

# **Chemistry Study Circle**

**Date of Commencement: SUNDAY 23 NOVEMBER, 2014**

**Time: (10.00 a.m.—2.00p.m)**

**Sessions devoted to**

**(1) MATHEMATICS FOR CHEMISTRY**

**(2) QUANTUM CHEMISTRY**

Chemistry at the U.G and P.G levels needs considerable familiarity with mathematical topics such as

Co-ordinate systems (rectangular, spherical polar, etc.), functions ( exponential, Gaussian, logarithmic, trigonometric functions ,etc.) , series expansions, Ordinary Calculus, Partial differentiation, change of variables and chain rule of partial differentiation, ordinary and partial differential equations, ideas of probability, and several other related topics.

Chemistry students need to have good working familiarity with these topics, not at the rigorous level of pure mathematics, but at the level that helps them understand the core areas of quantum chemistry, chemical kinetics, thermodynamics and statistical mechanics –areas that are basic to all of chemistry and are part of their physical chemistry syllabus.

In the absence of this mathematical background, many students at the U.G/P.G level find it difficult to understand their subject well.

Mathematics for Chemistry sessions to be held every Sunday will address this widespread difficulty chemistry student's face. These sessions will also include applications of the mathematical methods so learnt to core areas of chemistry.

The chosen area of application from Nov.23 will be Quantum Chemistry.

The sessions are free and open to all interested students at the U.G/P.G levels.

**Venue: Homi Bhabha Centre for Science Education (HBCSE)**

**Near Anushaktinagar Bus Terminal,**

**Mankhurd, Mumbai 400088.**

**Room G1, ground floor, Olympiad Building.**