

## ROOT used in Test and Measurement Industry

*Tuesday 12 March 2013 19:40 (20 minutes)*

**Abstract:** In Agilent Technologies Tokyo site, we develop test and measurement equipment for semiconductor industry. Dielectric material is a key element to build semiconductor device and high performance measurement equipment. We use ROOT in a physics research of such material. 2D/3D graphics is a powerful tool to visualize simulation result. Fitting function is used to validate charge transportation formula. Thanks to ROOT, we figured out that known approximation does not correctly represent electrical behavior of dielectrics and came up with a new charge transportation theory. Based on the result, we could build high performance measurement instrumentation using low cost material. In our lab, we also use ROOT as high volume data logging and analysis tool. We will present how we use ROOT.

**Author:** GOTO, Masaharu (Agilent Technologies)

**Presenter:** GOTO, Masaharu (Agilent Technologies)

**Track Classification:** Innovation