

# MMDM3 Technical Program

## 3rd International Workshop on

### High Frequency Micromagnetic Devices and Materials

April 11th-12th, 2005

Aoba Memorial Hall, Tohoku University, Sendai, Miyagi, Japan

#### April 11

8:30

Open Registration

9:30-9:40

Welcome Remark M. Yamaguchi, Tohoku University, Japan

#### Plenary Talk

9:40-10:20 11a-1

**Latest Activities on the High Frequency Micromagnetic Devices and Materials in Japan (Invited)**

Toshiro Sato

Chairman of the Special committee on the advanced ultra high frequency micromagnetic devices (IEE of Japan)

Shinshu University, Nagano, Japan

10:20-10:30 Break

#### Session: RF Integrated Inductors and Applications, I

10:30-11:10 11a-2

**Toroidal thin film inductors (invited)**

Michael Frommberger<sup>1</sup>, Clemens Schmutz<sup>1</sup>, Jeffrey McCord<sup>2</sup>, and Eckhard

<sup>1</sup>Center of Advanced European Studies and Research (caesar), Smart Materials Group, Bonn, Germany

<sup>2</sup>IFW Dresden, Institute for Metallic Materials, Dresden, Germany

11:10-11:50 11a-3

**Low Resistance and High-Q Magnetic Integrated Inductors: Material and Design Issues (invited)**

Shan X. Wang, Liangliang Li, and Dok Won Lee

Stanford University, Palo Alto, CA, USA

11:50-12:10 11a-4

**Investigation of the Proximity Effect in Ferromagnetic Inductors with Different Topologies : comparison and solutions**

Anne-Sophie Royet<sup>1</sup>, Sandrine Couderc<sup>2</sup>, Bastien Orlando<sup>2</sup>, Bernard Viala<sup>1</sup>

<sup>1</sup>CEA-DRT LETI Grenoble France

<sup>2</sup>STMicroelectronics Central R&D Crolles France

12:10-13:30 Lunch

#### Session: High Frequency Magnetic Materials

13:30-13:50 11p-1

**Nanostructure and microwave properties of CoFeAlO films**

M. Pasquale<sup>1</sup>, C.P. Sasso<sup>1</sup>, A. Magni<sup>1</sup>, S. Perero<sup>1</sup>, F. Celegato<sup>2</sup>, V. Teppati<sup>3</sup>, J. C. Sohn<sup>4</sup>, S. H. Lim<sup>4</sup>

<sup>1</sup>Materials Dept. IENGF, Torino, Italy

<sup>2</sup>INFM Politecnico di Torino, Italy

<sup>3</sup>DELEN Politecnico di Torino, Italy

<sup>4</sup>Korea Univ.-KIST, Seoul, Korea

13:50-14:10 11p-2

**High frequency soft magnetic properties and structure of nano-granular Co-Pd-Si-O films**

S. Ohnuma<sup>1</sup>, M. Ohnuma<sup>2</sup>, H. Fujimori<sup>1</sup>, T. Masumoto<sup>1</sup>

<sup>1</sup>The Research Institute for Electric and Magnetic Materials, Sendai, Japan

<sup>2</sup>National Institute for Materials Science, Tsukuba, Japan