PROBLEM STATEMENTS
(Department of Biomedical Engineering)

PROBLEM 1:

Classification of biological nano-objects according to their spatial properties

Abstract :The spatial recognition of objects, from airplanes to human faces, is of ever-increasing interest in the present much more interconnected and crowded world. The Project will involve the use of existing in-house developed software for building images of biomolecules, followed by the development of an interface between structural databases, image building for the bio-objects present in these databases, and the archiving, classification and access to a database of molecular images.

PROBLEM 2:

Rehabilitation related to prosthetic/orthosis for hands and legs

Abstract :Prosthetics and Orthotics is the horizon of modern treatment and rehabilitative modality that deals with the orthopaedic and neuromuscular disorders and insufficiencies including congenital loses and accidental or traumatic amputations.

PROBLEM 3:

Wound healing patches

Abstract :In medicine today ,patch technology is the best known and widely used approach for delivering drugs and medications through the skin without using needles.It has proven to be fastest, easiest, safest and most economical way to help wound heal.

PROBLEM 4:

Wireless ECG

Abstract:The purpose of this project is to get a clear ECG-signal without any noise, save it and send it through wireless communication. A challenge of the wireless communication unit is to send as little information as possible to make the communication faster, without loss of information in the ECG-signal.

PROBLEM 5:

Human identification using the eye

Abstract:The vein structure in the sclera, the white and opaque outer protective covering of the eye, is anecdotally stable over time and unique to each person. As a result, it is well suited for use as a biometric for human identification