

Transmission Oil Data Modeling for Condition-Based Maintenance Decision-Making

Faculty advisor: Prof. Viliam Makis

Description:

Real oil data obtained in the healthy state of a heavy-hauler truck transmission will be pre-processed and modeled using time series methodology. Residuals will be obtained using complete data histories. Several fault detection schemes will be designed, tested, and compared for fault detection using residuals. Matlab and MINITAB software will be used as well as C programming. Note: In addition to the listed topics, topics in the area of process/quality improvement, maintenance, reliability, production and inventory control are possible, interested students should contact Prof. Makis, e-mail: makis@mie.utoronto.ca.