

Technology Interventions for the Disabled and Elderly (TIDE) Financial Year 2021-2022

<i>Sl. No</i>	<i>Title of the Project</i>	<i>Name of the PI & Organisation Address, Email id</i>	<i>State</i>	<i>Amount Sanctioned (in Rupees)</i>	<i>Amount Released in 2020-21 (General & Capital Component in Rupees)</i>
1.	Fall Risk warning system for Elderly by gait analysis using wearable insole-based pressure sensors and integrated IOT	Dr. Harsh Chaturvedi, Indian Institute of Technology, Guwahati – 781039, Assam harshc@iitg.ac.in	Assam	G: Rs.42,56,000/- C: Rs.21,61,410/- Total:Rs.64,17,410/-	Rs.18,28,000/- (G) Rs.21,61,410/- (C) Total:Rs.39,89,410/-
2.	Design and Development of a SMART (shape memory alloy restoration technique) Actuation based Lower Limb Rehabilitation Robotic System	Dr. Yogesh Singh, National Institute of Technology, Silchar – 788010, Assam yogeshsingh15@gmail.com And Dr. Manidipto Mukherjee, CSIR-Central Mechanical Engineering Research Institute, Durgapur 713209, West Bengal m.mukherjee.ju@gmail.com	Assam & West Bengal	NIT Silchar G: Rs.6,45,000/- C: Rs.20,68,950/- Total:Rs.27,13,950/- CSIR-CMERI G:Rs.6,00,000/- C: Nil Total: Rs.6,00,000/-	NIT Silchar Rs.1,60,000/- (G) Rs.20,68,950/- (C) Total:Rs.22,28,950/- CSIR-CMERI Rs.2,00,000/- (C)
3.	Development of Wireless Smart Bed Wet Detection system in Elderly care	Dr. Raja Basha, Department of Electronics and Communication Engineering, Audisankara College of Engineering and Technology, NH-5 Bypass Road, Aravinda Nagar, Gudur – 524101, Andhra Pradesh arajabasha@gmail.com	Andhra Pradesh	G: Rs.16,43,520/- C: Rs.12,45,517/- Total:Rs.28,89,037/-	Rs.8,76,760/- (G) Rs.12,45,517/- (C) Total:Rs.21,22,277/-
4.	Automatic Brushing device for oral hygiene maintenance in	Mr. Sanjeev Verma Department of Biomedical	Chandigarh	CSIO, Chandigarh G: Rs.28,26,080/-	CSIO, Chandigarh Rs.13,63,040/- (G)

	elderly population	Instrumentation CSIR Central Scientific Instruments Organisation Sector 30, Chandigarh-160030 sanjeevverma@csio.res.in And Dr. Manoj Jaiswal, Oral Health Science Centre, PGIMER, Sector – 12, Chandigarh – 160012 drmanojjaiswal@yahoo.in		C: Rs. 6,50,000/- Total: 34,76,080/- PGIMER, Chandigarh G: Rs.2,95,000/- C: Nil Total: Rs.2,95,000/-	Rs.5,50,000/- (C) Rs.19,13,040 PGIMER, Chandigarh Rs.1,20,000/- (G) Nil (C) Rs.1,20,000/-
5.	Development of a contextually-adaptive travel aid for the visually challenged enabling route navigation, safe mobility and destination identification	Dr. Rohan Paul, Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 110016 in collaboration with Mitra Jyoti rohan.cosmos@gmail.com rohan@cse.iitd.ac.in	Delhi	G: Rs.44,59,560/- C: Rs.5,80,114/- Total:Rs.50,39,674/-	Rs.21,97,280/- (G) Rs.3,00,114/-(C) Total:Rs.24,97,394/-
6.	Restore Continence - Assessment and management of urinary bladder dysfunction in patients with neurogenic detrusor over activity following spinal cord injury: A proposal for conducting multi-centric clinical trial	Dr. Rajdeep Ojha, Christian Medical College, Scudder Road, Vellore – 632004, Tamil Nadu collaboration for Satellite Centre with (either NIMHANS, Bengaluru or SJMSCH, Bengaluru) rajdeep@cmcvellore.ac.in	Karnataka	CMC Vellore G: Rs.40,01,396/- C: Rs.7,48,638/- Total:Rs.47,50,034/- Satellite Centre G: Rs.5,78,289/- C: Rs.73,372/- Total: Rs.6,51,661/-	CMC Vellore Rs.22,46,346/- (G) Rs.7,07,598/- (C) Total:Rs.29,53,944/-
7.	Design and Development of Semi-Active Prosthetic Knee using cost-effective Magneto Rheological Brake to assist Trans-Femoral Amputees	Dr. Hemantha Kumar, National Institute of Technology, Surathkal Srinivasnagar, Mangalore - 575025, Karnataka hemanta76@gmail.com	Karnataka	G: Rs.15,99,344/- C: Rs.7,98,998/- Total:Rs.23,98,342/-	Rs.7,99,672/- (G) Rs.7,98,998/- (C) Total:Rs.15,98,670/-
8.	Development of stance control	Mr. Subhash N N,	Kerala	G: Rs.46,72,760/-	Rs.13,00,920/- (G)

	knee ankle foot orthosis SCKAFO for knee instability management	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram– 695012, Kerala subhashnn@sctimst.ac.in		C: Rs.5,00,000/- Total Rs.51,72,760/-	Rs.1,00,000/-(C) Total:Rs.14,00,920/-
9.	AI-based healthcare for elderly and diabetic people”	Dr. V Sampath Kumar, Christ College of Engineering, Irinjalakuda, Thrissur – 680125, Kerala vsampath@vjec.ac.in	Kerala	G: Rs.9,00,000/- C: Rs.6,53,988/- Total:Rs.15,53,988/-	Rs.4,50,000/- (G) Rs.5,00,000/- (C) Total: Rs.9,50,000/-
10.	Bio-inspired total foot pressure off-loading device for diabetic foot ulcer management in geriatric population	Mr. Subhash N N, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram– 695012, Kerala subhashnn@sctimst.ac.in	Kerala	G: Rs.29,11,600/- C: Rs.4,72,200/- Total:Rs.33,83,800/-	Rs.8,37,200/- (G) Rs.3,72,200/- (C) Total: Rs.12,09,400
11.	Development of Pedicle Screw-Based Dynamic Stabilisation Systems for degenerative diseases of lumbosacral spine	Mr. Arvind Kumar Prajapati, Sree Chitra Tirunal Institute for Medical sciences and Technology, Thiruvananthapuram – 695011, Kerala arvind@sctimst.ac.in	Kerala	G: Rs.31,32,760/- C: Rs.11,70,000/- Total:Rs.43,02,760/-	Rs.10,80,920/- (G) Rs.3,50,000/- (C) Total:Rs.14,30,920/-
12.	Development and Standardization of Computerized Cognitive Retraining Program for Dementia Patients	Prof. B Rangaiyah, Pondicherry University, R.V.Nagar, Kalapet – 605014, Puducherry rangaiyah.psy@pondiuni.edu.in	Puducherry	G: Rs.43,87,260/- C: Rs.1,34,500/- Total:Rs.45,21,760/-	Rs.11,13,400/- (G) Rs.74,500/- (C) Total:Rs.11,87,900/-
13.	Voice Enhanced Assistive and Safety Device for Elderly Person	Mrs. Hepsiba D, Karunya Institute of Technology and Sciences Karunya Nagar, Coimbatore – 641114, Tamil Nadu hepsiba@karunya.edu	Tamil Nadu	G: Rs.20,13,966/- C: Rs.3,51,234/- Total:Rs.23,65,200/-	Rs.6,49,420/- (G) Rs.3,51,234/- (C) Total:Rs.10,00,654/-
14.	Conduct of Large-Scale	Dr. Rajkumar Krishnan	Tamil Nadu	G: Rs.18,22,560/-	Rs.9,11,280/- (G)

	Clinical Trial with a Novel Single Unit Wireless Device for Management of Xerostomia in Elderly Patients	SRM Dental College Bharathi Salai, Ramapuram, Chennai – 600089, Tamil Nadu drrajkumar22163@gmail.com		C: Rs.10,00,000/- Total:Rs.28,22,560/-	Rs.5,00,000/- (C) Total:Rs.14,11,280/-
15.	Design and development of self-locking shoes for obese/diabetic/elderly persons	Dr. K Balachandar Sastra deemed to be University Tirumalaisamudram Thanjavur, Tamil Nadu – 613401 kbchandar@mech.sastra.edu	Tamil Nadu	G: Rs.10,63,520/- C: Rs.75,000/- Total:Rs.11,38,520/-	Rs.5,51,760/- (G) Rs.25,000/- (C) Total: Rs.5,76,760/-
16.	Breath Assist: A Continuous Positive Airway Pressure System	Dr. T. Jayanthi SRM Institute of Science and Technology SRM Nagar, Kattankulathur – 603203, Kancheepuram District, Tamil Nadu jayantht@srmist.edu.in	Tamil Nadu	G: Rs.18,10,000/- C: Rs.2,15,000/- Total:Rs.20,25,000/-	Rs.6,45,000/- (G) Rs.1,45,000/- (C) Total: Rs.7,90,000/-
17.	Multimodal Access enabled Technology Personalized Augmentative and Alternative Communication Board for Severely Disabled	Dr. G Sudha Sadasivam, PSG College of Technology, Post Box No. 1611, Peelamedu, Coimbatore – 641004, Tamil Nadu principal@psgtech.edu	Tamil Nadu	G: Rs.32,40,620/- C: Rs.10,41,408/- Total:Rs.42,82,028/-	Rs.10,53,040/- (G) Rs.10,41,408/- (C) Total:Rs.20,94,448/-
18.	A novel manually powered wheel chair based on slider-crank mechanism for lower limb disables	Dr. Jenarthanan M P, SASTRA Deemed University, Thanjavur – 613401, Tamil Nadu jenarthanan@mech.sastra.edu	Tamil Nadu	G: Rs.9,74,400/- C: Rs.3,15,000/- Total:Rs.12,89,400/-	Rs.4,68,700/- (G) Rs.2,95,000/- (C) Total: Rs.7,63,700/-
19.	Development of novel sensing device for evaluating sensory impairment on Diabetic foot to	Dr. R Periyasamy, National Institute of Technology, Tiruchirappalli Tanjore Main	Tamil Nadu	G: Rs.17,73,160/- C: Rs.2,30,160/- Total:Rs.20,03,320/-	Rs.5,86,800/- (G) Rs.2,30,160/- (C) Total: Rs.8,16,960/-

	detect ulcer risk areas at early stage	Road, National Highway 67, Near BHEL, Trichy – 620015, Tamil Nadu periyasamy@nitt.edu			
20.	Design and Development of Adapted Boccia Game & Gadgets and a Study of their Effect on Auditory Depth Perception and Auditory Reaction Time among Persons with Visual Impairment	Dr. Giridharan Rangaraj, Ramakrishna Mission Vivekananda Educational and Research Institute, Coimbatore - 641 020, Tamil Nadu giri.pd@gmail.com	Tamil Nadu	G: Rs.11,77,000/- C: Rs.5,23,108/- Total:Rs.17,00,108/-	Rs.3,43,500/- (G) Rs.5,23,108/- (C) Total: Rs.8,66,608/-
21.	Development of Foot Operated Vehicle for Disabled people	Dr. R Soundararajan S, Sri Krishna College of Engineering and Technology, Kuniathur, Coimbatore – 641008, Tamil Nadu soundararajan@skcet.ac.in	Tamil Nadu	G: Rs.19,06,150/- C: Rs.49,27,000/- Total:Rs.68,33,150/-	Rs.6,57,750/- (G) Rs.44,25,500/-(C) Total:Rs.50,83,250/-
22.	E-Dhrishti: Vision for the visually impaired	Mrs. M Vidhyalakshmi, Anand Institute of Higher Technology, IT Corridor, Old Mahablipuram Road, Kazhipattur, Chennai – 603103, Tamil Nadu vidhyalakshmi@aiht.ac.in	Tamil Nadu	G: Rs.11,56,960/- C: Rs.12,55,800/- Total Rs.24,12,760/-	Rs.3,68,400/- (G) Rs.11,40,800/- (C) Total: Rs.15,09,200/-
23.	Sujeev Design and Development of Smart Steps for Elderly or Differently Aabled People to Travel Safely and Comfortably in the Public Vehicles	Dr. Gadudasu Babu Rao, Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore – 641114, Tamil Nadu gadudasubaburao4974@gmail.com	Tamil Nadu	G: Rs.14,59,400/- C: Rs.8,41,340/- Total:Rs.23,00,740/-	Rs.4,28,500/- (G) Rs. Nil (C) Total: Rs.4,28,500/-
24.	Low Cost Mechanism for Early Detection of Eye Diseases (Glaucoma) in Elderly	Dr. M Seetha, G Narayanamma Institute of Technology and Science, Shaikpet, Raidurgam,	Telangana	G: Rs.25,89,040/- C: Rs.11,11,370/- Total:Rs.37,00,410/-	Rs.11,28,880/- (G) Rs.11,11,370/-(C) Total:Rs.22,40,250/-

		Hyderabad – 500104, Telangana State maddala.seetha@gnits.ac.in			
25.	Hybrid EEG-EMG based Prosthetic hand for transradial amputees to perform reach and grasp tasks	Dr. Shiru Sharma, Indian Institute of Technology, Banaras Hindu University, Varanasi – 221005, Uttar Pradesh shiru.bme@itbhu.ac.in	Uttar Pradesh	G: Rs.15,38,400/- C: Rs.21,76,382/- Total:Rs.37,14,782/-	Rs.7,69,200/- (G) Rs.20,76,382/- (C) Total:Rs.28,45,582/-