# 1 RESEARCH IDEAS

1. Machine Learning
Question: Can we effectively represent a very well trained DNN (Deep neural network) which does excellent tasks (may be like prediction or classification) etc in LOWER DIMENSIONAL SPACE? That is can we "coarse grain" a DNN? If so can we find any general method to analytically reduce these huge DNNs to a smaller representation which doeas equally good job? Do there exist Shallow networks which can do the job at all? Also designing Shallow networks which can do the job will be very good in the sense the computational cost need not be this high and computations will be faster. As an attempt I am going to try classify cats and dogs problem from a shallow network view point!

**2. molecular dynamics of particles inspired from human interactions with people and other creatures..MD of particles with memory... like lennard jones gas...but random interactions bw particles which has feedback memory properties. Design potentials for these**

# 2 IDEAS

OLD 1. Reaction diffusion in paints for texture creation
2. Reaction diffusion on a FPGA
3. SALT SEA - artificial like dead sea [what is this?? I forgot]

# 3 TO DO

1. Add Extracurricular activities - Volunteered "Science At Sabha"