Report on Expert Talk under R&D Talk Series on
“Classification and Management of Lung Disease”

Expert Talk Under R & D Talk Series
Organized by
MCA Department, Sarvajanik College of Engineering and Technology
in Collaboration with IEEE SPS (Gujarat Section & SCET Student
Branch Chapter)
"Classification and Management of
Lung Disease"
July 17 2021 | 10:30 AM IST
Scan to Register

Prof Dr Norliza Mohd Noor
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Since the beginning of the year 2020, the world has been traumatized with COVID-19 pandemic. The COVID-19 virus that attacked human respiratory system is still spreading with its variants in the world. Various machine learning models and technologies have been under research to classify and manage lung diseases that includes COVID-19 too. With this outlook, as a part of lecture series under R & D Drive, MCA Department in collaboration with IEEE Signal Processing Society (SPS) - Gujarat Chapter (GS), had organized an Expert Lecture on “Classification and Management of Lung Disease”. Dignified and learned professor, Prof Dr Norliza Mohd Noor shared her expertise in this domain with us and also shared the data that she had gathered on the topic during her research. The Talk was in collaboration with IEEE Signal Processing (SPS), Gujarat Section (GS) and IEEE SCET Student Branch Chapter.

Prior to the talk, an informal discussion between Dr Norliza and participants was carried out. Dr. Alpa Shah, Head of Department welcome all the faculties and invited Dr. Chirag Paunwala, Dean R & D, SCET and Chair of IEEE Signal Processing Society (SPS), Gujarat Chapter to introduce the audience regarding various activities done under IEEE SPS. After highlighting various events under IEEE SPS, Dr Alpa gave an introduction of Prof Dr Norliza Mohd Noor. After which, the stage was handed to the Expert.

**Highlighted from the Talk:**

- Discussion on Respirator Anatomy and normal Lung
- Identification of Lung Cancer through Images
- Various types of diseases related to lungs, viz. Pneumonia, Pulmonary Tuberculosis, Lung Cancer – Their symptoms, and treatments.
- Classification results using Machine Learning Techniques
- Role of AI in COVID-19 Clinical Decision
- Various components of AI-based lung Classification Systems
- Radiographic patterns of COVID-19
- Normal Vs Abnormal Lung Classification Model
The session ended with a Question and Answer session. To express sincere gratitude towards Prof Dr Norliza Mohd Noor, Dr Alpa Shah presented an E-Memento. Dr Norliza showed her interest in collaboration with Institutes/Individuals for future work in data available from India.

We would like to thank Dr. Hiren Patel, Principal, SCET, for providing an opportunity to schedule such informative talk. We profusely thank Dr. Chirag Paunwala, Dean R & D for providing a conducive environment and his continuous support. We are also grateful to Shri Bhaskar Cheruku, Registrar for helping with the process.

Some glimpses of the event are shared below: