

WFCS 2010 - Industry Day

Tuesday, May 18th

09:30 - 10:15 Registration and Coffee

10:15 - 10:30 **Opening Session**

10:30 - 12:00 **Session 1** : Fieldbuses for Process Control and factory automation

Using Digital Networks for Control in the Field, *Travis Hesketh - Vice Chair, Fieldbus Foundation Steering Committee Europe Middle East & Africa*

Abstract:

We will focus on the economic, schedule and process benefits of Foundation Fieldbus. Major plant operational benefits are available when IEC 61158 Foundation Fieldbus Capital Projects are completed faster and at lower cost using Foundation technology. Sales of Foundation Technology approaches \$1bn in 2010. Modelling work completed in the past 6 months by Strathclyde University related company ISC Ltd demonstrates that Control in the Field can deliver over 30% better control response and rejection of disturbance.

Foundation Fieldbus Control in the Field is used extensively to deliver additional benefits: Shell Global Solutions International: "...major benefits identified by SGSI are reduced process controller loading, reduced network traffic enabling more loops per segment, as well as very fast loop response" Finally we will explore the proposition of using control in the field. With intelligent measurement and control devices with backup mode is 3x more reliable than conventional analogue.

From Field realtime communication up to Energy cost savings with PROFINET and PROFIenergy, *Patrick BRASSIER - Product Manager, Industrial Communication, Siemens IA&DT France*

Abstract:

PROFINET the innovative open standard for Industrial Ethernet satisfies all requirements of automation technology. PROFINET enables solutions to be developed for factory automation, including safety applications, Wireless communication and the entire range of drive technology up to and including isochronous motion control applications. Moreover, with PROFIenergy, its latest application Profile, PROFINET is used in production environments for costs reduction through energy savings, thereby contributing actively to environmental protection.

12:00 - 14:00 **Lunch break**

14:00 - 15:30 **Session 2:** Industrial wireless solutions and wireless sensor networks

IEC 62591 wireless standard for process manufacturing, *Jose Luis Juncar – Director, Wireless Emerson Process Management*

Abstract:

To follow...

WSN deployments with CSEM WiseNET, *Dr. Philippe Dallmemagne, Project Manager, Centre Suisse d'Electronique et de Microtechnique*

CSEM is an R&D center active in various domains, such as micro-electronics, mechatronics, optoelectronics and information technology. During the last 10 years, CSEM developed an original full-blown WSN technology called WiseNET, based on in-house developed hardware as well as COTS components. WiseNET is recognised for its ultra-low power and effectiveness properties in low duty-cycle, low data-rate applications.

WiseNET has been deployed in several contexts, such as fire or flood detection, cliff or bridge monitoring, water quality monitoring, people tracking, transportation systems, etc.

The talk will give an overview of the CSEM WiseNET technology, a brief description of selected deployments and the main learned lessons.

15:30 - 16:00 **Coffee break**

16:00 - 17:30 **Session 3** Communication systems for broader applications

e-maintenance, *Dr. Jean-Baptist, Léger, President of PREDICT company*

Abstract:

To follow...

Frame latency evaluation: when simulation and analysis alone are not enough, *Nicolas Navet, INRIA / RTaW, Aurélien Monot, LORIA/PSA, and Jörn Migge, RTaW*

Abstract:

To follow...

17:30 - 18:00 **Panel Discussion: What are R&D needs on fieldbus and wireless technology for industrial applications ?** (tentative title) Chair: Ye-Qiong Song

18:00 **Welcome Reception at LORIA**

