

Name of the Technology/Product : “Myoelectric Arm”

Laboratory Name	CSIR-Central Scientific Instruments Organisation, Chandigarh
Brief Profile of Technology/Product	Myoelectric arm consists of gripping fingers, palm, wrist and lower portion of upper limb. The arm further has a dc motor for hand movement, sensors to pick up myoelectric signals from the stump, circuitry to process and condition the signals to perform the opening and closing of hand, and finally a case in which the entire setup is placed to provide a cosmetic appeal.
Returns/Benefits	One disability which commonly occurs in factory workers and military personnel is the partial/full loss of upper limb. People who lose their arm and hand find it very difficult to perform various operations that a normal arm does. Hence it is necessary to provide an artificial hand/arm to such amputees which looks and functions as a normal arm. This technology acquired the muscle signals from the leftover part of the amputation (stump) and used to drive the hand drive electronic circuitry which helps in grasping and releasing of objects.
Validation Level	Tested Prototype
IPR Status [also indicating the status of the patent (if any) in 2015]	No patent applied so far
End product price (if not available, estimated price)	Rs. 20000/- to Rs. 25000/-
Technology/Product Collaborator	None, in-house development.
Relevance of Technology in present times	The technology is related to the persons with disability at below the elbow. That can be fitted to any person who lost his hand in any accident subject to his residue muscles are still active.
Similar technology/product developed	Available in international market @ Rs. 3.50 Lakhs
Picture of the technology/product (if any, with good resolution)	