



# TechTalks@SJB

SJB Institute of Technology, Bangalore

## Distinguished Lecture Series – Autumn 2010

Date:

**25<sup>th</sup> August 2010**

**Wednesday**

Time:

**2:30 PM**

Venue:

**Seminar Hall  
CSE Block, SJB**

Address:

**SJB Institute of Technology  
BGS Health & Education City  
Uttarahalli Main Road  
Kengeri, Bangalore 560060**

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### Damage Tolerance: Mandatory Approach in Safety Critical Structures

Padma Shri Dr. B. Dattaguru  
Professor (Retd), Dept. of Aerospace Engineering  
Indian Institute of Science, Bangalore 560012

Visiting Professor, Jain University  
Consultant, Mahindra Satyam

Damage Tolerance (DT) based design is becoming mandatory in all high technology structures. Its importance is well recognized in safety critical structures in Aerospace and Nuclear industries. Fracture Mechanics is the fundamental science behind this approach and now DT has become a well organized technology. The success with DT based designs lead to the modern developments towards Structural Health Monitoring (SHM). In the near future this technique is likely to be the core of flight safety activities and also will be crucial in decreasing the time for MRO (Maintenance and Repair Operations) and leads to greater availability of flight vehicles and major engineering equipment.

Prof. Dattaguru will identify the crucial scientific developments and demonstrate with practical examples, the ways in which this modern technique is assimilated into design practices.

A product of IISc, Dr. Dattaguru is an outstanding scientist in Aerospace engineering and has made seminal contributions across several engineering fields. Prof. Dattaguru was a pioneer in the field of Fracture Mechanics and Damage Tolerance. He received the Padma Shri for Science & Engineering from the Government in 2005. He is the recipient of Prof. Rustom Choksi Award for Excellence in Engineering Research from IISc, Academic Excellence Award from DRDO, Biren Roy Trust Award and Excellence in Aerospace Education by the Aeronautical Society of India. He was the former Chairman of Karnataka State Industrial Investment & Development Corporation Limited and is currently a visiting professor at Jain University and a senior consultant at Mahindra Satyam.

Dr. Dattaguru is a founding member ACCS, a Fellow of Indian National Academy of Engineering, Fellow, Institution of Engineers and Fellow of Aeronautical Society of India.



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