

DEPARTMENT OF AEROSPACE ENGINEERING

Defence Institute of Advanced Technology (DU) Girinagar, Pune - 411025, INDIA



Dr. R K Satapathy

Ph.D. (AcSIR Ghaziabad)
Professor (on contract), School of Defence Technology





Research Areas

1. Engine Lifing & IVHM, 2. High Temperature Coatings, 3. Accident Investigation

Awards

1.Appreciation Letter from SA to RM & Secretary DRDO for AN 32 A/C Engine Life Extension & Saving Rs 350 crores. 2010

2.Titanium Medal & Commendation Certificate. SA to RM & Secretary DRDO -2008

Publications (Total)	Journals	Conferences	CEPs/ STTP Conducted	Invited Talks	PhDs Guided	M.Tech/Master's Theses Guided
17	11	06	03 CEPs & 02 Workshops	12 National, 01 International	01 Completed	18

Facilities Developed

One legacy Rolls –Royce Conway 508 aeroengine, First Civil low bypass engine set up for Educational purposes & display.

Research Highlights





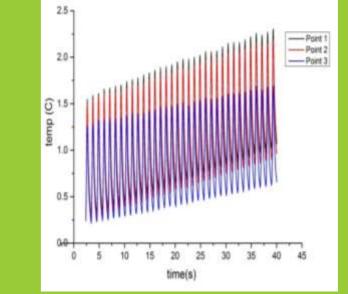


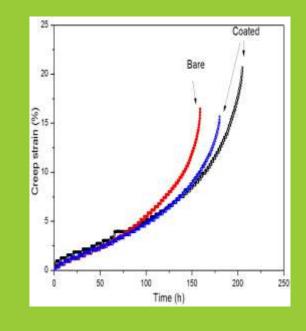
Professional Membership

Life Member AeSI
Life Member-Indian Institute of Metals
Member-Society for Failure Analysis

Member- Society for Failure Analysis, American society for Quality

3.33 3.17 3.01 2.86 2.70 2.54 2.39 2.22 2.06 1.90 1.75 1.91 1.43 1.27 1.11 0.95 0.79 0.64





Peer Reviewed Journal Publications (selected Five)

- 1. Modeling of Degradation in Gas Turbine Engine by Modified Off-Design Simulation, DSJ-2022,72(2), 133-145, doi: 10.14429/dsj.72.15428
- 2. Effectiveness of lanthanum zirconate and Yttria-stabilised zirconia freestanding APS thermal barrier coatings against natural CMAS attack at high temperatures, Materials at High Temperatures, 2020, VOL. 37, NO. 6, 416–424, https://doi.org/10.1080/09603409.2020.1811600
- 3. Influence of Machining Process on Surface Integrity and Fatigue Life of a Turbine Rotor Blade, Advances in Structural Integrity, Springer.2018
- 4. Design point parameter estimation of a legacy twin spool turbojet engine for health monitoring. Journal of Aeronautical Society of India, 2016
- 5. Effect of Operating Variables on the Performance of a Highly Loaded Annular Combustor, International Journal of Turbo & Jet-Engines, 2015