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IIT-M & CMC Vellore develop affordable indigenous robot for hand rehabilitation

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This patented technology offers precise therapeutic movements and real-time feedback



Researchers at the Indian Institute of Technology Madras (IIT-M) and Christian Medical College, Vellore (CMC Vellore) have developed a cost-effective and portable plug-and-train robot for hand rehabilitation.

Called ‘PLUTO’ (Plug and Train Robot), this device technology was licensed through Technology Transfer Office-TTO ICSR and commercialised by Thryv Rehab Solutions. It addresses a significant gap in the current rehabilitation market. This innovative device is well-positioned to meet the growing demand for affordable and adaptable rehabilitation solutions in clinical and home settings.

PLUTO is also the first and only indigenous robot to have been tested in Indian homes, demonstrating that PLUTO can deliver intense therapy and make therapy accessible. PLUTO has already benefitted more than 1,000 Patients in the last four years.

This product is a great example of academic research successfully translating into a product that reached the common man and is poised to benefit thousands of patients.

This patented technology offers precise therapeutic movements and real-time feedback, ensuring better outcomes for patients with conditions such as stroke, spinal cord injury, multiple sclerosis, Parkinsons’ disease and post hand-surgery, among others.

The device is well-suited for use in rehabilitation centres, clinics, hospitals, and even patients’ homes, bridging the gap in accessibility to effective, affordable hand rehabilitation solutions. The innovation’s cost-effectiveness and portability make it a transformative tool in the healthcare industry.