

NDRF NEWSLETTER

Vol 8 Issue March 2021



- NDRF Golden Jubilee Year
- IE(I) Centenary Celebrations
- Webinars
- Meetings
- Research

DIRECTOR
NATIONAL DESIGN AND RESEARCH FORUM
The Institution of Engineers (India)

No.3, Dr. B.R. Ambedkar Veedhi, BANGALORE-560001

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Virtual Science Exhibition



National Design and Research Forum (NDRF), Kalasalingam Academy of Research and Education (KARE) and Engineers Without Borders (EWB) Bangalore Professional Chapter **jointly organized a “Virtual Science Exhibition” on 23rd January 2021.**

In this event, 115 students had participated from 30 different Schools, from India, Egypt, Riyadh, Mauritius and Turkey. This event was started with an inaugural function followed by five parallel sessions. Dr. V. Dillibabu, Scientist, GTRE, DRDO cum Director, NDRF, Bengaluru inaugurated the event through online (Zoom Meet) in the presence of KARE Team, EWB Bangalore Professional Chapter Members, EWB India Students members and event participants. During the Inaugural session, Director, NDRF stressed the importance of science and support being rendered by NDRF. Finally, results were declared in different categories:

1. Best Project (Cash Award Winners)

- Akash Sexana (IX Std) - Atomic Energy Central School -Rajasthan
- Hanishca Jain (VI Std) – SPS School – Rawatbhata
- K. Rishi Prannav (VIII Std) – Linga Global School – Srivilliputhur
- Fatma Wael Fawzy (V Std) – Inspire Language School- Egypt

2. Best Team

- The TVS School, TVS Nagar, Madurai
- St. Joseph Matriculation Higher Secondary School, Hosur
- Linga Global School, Srivilliputhur, Viruthunagar

3. Scientific Development

- Dolphin Elite CBSE School, Madurai

4. Social Development

- Hyderabad Public School, Hyderabad

5. Technology Transformation

- S.B.I.O.A Senior Secondary School, Trichy
- St. Joseph Matriculation Higher Secondary School, Hosur
- Guru Govind Sing Public School, Nasik, Maharashtra

6. Eco Friendly Project

- Magdalene Matriculation School Higher Secondary School, Tirunelveli
- Government Model Girls Higher Secondary School, Trichy
- Amrita Vidhyalayam CBSE School, Kanyakumari
- Al-Ahram Language School, Cairo, Egypt

7. Science & Media

- Tagore Vidhyalayam, Madurai

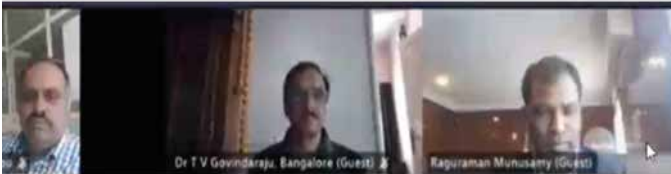
Invited talk on Are We Future Ready? – Quantum Technology



NDRF and The Institution of Engineers (India), Maharashtra State Centre jointly organized the Online invited talk on “**Are We Future Ready? – Quantum Technology**” on 30th January 2021. The Speaker of the session **Dr. C.P. Ramanarayanan, Vice Chancellor, Defence Institute of Advanced Technology (DIAT), Pune**, gave the brief presentation on the topic and 50 members participated from various states. **Presidential Address was given by Padmashri Dr. Mylswamy Annadurai, Chairman, NDRF.** Welcome Address was given by Dr.V. Dillibabu, Director, NDRF.

Felicitation address was given by **Dr. H. M. Raje, Chairman, IEI Maharashtra State center** and the program concluded by vote of thanks by Secretary IEI- Maharashtra state centre.

Webinar on ‘Design Thinking for Engineers’



NDRF conducted a **webinar on ‘Design Thinking for Engineers’** in association with Engineers Without Border (EWB) Bengaluru Chapter and Vidya Vikas Institute of Engineering and Technology, Mysuru, on 13th February 2021. **The speaker of the webinar was Dr. Raguraman Munusamy, Assistant Professor in School of Interdisciplinary Design and Innovation at Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram.**

The technical session was started with the explanation of importance of Design Thinking and Innovation and its importance in personal or community life. He explained the way of solving a complex problem by following different steps such as understand, observation, point of view, ideate, prototype and test.

He further explained about the physical problems of the banana farmers from different states such as Tamil Nadu, Andhra Pradesh, Telangana, Kerala, Karnataka and Maharashtra related to waste disposal after harvesting of banana. The webinar was ended by vote of thanks by Prof. Yogesh N, Faculty Advisor, VVIET- EWB Student chapter.

Webinar on ‘Remote Sensing Satellites and Application: An Introduction to Societal Technologies’



NDRF in association with Alliance College of Engineering and Design, Alliance University, Bangalore has organised a **webinar on ‘Remote Sensing Satellites and Application: An Introduction to Societal Technologies’** on 27th Feb 2021.

The speaker of this webinar was Dr. C. J. Jagadeesha, former ISRO Scientist and Technical Advisor at NDRF. At the start of the webinar, the welcome Address was given by **Dr. Reeba Kora, Dean at Alliance University,** Felicitation Address by Dr. V. Dillibabu, Scientist at DRDO and Director at NDRF. **Inaugural Address was given by Padmashri Dr. R. M. Vasagam, Former Vice Chancellor of Anna University, Chennai.**

The technical session was Presented by Dr. C. J. Jagadeesha. The webinar was attended by students, faculty members and technical advisors of the NDRF from 3 states. The webinar session was ended by vote of thanks by Mr. Mukund Kumar, Assist. Manager (Technical), NDRF.

Virtual Workshop on 'Laser in Engineering'



National Design and Research Forum in association with IIT Kanpur, NIT Trichy- Siemens Centre of Excellence in Manufacturing, and Kalasalingam Academy of Research and Education, Srivilliputhur had organized a virtual workshop on 'Laser in Engineering' on 6th March 2021. Saturday from 09:30 am to 12:30 pm.

The virtual workshop was inaugurated by Padmashri Dr. Mylswamy Annadurai. Welcome Address was given by Dr. V. Dillibabu. There were 3 distinguished subject matter experts, who presented in this webinar.

- **The first speaker was Dr. M. Duraiselvam. Professor, Department of Production Engineering, NIT Trichy and Dean of Planning and Development.** The lecture on 'Lasers in Engineering Application and opportunities.
- **The second speaker was Dr. J. Ramkumar. Professor, Department of Mechanical Engineering, IIT, Kanpur.** The lecture was delivered on 'Laser in Academic Project and Medical Application'. He explained the application of lasers in Health science, Engineering & Technology, Security and defence.
- **The third speaker of this session was Shri J. A. Kamalakar, former Director, LEOS, ISRO.** He has delivered the lecture on 'Laser in Space Technology' and explained the laser instruments development at LEOS ISRO, Lunar laser ranging instrument- Chandrayan-1 and other applications of lasers in remote sensing satellites.

The participants were students, faculty members, research scholars and professional engineers from different states.

Webinar on 'Smart Material & Structure Application, Research & Career Opportunities for Circuit & Non-Circuit Branches'



NDRF had organized a webinar on 27th March 2021 at 10:00 am to 12:30 pm on 'Smart Material & Structure Application, Research & Career Opportunities for Circuit & Non-Circuit Branches' in Association with EWB-Student Chapter, Sambhram Institute of Technology and Engineers Without Borders (EWB) Bengaluru Professional Chapter.

The Speaker of webinar was Dr. R. Santhanam, Scientist, DRDO, Hyderabad. The webinar was started with welcome address, by Dr. C. V. Ravishankar, Faculty Advisor EWB-SaIT Student chapter. Dr. V. Dillibabu, Director, NDRF-Bangalore, addressed the program and followed by Dr. Koteswar Rao, President, EWB-Bangalore. **The seminar was attended by 50 members and the session was ended by a question answer session followed by vote of thanks.**

NDRF's Meeting with Shri B. S. Ediyurappa, Chief Minister of Karnataka



Dr Mylswamy Annadurai, Chairman, NDRF and Dr. V. Dillibabu, Director NDRF had called on the Chief Minister of Karnataka, Shri B. S. Ediyurappa on 10th March 2021 to discuss on various technology developments of social relevance that are being developed by NDRF on a collaborative research.

The Points discussed were:

1. Collaborative Research Model of NDRF
2. Banana: Waste to Wealth Project
3. Drone Corporation for Karnataka
4. Bio Toilet for villages
5. Satellites Projects for Govt School Students

Chief Minister has shown keen interest and appreciated the technological intervention of NDRF and partners to uplift the banana farming community. He had assured support from the state government. Dr. S. Selvakumar, Secretary to Chief Minister and M. Lakshminarayana, Advisor to Chief Minister had attended the meeting.

NDRF Signed MoU with waycool



NDRF Signed MoU with M/S waycool on 23rd Feb 2021, in the presence of **Padmashri Dr. M. Annadurai, Chairman, NDRF**. MoU is on collaborative and other technical activities on supply chain towards agricultural byproducts.

NDRF, IITDM-Kancheepuram and NRCB, Trichy - MoU Signed



Dr. M. Annadurai



Prof. Banshidhar Majhi



Dr. S. Uma

MoU was signed on 1st January 2021 between **Dr. Mylswamy Annadurai, Chairman, NDRF, Prof. Banshidhar Majhi, Director, IITDM-Kancheepuram and Dr. S. Uma, Director, National Research Centre for Banana (NRCB), Trichy**. The MoU is on collaborative research in the extraction of fiber from pseudo stem of banana and realization of value added products from banana waste.



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NDRF ONLINE INTERNSHIP PROGRAM



3-16 July 2021 (14 Days), 05:00 PM to 06:00 PM

Inaugural Address by Padmashri Dr. Mylswamy Annadurai
Ex-Project Director, Chandrayaan-1&2, Ex-Program Director,
Mangalyaan, Chairman - NDRF

27 Speaker 27 topics with their expertise from
ISRO, DRDO, CSIR, HAL, IIT Bombay, IIT Kanpur,
IIITDM and other organisations

Rs. 999/- Registration Fee

Engineering Disciplines

CSE, EE, EEE, ECE, ETC, ME, CE, PE,
Aerospace and Aeronautical Engineering

Eligibility: All Interested
Engineering Students

Tentative Topics

1. Industry 5.0
2. Artificial Intelligence
3. Internet of Things (IoT)
4. Drone and Technologies
5. Future Digital Technologies
6. Additive Manufacturing
7. Space Technologies and Opportunities
8. Robotic

Eminent Spaeakers of the Program



Dr. V. Dillibabu
Scientist, DRDO
Director - NDRF

Dr. J. Ramkumar
Professor, Mech Engg
IIT Kanpur



Dr. Latha Christy
Sr. Scientist
MTRDC - DRDO

Shri. Prince Arora
Scientist, Ocean Engg
CSIR - NIO



10% Discount for IEI Student Chapter Members and for Group Registration
of 10 students

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