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CEREMONIAL SALUTE TO TIRANGA FROM MADE-IN-INDIA ATAGS





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CEREMONIAL SALUTE TO TIRANGA FROM MADE-IN-INDIA ATAGS

In a first, an indigenously developed howitzer gun, 155 mm/52 Cal Advanced Towed Artillery Gun System (ATAGS), became part of the signature 21-gun salute during the Independence Day ceremony at the Red Fort on 15 August 2022. It is designed and developed by the Pune-based Armament Research & Development Establishment (ARDE). The ATAGS was used alongside the traditional British-origin '25 Pounders' artillery guns. Prime Minister Narendra Modi also referred to the gun while speaking about the Atmanirbhar Bharat initiative of the Centre during his Independence Day

speech. "Today, for the first time in 75 years since Independence, a Made-in-India artillery gun was used in the 21-gun salute, that is given to the tricolour. All Indians will be inspired and empowered by this sound. And that is why, today, I want to thank our Armed forces for carrying the responsibility of Atmanirbharta on their shoulders in an organised manner," the PM said.

With a realistic objective of becoming self-reliant in the field of defence technology and especially in the area of armament technology, the design and development of 155 mm/52 Cal ATAGS were taken by ARDE, Pune.

It is a multi-disciplinary and multi-laboratories programme.

ARDE is the nodal laboratory and Centre for Artificial Intelligence and Robotics (CAIR), Bengaluru; Defence Electronics Applications Laboratory (DEAL), Dehradun; Instruments Research & Development Establishment (IDRE), Dehradun; Proof and Experimental Establishment (PXE), Chandipur; and Vehicles Research and Development Establishment (VRDE), Ahmednagar are the participating laboratories of DRDO.

The ATAGS was designed by ARDE and manufactured by two lead system integrators, viz.



Advanced Towed Artillery Gun System (File photo)

Bharat Forge Ltd, Pune, and Tata Advanced System Limited, Bengaluru-based on ToT handed over by DRDO.

In a statement ahead of Independence Day, the defence ministry said, "the Gun is a Testament to India's growing capacity of developing arms

and ammunition indigenously." For the ceremony, a special slug has been developed and no modification has been carried out to the gun.

Shri Ankathi Raju, Director, ARDE said, "It is a proud moment for me and the entire ARDE community that ATAGS has given

salute to the nation during the 75th year of Independence.

It is indeed a great achievement for ARDE and DRDO that for the first time an indigenously developed gun has shouldered the responsibility of firing alongside the 25 pounded British guns."

MOU

MOU SIGNED BETWEEN DEAL, DEHRADUN AND DIT, UNIVERSITY

A Memorandum of Understanding (MoU) was signed between Defence Electronics Applications Laboratory (DEAL), Dehradun and DIT University, Dehradun on 20 July 2022 to encourage interaction among academia, scientists, and staff. Shri LC

Mangal, Director, DEAL and Prof Raghuram, Vice Chancellor, DIT University signed the MoU in the presence of senior management personnel at DIT. DEAL is committed to enhance interaction with academia for knowledge sharing and to curate centres for advance academic programmes. The MoU enables

sharing of scientific and academic knowledge as mutually agreed upon, joint guidance of PG/UG students, joint PhD programmes and conduct of B.Tech and M.Tech programmes for staff/scientists as per mutually agreeable terms under the norms.



Shri LC Mangal, Director DEAL and Prof Raghuram during the MoU signing Event.

MOU BETWEEN DRL, TEZPUR AND IIT-BHU

Defence Research Laboratory (DRL), Tezpur, signed a MoU with Indian Institute of Technology-Banaras Hindu University (IIT-BHU) at Varanasi to promote the collaborative R&D between the two premier institutions to solve the survival related problems of army soldiers in India in general and North-East region in particular. The MoU was signed by Dr DV Kamboj, Director, DRL and Prof. PK Jain, Director, IIT-BHU in the presence of Dr UK Singh, Director General (Life Science), DRDO on 22 July 2022.



EVENTS

DRDO SUCCESSFULLY TEST FIRES INDIGENOUSLY DEVELOPED LASER-GUIDED ATGMs

Defence Research and Development Organisation (DRDO) and Indian Army successfully test-fired indigenously developed Laser-Guided Anti-Tank Guided Missiles (ATGMs) from Main Battle Tank (MBT) Arjun at KK Ranges on 4 August 2022. The test fire was conducted with support of Armoured Corps Centre & School (ACC&S) Ahmednagar, Maharashtra. The missiles hit with precision and

successfully destroyed the targets at two different ranges. Telemetry systems have recorded the satisfactory flight performance of the missiles.

The all-indigenous laser-guided ATGM employs a tandem High Explosive Anti-Tank (HEAT) warhead to defeat Explosive Reactive Armour (ERA) protected armoured vehicles. The ATGM has been developed with multi-platform launch capability and is

currently undergoing technical evaluation trials from 120 mm rifled gun of MBT Arjun.

Raksha Mantri Shri Rajnath Singh has complimented DRDO and Indian Army for successful performance of the laser-guided ATGMs. Dr G Satheesh Reddy, Secretary, Department of Defence R&D and Chairman DRDO congratulated the teams associated with the test firing of laser-guided ATGMs.

HERITAGE WALK TO KHALANGA MEMORIAL

A fourteen kilometer heritage walk was undertaken by Defence Electronics Applications Laboratory (DEAL), Dehradun employees on 23 July 2022. With immense enthusiasm, forty people embarked on a walk up to Khalanga hill top which was witness to Anglo-Gurkha war fought more than 200 years ago. The war was fought between 500 Gurkhas including women and children against the mighty 3000 British forces well equipped with artillery power. The war which was supposed to end in a couple of days went on for one month due to the valor, grit and determination of the Gurkhas. The British were so impressed with the bravery of Gurkhas that they made them part of their army by raising the Gurkha regiments. These regiments are still part of the Indian Army and are endowed with gallant history full of sacrifice and chivalry. The walk was led by Shri LC Mangal, Director, DEAL who accompanied the group right up to the hill top motivating it with his presence.



AZADI KA AMRIT MAHOTSAV: HAR GHAR TIRANGA

'Har Ghar Tiranga', a campaign under the aegis of Azadi ka Amrit Mahosav to invoke sense of patriotism among the hearts of the people and to promote awareness about the national flag. DRDO took part in the campaign whole heartedly and celebrated it with

zeal and fervor. Following labs also celebrated the Mahotsav at their respective locations:

DEAL, DEHRADUN

Defence Electronics Applications Laboratory (DEAL), Dehradun took part in the campaign

and hoisted Tiranga on 13 August 2022 on all the official buildings as well as residential buildings. Cleanliness drive was carried out at eleven monuments/statues in the city along with hoisting of national flag and rendition of national anthem. A Cycle rally

was organised where children of DEAL employees participated with enthusiasm displaying the Tiranga. In the early morning of 15 August 2022, Shri LC Mangal, Director, DEAL led 'Prabhat Feri' where people sung patriotic songs with much ardour and passion. Retired DEAL employees who had completed seventy-five years graced the flag hoisting ceremony on Independence Day. They were felicitated by Director, DEAL and they shared their experience with the audience. Special 'Azadi Ka Amrit Mahotsav' edition of inhouse 'Tarangavali' and 'Sanchetna' magazine were released, which covered the activities undertaken by DEAL during past 75 weeks.



DESIDOC, DELHI

Defence Scientific Information and Documentation Centre (DESIDOC), Delhi celebrated 'Azadi Ka Amrit Mahotsav' to commemorate 75 years of India's independence by hosting series of events. Officers and staff of DESIDOC along with a team from laboratories situated at Metcalfe House visited various schools in Delhi-NCR. The team showcased and shared achievements of DRDO among school children through videos and lectures. A tree plantation activity was also performed by the employees of DESIDOC. This was followed by flag hoisting at DESIDOC main building as well as other buildings which is under the administrative control of DESIDOC. Shri Kuldeep Singh, Sc 'G' hoisted the flag. Employees of DESIDOC attended the ceremony with full enthusiasm and happiness.



DFRL, MYSURU

On the occasion of the 75th year of Indian Independence, various activities and events were conducted by Defence Food Research Laboratory (DFRL), Mysuru. As part of the campaign, DFRL, Mysuru and Defence Bioengineering and Electromedical Laboratory (DEBEL), Bengaluru organised exhibitions to showcase their new technologies and products developed for Armed Forces. The exhibition was conducted at two historical places, viz., Vidhana Soudha, Bengaluru, and Mysore Palace premises, Mysuru. A large number of public, college and school students and public attended the exhibition.

Various other activities like distribution of flags and pamphlets about DFRL to schools and distribution of flags at monuments/prominent places, etc., were also conducted in a befitting manner during 13-15 August 2022.



DIPR, DELHI

Defence Institute of Psychological Research (DIPR), Delhi celebrated 'Har Ghar Tiranga' during 13-15 August 2022. Flag hoisting was carried out by Dr K Ramachandran, OS & Director, DIPR followed by national anthem on 13 and 15 August 2022. After the flag hoisting, Director, DIPR addressed the august gathering on 13 August 2022. Various competitions like poster-making, singing, and essay writing were also organised.



DRDE, GWALIOR

Defence R&D Establishment (DRDE), Gwalior celebrated 'Har Ghar Tiranga' campaign with great fervor from 13-15 August 2022. The events of 'Tiranga' were organised at four different locations, i.e., DRDE Old Campus, Tansen Road; Maharani Lakshmi Bai Smarak; Tansen ka Makbara; and Chhatrapati Shivaji Maharaj Memorial Garden. A large number of officers and staff of DRDE and students participated in the events. In DRDE Campus, the programme started with flag hoisting and national anthem. The scientists and personnel of DRDE made a geographical map of India through a human chain along with a group portrait depicting 75 years of independence. Besides, DRDE organised drawing and



painting competitions for the children of DRDE and DSC staff. Dr Manmohan Parida, Director, DRDE distributed prizes to the winners. He awarded meritorious

students of employees of DRDE and addressed the gathering. Besides, plantation was also done at DRDE technical and residential premises.

ITM, MUSSOORIE

Institute of Technology Management (ITM), Mussoorie celebrated the 76th Independence Day with great enthusiasm and fervor, despite the inclement weather condition. Shri SA Katti, Director, ITM hoisted the national flag followed by the national anthem. He expressed his joyous and heartfelt feelings during the Independence Day celebration; which reflected the unity of diversity, the contribution of DRDO and tri-services for self-reliance in national security. In his address, he highlighted the achievements of ITM in various aspects and thanked the entire 'Team ITM' for their wholehearted support in achieving targets within the schedule. Apart from the flag hoisting ceremony performed at ITM, national flags were hoisted on all residential buildings of ITM



(30) during 13-15 August 2022; Local schools (05) were visited by ITM officers and staff wherein paper flags and chocolates were distributed to over 500 children. Also, a lecture on the national flag and flag code of India-2002 along with the short film on DRDO was

presented at all schools by officers of ITM. Also a visit of over 200 school children, in collaboration with the local charity of 'Rotary Club', was organised as on 13 August 2022 wherein school children participated in 'Tiranga March' in Landour.

DRL, TEZPUR

Defence Research Laboratory (DRL), Tezpur celebrated 'Har Ghar Tiranga' to commemorate the glorious 75 years of India's independence, under 'Azadi Ka Amrit Mahotsav' at various locations of Arunachal Pradesh during 3-4 August 2022. The goal of the programme was to encourage people to bring the Tiranga and hoist it gracefully at home. The campaign was organised at Tawang War Memorial, Tawang monastery, Buddha statue, Mahabodhi School, Old age home in Tili village, Seru village and Changbu village in Tawang district and Dirang monastery, Dalgaon village, Sangti valley and Nyukmadung in West Kameng district. A good crowd of locals, students, and monks participated in the campaign with great



enthusiasm. DRL team waved the Tricolour at an altitude of 10,000

ft. at Tawang and its adjacent locations.

LRDE, BENGALURU

The 76th Independence Day was celebrated at O/o DG ECS, LRDE campus Bengaluru on 15 August 2022. Dr BK Das, DG (ECS) hoisted the national flag followed by the national anthem. Dr Das addressed the gathering bringing out the sacrifices made by our freedom fighters. He brought out that all those, who have assembled here are lucky to be part of the 76th independence day celebration, having completed 75 years after independence. He highlighted the achievements of ECS cluster in the areas of radar, EO payloads, communication, electronic warfare, high power microwave modules, ground-based & shipborne jammers, and directed energy weapons. He brought out that there was a time, when the country used

import all the weapons needed for fighting a war and now, the time have changed. He stressed that all-out effort should be put in to make India a world leader in defence technology. With the trust, commitments and passion by everyone, India would soon

have potential to be the leading exporter of defence assets. The event was marked by various posters and painting depicting the independence day celebration and rangoli by employees of O/o DG ECS and release of balloons by DG ECS.



✧ The 76th Independence Day was celebrated at Electronics and Radar Development Establishment (LRDE), Bengaluru with great enthusiasm on 15 August 2022. Dr P Radhakrishna, OS & Director, LRDE hoisted the Flag followed by National Anthem. Later, Director addressed the gathering. To mark the celebration of the 'Azadi Ka Amrit Mahotsav' and 'Har Ghar Tiranga' campaign, LRDE organised several events for officers and staff. Quiz, Pick & Speak, and Essay Writing competitions on India's independence were organised and prizes were distributed to winners. A Rally was organised in LRDE and DRDO Township.



NPOL, KOCHI

Naval Physical & Oceanographic Laboratory (NPOL), Kochi celebrated 'Har Ghar Tiranga' campaign during 13-15 August 2022. Director, NPOL handed over the National flags to various senior officers and staff during the inauguration function conducted at NPOL on 12 August 2022. These flags were hoisted at 15 identified locations inside NPOL with utmost care and honour. A quiz competition was also conducted based on the 75 glorious years of Indian independence. An online quiz competition was also conducted by Technical Information Resource Centre (TIRC), NPOL, based on Azadi ka Amrit Mahotsav, and Indian independence.

As part of the Mahotsav, on 13 August 2022, a visit of 70 students and 20 teachers from Bhavan's Varuna Vidyalaya, the DRDO sponsored school along with Dr K Ajith Kumar, Director,



NPOL and many scientists were organised onboard INS Sagardhwani, Southern Naval Command, Kochi. A first-hand experience of life onboard ship and day-to-day activities were shared with students. A guided tour of important compartments, scientific laboratories and machinery rooms were also arranged. Director, NPOL addressed the gathering highlighting the role of the ship and the close coordination among NPOL and Indian Navy towards building a technologically advanced maritime force.

On 15 August 2022, Dr. K Ajith Kumar, Director, NPOL hoisted the National Flag at NPOL



technical complex and addressed the gathering. The event was followed by felicitation of DSC

personnel. National flag was also hoisted in DROMI and DREMI by Director, NPOL.

DRDO PARTICIPATION AT AIDEF EXHIBITION

Defence Research & Development Organisation participated in the first ever 'Artificial Intelligence in Defence' (AIDef) symposium and exhibition organised by Department of Defence Production, Ministry of Defence, in New Delhi on 11 July 2022. The event featured an exhibition to showcase the cutting-edge AI-enabled solutions developed by the Services, research organisations, industry, and start-ups, innovators and launch of AI products for the market.

A 'GenNext AI' Solutions Competition has been organised to get bright innovative ideas from students on futuristic AI solutions. The top three ideas curated by AI experts will also be felicitated. An exhibition of AI products has also been organised. The event is likely to be attended by dignitaries from friendly

foreign countries, senior officials from Ministry of Defence and other Ministries of Government of India, representatives from research institutes, academia and the Industry.

Two AI-based products—AI-enabled Electro-Optic Infrared

System and Deep Learning Toolkit for Defence & Aerospace were launched by Hon'ble RM Shri Rajnath Singh during the exhibition. The products are developed by developed by Centre for Airborne Systems (CABS), Bengaluru.



DJLIT EDITORIAL SUMMIT - 2022

Defence Information & Documentation Centre (DESIDOC), Delhi organised 'DESIDOC Journal of Library and Information Technology (DJLIT) Editorial Summit-2022' on 5 August 2022. The summit was organised in both online and offline mode. The objectives of the Summit were to discuss various topics such as enhancement of quality and visibility of DJLIT, identification of emerging areas for special issues, revision of journal's policies and reviewing of authors' guidelines, etc.

The Summit was attended by 21 members including DJLIT Editorial Board (EB) members from India and abroad and Editorial Team. Dr K Nageswara Rao, Director, DESIDOC



welcomed all the members and emphasised the visibility and quality of the journal. Shri Yogesh Modi, Sc 'E' gave a presentation on DJLIT, its current status, and its publishing & editorial policy. The summit was highly interactive and brainstorming. The EB members praised DESIDOC for publishing high-quality research papers in

DJLIT to make it as the top journal in India in the field of LIS. Several new topics for forthcoming special issues of DJLIT as well as their potential Guest Editors were identified and some EB members themselves proposed to bring out special issues. The meeting was concluded with the vote of thanks by Mrs Alka Bansal, Sc 'F'.

LIBRARY WEEK CELEBRATION AT ARDE, PUNE

Library Week was organised during 8 to 12 August 2022 at Information Center for Armament Technology (ICAT), the library of ARDE, as a part of Azadi Ka Amrit Mahotsav and also to mark the 130th Birth Anniversary of Dr SR Ranganathan, Father of Library Science in India.

The event was inaugurated by Shri A Raju, Director, ARDE on 8 August 2022. During inauguration, an Open Book Quiz and Research Paper Exhibition were organised. Director appreciated the efforts of the Team-ICAT to organise the event. Prizes were distributed to the winners of the event by Shri Ramesh Kumar, Sc 'G' & officiating Director and Dr BB Padhy, Sc 'F',



GD (ICAT & HR). Shri AK Pandey, Sc 'E', Head-ICAT presented vote of thanks and expressed a heartfelt

thanks to all the participants for making Library Week a successful event.

WORKSHOP ON CPGRAM 7.0

The Department of Administration Reforms & Public Grievance (DARPG) is responsible for monitoring the grievance redressal mechanism in the ministries and departments of the Government of India as well as the state governments. To strengthen this mechanism to ensure speedy and quality redressal of the problems of the citizens, Central Public Grievances Redressal and Monitoring System (CPGRAMS) Version 7.0 has been launched in collaboration with QCI, and all the ministries and departments have been on board with this platform.

Besides the existing functionalities, this version strives

to redress the grievance in 30 days, and a feedback mechanism from the citizens has been introduced. The ministries/departments will be graded through a Grievance Redressal Index based on the time taken at disposal and the quality of feedback. Last Mile Officers (LMO) have been designated for field offices (laboratories/established) who will examine and reply to the grievance. The Closing Rights Officers (CRO) have been designated who will approve the reply being given to the applicant and then close the grievance. In case the citizen is not satisfied with the given reply he has the option of filing an appeal to the Nodal Appellate Authority who

will dispose of the same within 30 days.

To sensitise the Nodal/Dy. Nodal Officers of DRDO who are the LMO under CPGRAMS 7.0, a one-day workshop was organised at Solid State Physics Laboratory (SSPL) on 8 August 2022 for all laboratories/establishments. of Delhi and Delhi Zone.

The workshop was inaugurated by Dr (Ms) Seema Vinayak, Director, SSPL and was presided over by Dr Sanjai K Dwivedi, Director of Personnel, DRDO HQ and the faculty included Ms Nishi Srivastava, Addl Director, DOP; Shri Gaurav Choudhary, Sc 'D' & SO to DG (HR) and Ms Sadhana Pathak, TO 'B'.

TRAINING MODULE ON COGNITIVE ENHANCEMENT: CRITICAL THINKING

Defence Institute of Psychological Research (DIPR), Delhi developed and standardised 'Training Module on Cognitive Enhancement: Critical Thinking' for different establishments of Indian Army. The present training module has been developed to enhance critical thinking skills of the soldier. Training module facilitates in enhancement of the overall cognitive resources of the individual with the help of simple activities and also helps in enhancement of critical thinking of the individual. The module consists of user manual and three workbooks, namely, Priming Workbook, Basic Cognitive

Training Workbook, and Trainer's Workbook: Critical Thinking.

'Training Module on Cognitive Enhancement: Critical Thinking' was handed over for implementation to Mechanized

Infantry Centre and School, Ahmednagar; NCO Academy, Dhana; Young Officers at Infantry School, Mhow and Rajputana Rifles Regimental Centre, Delhi by Director, DIPR on 28 July 2022.



COURSE ON ADVANCES IN FOOD PROCESSING TECHNOLOGIES & QUALITY EVALUATIONS TECHNIQUES

Defence Food Research Laboratory (DFRL), Mysuru organised a 5 days Continuing Education Programme (CEP) on 'Advances in Food Processing Technologies & Quality Evaluations Techniques' during 20-24 June 2022. Dr Anil Dutt Semwal, Director, DFRL inaugurated the course. Lectures on various topics covered in concurrence with the course theme were: Advanced techniques in quality analysis of wheat milling and wheat milled products; thermal processing and pulsed electric field processing of foods, advanced spectroscopy techniques for food quality, 3-D printing of food, non-thermal processing of foods, advances in meat & poultry processing technologies, food safety, etc. About 22 sessions



were given by 4 external and 14 internal faculties. The external faculties were from Bangaluru, Pune (Satara), Thanjaur and Mysore from different institutes and industries. A visit to Mysore-Chamarajanagar Dist. Co-op. Milk Producers' Societies' Union Limited (Nandini Dairy), Siddarthanagar, Mysore (QCD Lab

& Processing Plant), International School of Milling Technology (ISMT), CSIR-CFTRI, Mysore, ITC Ltd-Food Division, Nanjangud was also arranged as a part of the course. The course was successfully completed under the leadership of Dr DD Wadikar, Sc 'F' as Course Director and Dr M Palmurugan, Sc 'E', as Course Coordinator.

HOMAGE TO DR APJ ABDUL KALAM

Naval Physical & Oceanographic Laboratory (NPOL), Kochi observed the 7th Death Anniversary of Dr APJ Abdul Kalam on 27 July 2022. The Statue of Dr APJ Abdul Kalam at NPOL façade was garlanded. D Ajith Kumar K, Sc 'G' & Director, NPOL offered floral tribute. This was followed by floral tribute by senior officers and employees of NPOL.



SPECIALIZED TRAINING ON LIVE CHEMICAL AGENTS

A five-day 'Specialized Training on Live Chemical Agents' was conducted at Chemical Defence Equipment Evaluation Facility (CDEF), DRDE, Nagpur during 25 - 29 July 2022 for commandos and officers of National Security Guards (NSG), as a part of DRDE's continuous efforts to impart knowledge and skill on CBW defence under field conditions. The hand-on training was provided to the participants to handle and monitor the Chemical Warfare Agents (CWAs). Besides, the participants attended several interactive lectures to gain updated knowledge on the CWAs. Various NBC equipment developed by DRDE were demonstrated to the participants to enhance their skill for effective and safe use. Participants also performed collective field exercises in



simulated CWAs scenarios under the supervision of experienced faculty members of DRDE. This course enhanced confidence of the participants in handling

emergencies involving CWAs. Dr MM Parida, Director, DRDE, Gwalior distributed certificates to the participants. Dr BC Bag, Sc 'F' gave the vote of thanks.

RAJBHASHA HINDI ACTIVITIES

DESIDOC, DELHI

A Rajbhasha Hindi Karyashala was conducted by DESIDOC on 29 June 2022. An invited lecture on 'Bhumandaliya Parivesh Mein Hindi Ka Naya Swaroop' (New form of Hindi in Globalization) was delivered by Prof. (Dr) Kumud Sharma from University of Delhi, Delhi. Number of examples were mentioned by the speaker regarding acceptance of Hindi language on the global platform. Dr K Nageswara Rao, Director, DESIDOC addressed the employees of DESIDOC during the workshop and urged them to do their job in Hindi as much as they can.



DMRL, HYDERABAD

Defence Metallurgical Research Laboratory (DMRL), Hyderabad organised a one-day Hindi workshop on 24 June 2022 in which various officers of admin and allied categories participated. Dr Ashok Kumar Singh, Sc 'G' conducted the workshop. He delivered a lecture on 'Role of Employees in the Implementation of Official Language'. He highlighted the need and importance of doing more and more work in the office in Hindi while motivating the participants to speak in Hindi. He also exhorted all the participants to play their role in accelerating



the implementation of Hindi in their day to day work. He informed about the various Hindi words

substituting the English words to write comments in Hindi instead of English in daily work.

INMAS, DELHI

Institute of Nuclear Medicine and Allied Sciences (INMAS) organised a one-day Hindi workshop for all the officers from different cadres on 29 June 2022 to promote the use of Hindi as an official language. The workshop was inaugurated by Dr Anil Kumar Mishra, Sc 'G' and Director, INMAS. Dr Anshoo Gautam, Sc 'E' & Rajbhasha Adhikari, introduced his achievements in the field of Hindi. He welcomed the invited speaker Dr (Prof.) Ravi Sharma, HOD, Hindi Department, Shri Ram College of Commerce, Delhi with the sapling. During the workshop, Dr Mishra addressed and inspired all the participants to do maximum official work in Hindi.

The workshop theme was 'Hindi Mein Kaam, Bahut hi Asan'. The invited speaker Prof. Sharma explained the effective implementation of the official



language policy and its extensive use in the scientific and technical fields besides administrative work. He emphasised the importance of using Hindi as an official language. He motivated all the participants to do maximum work in Hindi. About 100 participants participated in this workshop.

At the end of the workshop, Director, INMAS felicitated Prof. Sharma with a souvenir and shawl. Dr Anshoo delivered a vote of thanks and requested all the participants to participate in various activities in the institute for maximum use of Hindi as Rajbhasha.

WORKSHOP ON IMMS-2.0

Defence Research Laboratory (DMRL), Hyderabad organised a two days workshop on 'Implementation of IMMS-2.0' during 14-15 July 2022. Two experts from ARDE, Pune were invited to train DMRL officers and staff for early implementation of IMMS-2.0. There was an overwhelming response by all the users in attending the training reflecting the sincerity, zeal, enthusiasm and dedication to implement IMMS-2.0 in DMRL.



WORKSHOP ON ACCELERATED MATERIALS DEVELOPMENT THROUGH COMPUTATIONAL APPROACHES

Defence Research Laboratory (DMRL), Hyderabad organised a one day technical workshop on 'Accelerated Materials Development through Computational Approaches' on 16 June 2022 to aid in steering DMRL's current projects with new ideas and inputs from various stakeholders and to assess the national capability to fulfil effectively the futuristic demands of materials development at a faster pace. The workshop was attended by about 85 participants from DRDO laboratories, academia, and industries. A keynote address by Prof G Phanikumar, IIT Madras, described case-studies illustrating ICME applications in accelerating several steps related to materials development. Speakers from DMRL, IITs and industry deliberated on the scope



and significance of materials for defence, success stories of employing computational methods in accelerating materials development, computational methodologies/techniques for multi-scale materials modelling and machine learning/artificial intelligence as well as various software and integration tools used by the ICME community.

A panel discussion was also

held under the Chairmanship of Dr G Madhusudhan Reddy, OS & Director, DMRL to discuss the current capability to address issues related to accelerated certification and indigenization of alloys for strategic programmes, the necessity for developing benchmarks for various simulation tools and the importance of sharing data from public funded projects.

INAUGURATION OF AIRBORNE COOLING SYSTEM TEST FACILITY

The Airborne Cooling System Test Facility which was established at Combat Aircraft Systems Development and Integration Centre (CASDIC), Bangalore as part of cooling system development project 'PRAVAH' was inaugurated by Ms J Manjula, then Director General (ECS) on 27 April 2022. The Test Facility can simulate mass flow, inlet temperature and pressures experienced by the cooling system in different flight conditions for evaluation of its performance. Test Facility can also be used for generation of performance maps of the heat exchangers and air cycle machines used for airborne application.



Special provisions have been made in the Test Facility to simulate negative pressure experienced during flight at the exit scoop location of the cooling system. Variable heat load is also provided to check the performance of the cooling system against different heat loads.

The Facility can supply up to 1000 Kg/hr mass flow, inlet temperature can be varied from 0 to 150 °C and inlet pressures can be set up to 5 bar. With SCADA-based close loop control system, required test point for the cooling system can be achieved accurately.

VISIT

VISITOR TO DRDO LABS CAIR, BENGALURU

Vice Admiral Biswajit Dasgupta, AVSM, YSM, VSM, FOC-in-C (East) and his team visited Centre for Artificial Intelligence & Robotics (CAIR), Bengaluru on 19 July 22. There was a briefing by OS & Director, CAIR Dr Subrata Rakshit followed by discussion and demonstration of technologies developed by CAIR in the domain of Command and Control for Naval Forces.



PATENT

A Patent 'Apparatus for Manufacturing an Integral Rotor with Equiaxed Grained Hub and Columnar Grained Blades, and Method Thereof' (Patent No. 369447) has been granted for which Shri N Das, Shri N Hazari, and Shri D Chatterjee, Defence Metallurgical Research Laboratory (DMRL), Hyderabad are the inventors.