Dr. Mahesh J Kulkarni  
PI  
Biochemical Sciences  
CSIR-National Chemical Laboratory  
Pune, Maharashtra, 411008

Dr. Sanjay Gambhir  
Professor & Head  
Nuclear Medicine  
Sanjay Gandhi Post Graduate  
Institute of Medical Sciences  
Institute/University: S.G.P.G.I.M.S  
Address: Rai-Bareli Road, Lucknow, Uttar Pradesh, 226014

2.3 Objectives:

1. Mass production of chemically and physically difficult to synthesize nanoparticles using 'bottom-up' bioinspired approaches like biosynthesis, etc. (Nodal Lab-AMU).
2. Mass production of chemically and physically difficult to synthesize nanoparticles using 'top-down' bioinspired approaches like biosynthesis, etc. (Nodal Lab-AMU).
3. Studies on metal accumulation in plants and employing them for the bleaching of technologically important nanoparticles. (Nodal Lab-AMU).
4. Conjugation of our nanoparticles with various anti-diabetic, anti-malarial, etc. drugs. (Nodal Lab-AMU).
5. Radiolabelling of nanoparticles/nano-drug formulations and animal studies to see their bio-distribution and clearance time from blood. (Co-PI: Dr. Sanjay Gambhir, SGPGIMS, Lucknow).
6. Biological synthesis of carbon supported metal/oxide/sulfide/quantum dots nanoparticles. (Nodal Lab-AMU)
7. Nanomaterials embedded in fungal biofilms for uptake studies. (Nodal lab-AMU).
8. Evaluating the exact target site, uptake and location of nanoparticles inside cells samples. (Nodal Lab-AMU).
10. Evaluation of biosynthesized inorganic nanomaterials for ant-diabetic properties and translation into related products (project 1: study of bioinspired nanomaterials in Diabetes: Dr. Mahesh Kulkarni, CSIR-NCL, Pune)
11. Evaluation of biosynthesized inorganic nanomaterials for anti-malarial properties and translation into related products (project 2: Study of bioinspired nanomaterials in Malaria: Dr. Dhanasekaran Shanmugam, CSIR-NCL, Pune)

2.4 Time Schedule:
The duration of the project is 5 Year 0 Month from the date of this sanction order.

2.5 Project Cost:
The total cost of the project is Rs. 39539200/- (Rupees Three Crores Ninety Five Lakhs Thirty Nine Thousand Two Hundred Only) as per details given below: