

Name: Gopal R. Shevare
Date of Birth: 20th May 1947
Education:

B. Tech (Aerospace Engineering), IIT Bombay 1972
M. Tech (Aerodynamics), IIT Bombay 1974
Ph. D. (Aerodynamics), IIT Bombay 1979



Working experience:

Research Associate: Department of Aerospace Engineering, IIT Bombay 1974 – 1976
Lecturer: Department of Aerospace Engineering, IIT Bombay 1976 – 1979
Assistant Professor: Department of Aerospace Engineering, IIT Bombay 1979 – 1984
Associate Professor: Department of Aerospace Engineering, IIT Bombay 1984 – 1986
Professor: Department of Aerospace Engineering, IIT Bombay 1986 – Present

Courses Taught:

- Fluid mechanics
- Gas dynamics
- Computational fluid dynamics
- Aircraft stability and control
- Mesh generation
- Numerical method to conservation laws
- Experimental fluid dynamics and wind tunnel techniques

Guided: Many B Tech, M Tech and PhD students. Most number of graduates and PhD's work in my group.

Professional membership:

Fellow of Institute of Engineers (India)
Fellow Aeronautical Society of India (India)
Life member Fluid Mechanics and Fluid Power

Membership:

Member of Aeronautics Research and Development Board (ARDB Aerodynamics)
Member of Indian Science Academy
Membership of many review committees on fluid mechanics and aeronautics
Delivered Keynote lectures (5 to 6) every year

Research interests:

Experimental Fluid Mechanics

- Laser Doppler Velocimetry (LDV) laboratory set up and did experiments
- Flow visualization laboratory with a horizontal water tunnel (designed)
- Developed Particle Image Velocimetry (PIV)

Numerical Simulations:

- Developed Associate Center for Computational Fluid Dynamics (AR&DB) Laboratory
- Developed industry standard panel method code for analysis of complex configurations
- Developed surface modeler cum grid generator **IITZeus**
- Founded Zeus Numerix Pvt. Ltd. a company incubated by Society for Innovation and Entrepreneurship (SINE) IIT Bombay

Research papers and projects include topics ranging from experimental fluid mechanics (in various applications from water tunnel to supersonic wind tunnels), mesh generation, Computer Aided Design (CAD), computer graphics, automobile external aerodynamics, aircraft aerodynamics, hypersonic flow, combustion (droplet and gaseous), turbo-machinery, acoustics, parallelization and automation, computational electro-magnetism, post-processing etc.

IITZeus and CFD activity:

IITZeus was started nearly one and half decade ago with a goal to make an indigenous mesh generation software with capabilities in geometric modeling, mesh generation both structured and unstructured and subsequently solvers for those grids and post-processing. More than a 100 students and project staff contributed in the development effort of the IITZeus package. Nearly half a decade ago, our group started developing solvers and developed solvers from incompressible flow to supersonic and hypersonic flows including reactions and multi-phase etc.

He is founder Director of Zeus Numerix, a company started based on the IP generated over 15 years. Zeus Numerix has the distinction of being the **first and only CFD** software of India with fully indigenous technology and international standard ISO 9001 file format, CGNS. Zeus Numerix is currently incubated by SINE, IIT Bombay.

Distinctions:

Excellence in teaching award from IIT Bombay

Best Alumni Award from Aeronautical Society of India