

One of the unique features of this vehicle is a LED Light Robot with Mast & Lamps. Roof mounted lighting system, fitted with 2500 lumens LED; vertically elevated pneumatically up to 5.5 m has been installed on the roof of the vehicle. Lighting is provided by battery of vehicle with remote control, directional lighting system with rotation of 360 degrees & tilt lamps are provided for total coverage. The remote-control unit allows a person to operate all the functions of the light mast & accurately aim for complete directional positioning. In addition auto-show, a one button command, automatically retracts, turns out the lights and stows the entire system to the compact transport position is also included in the remote controller. The Fire Tender is also equipped with electrical winch of 6 Ton capacity connected with 5.5 HP 12 V DC series wound electric reversible motor and fitted with 27 m heavy duty galvanized EIPS wire rope with replaceable self-looking clevis hook for removing any debris during rescue. This is fitted in the front of the vehicle.

This Fire Tender has been commissioned on 28th October 2021. The configuration design of the vehicle was proposed by RRCAT and an order was placed on M/s Aarel Industries, Indore. The code compliances have been checked and certified by TUV SUD South Asia Pvt. Ltd. The design, manufacturing, installation and commissioning was done under the technical supervision of RRCAT.

Reported by:
Vivek Bhatnagar (vivek@rrcat.gov.in)

N.7: Clean and green campus activities at RRCAT

Sustained efforts have been made over the years to develop a clean, green and beautiful RRCAT campus by developing gardens and landscapes, and large-scale planting of trees. This year also, during the monsoon season, a massive green cover enrichment program was undertaken in RRCAT towards the aim of protecting the environment and improving the biodiversity of the campus. With these aims, two tree plantation campaigns were organized in the RRCAT campus. For the first plantation campaign organized on July 31, 2021, the site chosen was the Central Park (area between Basketball Court, AECS and Open Air Theatre). The theme of plantation at the site was "Nakshatra Garden", which means constellation (group of stars). Every Nakshatra has a symbolic tree/plant that has a connection with eternal nature, and has medicinal, economic as well as aesthetic value. Trees planted here were all native species suitable for local environment. Some of the prominent tree species planted were *Azadiracta indica* (Neem), *Ficus benghalensis* (Barghad), *Ficus benjamina* (Benjamin fig), *Ficus religiosa* (Pipal), *Mangifera indica* (Aam), *Nyctanthus arbortrista* (Harsingar), *Terminalia belerica* (Bahera), *Achar* (*Buchanania latifolia*), *Anjan* (*Hardwickia binata*), *Khirani* (*Mimusops hexandra*), *Bijasar* (*Pterocarpus marsupium*), *Kusum* (*Schleicher oleosa*), *Baraga* (*Gmelina arborea*), *Papada* (*Gardenia latifolia*) and *Garud* (*Radermachera xylocarpa*). The theme followed for rest of the area of Central Park was "Miyawakii", which is a high density

tree plantation scheme aimed at creating a multilayered natural forest using native tree species. For the second plantation campaign on August 05, 2021, the site chosen was the area around the Laser R & D Block - I (LIGO Building site). The theme of plantation at this site was "Miyawakii", which is a high density tree plantation scheme aimed at creating a multilayered natural forest using native tree species with a thrust on beauty, colour, canopy, shape, texture and foliage. Plants selected in this drive were trees and shrubs, which grows 10 time faster and 30 times denser than the traditional ones, and have ornamental value. The selected varieties require up-keep for only the first three years period and thereafter require minimum care. Some of the selected species include flowering shrubs, Royal palms, *Ficus benzamina*, *Ficus infectoria*, *tecoma*, in combination with colourful flowering shrubs like *ixora*, *pulchirimas*, *gardenia*, *bouganvillea*, etc. with introduction of some extinct species like *Achar*, *Anjan*, *Kaim*, *Garud*, *Kusum*, etc. In all, about 1600 plants were planted during the two campaigns by planting about 47 heterogeneous species with a special focus on rare and endangered flora of Madhya Pradesh. Plants used in the campaign were raised and reared in-house in the RRCAT nursery. The tree plantation campaigns were graced by members of the Director's Advisory Committee (DAC) with the support from the members of the Advisory Committee for Clean and Green Campus (ACCGC) of RRCAT, and the staff of the Horticulture Section. All the COVID-19 related precautions were followed during the plantation drive.



Dr. S. V. Nakhe, Director, RRCAT planting a tree during the plantation campaign.

Periodic cleanliness drives are undertaken in RRCAT to keep the campus clean. The objective of the 'Cleanliness Campaigns' is to take up sanitation initiatives, mobilise people and reinforce the mass movement for cleanliness to contribute to Mahatma Gandhi's dream of a clean India. In this regard, a special cleanliness campaign was undertaken in RRCAT premises during 2nd to 31st October, 2021. The importance of maintaining cleanliness in-and-around our working as well as residential areas has become even more important in the light of COVID-19 pandemic. All the Divisions in RRCAT technical area actively participated in this cleanliness campaign, which included cleaning inside-and-around each

building, rearrangement of equipment in the Labs for efficient utilisation, cleaning of working tables and sitting places, floor cleaning, proper routing of cables and hose pipes, identifying the non-functional materials and shifting it to a selected place to declare them as scrap, cleaning of windows and pelmets of Labs and sitting rooms, and dusting of roofs and walls was done. The waste collected in each of the Division & Section was placed at selected location near the individual building, which was then collected by the Stores Unit of RRCAT for further segregation and proper disposal as per the norms set by the Indore Municipal Corporation. A tractor trolley ferried from building to building for collection of the waste and its disposal. In addition, a special cleanliness drive was also conducted in the residential premises of RRCAT for collection of wastes from the residences of the employees. This exercise was in-addition to the regular collection of domestic waste, which is done in a door-to-door manner on daily basis from every residence of the RRCAT colony.



Glimpse of special cleanliness drive in the technical area of RRCAT.

The cleanliness initiatives undertaken at RRCAT have been highly appreciated by the Municipal Authorities of Indore city. As part of the Swachh Survekshan – 2022, Indore Municipal Corporation (IMC) has chosen RRCAT colony for the “Swachhta Champion Award” for the record fifth time in the category of “Cleanest Colony of Indore”. As a part of the competition, a survey was conducted in the Indore city by the Quality Council of India under the aegis of IMC. RRCAT was adjudged as “श्रेष्ठ रहवासी संघ” in the Swachhta Rankings in this Survekshan, for which a “Certificate of Appreciation” and a trophy of “Swachhta Champion - 2021” was awarded to RRCAT in an award ceremony (स्वच्छता चैंपियन सम्मान समारोह) organized by IMC on October 02, 2021.

The clean and green campus activities are coordinated by the Advisory Committee for Clean and Green Campus (ACCGC), RRCAT under the keen supervision and guidance of Dr. S. V. Nakhe, Director, RRCAT. Successful completion of the above reported activities was possible due to the enthusiastic support and cooperation received from multiple agencies of RRCAT, especially the Horticulture Section, Civil Construction and Maintenance Section, Construction and Services Division, RRCAT security and CISF personnel.

*Reported by:
Sunil Verma (greencampus@rrcat.gov.in)*

N.8: Activities of RRCAT Staff Club

RRCAT Staff Club has been actively involved in carrying out various sports and cultural activities for the benefit of its members. As per the directives of central and local government of “Phased Unlock”, re-opening of all indoor and outdoor sports activities like coaching for kids for taekwondo, pickleball and lawn tennis were carried out in phased manner following standard operating procedure (SOP) of COVID-19.

Lecture by Dr. M. L. Parihar: To commemorate the “Azadi ka Amrit Mahotsav”, a lecture by Dr. M. L. Parihar, Ph.D. (Alternative Medicines) on “Holistic Health Management through Alternative Medical Practices” was organized on 22nd November 2021 by the Public Outreach Committee of RRCAT. The lecture was attended by a large number of staff club members and their families. A copy of his presentation has also been made available on RRCAT Staff Club website.



Lecture and demonstration by Dr. M. L. Parihar (left) and his felicitation by Director, RRCAT (right).

Staging of one act play “Dream Project”: One act play titled, “Dream Project” was staged on 18th December, 2021 in RRCAT Convention Centre by “Abhuday” society, Indore. During the event, former scientist of RRCAT, a legendary social worker and convener of “Sutradhar”, Shri S. N. Vyas was felicitated by Smt. Revati Nakhe for his contribution in the field of art and culture.



Staging of one act play “Dream Project” (left) and felicitation of Shri S. N. Vyas by Smt. Revati Nakhe (right).

Lecture by Dr. Gaurav Gupta: To create awareness on “Normal Flu vs Covid and the New Omicron Variant” a special talk by Dr. Gaurav Gupta, specialist in Pulmonary Medicine, CHRC, Indore was organized with RRCAT Medical Centre on 30th December 2021. This was followed by an interactive session in which various queries were answered by the speaker.