THE INSTITUTO DE INVESTIGACIONES EN MATERIALES

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The *Instituto de Investigaciones en Materiales* (IIM) is part of the *Universidad Nacional Autonoma de Mexico* (UNAM), it's main objectives are:

1. To carry out research in materials science and technology.
2. To train specialized personnel.
3. To provide scientific and technological assistance to other research and industry establishments in Mexico.
4. To promote diffusion of the results of our research.

The Institute was created on February 1st, 1967 under the name of Centro de Materiales, in 1969 it's name was changed to Centro de Investigaciones en Materiales and finally the 21st of November of 1979 the Institute status was approved, resulting in greater independence in it's research activities.

To carry out research the IIM is subdivided in three Departments and one off campus Laboratory:

- Department of Metallic and Ceramic Materials.
- Department of Polymers.
- Department of Solid State and Cryogenics.

and

- Solar Energy Laboratory.

The IIM carries out theoretical and applied research and development on metals, polymers, amorphous materials, semiconductors, superconductors, solar energy materials and systems, and construction materials and systems. Specifically the active areas of research are:

- Properties of copper and zinc alloys.
- Memory alloys based on copper.
- Magnetic mechanism in amorphous metals.
- Electrical and optical properties of ceramics.
- Synthesis of polymers and ionic surfactants.
- Rheology of polymers.
- Theoretical studies on chemical reactivity of polymers.
- Synthesis and dynamically properties of liquid crystals.
- Dielectric relaxation of polymers.
- Hydrodynamic stability and convection of viscoelastic fluids.
- Technological applications of amorphous silicon and alloys.
- Recombination and trapping in hydrogenated amorphous silicon.
- Growth of amorphous silicon thin films.
- Electronic and vibrational properties of materials.
- Quasi crystals and low dimensional systems.
- Transport properties of superconducting ceramics.
- Impurity effects in superconducting ceramics.
- Magnetic properties of perovskites.
- Superconductivity in copper free ceramics.
- Wires and strips of high Tc superconductors.
- Electronic structure of superconductors.
- Characterization of photovoltaic systems.
- Heat transfer in porous media.
- Magneto hydrodynamic flow.
- Laser anemometer of fluids.
- Natural convection in cavities and closed circuits.
- Solar refrigeration systems.