

NIT-K set to launch dirt e-bike for use in disaster management operations, rescue missions

The e-bike is being developed in co-ordination with the 1979 alumni batch and an automobile company and it will be released this month

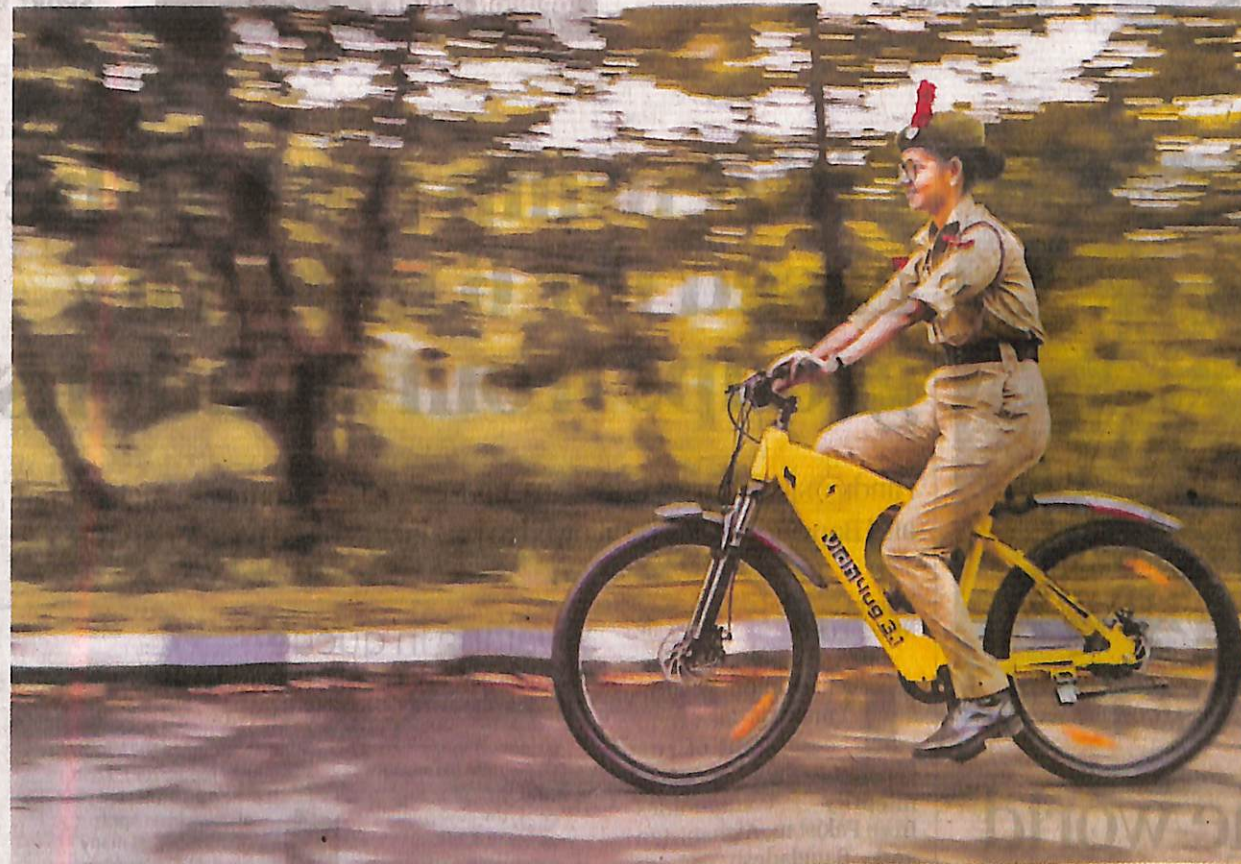
Ravi Prasad Kamila
MANGALURU

Having developed 16 electric vehicles on its own in the last nearly one-and-a-half years, the National Institute of Technology - Karnataka (NIT-K), Surathkal, is set to launch a dirt e-bike for use during disaster management operations or for any rescue missions.

The e-bike is being developed in coordination with the 1979 alumni batch and an automobile company. It will be released this month, Pruthviraj U., Head, E-Mobility Projects at the Centre for System Design (CSD) at the institute, told *The Hindu*.

Speaking on the sidelines of the institute launching two more e-cycles, which are unisex variant, for campus use last week, taking the total number of e-cycles to nine, Mr. Pruthviraj said that the dirt e-bike can be used by disaster management forces such as the National Disaster Response Force (NDRF).

"The launch of the dirt e-bike is not for fun, but for rescue operations or for



The unisex variant of e-cycle developed by the National Institute of Technology-Karnataka, Surathkal. SPECIAL ARRANGEMENT

any other need during natural calamities," Mr. Pruthviraj said, adding that it can be used for risk reduction during rescue operations.

The NIT-K launched an

e-bike for forest surveillance in the Kudremukh National Park area in November, 2021.

The 16 e-vehicles, all geo-fenced, developed so far with major financial

support from its alumni and donors, included nine e-cycles, three scooters, two motor bikes, an automatic e-trolley, and an e-three-wheeler.

All those vehicles, ex-

cept the one handed over to the Forest Department which is also in use, are in use on the campus by staff and students. The alumni of 1970, 1972, and 1981 have contributed a major share

for the projects. He said that an e-cycle, which is pedal assisted, once charged gives up to 40 km mileage. The motor may be stopped by gripping the brake, and wireless charging is also a feature of the unisex variant launched last week.

The e-three-wheeler, launched for Azadi Ka Amrut Mahotsav this August, is used for biowaste/organic-waste collection from the campus, including from hostels and staff quarters, to its bio-waste recycling plant. It gives a mileage of 60 km per charge with a charging time of three hours.

The solar powered e-charging station built at the campus has provision to charge six cycles, two bikes, and any other e-vehicle, including a car, at a time. Any other e-vehicle which can be charged is a pay and use facility. The alumni from the 1972 batch contributed ₹15 lakh for e-mobility with the main donor being P.M. Pai who donated ₹10 lakh.

The CSD is headed by K.V. Gangadharan, a Professor of Mechanical Engineering.