



# Lifetime Data Analysis (LDA) for Railway Industry

## SECURE YOUR PARTICIPATION!

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### Why Should attend this training ?

- To define the probability density functions such as exponential, log-normal, logistic, loglogistic, Weibull, Normal, Gumbel, Gama, others based on LDA;
- To apply the goodness of fit test such as Plot method, Regression, likelihood, Chi-square, Komogorov Smirnov and Cramer von mises during LDA;
- To implement a FRACAS that enable the LDA;
- To understand the QALT methods fconcepts or equipment under different stress level;
- To understand the RGA Concepts to measure the effect of maintenance and operation on equipment performance;
- To apply PDA methods to predict reliability based on equipment degradation such as corrosion and, crack;
- To apply Warranty Analysis to assess vendors products;
- To learn how to create a reliability database.

### Who Shoud attend this training ?

Reliability Managers, Reliability Engineers, Asset Managers, Maintenance Managers, Maintenance Engineers.

### Training Outline:

#### Day 1:

- Module 1: Introduction
- Module 2: Statistic concept
- Module 3: Reliability Concepts
- Module 4: LDA Methodology
- Module 5: Goodness of Fit tes
- Module 6: Probability Density Functions
- Module 7: Probabilistic Degradation Analysis
- Module 8: Preventive Maintenance Modeling
- Module 9: Preventive Maintenance effect on Reliability

#### Day 2:

- Module 1: Accelerated test data analysis Model
- Module 2: Reliability Growth Analysis
- Module 3: FRACAS Concepts
- Module 4: FRACAS online application
- Module 5: *LDA Case Studies*
- Module 6: RGA Case Studies
- Module 7: PDA and WA Case Studies



### Trainer : Dr Eduardo Calixto, CRP, CFSE.,

He's Reliability and Safety Engineer Expert with over 18years experiences in Oil & Gas, Railway, Aerospace and Mining Industries. He has Doctoral Degree in Energy and Environmental, Master in safety System Management, Bachelor in Industrial Engineering. Author of the best seller Book Gas and Oil Reliability Engineering: Modeling and Analysis (material content of this training).

