PhD student:

Philippe CORNU

Title:

Proving Grounds - Surface Characteristics Life Cycle:

(Study of the aggregate effects, relation with environment, using, aging, regulations, ...)

Abstract

The PhD aims to develop expertise in specifying, designing, controlling, and maintaining proving ground surfaces for tire testing operations, particularly in addressing the long-term stability of proving ground surfaces, which is critical for low variances in the test results. The focus is on the skid resistance of pavement surfaces, which is determined by the pavement surface's texture, particularly macrotexture and microtexture. The project aims to address unanswered questions, such as the effect of water characteristics on skid resistance, how to maintain pavement to meet skid resistance targets, how to predict skid resistance variation due to seasonal and environmental changes, and how to measure and monitor these variations at high precision. The goal is to propose a toolkit to design road surfaces adequately addressing different types of tire testing.