# **CRE-REPORT**

Organized by: Composite Regional Centre (CRC), Guwahati

Venue: CRC Auditorium, GMCH Campus, Bhangagarh, Guwahati, Assam

Date: 9th July 2025

Time: 10:00 A.M. to 5:00 P.M.

Mode-Offline

Topic: Advancement in Assistive Technologies for Persons with Locomotor Disability

CRE Proposal ID: CRE-25062414031501

**Programme Coordinators:** 

### 1 Mr. Mritunjay Kumar

RCI CRR A69420

Prosthetist & Orthotist (P&O), Department of Prosthetics & Orthotics

CRCSRE, Guwahati

• kumarmirtunjay999@gmail.com |

### 2. Dr. Mantu Paul (PT)

• Lecturer, Department of Physiotherapy

CRCSRE, Guwahati

### Details of CRE:

Day/Date	Time	Торіс	Total footfalls	Total Verified
			(Registered)	Participants
09/07/2025	10:00 AM	Advancement in Assistive		
Wednesday	То	Technologies for Persons	58	58
	05.00 PM	with Locomotor		
		Disability.		

#### 1. Introduction:

The Composite Regional Centre (CRC), Guwahati successfully organised a one-day Continuing Rehabilitation Education (CRE) programme on 9th July 2025. The theme of the programme was "Advancement in Assistive Technologies for Persons with Locomotor Disability." The event aimed to disseminate current advancements and innovations in assistive technology and their practical applications in the rehabilitation of individuals with locomotor disabilities.

## 2. Objectives:

- To explore the latest advancements in assistive devices and technologies.
- To enhance the understanding of professionals regarding effective rehabilitation solutions.
- To promote interdisciplinary discussions on challenges and opportunities in the field

#### **Technical Sessions:**

- 1. **Smart Solution for Faster Rehab and Personalized Mobility Speaker:** Ms. Lipika Boruah, Research Scholar, IIT Guwahati *Overview:* The session highlighted innovative robotic and Al-enabled solutions aimed at enhancing personalized mobility and faster rehabilitation.
- 2. **Emerging Trends and Future Directions in Assistive Technology Speaker:** Dr. Jyoti Prakash Medhi, Assistant Professor, Gauhati University *Overview:* This presentation emphasized evolving trends in assistive technology, with a focus on smart devices, wearable tech, and user-centered innovations.
- 3. Utilization of Artificial Intelligence (AI) in Assistive Technologies for Persons with Locomotor Disability Speaker: Dr. P. K. Lenka, Director, CRCSRE *Overview:* Dr. Lenka discussed real-world applications of AI in diagnostics, prosthetics customization, and rehabilitation monitoring.
- 4. **Biomechanical Analysis: Advanced Assistive Technologies for Persons with Locomotor Disability Speaker:** Mr. Joydeep Nath, Prosthetist & Orthotist, FAAMC&H, Barpeta *Overview:* This session provided practical insights into biomechanical assessments and their impact on improving assistive device outcomes.

**Lunch Break:** 1:00 PM - 2:00 PM

- 1. Physiotherapeutic Outlook: Advanced Assistive Technologies for Persons with Locomotor Disability Speaker: Dr. Biju Chetri (PT), Physiotherapist, GMCH, Guwahati *Overview:* The session explored physiotherapy integration with modern assistive technologies for comprehensive care.
- 2. **Panel Discussion FOCUS:** Focused AI Rehabilitation in Persons with Disabilities (PWD) **Moderator:** Dr. P. K. Lenka Overview: A collaborative discussion exploring interdisciplinary approaches and future strategies for AI-based rehabilitation.

### **Closing Session:**

- Valedictory Ceremony: 4:00 PM 4:20 PM
- Vote of Thanks: Delivered by Dr. Monika Megha (PT), Physiotherapist, CDEIC, CRCSRE
  - Inauguration –



## • Session -1



# Session -2



# Session -3



# • Session -4



## Session -5



## Session -6



## • Group Photo



## **Conclusion:**

The CRE programme successfully fostered knowledge exchange on the convergence of technology and rehabilitation. Participants gained valuable insights into how AI and advanced assistive technologies are transforming the lives of persons with disabilities. The session concluded with a collective commitment to advancing research and practice in this crucial area.