# **HRDP6** Oral Program

# **Monday 27 June 2011**

#### Chair: Daewon Moon

9h00	I 1	Gustafsson	Medium Energy Ion Scattering from Novel Materials: High-k, SiC, Oxide
			Interfaces and Topological Insulators.
9h35	O1	Primetzhoffer	High resolution Rutherford backscattering spectrometry: Depth profiling and composition analysis.
10h00	O2	Bauer	Information depth in Low Energy Ion Scattering

## Coffee

#### Chair: Denis Jalabert

	10h45	I 2	Shutthanandan	High resolution depth profile analysis of interface mixing at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interface	
				Lano3/511103 Interface	
F	11h20	О3	Munnik	High-resolution RBS investigation of LaLuO <sub>3</sub> as candidate for a second-	
				generation high-k material	
	11h45	O4	Chan	High-resolution Rutherford Backscattering Spectrometry investigation of solid	
				phase epitaxial growth in Sn-implanted Si	

### Lunch

#### Chair: John O'Connor

14h00	I 3	Blavette	Ultimate depth profiling using Atom Probe Tomography
14h35	O5	Shuttanandan	Embedded Nanoparticle Analysis using Atom Probe Tomography and High-
			Resolution Electron Microscopy
15h00	O6	King	Surface Analysis of Samples Returned from the NASA Genesis Mission

## Coffee

## Posters and Sponsor Displays

# Tuesday 28 June 2011

### Chair : Kenji Kimura

09h00	I 4	Goncharova	Transport and exchange of hydrogen and oxygen isotopes using medium energy ion scattering
09h35	O7	Deokar	Investigation of oxygen exchange between CO <sub>2</sub> and thermally grown SiO2 network by Narrow Resonance Depth Profiling
10h00	O8	Ру	Ultimate backside sample preparation for ultra thin high-k/metal gate stack depth profiling with ToF-SIMS, MEIS and pAR-XPS

## Coffee

#### Chair: Pedro Grande

Citati .	1 caro	Granac	
10h45	I 5	Visikovskiy	Oxygen deficiency and excess of metal-oxide surfaces analyzed by MEIS and ERD
11h20	O9	Woodruff	The $V_2O_3(0001)$ surface termination crystallography: phase equilibrium
			revealed by medium- and low-energy ion scattering.
11h45	O10	Jalabert	Strain measurement in a thin silicon film using Medium Energy Ion Scattering.

### Lunch

#### Chair: Lyudmila Goncharova

	14h00	Ĭ 6	Etgens	Layer-by-layer film growth monitored by Grazing Incidence Fast Atom Diffraction
	14h35	O11	Brongersma	Quantitative and non-destructive determination of the atomic composition of the outer surface and of in-depth profiles by HS-LEIS
Ì	15h00	O12	Goebl	Quantification of second layer contributions in Low Energy Ion Scattering

# **Tuesday 28 June 2011(continued)**

Chair: Peter Bauer

15h45	I7	Noakes	Dealing with disorder, defects and amorphicity in medium energy ion scattering experiments	
16h20	O13	Bergmaier	Monte Carlo simulations of high resolution elastic recoil detetection depth profiles	
16h45	O14	Ganem	Vicinage Effect and Coulomb explosion dynamics of hydrogen molecules in Silicon Nitride Films	
17h10	O15	Hentz	A simple approach for simulating the 2D MEIS spectrum in crystalline materials	

# Wednesday 29 June 2011

Chair: Bruce King

09h00	I 8	Vandervorst	High Resolution SIMS Depth Profiling
09h35	O16	Ngo	Depth profiling of metal - organic samples by (low-energy) dynamic SIMS
10h00	O17	Meerschaut	Compositional analysis of NiO thin films grown by MOCVD

### Coffee

Chair: Wilfried Vandervorst

10h45	I9	Sánchez	Adsorption and thermal stability of organic films on surfaces monitored by Direct Recoil Spectroscopy
11h20	O18	Itani	Depth Resolution in SIMS Depth Profiling with Oxygen Primary Ions
11h45	019	Galtayries	ToF-SIMS depth profiling of nanometric Mg/Co/Zr stacks

Lunch

Outing

Gala Dinner

# Thursday 30 June 2011

Chair: Phil Woodruff

09h00	I10	Baddeley	Using MEIS to probe segregation effects in bimetallic nanoparticles.
09h35	O20	Sortica	Nanostructures characterization using the MEIS technique.
10h00	O21	Sanchez	Structural characterization of buried nanostructured materials through Medium
			Energy Ion Scattering technique

## Coffee

Chair: Torgny Gustafsson

10h45	I11	Kimura	Improvement of sensitivity in high-resolution RBS by reducing detector
			noise
11h20	O22	Bailey	A UHV-compatible, demountable heat transfer system.
11h45	O23	Moon	Development of imaging TOF- MEIS and Applications

Closing Remarks

Lunch

**END**