Expert Talks by Prof. S Kumaresan

President of the MTTS Trust

28th-29th January, 2019

About the Speaker: Prof. S. Kumaresan is the convener of a National level programme called "Mathematics Training and Talent Search Programme" (MTTS, in short) since 1993 for undergraduate students. This activity is supported by the National Board for Higher Mathematics. The aim of this programme is to attract talented young students towards mathematics by giving them a better perspective of modern mathematics than given at the college or university level. This is achieved by adopting newer methods of teaching in which the participation by the students is the most important ingredient. He is at present the President of the MTTS Trust. He obtained his Ph.D. degree from TIFR Mumbai in 1980. He is a former Professor of the University of Hyderabad and University of Mumbai.

Prof. S. Kumaresan has been awarded the prestigious **INSA Teachers Award** (2013). The Award has been instituted to recognize and honour teachers who have inspired students to take up careers in Science & Technology. Prof. Kumaresan is the first Mathematician to receive this award. He has also awarded **C.L.Chandna Award** of the Indo-Canadian Math Foundation in 1998.

He is the author of a number of books and expository articles. He is very much concerned with writing quality text-books at undergraduate and graduate levels. The books mentioned below are very much appreciated by students and teachers.

1) S. Kumaresan, Linear Algebra- A Geometric Approach, Prentice Hall of India, 1999.

2) S. Kumaresan, A Course in Differential Geometry and Lie Groups, TRIM Series, Hindustan Book Agency, 2001.

3) S. Kumaresan, Short Courses in Analysis, University Press, Hyderabad, 2003.

4) Ajit Kumar & S. Kumaresan, A Basic Course in Real Analysis, Chapman & Hall/CRC Press, 2014.

Title of the Seminar-1: From Coordinates to Manifolds: A setting for Modern Differential Geometry

Time: 4:00 PM--5:00 PM, Date: 28th January, 2019, **Venue:** LT-05

Abstract: In this talk, He will start with the genesis of coordinate systems. Then he moves on to a practical definition of a manifold, the basic notions of tangents and transformation laws

Title of the Talk-2: Function Spaces

Time: 4:00 PM-5:00 PM, Date: 29th January, 2019, **Venue:** LT-05

Abstract: This will be an overview of various results scattered throughout courses in analysis and studied in isolation. The talk will emphasize the recurring themes which exhibits unifying