

Honorable Chairman: Sri. Dayananda.G, Executive Director: Sri.G.D.Manoj.

## DEPARTMENT OF CHEMISTRY

# CHEMitario-2021-22

### VISION

Upgrade our students about the latest developments in chemical science and also creating progressive environment for learning & innovations.

### MISSION

- ❖ To feed the budding engineers with finer aspects of science which make them to understand, exploit and innovate, thus contributing to the future technologies.



**Dr. H Ramakrishna**  
Principal

### PRINCIPAL MESSAGE

*It gives me immense pleasure to note that, SCE has been publishing bi-annual newsletter and I am sure, this will provide an opportunity for the faculty and students to share their knowledge and beacon the information about various issues and activities that are being taking place in the department. I look forward for more activities and achievements for the department to march towards excellence in the future. I would like to thank all teaching, supporting staff and our beloved students for their active participation in publishing this magazine. My special compliments and congratulation to the editorial team of the department for their consistent effort in publishing this newsletter.*

### HODs Message



**Dr. B S Krishna**

I am very happy to bring out the Department Magazine "**CHEMitario-2021**". This magazine outlines various activities took place during the academic year **2021-22** and the Achievements of faculty and students. It is great to find a considerable number of articles, poems and art that certainly prove that our staff and students are adequately equipped and possess necessary skill sets to express their talent. Sincerely congratulate the Chairman, Principal, and editorial team of the department for their unrelenting efforts in compiling this Magazine

## Faculty Paper Published in International/National Journals

- Novel Heterocyclic Transition Metal Complexes: Synthesis, Characterization, Antimicrobial and Anticancer Activity. , Anusuya A.M., B.S. Krishna, S.B. Benaka Prasad, K. Yogesh kumar, R. Raveesha, and M.K. Prashanth., Asian Journal of Chemistry, (Sept. 2021) .
- Novel transition metal complexes of 5-(2-phenyl-1H-benzo[d]imidazol-1-yl) quinolin-8-ol as active pharmacophore: Experimental and computational explorations. Anusuya A.M., B. S. Krishna, S. B. Benaka Prasad, M.S.Raghu, M.K. Prashanth, Krishna and Prakas Krishnaiah, Chemical Data Collections, September 2021, 100777
- Antimicrobial and Antioxidant Activity of New Transition Metal Complexes Derived from 5-(2-(4-methoxyphenyl)-1h-Benzo [d] Imidazol-1-yl) Quinolin-8-ol, A. M. Anusuya, B. S. Krishna, S. B. Benaka Prasad, K. Yogesh Kumar and M. K. Prashanth. International journal of pharmaceutical sciences and research, August 2021.
- Improved Photoluminescence and spectroscopic features of Sm<sup>3+</sup> - doped alkali borate glasses by embedding silver nanoparticles, K.P. Roopa, B. N. Shwetha, K. Keshavamurthy and et.al, Journal of Non crystalline solids, Dec 2021.
- Thunbergia mysorensis mediated Nano silver Oxide for enhanced antibacterial, antioxidant, anticancer potential and in vitro Hemolysis Evaluation, K.P. Roopa, N R Kokila, B Mahesh,, B. Daruka Prasad and et.al, Journal of Molecular structure, Jan 2022.
- Statistical Analysis Of Groundwater In Kasaba Hobli, Kunigal Taluk, Krishne Gowda Y H , Gurushantha K , Journal of Emerging Technologies and Innovative Research (JETIR), April 2022.

## Paper presented in International/National Conferences

- ❖ Synthesis Characterization and Antimicrobial Studies on 5-(2-phenyl-2, dihydro-1H Benzimidazole-yl) Quinolin-8-ol and Transition Metal Complexes as a Biologically Active Pharmacophore. Anusuya A M , Krishna B S, **International conference on Global Convergence in Technology, Entrepreneurship, Computing and Value Engineering: Principles and Practices, (ICGCP-2022), 24th – 25th June, 2022 at SCE, Bengaluru.**
- ❖ Assay of Cephalosporins in bulk and Pharmaceutical Formulations, Roopa K P, **International conference on Global Convergence in Technology, Entrepreneurship, Computing and Value Engineering: Principles and Practices, (ICGCP-2022), 24th – 25th June, 2022 at SCE, Bengaluru.**
- ❖ Chemical Hydrology Analysis Of Groundwater In Hutridurga Hobli, Kunigal Taluk, Krishne Gowda Y H, Gurushantha K, **International conference on Global Convergence in Technology, Entrepreneurship, Computing and Value Engineering: Principles and Practices, (ICGCP-2022), 24th – 25th June, 2022 at SCE, Bengaluru.**

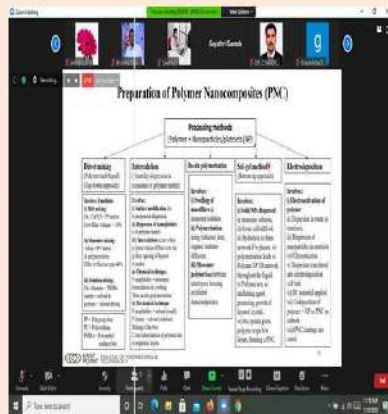
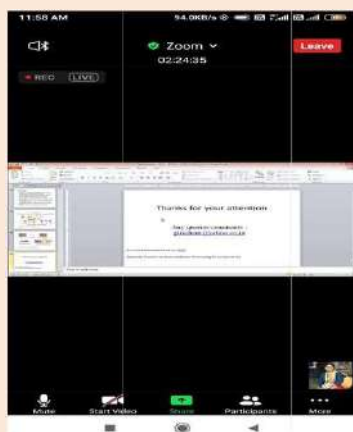
## Faculty development Program/Workshop/conference attended

- ❖ Dr. B S Krishna attended 3 days FDP on “Innovative Tools / Techniques to improve Quality of Teaching-Learning at Sapthagiri College of Engg, Bengaluru from April 7th to 9th, 2022.
- ❖ Dr. B S Krishna attended One week FDP on “Universal Human Values” at UHV cell, BIT, Bengaluru from 27-09-2021 to 01-10-2021.
- ❖ Dr. B S Krishna attended One week FDP on “Recent Trends in Green Chemistry-2021”, at DBIT Bengaluru from 15-11-2021 to 19-11-2021.
- ❖ Dr. B S Krishna attended 3 days FDP on “Implementation of National Education Policy-2020” at BIT Bengaluru from 06-12-2021 to 08-12-2021.
- ❖ Dr. Roopa K P attended 3 days FDP on Innovative Tools / Techniques to improve Quality of Teaching-Learning at Sapthagiri College of Engg, Bengaluru from April 7th to 9th, 2022.

- ❖ Dr. Roopa K P attended 5 days FDP on “Recent trends in Green Chemistry-RTGC” at Don Bosco Institute of Technology, Mysore Road, Bengaluru from 15th to 19th November - 2021.
- ❖ Dr. Roopa K P attended 5 days FDP on ““Science of New-Age Materials for Advanced Technological Applications” at Department of Chemistry, AIT, Bengaluru-107 from 25th to 29th April -2022.
- ❖ N Ravikantha attended 3 days FDP on “Innovative Tools / Techniques to improve Quality of Teaching-Learning at Sapthagiri College of Engg, Bengaluru from April 7th to 9th, 2022.
- ❖ N Ravikantha attended 5 days FDP on “Recent Advances in Chemical Sciences and Intellectual Property Rights” at Sapthagiri College of Engg, Bengaluru from 25th -29th of October 2021.
- ❖ Anusuya A M attended 3 days FDP on “Innovative Tools / Techniques to improve Quality of Teaching-Learning at Sapthagiri College of Engg, Bengaluru from April 7th to 9th, 2022.
- ❖ Anusuya A M attended 5 days FDP on “Recent Advances in Chemical Sciences and Intellectual Property Rights” at Sapthagiri College of Engg, Bengaluru from 25th -29th of October 2021.
- ❖ Anusuya A M attended 5 days FDP on “Science of New Materials for Advanced Technological Applications” Acharya Institute of Technology, Bengaluru from 25th -29th of April 2022.
- ❖ Krishne Gowda Y H attended 3 days FDP on “Innovative Tools / Techniques to improve Quality of Teaching-Learning at Sapthagiri College of Engg, Bengaluru from April 7th to 9th, 2022.
- ❖ Krishne Gowda Y H attended 5 days FDP on “Recent Advances in Chemical Sciences and Intellectual Property Rights” at Sapthagiri College of Engg, Bengaluru from 25th -29th of October 2021.
- ❖ Krishne Gowda Y H attended 5 days FDP on “Recent Developments in Advanced Materials Processing Techniques and Characterization” at School of Engineering, Presidency University, Bengaluru from 21st to 25th February 2022.

## The Department of Chemistry organized the Five days e-FDP (25-10-2021 to 29-10-2021) on “Recent Advances in Chemical Sciences and Intellectual Property Rights”

- **Day 1 (25-10-2021):** Dr. M S Vijaya Kumar (Ph.D) (Japan) Ramanujan Faculty Fellow, Department of studies in Chemistry Manasagangotri, University of Mysuru. He delivered a talk on “**Material Science in Space**”. The session was useful in understanding about how the research is going on in space, what are the drawbacks, advantages and difficulties the scientists are facing during their research in space and how we can utilize those facilities.
- **Day 2 (26-10-2021):** Dr. K Motelingu, Associate Professor, Department of Studies in Chemistry, Manasagangotri, University of Mysuru was speaker for the 2<sup>nd</sup> day. The speaker was introduced by Dr. Roopa K P, AP, Department of Chemistry, SCE. He gave a talk on “**Reagents, Nano catalysts in synthetic organic and medicinal chemistry**”. The session was useful about how to synthesize the organic compounds, applications of nano catalysts in different field.
- **Day 3 (27-10-2021):** Dr. K S Lokesh, Professor, Department of studies in Chemistry, Vijayanagara Sri Krishnadevaraya University, Bellary, was introduced by, Dr. Roopa K P, Assistant Professor, Dept of Chemistry. He delivered a lecture on “**Electrochemical applications of N4 Macrocycles**”. He explained about basic fundamentals of Electrochemistry, Insights into electrochemistry for sustainable development, corrosion related problems, batteries & Fuel cells.
- **Day 4 (28-10-2021):** Dr. T K Vishnuvardhan, Assistant Professor, Department of Chemistry, Ramaiah University of Applied Sciences, Bengaluru, delivered a talk on “**Morphology and Applications of Nanocomposite Materials**”. Mrs. Anusuya A M, Assistant Professor, Dept of Chemistry, introduced the speaker Dr. T K Vishnuvardhan to the participants. He explained about the synthesis and applications of Nanocomposite materials in various field.
- **Day 5 (29-10-2021):** Mr. Ravikantha N , Assistant Professor Dept of Chemistry, SCE introduced the speaker **Dr. M Rudresh**, Assistant Professor, Department of Aeronautical Engineering, Dayanand Sagar college of Engineering, Bengaluru. He delivered his lecture on “**Overview of Intellectual Property & Rights**”.



Glimpse of e-FDP on “Recent Advances in Chemical Sciences and Intellectual Property Rights”

## Induction Program Phase-I was conducted for first year students AY 2021-21 from 13/12/2021 to 24/12/2021 (11days).

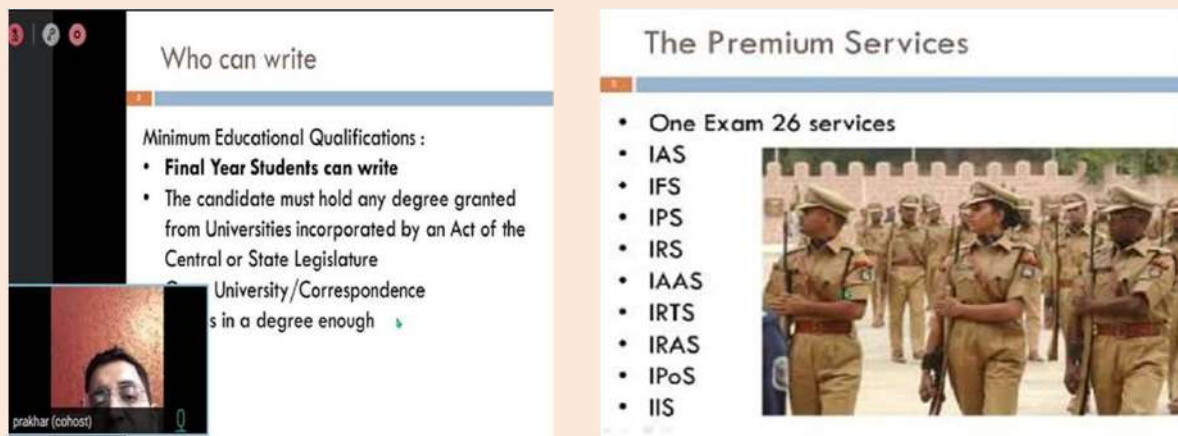
Inauguration of Student Induction program (SIP) Phase-I: Program was inaugurated by our beloved Dr. H Ramakrishna, Principal, SCE. Principal was highlighted about persistence of conducting SIP for first year students to set a healthy daily routine, enhance awareness regarding social and human values, and begin a better bonding.



Speaker **Dr. M A Narasimha Murthy**, Quality Head, Infineon Technologies, Bengaluru, inspired our newly joined young and energetic engineering students by his motivational words. He has explained very important Guiding principles to students which will be helpful for them throughout the tenure of their engineering course. Further, he also explained about importance of professional ethics and requirement of good mentor. He gave many fruitful messages to the students and also to all of us, by playing few videos. He clearly explained about the “4E learning Approach of today” i.e. Education, Experience, exposure and Environment. His speech consists of Role of Engineer, Social Responsibility.



In Day-2, session-1, a talk was arranged to students by Mr. Prakhar Pandey, Assistant Registrar, Department of co-operative Government of Karnataka and he is also alumnae of SCE. He gave very essential information about **Civil Services as Carrier**. He motivated our students about i) How to prepare for civil services exams, ii) Plan of exam iii) who can write exam iv) the various premium services v) Prelims and mains subjects and preparations vi) Interview process. It was actually a more interactive session students and faculties are involved in questions and answer session with important and useful questions. Mr. Prakhar Pandey Sir clarified all the queries which are been asked by the students and teachers as well. At the end of session, he gave few useful tips to students about how to crack civil exams.



- Heads of Basic Science (PCM) departments were addressed the students. They have explained about important academic points



Dr. Krishna B S presenting the details of C-Cycle



Dr. Jagadeesha Gowda G V presenting the details of P- Cycle

In Day-3 Session-1, **Vallabha Chaithanya Dasa**. Youth guide and presenter, Youth Empowerment Club, ISCKON, Bengaluru, gave a talk on **Values and Ethics in Decision Making**. In his speech, he has explained about ethics and values and he made the session has more interactive by asking few general questions to the students. Students were also responded to speakers with many answers and the speaker appreciated the students

In Day-4 Session-1, the seven departments HOD's gave talk to the respective branch student's separately by giving separate meeting link. In their address, they covered the details about their departments mainly on Academics, achievements, placements, sports achievements, also played department videos,.

In Day-5 Session-1, a talk was held on Phycology by **Dr. Varsha B G**, Assistant Professor, Department of Psychiatry, SIMS & RC Bengaluru. In her talk, she has explained about the

1. Introduction to Psychology
2. Importance of Psychology
3. Strategies for Handling Anxiety
4. Stress management skills
5. Signs & Symptoms of Substance abuse and etc.

**Dr. Veena S More**, Professor & Head Department of Biotechnology Saphagiri College of Engineering Bengaluru, gave a talk on Cultural club. This talk contains points namely;

1. Objectives of Cultural Committee
2. Roles & Responsibilities
3. Cultural Committee Members
4. Events under Cultural Committee

Fresher's Day

Madhurya – The Festival of Music- Anthyakshari, classical, filmy, Folk

Okuli – The Festival of Colors-Rangoli, Face painting, Sketching, nail art

Ganesha Festival

Navaratri Festival

Kannada Rajyostava, etc.

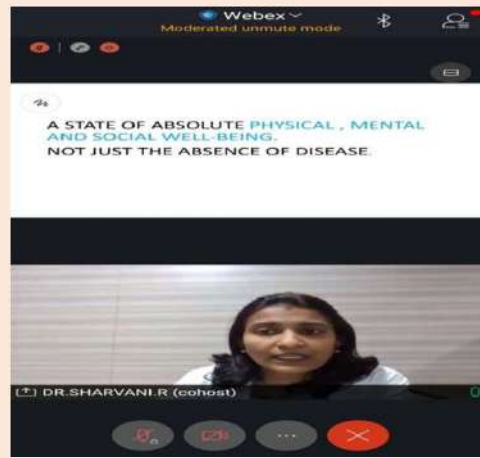
In Day-6, in Session-1 & 2, i) **Dr. Tulsidas**, Associate Professor Department of Mechanical Engineering Saphagiri College of Engineering Bengaluru, gave a talk on **NSS & Community Club**, ii) **Prof. Rekha S N**, Associate Professor Department of EEE Saphagiri College of Engineering Bengaluru, gave a talk on **Proctoring System**, iii) **Dr. Raghavendra**, Associate Professor Department of EEE Saphagiri College of Engineering Bengaluru, gave a talk on **Health Club**.

In their talk, they have mentioned importance and outcomes of the club activities precisely.

**Mr. Prasad D**, Lecturer & Athletics Coach, University College of Physical Education, Bangalore University, Bengaluru addressed our students on **Importance of Sports**. In his talk he has explained about how important sports are for students for all round development in student's life. He also explained about

- i) Importance of Exercise in our life,
- ii) Principles of Exercise
- iii) Physical Fitness
- iv) Exercise as a therapy





Glimpse of Student Induction Program Phase-I

## Science Exhibition 2021

A Science Exhibition was held by the Sapthagiri College of Engineering, Bengaluru under the banner of ALCHEM club on Monday, 28<sup>th</sup> of February 2022 for First year students. The students of I SEM BE: ECE/ ME/BT/CV have participated and presented their projects with innovative ideas. The arrangement was done in Ground floor of Sir MV Block between 2 PM to 4 PM. 47 teams have participated in the event. Students exhibited their talents in different aspects under the supervision of faculty members of the Chemistry department and also proctors from other departments. They exhibited their projects using models with reports to all the viewers.



## Glimpse of Science Exhibition 2021

## Phase-II Student Induction Program (SIP) 2021-22

- Induction Program Phase II was conducted for first-year students AY 2021-22 from 06/06/2022 to 08/06/2022.
- Inauguration of Induction program Phase-II: Program was inaugurated by the Principal. Later Introduction talk on the committees of the college was addressed by various Committee conveners to give a clear idea on how the committee of our institution helps students in enhancing their academics and non-academics performances.
- Cultural activities like singing, dumb charades were organized in the afternoon session day for the students to enhance and showcase their talents in the cultural events.
- Technical Talk on “**Relevance of Values in Modern Life**” was addressed by Sampaturu Vishwanath, Writer & Retired Principal, Gandhi Nagar Govt School, Bangalore.
- Technical Talk on awareness on “**Prevention of Sexual Harassment**”, was organized from women empowerment Cell by Prof. Prerana Chaitra ISE Dept. SCE.



## Glimpse of Phase-II Student Induction Program (SIP)

## Industrial Visit

- Our department had organize an Industrial Visit for ISRO, Old HAL Airport Road , Bangalor-17 on 04.07.2022 around 55 students with 3 faculty members are visited
- Industrial visit for students will help them to gain practical knowledge other than what we teach in the syllabus.



## Glimpse of Industrial Visit to ISRO

## Mini Project Exhibition 2022

- A Mini Project Exhibition 2022 was held by the Sapthagiri College of Engineering, Bengaluru under the banner of ALCHEM club on Saturday, 30<sup>th</sup> of July 2022 for First year Chemistry Cycle students. The students of II SEM BE: CSE/ISE/EEE have participated and presented their projects with innovative ideas. The arrangement was done in First floor, Sir M V Block between 11 AM to 1 PM. 68 teams have participated in the event. Students showed their talents in various aspects under the guidance of faculty members of the Chemistry department and also proctors from other departments. They exhibited their projects using models with reports to all the viewers.



## Glimpse of Mini Project Exhibition 2022

## Editorial Board



**Chief-Editor:**  
**Dr. B S Krishna**  
**Professor & Head**



**Co-Editor:**  
**Krishne Gowda Y H**  
**Assistant Professor**



**Student Member:**  
**Nithyanandan**  
**1<sup>st</sup> Sem ECE**



**Student Member:**  
**Raksha R**  
**2<sup>nd</sup> Sem ISE**