

**INSTITUTE OF HIGH PERFORMANCE COMPUTING
(IHPC)**

**SEMINAR
ON**

**Electromagnetic Compatibility
*Simulation and Design***



Co-organised by IEEE EMC Chapter, Singapore

Date : 15 November 2001

Venue: 89B Science Park Drive,
Conference Room 2, 1st floor,
The Rutherford
Singapore 118261

Time : 1:30pm – 5:00pm

Fee : Free of Charge

REGISTRATION FORM

To: Wee Siang Beng
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DID: 7709269 Email: weesb@ihpc.nus.edu.sg

SEMINAR ON

Electromagnetic Compatibility Simulation and Design

15 November 2001, 1:30-5:00pm
89B Science Park Drive, Conference Room 2, 1st floor
The Rutherford

The following persons will be attending the Seminar:

Name	Designation

Organization : _____
Address : _____
Contact Person : _____
Contact No : (O)_____ (Fax)_____ (HP)_____
Email : _____

Please email (weesb@ihpc.nus.edu.sg) or fax this response form by 10 November 2001 to **7709902**

Note: Due to space limitation, interested participants are encouraged to reply early.

Electromagnetic Compatibility and Interference

Simulation, Testing and Management

INTRODUCTION

The millennium challenges have driven the electronics design community to constantly searching for ways and improve their performance and come up with innovative and practical ideas. The technology of three years ago is obsolete and may not meet the insatiable demands of the sophisticated electronics.

The design of high-speed electronics for integrated chips (IC) and printed circuit board (PCB) is fast changing. They are now required to operate at beyond the gigahertz range in the coming years. At higher frequency, electromagnetic interference (EMI) becomes a major concern for electronic engineers. Minimizing electromagnetic interference (EMI) and coupling for IC, circuits, system and between the system are some key design aspects. Most design engineers are competent in designing a circuit or system to perform a specific function. However, they may lack the necessary knowledge for that circuit or system design to meet the required EMC compliance. Although some quick “hard-fixes” can be applied to the final design stage to help improve the EMC limits, under-the-pressure remedies can be very expensive to implement. On the other hand, increasing cost competitiveness in the electronic market has required the manufacturers worldwide to look into cost-effective solutions.

OBJECTIVE

This seminar is specially arranged for small and medium enterprises (SME) or industries to fill “the EMI knowledge gap” with concise but yet some practical know-how to overcome EMI. To suppress it through proper designs at the initial design stage without incurring unnecessary additional costs is possible. The EMC/EMI design and control are important. It is especially beneficial for the local SMEs to be aware of EMC/EMI for good quality electronic and electric product designs.

WHO SHOULD ATTEND

This seminar will benefit engineers and managers who are involved in design, quality control and management for electronic and electrical products and willing to acquire EMC/EMI knowledge.

CONTENTS

- EMC concepts, fundamentals and principles
- EMC simulation techniques
- Reverberation chamber design
- System EMC Engineering on Customised-Off-The-Shelf

SPEAKERS AND TUTORS

- **Dr Ye Chunfei** has over 15 years of industrial and academic experiences. He does research and development in areas of electromagnetic simulation, EMC control and management in Singapore, China and USA. He is a Senior Research Engineer at IHPC
- **Mr Chow Wee Sing** received his BEng in electrical and electronic engineering in 1991 and MSC in industrial system engineering in 1998 from NUS. Since graduated, he has been working with ST electronic engineering Ltd as project engineer, senior project engineer in EMC testing and design. He is currently the Manager of EMC centre in CET technologies Pte Ltd.
- **Dr. Zhang Da Ming** has been with IHPC since the beginning of 1999. He has been working on PCB radiation, signal integrity simulation. He is also the principal investigator for the reverberation chamber design project. He is a Senior Research Engineer at IHPC.
- **Mr Wee Siang Beng** has working experience in CAD modellings for electromagnetic, signal integrity and high frequency applications. He is a Senior Research Engineer at IHPC.