Student Strength	45	40	00	08	00	02	
2024-25 Student Strength							

### 8. Students training / workshop/seminar / Industrial Tour organized by the Department:

Sl. No.	Title of the event	Year	No of participants	Outcome
01	<b>Industrial Tour</b> to Krishna Sugars, Athani	2021-22	98	Education with live demonstration of production of sugar
02	<b>Industrial Tour</b> to UB Distilleries, Bangalore	2022-23	56	Education with live demonstration of production of Beverage products.
03	<b>Industrial Tour</b> to Vignana Bhavan Mysore	2023-24	112	Education with live demonstration of analytical instruments

### 9. Students Progression to

Students Progression	Year	Numbers
1.Higher study	2021 - 22	7
	2022 - 23	9
	2023 - 24	8
	2024 - 25	
	<b>Total</b>	<b>24</b>
2. Entrepreneurship		
3. Employment	2021 - 22	11
	2022 - 23	3
	2023 - 24	4
	2024 - 25	
	<b>Total</b>	<b>18</b>

### 10. Faculty Profile:

Name of faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of M.Phil/ Ph.D. Students Guided
Dr. Jayanna N D	M.Sc. Ph.D., PDF	Asst. Professor	Industrial Chemistry	07 Years	-
Achuthananda K.M.	M.Sc. K-SET	Asst. Professor	Industrial Chemistry	11 Years	-
Dr. Prashant Magdum	M.Sc. Ph.D.	Asst. Professor	Physical Chemistry	12 Years	-
Kiran. M. Madalagi	M.Sc., K-SET	Asst. Professor	Physical Chemistry	08 Years	-

### 11. Department MoU / Linkages/ Collaboration

Sl.No	Organization	Purpose	Date
01	J.E.Society, K.A.Lokapur Degree College, Athani.	Teachers & Students Exchange Programme	2024-29
02	DRM Science College, Davanagere	Employability	2024-29

### 12. Extension activity of the Department

Sl.No	Venue	Event	Date	Participants	Beneficiaries
01	Morarji Desai Residential School, Madabhavi. Tq. Athani.	“Active Learning Through Chemical Experiments”	07.09.2021	05 Faculty 20 Students	86
02	Government Higher Primary School Ghatnatti	Creative Learning Through Chemical experiment	30-07-2024	02 Faculty 25 Students	91
03	GBG High School, Ghatnatti	“Active Learning Through Chemical Experiments”	06.12.2024	02 Faculty 20 Students	65

### 13. Best Practice

Sl. No.	Best practices	Beneficiaries	Outcome
01	Preservation of rain water.	All Chemistry students	To make use of natural resources of rain water for practical purposes and to control the consumption of energy.
02	Proper disposal of waste Chemicals and Laboratory waste.	All Chemistry students	Reduction of environmental pollution and proper management of laboratory waste.

### 14. SSS of the Department: Analysis

### 15. SWOC analysis

<b>Strength</b>	✓ Competent teaching staff. ✓ Well equipped Laboratories.
<b>Weakness</b>	✓ Less number of research projects. ✓ Lack of linkages with Industries, institutes of higher learning and research.
<b>Opportunity</b>	✓ Survey-cum-remedial project for urban waste management. ✓ Students are motivated to excel as an entrepreneur based on their applied knowledge in Chemistry.
<b>Challenges</b>	✓ Create awareness programmes for progressions of higher studies and placements. ✓ To motivate the students to carry out research activities in national and international institutions

**16. Ten Prominent Alumni**

Sl.No.	Name of the Alumni	Present Position
01	Shri. Shrikant Deshpande	Scientist, USA
02	Dr. S.A. Patil	Scientist, USA
03	Dr. L.A. Shastri	Associate Professor, KUD.
04	Dr. Ravi Hunnur	Sr. Scientific officer, R&D Arbindo Pharma Ltd, Hyderabad,
05	Dr. Sanbhaji Chiula	Senior Scientist. Sadic International Ltd. Bangalore,
06	Shri. Avinash	USA
07	Shri. Yalladagi	Shingapore
08	Shri. Shripati Gayakwad	Lieutenant in Defense Service
09	Miss Danamma Gunjigavi	KUD, Gold Medalist & RFO
10	Shri. Ramesh Patil	S I Civil, Mysuru
11	Shri. Sidappa Nagani	Traffic Inspector, Hubballi
12	Shri. Basavaraj Hanagandi	Dy, RFO, Raibag
13	Shri. Manjunath Patil	Dy, RFO, Athani

**17. Future plan**

Organizing National / International Seminars.
Establishing Treatment Plant for Laboratory Waste.
Organize more number of guest lectures, extension activities.
Study Tours to Research Centers.
Conduct research oriented student projects of local relevance.
Introduce more number of certificate course.



# Photo gallery

## KSTA Sponsored One Day National Conference on “Through the Instruments”

Resource Person: Dr. J Manjanna, Professor, RCU, Belagavi

Dr. Nagappa Teradal, Assistant Professor, JSS College, Gokak





# EXTENSION ACTIVITY 2023-24

Vanue : GHPS Ghatnatti, Athani





## EXTENSION ACTIVITY 2024 -2025

Vanue : GBG High School, Ghatnatti



P399+QC4, Satti road, Athani, Karnataka 591304, India

Latitude 16.718825° Longitude 75.06822333333334°

Local 11:25:35 AM	Altitude 584 meters
GMT 05:55:35 AM	Date Fri, 06 Dec 2024

Note : Extension Activity  
KLE SSMS ARTS SCIENCE & COMMERCE COLLEGE ATHANI



M37V+H52, Athani, Karnataka 591304, India

Latitude 16.664785° Longitude 75.09536833333333°

Local 11:53:18 AM	Altitude 565 meters
GMT 06:23:18 AM	Date Fri, 06 Dec 2024

Note : Extension Activity  
KLE SSMS ARTS SCIENCE & COMMERCE COLLEGE ATHANI



Unnamed Road, Karnataka 591304, India

Latitude 16.665058° Longitude 75.086848°

Local 12:12:05 PM	Altitude 572 meters
GMT 06:42:05 AM	Date Fri, 06 Dec 2024

Note : Chemistry Extension Activity  
KLE SSMS ARTS SCIENCE & COMMERCE COLLEGE ATHANI



Unnamed Road, Karnataka 591304, India

Latitude 16.665058° Longitude 75.086848°

Local 12:37:07 PM	Altitude 572 meters
GMT 07:07:07 AM	Date Fri, 06 Dec 2024

Note : Extension Activity  
KLE SSMS ARTS SCIENCE & COMMERCE COLLEGE ATHANI



Unnamed Road, Ghatnatti, Karnataka 591304, India

Latitude 16.6676125° Longitude 75.0923227°

Local 12:21:06 PM	Altitude 564 meters
GMT 06:51:06 AM	Date Fri, 06 Dec 2024

Note : Extension Activity  
KLE SSMS ARTS SCIENCE & COMMERCE COLLEGE ATHANI



Unnamed Road, Karnataka 591304, India

Latitude 16.665058° Longitude 75.086848°

Local 12:36:57 PM	Altitude 572 meters
GMT 07:06:57 AM	Date Fri, 06 Dec 2024

Note : Extension Activity  
KLE SSMS ARTS SCIENCE & COMMERCE COLLEGE ATHANI