



# 2016 International Symposium on Dependable Integrated Systems



February 29, 2016

Graduate Seminar Room 7F, General Research Building, Izuka Campus  
Dependable Integrated Systems Research Center, Kyushu Institute of Technology

■ 09:30~09:40 Opening & Introduction to DISC

*Xiaoqing Wen, Professor and Director of DISC, Kyushu Institute of Technology, Japan*

■ 09:40~10:15 Invited Talk 1

• **Cyber Security & Future Cyberspace: Mission Based Access Control**

*Eduard Babulak, Professor, Institute of Technology and Business, Czech Republic*

■ 10:15~10:20 Break

■ 10:20~10:55 Invited Talk 2

• **Multi Metric Preferential Algorithm for Partially Re-Configurable Targets**

*Amlan Chakrabarti, Associate Professor, A.K. Choudhury School of I.T., University of Calcutta, India*

■ 10:55~11:00 Break

■ 11:00~11:35 Invited Talk 3

• **Industrial Approach for Dependability in the Recent Decade**

*Nobuyasu Kanekawa, Chief Researcher, Hitachi Research Laboratory, Hitachi Ltd., Japan*

■ 11:35~13:00 Lunch

■ 13:00~14:40 DISC Research Presentation I (LSI Design)

*Chair: Kohei Miyase, Assistant Professor, DISC, Kyutech, Japan*

1. **Low-Power PHY Design for Factory Automation (FA) Wireless LAN System**

*A. M. Kurniawati, L. Lanante Jr., Y. Nagao, and H. Ochi*

2. **Fast HW/SW Co-Verification Platform for High Throughput Wireless Communication System**

*N. Sutisna, R. Hongyo, L. Lanante Jr., Y. Nagao, M. Kurosaki, and H. Ochi*

3. **A Study on Design of Segmental Transmission Line Using Improved Quantum Genetic Algorithm**

*K.-X. Luo, M. Kurosaki, and H. Ochi*

4. **A DC-balanced Bus-invert Coding for Stabilizing the Intermediate Power Level in Stacked-Vdd LSIs**

*A. Rahmat, Y. Kohara, N. Kubo, M. Alimudin, and K. Nakamura*

■ 14:40~15:00 Break

■ 15:00~16:40 DISC Research Presentation II (LSI Test)

*Chair: Leonardo Lanante, Assistant Professor, DISC, Kyutech, Japan*

5. **Delay Measurement for Field Test in FPGAs**

*Y. Miyake, Y. Sato, and S. Kajihara*

6. **An Evaluation of Temperature Voltage Monitor with the TEG chip for Field test**

*T. Kato, T. Itonaga, Y. Miyake, Y. Sato, and S. Kajihara*

7. **Logic/Clock-Path-Aware At-Speed Scan Test Generation for Avoiding False Capture Failures and Reducing Clock Stretch**

*K. Asada, X. Wen, S. Holst, K. Miyase, S. Kajihara, M. A. Kochte, E. Schneider, H.-J. Wunderlich, and J. Qian*

8. **Capture-Safe At-Speed Scan Pattern Generation Concerning IR-Drop Affecting Both Logic Paths and Clock Paths**

*F. Li, X. Wen, S. Holst, K. Miyase, S. Kajihara, M. A. Kochte, E. Schneider, and H.-J. Wunderlich*

■ 16:40~17:00 Closing

*Seiji Kajihara, Vice-Dean of School of Computer Science and Systems Engineering, Kyushu Institute of Technology, Japan*

*All presentation files are available for download at [https://dl.dropboxusercontent.com/u/64915293/DISC-2016\\_Files.zip](https://dl.dropboxusercontent.com/u/64915293/DISC-2016_Files.zip)*