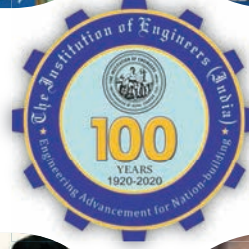
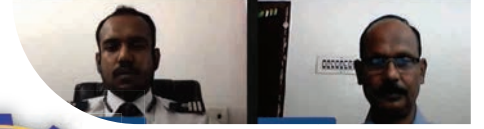
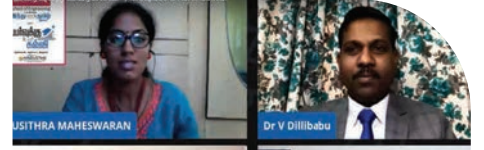


NDRF NEWSLETTER

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முனைவர். திரு. மயில்சாமி அண்ணாதுரை



NDRF Golden Jubilee Year

IE(I) Centenary Celebrations

**NDRF Online Internship Program
for B. E / B. Tech Engineers**

**Let's Fly:NDRF-Hindu Group
Webinar on Aerospace Opportunities**

**Engg- Medical : Educational and
Research Opportunities Webinar**

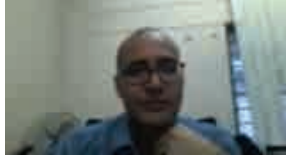
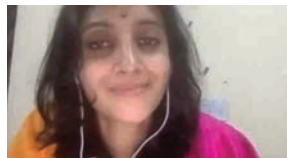
**DIRECTOR
NATIONAL DESIGN AND RESEARCH FORUM
The Institution of Engineers (India)**

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

Phone : 080 - 2226 4336

NDRF WEBINARS

Online Internship Program for B.E / B.Tech Students



NDRF had organized a 11 day Online Internship Program from 3rd to 14th Aug 2020. Padmashri Dr. Mylswamy Annadurai Chairman-NDRF gave Inaugural address on “**Space Technologies and Opportunities**” and Shri Shanmuga Subramanian gave a talk on “**Finding Vikram Lander on Moon**”. The program was well attended by 337 students from 69 Engineering Colleges from Andhra Pradesh, Gujarat, Karnataka, Kerala, Maharashtra, Tamilnadu and **Russia**.

4 August 2020 – 2nd day session on “**3D Printing & Bio Printing**” was conducted by Prof. J. Ramkumar Professor Indian Institute of Technology, Kanpur.

5 August 2020 – 3rd day session on “**Artificial Intelligence & Robotics**” was conducted by Dr. Latha Christy Sr. Scientist, MTRDC-DRDO, Bengaluru.

6 August 2020-4th day session on “**Internet of Things and Blockchain**” was conducted by Dr. P. Kalpana Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram.

7 August 2020 – 5th Day session on “**Drone Technologies and Applications**” was conducted by Dr.K.Ramachandra Former Director Gas Turbine Research Establishment, DRDO.

8 August 2020 – 6th Day First session on “**Modern Quality Practices in Aeronautics**” was conducted by Shri T.V. Kishore, Chief Manager (Quality), (HAL). Second session on “**Design Thinking**” was conducted by Dr. Archana Magadi Assistant Professor RV College of Engineering.

10 August 2020 – 7th day session on “**e-Mobility and Future Trends**” was conducted by Sri Sanjeev Koushik ESBEEM Technologies & Dr. Kuldeep Singh Rana Scientific Officer, Gr-III Central Power Research Institute.

11 August 2020 – 8th day first session on “**Intellectual Property Rights**” was conducted by Shri R. Vijaykrishna Project Manager NDRF. Second session on “**Industry 4.0 & 5.0**” was conducted by Shri Anbuhezhan General Manager Caterpillar.

12 August 2020 – 9th day session on “**Design Optimization Through Digital Manufacturing**” was conducted by Dr. U. Chandrasekar Program Director AddWize Wipro 3D.

13 August 2020 – 10th day session on “**Lasers in Manufacturing**” was conducted by Dr. Ing. M. Duraiselvam National Institute of Technology, Trichy.

14 August 2020 – 11th day session on “**Emerging Opportunities in Materials and Processing**” was conducted by Dr. S. Sundarajan Ex-Director, National Institute of Technology, Trichy.

The students had a good interaction with the speakers, e-certificate was distributed to all the participants.

Webinar on Career opportunities in Aerospace & Aeronautics- Webinar



Director, NDRF addressed a webinar on Career opportunities in Aerospace & Aeronautics-was organized Jointly with Hindu Thamizh Thisai, Newspaper from The Hindu Group and Amrita Vishwa Vidyapeetham School of Engineering, powered by Hindustan Institute of Technology and Science on 2nd Aug 2020.

The Program was delivered by following speakers

1. Dr. V. Dillibabu, Scientist, DRDO & Director, NDRF.
2. Capt. P. Ram Ranveer First Officer, Indigo Airlines.
3. Dr. R. Asokan, Professor & HOD School of Aeronautical Science Hindustan Institute of Technology and Science.

Let's Fly:NDRF-Hindu Group Webinar on Aerospace Opportunities



Padma Bhushan

Dr. A. Sivathanu Pillai
Founder BrahMos Aerospace



Shri. V. Ponraj

Former Scientific Advisor to
Dr APJ Abdul Kalam



Dr. K. Senthilkumar

Dept of Aerospace Engg,
MIT Chennai



Dr. V. Dillibabu

Scientist, DRDO &
Director, NDRF



Padmashri

Dr. Mylswamy Annadurai
Vice President, TNSCST & Chairman, NDRF

NDRF had organized a 5 webinar titled "Let's Fly" on Research and Opportunities in Aerospace Jointly with Hindu Thamizh Thisai, Newspaper from The Hindu Group from 5 to 9 Aug 2020. The webinar was attended by 149 students of 8th to 12th Standard from various schools.

The First session was conducted by Padma Bhushan Dr. A. Sivathanu Pillai, Founder BrahMos Aerospace on "**Missiles: Education, Research and Job opportunities**".

Second session was conducted by Shri. V. Ponraj, Former Scientific Advisor to Dr APJ Abdul Kalam on "**Civil Aviation Education Research and Job opportunities**".

The third session was conducted by Dr. K. Senthilkumar, Dept of Aerospace Engg, MIT Chennai on "**Drones: Education, Research and Job opportunities**".

The Fourth session was conducted by Dr. V. Dillibabu, Scientist, DRDO & Director, NDRF on "**Combat Aircraft & Helicopters: Education, Research and Job opportunities**".

The final session lead by Padmashri Dr. Mylswamy Annadurai, Vice President, TNSCST & Chairman, NDRF on "**Space Exploration: Education, Research and Job opportunities**".

The students had a good interaction with the speakers, e-certificate was distributed to all the participants.

Opportunities and Challenges in Space Technology & Aerospace



Leher organised Opportunities and Challenges in Space Technology & Aerospace on 28th August 2020. The program chief guest was Padmashree Dr. Mylswamy Annadurai Ex-Project Director, Chandrayaan - 1&2 Ex-Program Director, Mangalyaan Chairman, NDRF.

All India Seminar on Residual Stress: Dr. Baldev Raj Memorial Lecture



NDRF organized Dr. Baldev Raj Memorial Lecture - All India Webinar Series on Residual Stresses, Structural Integrity: NDE Management & Control. As a part of Golden Jubilee celebrations of NDRF, a webinar was held on 25th August 2020 with the main topic "Residual Stress, Structural Integrity; NDE Management and Control". The event is the second Dr. Baldev Raj memorial lecture, held in the honour of the former Chairman of NDRF, also the NDE stalwart. Padmashree Dr. Mylswamy Annadurai, Chairman: NDRF and Former Project Director – Chandrayaan 1 & 2 and Program Director - Mangalyaan, ISRO gave the welcome address and also briefed about the importance of memorial lecture & significance of "Residual

Stresses" on the structural integrity assessment of components. Dr. Parvati Ramaswamy, Professor, Christ University had briefed on Dr. Baldev Raj's contribution. Dr. Dheepa Srinivasan, Chief Engineer, M/s Pratt and Whitney, Bangalore delivered the lecture titled "Residual Stress in Structural Integrity of Materials Technology for Gas Turbine Components". In her talk she covered panoramic listing of more than 20 measurement techniques, role of Residual Stress in additive manufacturing, cold spray process, in-situ advanced coatings from the point of Materials Technology. It was well received by the audience. About 190 participants attended the webinar. R V College of Engineering supported the program. Dr. P. Sampathkumaran, Technical Advisor: NDRF and Former Joint Director, CPRI indicated that measurements involving IoT should get evolved and implemented including micro residual stress measurements for better prediction. Dr. S. Seetharamu Former, Director CPRI and Tech Advisor NDRF in his concluding remarks stressed the need for reliable, and precision in the measurement and analysis of residual stresses blending with the automation on procedures right in tune with Industry 4.0. The vote of thanks was rendered by Dr. J. R. Nataraj, Professor, RVCE and Technical Advisor NDRF.

Engg- Medical : Educational and Research Opportunities Webinar



Dr. Sakkarapalayam M. Mahalingam
Professor,
SRM Institute of Science and
Technology, Chennai



Dr. Bala Murugan
Director,
Combat Vehicles Research and
Development
Establishment (CVRDE), DRDO,
Chennai



Dr. Srinivasan Sundararajan
Former Director,
Nation Institute of Technology,
Trichy



Dr. Sakthirajan
Nephrologist,
Madras Medical College,
Chennai



Dr. J.S. Bhuvaneshwaran
Director, PSG Hospitals,
Coimbatore



Dr. V. Natarajan
Director,
Research and Innovation Centre
(RIC), DRDO,
IIT Madras Research Park,
Chennai



Prof. J. Ramkumar
Professor,
Department of Mechanical Engineering,
Indian Institute of Technology, Kanpur



Dr. Sudha Ramalingam
Director, Research and Innovation
Professor, Community Medicine
PSG Institute of Medical Sciences and
Research, Coimbatore



Dr. Raguraman Munusamy
Asst Professor,
IIITDM,
Kancheepuram



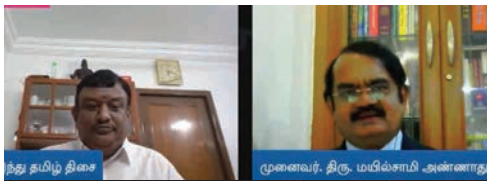
Dr. Chitra Rajagopal
Director General (RM & Impl)
DRDO, New Delhi



Prof. Radhakrishnan Pradeep Kumar
Chief, Division of Cardiothoracic and
Vascular Surgery, GIMSR,
GITAM University, Visakhapatnam



Dr. V. Dillibabu
Scientist, DRDO &
Director, NDRF



NDRF had organized Engg-Medical : Educational and Research Opportunities Webinar from 18th Sep to 11th Oct 20. The 12 day webinar series was jointly organized by NDRF-Hindu Thamizh Thisai, Newspaper from The Hindu Group. The webinar was attended by 1200 students of 8th to 12th Standard students from various schools.

The program was Inaugurated by Padmashree Dr. Mylswamy Annadurai, Vice President, TNSCST & Chairman, NDRF. 1st Day Session was conducted by Dr. Sakkarapalayam M. Mahalingam, Professor, SRM Institute of Science and Technology, Chennai on "**Drug Research: Education and Research Opportunities**".

2nd Day Session was conducted by Dr. V. Balamurugan, Director, Combat Vehicles Research and Development Establishment (CVRDE), DRDO, Chennai on "**Research opportunities in Combat Vehicles**".

3rd Day Session was conducted by Dr. Srinivasan Sundararajan, Former Director, National Institute of Technology, Trichy on "**NITs: Education and Research Opportunities**".

4th Day Session was conducted by Dr. Sakthirajan, Nephrologist, Madras Medical College, Chennai on "**Research in Modern Medicine: Not an option but Dire Need**".

5th Day Session was conducted by Dr. V. Natarajan, Director, Research and Innovation Centre (RIC), DRDO, IIT Madras Research Park, Chennai on "**Research opportunities in Naval systems**".

6th Day Session was conducted by Prof. J. Ramkumar, Professor, Department of Mechanical Engg, Indian Institute of Technology, Kanpur on "**IITs: Education and Research Opportunities**".

7th Day Session was conducted by Dr. Sudha Ramalingam, Director, Research and Innovation Professor, Community Medicine, PSG Institute of Medical Sciences and Research, Coimbatore on "**Research and Innovation Opportunities in Public Health**".

8th Day Session was conducted by Dr. Raguraman Munusamy, Asst Professor, IIITDM, Kancheepuram on "**IIITs: Education and Research Opportunities**".

9th Day Session was conducted by Dr. Chitra Rajagopal, Director General (RM & Impl) DRDO, New Delhi on "**Green Technologies for a Sustainable Environment**".

10th Day Session was conducted by Prof. Radhakrishnan Pradeep Kumar Chief, Division of Cardiothoracic and Vascular Surgery, GIMSR, GITAM University, Visakhapatnam on "**AIIMS: Education and Research Opportunities, Research on Total Artificial Heart**".

11th Day Session was conducted by Dr. V. Dillibabu Scientist, DRDO & Director, NDRF on "**Medical & Engineering: Joint Research Opportunities**".

The Last Concluding Session was delivered by Padmashree Dr. Mylswamy Annadurai Ex-Project Director, Chandrayaan- 1&2 Ex-Program Director, Mangalyaan Chairman, NDRF on "**Research as a Career Option :Ways and Means**".

The students had a good interaction with the speakers, e-certificate was distributed to all the participants.

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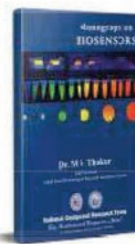
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