PROGRAMME SCHEDULE

(Venue: PG Seminar Hall, O.U.C.W., Koti, Hyderabad)

- 08:30 a.m. 09:30 a.m. REGISTRATION
- 09:30 a.m. 10:30 a.m.
- 10:30 a.m. 11:00 a.m. **TEA BREAK**
- 11:00 a.m. 1:00 p.m.

11:00 a.m. - 12:00 p.m.

12:00 p.m. – 1:00 p.m.

1:00 p.m. – 2:00 p.m.

2:00 p.m. – 4:00 p.m.

4:00 p.m. - 5:00 p.m. 5:00 p.m.

INAUGURAL SESSION

SESSION-I: Lecture Session

Lecture-1: Dr. K. Ravi Kumar Scientist, X-ray Crystallography Division, IICT, Hyderabad

Lecture-2: Dr. Tata N Rao Scientist-F & Team Leader **Centre for Nanomaterials** ARCI, Hyderabad

LUNCH BREAK

SESSION-II: Lecture Session Lecture-3: Prof. Samara Kumar Das Department of Chemistry, UOH, Hyderabad Lecture-4: Dr. A. Shiva Lakshmi Devi GM, ADL, Mylan Laboratories Ltd, Hyderabad **VALEDICTORY SESSION** TEA

Patrons

Prof. B.T. Seetha, Principal, O.U.C.W Prof. Sugitha Mathur, Vice Principal, O.U.C.W Dr. P. V. Ananthalakshmi, Head, Dept. of Chemistry, O.U.C.W

Organizing Secretaries

Dr. A. Hari Padmasri Dr. P. Saritha Reddy Contact: 9441788898; 9848487363

Organizing Committee

Prof. Ch. Anjaneyulu Dr. Aliya Begum Dr. K. Premalatha Dr. Swaroopa Rani Dr. V. Shashikala Dr. M. Kavitha Dr. B. Padma

Dr. A. Gayatri Devi Mrs. D. Anitha Rangasree Mrs. P. Mamatha Mrs. B. Kavitha Mrs. K. Rajeshwari Mrs. Syeda Shahjahan Mrs. Vasantha Mr. M. Thirupathi Ms. Shireen Sultana Mrs. B. Vijaya Lakshmi Dr. P. Pallavi Ms. M. Sravani Dr. M. Sarasija

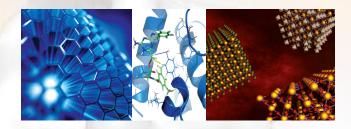
Mrs. M. Jayasuryakumari Mrs. K. Mythili Mrs. E. Sreevalli Mrs. N. Kavitha Mrs. M. Sravanthi Mrs. P. Annapurna Mrs. Vijayatha Mrs. R. Madhavi Mrs Saritha Subhashini Ms. J. Sowmya Mrs. B. Mounika

UGC sponsorer one-day Astallograh **X-ray Diffraction:**

Key to Crystallographic Studies



15th March 2014





Department of Chemistry O.U.COLLEGE FOR WOMEN

Koti, Hyderabad-500 095

Scope of the Workshop

The International Year of Crystallography 2014 (IYCr2014) commemorates not only the centennial of X-ray diffraction, which allowed the detailed study of crystalline material, but also the 400th anniversary of Kepler's observation in 1611 of the symmetrical form of ice crystals, which began the wider study of the role of symmetry in matter. The major objectives of the IYCr2014 are to increase awareness of the science of crystallography and how it underpins most technological developments in our modern society, to inspire young people and to promote education and research in crystallography and its links to other sciences. X-ray crystallography is a tool used for determining the atomic and molecular structure of a crystal, in which the crystalline atoms cause a beam of X-rays to diffract into many specific directions. X-ray crystallography has led to a better understanding of chemical bonds and non-covalent interactions. The knowledge of accurate molecular structures is a prerequisite for rational drug design and for structure based functional studies to aid the development of effective therapeutic agents and drugs. Crystallography can reliably provide the answer to many structure related questions, from global folds to atomic details of bonding. In contrast to NMR (which is a spectroscopic method), no size limitation exists for the molecule or complex to be studied. Crystallography also has an important place as we work for inclusive sustainable development policies that are good for people and the planet, In fact, crystallography has many applications. It permeates our daily lives and forms the backbone of industries which are increasingly reliant on knowledge generation to develop new products, including the agro-food, aeronautic, automobile, beauty care, computer, electro-mechanical, pharmaceutical and mining industries. Thus, this seminar intends to celebrate this historical year which is the 'International Year of

Crystallography' in creating an awareness about the key role of x-ray diffraction in crystallographic studies in various fields of chemistry viz., characterization of various organic, inorganic, polymeric compounds, in the designing of drug molecules, nanomaterials and biological molecules. We welcome the active participation of all the PG students, research scholars and lecturers/researchers of various institutions.

About the College

The University College for Women is oldest and premier institution which caters to women's education. Over the years it has nurtured and nourished its rich academic potential. The main building of the college is a monument of great aesthetic, architectural and historical importance being part of the British legacy in India. The college offers more than 40 subjects at undergraduate level and 20 at PG level taught by highly qualified and experienced faculty. The college was given autonomy status at UG level in the year 1988-89 which enabled the college to start various restructured UG courses, new diploma and PG courses on self finance basis. The UGC has identified the college as "Centre with Potential for Excellence" in August 2004. The college strives to maintain standards of excellence in academic as well as co curricular activities thereby providing to students the best of opportunities for complete personality development. It is the only constituent college of Osmania University dedicated exclusively to the Women education.

specialization was introduced in 1984. The multidimensional growth in chemistry demanded the emergence of new courses. Consequently to strengthen basic sciences with the changing scenario, the department introduced M.Sc. Medicinal Chemistry (1993), M.Sc Analytical Chemistry and M.Sc Pharmaceutical Chemistry (2002) on selffinance basis.

At undergraduate level the department in a novel stride, started a new course with biological chemistry as an option incorporating the topics of both chemistry and biochemistry in its syllabus. The department also started a UGC vocational course in "Food Science and Management" in 2001. The department is continuously expanding its vast potential for academic growth and providing skilled hands to the industry.

About the Department

The Department of Chemistry, Osmania University College for Women is a multifaceted unit, with an embodiment of various courses, being catered to students' fraternity. It has started with B.Sc Chemistry course in 1959. The M.Sc. PG course with Inorganic Chemistry The department apart from academics is also emerging well in terms of research after being recognized by the DST under FIST programme. The department now has set up a modular research laboratory and computer lab. Several instruments like UV-visible spectrophotometer, fluorimeter, photochemical reactor etc., are being added on to the existing facilities like gas chromatograph, high performance liquid chromatography, FT-IR spectrophotometer etc. The department has eminent faculty, some of whom are research supervisors guiding about 20 research scholars and engaged in DST and UGC research projects. The department of chemistry regularly holds seminars and workshops on current topics and topics of interest to the students as well as teachers to create awareness on the latest research topics and to update their knowledge and teaching skills.

Registration Fee

- Academia & Research Scholars Rs. 300/-
- Students-Rs.150/-