



Hrvatski ogranak društva IEEE EMC i Hrvatska sekcija IEEE
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EMC DESIGN PRINCIPLES

koje će održati uvaženi predavač, IEEE EMC Society Distinguished Lecturer:

Dr. Franz Schlagenhauer
University of Western Australia, Perth

23. lipnja 2008. god. u 14.00h

na Fakultetu elektrotehnike, strojarstva i brodogradnje – FESB Split
Ruđera Boškovića bb, Split
u Telekonferencijskoj učionici – TCR (prizemlje).

Telekonferencijski prijenos bit će omogućen u daljinskim učionicama sljedećih institucija:

- FER, Sveučilište u Zagrebu (koordinator prof.dr.sc. Adrijan Barić)
- ETF, Sveučilište u Osijeku (koordinator prof.dr.sc. Srete Nikolovski)
- Tehnički Fakultet, Sveučilište u Rijeci (koordinator prof.dr.sc. Vera Gradišnik)

Predavanje će trajati 45 minuta i otvoreno je za sve zainteresirane stručnjake i studente.

Abstract: Grounding, shielding, filtering and cabling/wiring are important design criteria to achieve EMC on the equipment level. In order to avoid costly overkill solutions and to tailor individual measures in the case of contradicting requirements, they must not be understood as cookbook style recipes but their application must be based on sound theoretical principles. A sound knowledge of electromagnetic theory is essential to understand and appreciate EMC measures, and not consider them as magical spells that have to be put on machines to make them work. However emphasis is placed on conceptual understanding not on formulas and equations. So, this talk refreshes electromagnetic theory in a nutshell, but avoids the mathematical burden. The nature of electric and magnetic dipoles, estimation of current flow in ground planes, EMC characteristics of transmission lines are some of the topics that covered in this presentation.

About the speaker: Dr Franz Schlagenhauer is a Senior Research Fellow at the University of Western Australia, Western Australian Telecommunications Research Institute (WATRI) in Perth.

Dr Franz Schlagenhauer has studied Electric Engineering at the Technical University Munich, Germany and completed with the Diploma Degree in 1988. From 1988 until 1992 he was PhD student at the Technical University Hamburg-Harburg, and obtained the Doctorate in Engineering in 1994 with his thesis "Field Excitation of Multiconductor Lines with Non-linear Terminations". He was manager of the EMC laboratory at MAZ (Microelectronic Application Centre) in Hamburg from 1992 until 1995 and Technical Manager of EMCSI (Electromagnetic Compatibility and Systems Integration) Pty Ltd, Melbourne, Australia, from 1996 until 1999. During this time he was involved in EMC testing according to civilian and military standards and presented numerous workshops about EMC testing and design to industry. Since 2000 he is Senior Research Fellow at The University of Western Australia, Perth, where his topics of interest are computer simulation of PCBs and shielding enclosures. He is a senior member of the IEEE (EMC-S, AP-S and MTT-S) and has been appointed as IEEE Distinguished Lecturer in EMC for 2007/2008.