

Expert Registry

- 1. Name** : Dr. Ayaluru Murali
- 2. Designation and Present Institution** : Assistant Professor,
Bioinformatics Centre,
Pondicherry University,
- 3. Postal Address for communication** : Dr. A. Murali,
Assistant Professor,
Bioinformatics Centre,
School of Life Sciences,
Pondicherry University,
Puducherry – 605 014.
- 4. Phone Number** : 095730 25700.
- 5. Fax Number** : +91-413-2655211
- 6. email address** : mayaluru@gmail.com
- 7. Brief account of your research interests with special focus on Nano Science and Technology (strictly within 300 words) :**

I have extensive experience in USA in solving the structures of macromolecules (proteins, protein-protein complexes, viruses and virus like particles) using a novel technique called single particle analysis (SPA) and transmission electron microscopy (TEM). This is novel in the sense that one can get a physiologically relevant structure of macromolecules without crystallizing the sample. I have published several papers in this field in reputed journals such as PNAS, Journal of Biological Chemistry, Nano Letters, ACS Nano, Journal of Virology. Use of nanoparticles further enhances the power of single particle analysis as already shown in my earlier works [PNAS (2007, **104**, 1354-1359.), NanoLett (2006, **6**, 1993-1999), and ACS Nano (2010, **4**, 3853-3860)]. I recently moved to India to take up a Faculty position in Pondicherry University to continue my research in these lines.

- 8. Keywords related to your research interests (maximum 120, different lines separated by commas).**

Structural Biology,
Transmission Electron Microscopy,
Single Particle Analysis,
Virus like particles,
Proteins,
Protein-protein complexes.