



LECTURE INVITATION

OPTIMIZING PERFORMANCE/COST RATIO OF AUDIO DEVICES THROUGH EFFICIENT END-OF-LINE TESTING

The University lecture will be presented as a block seminar

PRESENTED BY: Dr. Stefan Irrgang
KLIPPEL GmbH, Dresden, Germany

DATE: **November 7th to 8th, 2018**
9:00 a.m. – 5:00 p.m.

LOCATION: Feng-Chia University, Taichung, Taiwan
Business Incubation Center of Feng Chia University

LANGUAGE: English

REGISTRATION FEE: NTD6,000 (for students NTD1,000)

LECTURE ORGANIZERS: Soma Acoustics Co. Ltd; EATD

CO-ORGANIZER: Feng-Chia University, Electro-Master's Degree Program

REGISTRATION: Soma Acoustics Co. Ltd.
Tel +886-2-27218345
E-Mail paco.lee@somaacoustic.com.tw
Website: www.somaacoustic.com.tw (for registration)

ABSTRACT:

Both, performance and reliability are critical characteristics of audio devices which are not always balanced in an optimal way. Part variances and uncertainties in the assembling process influence both aspects. Defective units increase the manufacturing cost if detected during end-of-line testing while undetected failures increase the after-sales cost if occurring in the field.

This workshop addresses the role of end-of-line testing to reduce both kinds of failures, rejects at the production and from the field, and to optimize the cost / performance ratio of the final product.

QUESTIONS ADDRESSED IN THIS LECTURE

- How to achieve maximum performance/cost ratio of audio devices for the end-user?
- How to define the target performance and permissible tolerances as perceived and expected by the end-user?
- How to describe the target performance by physical characteristics measured under standard conditions?
- How to link standard measurements with End-of-Line testing?
- How to set PASS/FAIL limits minimizing the rejection rate in production as well as additional cost in after-sales support?
 - How to improve the reliability of the product in the field?
 - How can EoL-testing be used to check the reliability of the DUT and to avoid field rejects?
 - How to benefit from traceability by matching the field rejects with the data from EoL-testing?
- How to improve the reliability and robustness of the product by design and DSP?
- How to communicate between supplier, manufacturer and customer using reliable data (cost, physical and perceptual characteristics)?
- How to use tools from KLIPPEL Analyzer System to solve those challenges?
- How to set up End-of-Line test giving best ratio of speed and sensitivity?

Those questions are discussed on examples from automotive and telecommunication application. Practical solutions are presented and illustrate the theoretical part. The lecture focusses on End-of-Line testing but shows the relationship to product definition, design process, product evaluation and feedback from the final application at customer site.

Dr. Irrgang will address other topics in his lecture which are important for your work. Please send your wish list or detailed question to henry.liou@somaacoustic.com.tw .