# Program of the Conference



#### VIII-th INTERNATIONAL CONFERENCE

# Ion Implantation and Other Applications of Ions and Electrons

## Kazimierz Dolny, Poland, June 14-17, 2010

# Monday, June 14, 2010

10:00 - Registration

13:00 - Lunch

14:00	Opening of the Conference	
	Afternoon session I	
14:15	L. Pranevičius (Lithuania)	Hydrogen separation under molecular ion implantation in nanocrystalline Mg films
14:45	J. Piekoszewski (Poland)	The effect of chromium on formation of nitrogen expanded austenite phase in Fe-Cr alloy induced by high intensity nitrogen pulses
15:15	A.D. Pogrebnjak (Ukraine)	Application of plasma jets for fabrication of coatings from metals, hard alloys, ceramics, and their combination
15:45	D.L. Alontseva (Kazakhstan)	The structural phase changes in Ni –Cr- and Co-Cr based coatings deposited by plasma detonation and the results of coatings' modification by duplex treatment

16:05 Coffee break

	Afternoon session II	
16:30	M. Ali	The use of PIXE in evaluation of Coptic Wall
	(Egypt)	Paintings conservation (case study)
16:50	A. Michel (France)	Interaction between energy of deposited species and intrinsic stress build-up in thin solid films
		grown by magnetron sputtering
17:20	P. Konarski (Poland)	Vacuum annealing effects in nickel alloys applied in aviation industry – Depth profile analysis by secondary ion mass spectrometry (SIMS) and glow discharge mass spectrometry (GDMS)
17:40	I. Jóźwik (Poland)	Thermal annealing of carbon layers formed via ion-beam induced hydrocarbons decomposition

18:00 Scientific Committee Meeting

19:15 Wellcome dinner

## Tuesday, June 15, 2010

7:30÷8:30 Breakfast

	Morning session I	
8:30	K. Potzger (Germany)	Ion-beam synthesis of magnetic semiconductors
9:00	A. Maziewski (Poland)	Tuning of ultrathin film magnetic properties by ions irradiation

9:30	A. Misiuk (Poland)	Properties of Si:V annealed under enhanced hydrostatic pressure
10:00	Z. Werner (Poland)	The effects of He irradiation in manganese implanted silicon
10:30	J. Fedotova (Belarus)	Magnetoresistance in n-Si/SiO <sub>2</sub> /Ni nanostructures manufactured by swift heavy ion-induced modification technology

#### 10:50 Coffee break

	Morning session II	
11:15	L. Thomé (France)	On the damage build-up in ion-irradiated ceramics
11:45	J. Jagielski (Poland)	Effect of grain size on mechanical properties of irradiated mono- and polycrys-talline MgAl <sub>2</sub> O <sub>4</sub>

## 12:15 – 14:00 **Poster Session I**

## 14:00 Lunch

	Afternoon session III	
15:00	J. Sullivan	Deposition and properties of ultra fast deposited
	(United Kingdom)	diamond-like hydrogenated carbon films
15:30	G.M. Wu	Aluminum-doped zinc oxide thin films prepared by
	(Taiwan R.O.C.)	sol-gel and RF magnetron sputtering
15:50	A. Turos	Stopping power and energy straggling of
	(Poland)	channeled He-ions in GaN
16:10	W. Wierzchowski	X-ray diffraction studies of strain distibution
	(Poland)	in 6H SiC repeatedly implanted with Al ions
16:40	G. Gawlik	Ion and electron beam induced luminescence
	(Poland)	of rare earth doped YAG crystals
17:00	F. Nickel	News about the precise numerical value of the em
	(Germany)	fine structure constant
17:30	Z. Wroński	Diagnostics of ion-cathode interaction of glow
	(Poland)	discharges

18:00 Dinner

19:30 Organ Concerto

# Wednesday, June 16, 2010

## 7:30÷8:30 **Breakfast**

Young Scientist Contest (oral and poster)		
8:30	K. Pągowska	RBS\channeling and TEM study of damage
		buildup in ion bombarded III-N compounds
8:50	A. Stępkowska	Application of electron beam radiation to modify
	(Poland)	crosslink structure in rubber vulcanizates and its
		tribological consequences
9:10	O. Yastrubchak	Application of the ion implantation for the synthesis
	(Poland, Ukraine)	and modification of the (Ga,Mn)As ferromagnetic
	,	semiconductors
9:30	S. Abd El Aal	Identification of painting layers Sennefer Tomb
	(Egypt)	by ion beam analysis
9:50	J. Lehmann	Wear-out phenomena in Si-based light emitting
	(Germany)	devices with ion beam implanted europium
10:10	M. Sochacki	Reactive ion etching (RIE) of 4H-SiC in fluorinated
	(Poland)	plasma for device fabrication
10:30	S. Prucnal	Optical and microstructural properties of In(As,N)
	(Poland)	quantum structure made by ion implantation
	, ,	and flash lamp processing
8:30÷10:50 Posters:		
	I. A. Chugrov	Effect of ion doping on optical properties

(Russia)	of multilayered nc-Si/high-k-oxide structures
A. Mikhaylov (Russia)	Ion-beam synthesis and modification of light- emitting silicon and silicon-carbon nanoclusters in oxide layers
R. Ratajczak (Poland)	Defect transformations in ion bombarded InGaAsP
V. Tsvyrko (Belarus)	Formation of H-donors and radiation defects in proton implanted SiGe

10:50 Coffee break

11:00 - 13:00 Poster Session II

13:00 Lunch14:00 Excursion20:00 Barbecue

# Thursday, June 17, 2010

7:30÷8:30 Breakfast

Morning session IV		
8:30	F.F. Komarov (Belarus)	Peculiarities of swift proton transmission through tapered glass capillaries
9:00	W. Skorupa (Germany)	Advances in Si & Ge millisecond processing: From silicon-on-insulator to superconducting Ge
9:30	B. Nycz (Poland)	Diagnostics of high intensity pulsed plasma beams by ex-post analysis of mophology of the irradiated silicon surface
9:50	R. Hurley (United Kingdom)	Hydrogen and helium implantation in germanium for semiconductor layer transfer applications
10:20	C. Cherkourk (Germany)	Estrogen detection in waterish solutions by silicon based light emitters

10:40 Coffee break

	Morning session V	
11:00	B. Słowiński (Poland)	Space structure and fluctuation of electromagnetic cascades produced by 100-3500 MeV gamma quanta in heavy amorphous media
11:30	T. Wilczyńska (Poland)	The changes of manganin thermoresistance properties induced by Nb, Ti, C low energy and then Kr high energy ion implantation
11:50	M. Turek (Poland)	Plasma ion source with an internal evaporator
12:10	P. Szałański (Poland)	Analysis of the iron state in ferric and ferrous iron containing pharmaceutical products available in Poland by Mössbauer spectroscopy
12:30	Closing of the Conf	ference

13:00 Lunch

14:00 Departure