DEPARTMENT OF CHEMISTRY

FACULTY PROFILES

NAME: Abhijit Kantankar

DESIGNATION: Assistant Professor

QUALIFICATIONS: M.Sc. (Organic Chemistry), CSIR-NET, (Ph.D.)

ALMA MATER: Osmania University, Hyderabad

AWARDS & RECOGNITIONS:

- Received State Level First Prize in JIGNASA-2018 Study Project conducted by CCE, Telangana State in Chemistry
- Received State Level Second Prize in JIGNASA-2020 Study Project conducted by CCE, Telangana State in Chemistry

TEACHING EXPERIENCE: **9years**

RESEARCH EXPERIENCE: **6years**

RESEARCH INTEREST: Organic synthesis, Heterocyclic chemistry, Phyto-remediation, Phyto-absorption, Environmental Chemistry

PROJECTS: "A Review on Analysis and Impact of Absorption and Assimilation of Physiologically Active Organic Drug Molecules and Their Complexes by Plants" (**UGC-SERO Sponsored Minor Research Project**)

RESEARCH PAPERS:

1. Abhijit, K., and Latha, P., A Quantitative Analysis of Chlorophyll Depletion by Aspirin and Paracetamol in *Oryza sativa*, *J. Pharmacy and Chemistry* , **2015**, *9(4),* 3-5.
2. Abhijit Kantankar*, P. Latha, L. Sandeep, D. Rashi And J. Venkatesh, Impact of ASA (Acetyl salicylicacid) and APAP (Acetyl para aminophenol) on morphological characteristics and yield formation of tomato plant (*Solanum lycopersicum l.*), *Ejpmr*, **2016**,*3(11)*, 541-547.
3. K. Abhijit, and P. Latha, Effect of physiologically active organic compounds like drugs on growth, development and yield formation of rice (Oryza sativa), ijmart, ***2016*** *Volume III*, *Issue 1(1)*, 73-84.
4. M. Sunitha, K.Abhijit and et. al., Impact of Effluents of Agro-based industries on ground water quality of Nizamaba District, *Int.J.Modern Chem. & Appl.Sci*., **2016**, 3(2), 341-343.

5. K.Abhijit, G.Sirisha, M.Prasanna, Ayesha Nazneen, and S.Sushma, Quantitative analysis of absorption of APAP and ASA by *Oryza sativa L.*plants under variable pH conditions, *J. Applicable Chem.*,2019, *8(5),* 2045-2050.
6. Y.Jayaprakash Rao an K.Abhijit, Synthesis of Novel Functionalized Pyrano Annulated/Oxazolone Pendent Chromone Derivatives as Potent Anti-Diabetic Agents, *Russ J Gen Chem.,* **2020,** *90***,** 1074–1082.
7. Rao, Y.J., Abhijit, K., Mallikarjun, G. Hemasri, Y. Design and synthesis of novel benzyloxy-tethered-chromone-carboxamide derivatives as potent and selective human monoamine oxidase-b inhibitors. *Chem. Pap.,* **2021,** *75***,** 703–716.

NAME: Shravani Nethi

DESIGNATION: Assistant Professor

QUALIFICATIONS: M.Sc. (Chemistry), CSIR-NET (JRF), (Ph.D.)

ALMA MATER: University of Hyderabad, Hyderabad

AWARDS & RECOGNITIONS:

- Represented Telangana state as contingent leader at National Integration camp for Women at University of Mumbai, Mumbai.

TEACHING EXPERIENCE: **9years**

RESEARCH EXPERIENCE: **4years**

RESEARCH INTEREST: Computational Chemistry, Molecular Dynamics, Nolecular modeling.

PROJECTS: Hydrophobicity of Ionic Liquids (**SRFP-IAS, NCL-PUNE**)

NAME: Ravi Kumar Jakanagari

DESIGNATION: Assistant Professor

QUALIFICATIONS: M.Sc. (Physical Chemistry), M.Ed., APSET

ALMA MATER: Osmania University, Hyderabad

AWARDS & RECOGNITIONS:

- Awarded Baga Reddy memorial Gold Medal for topper of Post Graduate Center, Mirzapur.
- Got Merit scholarship at post graduate level from Department of B.C. Welfare, Andhra Pradesh..

TEACHING EXPERIENCE: **19 years**

RESEARCH INTEREST: Physical chemistry

NAME: Manoj Kumar Vala

DESIGNATION: Assistant Professor

QUALIFICATIONS: M.Sc. (Inorganic Chemistry), CSIR-NET (Ph.D.)

ALMA MATER: Osmania University, Hyderabad

TEACHING EXPERIENCE: **15years**

RESEARCH EXPERIENCE: **5years**

RESEARCH INTEREST: Organic Synthesis, Organometalic chemistry.

RESEARCH PAPERS:

1. Sudhakar, C.; Shekar, V.; Shyamsundar, M.; Suryakumari, A.; Manoj Kumar, V. An efficient rapid synthesis of benzoxazoles and benzothiazoles using PMA. SiO_2 at room temperature under heterogenous conditions, *Lett. Org. Chem.*, **2021**
2. Manoj Kumar, V.; Shyamsunder, M.; Veera Reddy, N.; Sudhakar, Ch. Copper catalyzed oxidative cross coupling of phenol derivatives with THF for the synthesis of tetrahydrofuranyl ethers via C-H bond activation, *Synth. Commun.*, **2021.**

NAME: Sreedhar Kodiganti

DESIGNATION: Assistant Professor

QUALIFICATIONS: M.Sc. (Organic Chemistry), CSIR-NET (Ph.D.)

ALMA MATER: Osmania University, Hyderabad

TEACHING EXPERIENCE: **15years**

RESEARCH EXPERIENCE: **4years**

RESEARCH INTEREST: Organic Synthesis.

PROJECTS: Novel Synthesis and Characterization of 2-[4-(diphenylmethyl)piperazin-1-yl)N-Phenyl acetamide (**UGC-SERO Sponsored Minor Research Project**)

NAME: Shiva Deepti Rangu

DESIGNATION: Assistant Professor

QUALIFICATIONS: M.Sc. (Organic Chemistry), CSIR-NET(JRF).

ALMA MATER: Osmania University, Hyderabad.

TEACHING EXPERIENCE: **10 years**

RESEARCH EXPERIENCE: **1years**

RESEARCH INTEREST: Proteins and Peptide chemistry

ABOUT THE DEPARTMENT OF CHEMISTRY

Tara Govt. (A) College, Sangareddy was started in the year 1977 with B.A Humanities. B,Sc courses were introduced in the year 1981 with the combination of Mathematics, Physics, Chemistry(MPC) and Botany, Zoology, Chemistry (BZC). English as medium of instruction was started in the year 1998. In view of the demand for chemistry (Number of chemical industries around Sangareddy town) M.Sc Organic Chemistry a self financed course was started in 2006. In the year 2013 MPC, BZC English medium courses were started at UG Level. Currently Department of chemistry has 950 students with 7 combinations with chemistry as one of the subject where as the intake of M.Sc. Organic chemistry is 30 students per year.

Department has three spacious laboratories one instrumentation room, one balance room, one store room and one separate staff room for chemistry teaching faculty. In addition to this Department has separate library. The Department was well established and has well equipped like spectrophotometers, conductometers, pH-meters, colorimeters, polarimeters, ovens and vacuum pumps etc. Chemistry students from this college are rendering services to the society in various levels under Government and Private Organizations. Department of Chemistry has well experienced and qualified faculty. One minor research project has been completed in the Department sponsored by UGC-SERO. Department of chemistry has also organized two national seminars.

DEPARTMENTAL ACHIEVEMENTS:

- Department of chemistry has taken up best practice in which our B.Sc. students M.Prasanna, Ayesha Nazneen, and S.Sushma of chemistry were involved in actual research work under the super-vision of **K.Abhijit,** Asst. Professor of Chemistry, to encourage their scientific aptitude. The project was focused on practical problem of bio-absorption of Phenolic drugs by paddy as most of the students came from rural agricultural areas where pharma companies were established. Students deal the situation with multifaceted approach by incorporating knowledge of not only Chemistry but also

biological aspects along with advance level of analysis. The outlook of this project was very encouraging and certainly useful in design newer strategies in the field of Phyto-remediation, the Environmental technology in which pollutants were removed by using plants. This research work was published in "**Journal of applicable chemistry**" with the title "**Quantitative Analysis of Absorption of APAP and ASA by *Oryza sativa L.* Plants under Variable pH Conditions"**

(K.Abhijit, G.Sirisha, M.Prasanna, Ayesha Nazneen, and S.Sushma, Quantitative analysis of absorption of APAP and ASA by *Oryza sativa L.*plants under variable pH conditions, *J. Applicable Chem.*,2019, *8(5),* 2045-2050.)

- Department of chemistry has organized **a Lecture and Interactive talk on** "MIXED OXIDES & NANO COMPOSITES AS CATALYSTS FOR VALUE ADDED SYNTHESIS AND WATER SYNTHESIS" By **Professor Sreekantha Babu Jonnalagadda**, Senior Professor of Chemistry , **University of KwaZulu-Natal, Durban (UKZN), South Africa** on 27.12.2019.
- Students of BSc-III(Chemistry), **J.Manjulatha, J.Swetha, A.Pranaya, P.Pooja, G.Sai Ganesh** has presented a "Research Paper" on **Antimicrobial Silver Nanoparticle Coating On Paper Currency Notes And Mobile Phones Using Eco-Friendly Tollens Process For Prevention Of Infectious Diseases, at One day National seminar on Recent Advances in Chemicals science(NSRACS)-2020** on 1st February 2020 at Girraj Govt. College, Nizamabad and secured **First prize** in both Paper and Poster Presentations by esteemed judges.
- **A. Bhanuprakash** of BSc-III(Chemistry), secured National level Second prize in poster presentation at National Technofest, **ANTAHPRAGNYA** conducted by **RGUKT**, basara on 01.02.2020.
- Students of BSc-III(Chemistry), **J.Manjulatha, A. Bhanuprakash, J.Swetha, A.Pranaya, P.Pooja, G.Sai Ganesh** have won state level Second Prize in **"JIGNASA" study projects-2020** in Chemistry under the super-vision of **K.Abhijit,** Asst. Professor of Chemistry.
- In **CPGET-2019**-conducted by Osmania University, **G.Shirisha** secured **State level 1st Rank** in CHEMISTRY.

- **Dr. D. Karunakar,** Asst. Professor of Chemistry was awarded "**BEST TEACHER IN CHEMISTRY**" award for the academic year 2016-17.
- Minor research project entitled **"Synthesis of new isoxazolyl thiazolidinones and their biological activity"** was sanctioned by UGC-SERO, Hyderabad and successfully completed by Dr. D. Karunakar, Asst. Professor of Chemistry.