





NDRF NEWSLETTER

Vol 6 ISSUE SEPTEMBER 2020



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 Anbuchezhian 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.

Career opportunities in Aerospace & Aeronautics-Free Webinar



Aerospace & Aeronautics A Free Webinar was jointly organized with Hindu Thamizh Thisai, Newspaper from The Hindu Group and Amrita Vishwa Viyapeetham School of Engineering and Hindustan Institute of Technology and Science on 2nd Aug 2020.

The Program was delivered by the following speakers

- Dr. V. Dillibabu, Scientist, DRDO & Director, NDRF.
- Capt. P. Ram Ranveer First Officer, Indigo Airlines.
- 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. PonrajFormer Scientific Advisor to
Dr API Abdul Kalam



Dr. K. SenthilkumarDept of Aerospace Engg,
MIT Chaennai



Dr. V. DillibabuScientist, 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.

NDRF organised 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" with the main focus on the second Dr. Baldev Raj memorial lecture, held in the honour of the former Chairman, also the NDE stalwart.

The Chief Guest for the event was Padmashree Dr.

Mylswamy Annadurai, Chairman: NDRF and Former Project Director – Chandrayaan 1 & 2 and Program Director – Mission Mangal, ISRO. The Chief Guest gave the welcome speech and also briefed about the importance of memorial lecture & significance of "Residual Stresses" on the structural integrity assessment of components. The program was moderated by Dr. Parvati Ramaswamy, Professor, Christ University & Ex CPRI.

About 190 participants attended the webinar. R V College of Engineeing supported the program.

Engg- Medical: Educational and Research Opportunities Webinar



Dr.Sakkarapalayam M.Mahalingam 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.Bhuvaneswaran Director, PSG Hospitals,



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



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



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



Dr. Raguraman Munusamy Asst Professor, Kancheepuram



Director General (RM &Impl) DRDO, New Delhi



Dr Chitra Rajagopal Prof Radhakrishnan Pradeep Kumar Chief, Division of Cardiothoracic and VascularSurgery, GIMSR, GITAM University, Visakhapatnam



Dr.V.Dillibabu Scientist, DRDO &





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 Sundarrajan, 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

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

NDRF Book Store

Book on Bio-Aerodynamics of Avian Flight



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