

LIST OF PROJECTS

Sponsored Projects

1. Ocean modelling - Phase II; DOD
2. A neural network based atmospheric prediction system; DST
3. Determination of material properties of road pavement component layers from surface measurements-development of mathematical model and software; CRRI, New Delhi
4. Modelling of biogeochemical processes in upper ocean; DOD
5. Genesis, intensification and early warning of Bay of Bengal Cyclones; DST
6. Development of a model for ash distribution in Indian coals; CFRI, Dhanbad

Collaborative projects

1. Investigating strain fields in zones of recent seismicity in Southern Peninsular India (with NGRI, Hyderabad)
2. Nondeterministic modelling of earthquake processes (with NGRI, Hyderabad)
3. Dynamics of Indian oceanic lithosphere (with NIO, Goa)
4. Atmospheric photochemical modelling to study the global change and remote computing (with NPL, Delhi)
5. Computer aided chemistry (with IICT, Hyderabad)
6. Mathematical modelling of the pacemaker action potential in heart (with CDRI, Lucknow)

7. Development of software package for chaos game representation of DNA/RNA/Protein sequences (with IICB, Calcutta)
8. Prognostic modelling of landslides (with CBRI, Roorkee)
9. Computer simulation of airframe and turbomachinery components for NC machining (with NAL, Bangalore)
10. Strength contours of leather surfaces (with CLRI, Madras)
11. Computer aided design of tunnels (with CMRI, Dhanbad)
12. Modelling of microsegregation during solidification of metallic alloys (with NML, Jamshedpur)
13. Simulation of bioremediation in hydrocarbon contaminated soil beds (with RRL, Jorhat)
14. Kinetic analysis of cephalosporin biosynthesis (with RRL, Jorhat)
15. Application of nonlinear ray theory to unsteady sonic boom and seismic ray tracing (with IISc., Bangalore)
16. Finite element analysis of composite beams supporting walls (with Bangalore University)
17. Understanding neurodynamics using trans-spectral coherence of EEG data (with NIMHANS, Bangalore)

In House Projects

1. Modelling stress in the Indian Lithosphere and earthquake genesis
2. Augmentation of computing facilities
3. Development, operation and management of high performance computing and networking resources
4. Decomposition of seismic signals