



IWMMW 2015

July 2nd – July 3rd, 2015

Palacio Barrena, Ordizia (Gipuzkoa), Spain

PROGRAM

IWMW 2015

The 7th International Workshop on Magnetic Wires (IWMW 2015) will be held in **Palacio Barrena, Ordizia** (Gipuzkoa, Basque country, Spain) on **July 2nd - July 3rd, 2015**. This is already a 7th Workshop on Magnetic Wires and a third time this Workshop will be held in Gipuzkoa, Spain. Previous six International Workshops on Magnetic Wires have been organized in the following locations : London, UK 1990; Albuquerque, New Mexico, USA 1994; Nagoya, Japan 1999; San Sebastian, Spain 2001; Zumaia, Spain 2008 and Bodrum, Turkey, 2010.

Magnetic wires have been available for more than two decades. During this time, the unique properties of these materials have attracted considerable interest for many prospective applications, especially, in the field of magnetic sensors and electronic devices. The organization of this meeting is based on the continuing interest of many research and technological groups in these materials. It is worth to mention that Magnetic wires are also important topic of research in the Basque Country and, particularly, in San Sebastián (Gipuzkoa, Spain), where this kind of research is carried out by the Magnetic Group of the University of the Basque Country (UPV/EHU).

Sincerely,
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IWMW Program at a glance

<u>July, 1st</u>	<u>July, 2nd</u>	<u>July, 3rd</u>
	8.30-9.00 Registration	
	9.00-9.15 Conference opening	9.00-10.50 Talks
	9.15-10.15 Talks	
	10.15-10.45 Coffee break	10.50-11.15 Coffee break
	10.45-13.00 Talks	11.15-13.25 Talks
	13.00-15.00 Lunch	13.25-15.00 Lunch
	15.00-18.45 Poster session	15.00-16.30 Panel discussion
	15.00-17.00 Talks	16.30 Closure
18.00-20.00 Registration	17.00-17.15 Coffee break	
	17.15-19.45 Talks	
20.00-22.00 Cheeze & Wine party, Dinner	19.45-20.30 Sightseeing	
	20.30-22.30 Dinner	

IWMW PROGRAM

	<u>Wednesday, July 1, 2015</u>
18:00-20:00	Onsite registration <u>Cheese and Wine Party, Dinner</u>

	<u>Thursday, July 2, 2015</u>
8:30-9:00	Registration
9:00-9:15	Workshop opening
9:15-10:15	Session: Magnetization process of thin wires Chair: L. Panina
9:15-9:45	Invited talk: M. Vazquez , Instituto de Ciencia de Materiales de Madrid (CSIC), Madrid, Spain: <i>“Controlled motion of single domain walls in magnetic microwires”</i>
9:45-10:15	Invited talk: G. Beach , Massachusetts Institute of Technology, Boston, MA, USA: <i>“Static and dynamic chiral spin textures in ultrathin magnetic films and nanowires”</i>
10:15-10:45	<u>Coffee break</u>
10:45-13:00	Session: Magnetization process of thin wires (continuation) Chair: D. Atkinson
10:45-11:15	Invited talk: R. Varga , Technical University of Kosice, Kosice, Slovak Republic: <i>“Study of the single domain wall structure in glass-coated microwires”</i>
11:15-11:40	Oral talk: P. Gawroński , AGH - University of Science and Technology, Cracow, Poland: <i>“Magnetic hysteresis of Bent interacting wires”</i>
11:40-12:00	Oral talk: A. Chizhik , University of the Basque country, San Sebastian, Spain: <i>“Mechanism of domain switching in magnetic wires”</i>
12:00-12:20	Oral talk: D. Cornejo , Universidade de São Paulo, São Paulo-SP, Brazil: <i>“Magnetization reversal mechanism in small-grained CoxPd1-x nanowires”</i>
12:20-12:40	Oral talk: I. Iglesias , Immanuel Kant Baltic Federal University, Kaliningrad, Russia: <i>“Temperature dependent magnetic properties of Fe77,5Si7,5B15 glass-coated amorphous microwires at high and low magnetic fields”</i>
12:40-13:00	Oral talk: K. Chichay , Immanuel Kant Baltic Federal University, Kaliningrad, Russia: <i>“Magnetostatic and magnetostrictive properties and micromagnetic structure of Fe-based glass-coated microwires dependent on</i>

	<i>metallic nucleus diameter / total microwire diameter ratio</i>
13:00-15:00	<u>Lunch</u>
15:00-17:00	Session: Magnetization process of thin wires (continuation) Chair: G. Beach
15:00-15:30	Invited talk: D. Atkinson , University of Durham, Durham, UK: <i>“Dynamical pinning of domain walls in planar nanowires”</i>
15:30-16:00	Oral talk: V. Rodionova , Immanuel Kant Baltic Federal University, Kaliningrad, Russia: <i>“Novel way to estimate the volume of axial magnetized core in metallic nucleus of magnetically bistable glass-coated microwires”</i>
16:00-16:30	Oral talk: I. Machay , Immanuel Kant Baltic Federal University, Kaliningrad, Russia: <i>“High-temperature dependences of partially-covered biphasic microwires magnetic properties”</i>
16:30-17:00	Oral talk: A. Talaat , University of the Basque Country, San Sebastian, Spain: <i>“Effect of nanocrystallization on structural and magnetic properties of hitperm-type glass-coated”</i>
17:00-17:15	<u>Coffee break</u>
15:00-18:45	Poster session Chair: V. Rodionova
18:45-19:45	Session: High frequency properties and metamaterials Chair: R. Varga
18:45-19:15	Invited talk: D. Menard , Université de Montréal, Montreal, Quebec, Canada: <i>“Noise in Giant magnetoimpedance magnetometers - can they compete with fluxgate at low frequency?”</i>
19:15-19:45	Invited talk: S. Gudoshnikov , National University of Science and Technology «MISiS», Moscow, Russia: <i>“Magnetoelastic properties of CO based amorphous ferromagnetic microwires”</i>
19:45-22:30	<u>Sightseeing and Conference dinner</u>

Poster session

N. A. Yudanov	“Temperature dependence of the off-diagonal magnetoimpedance in sensor configuration utilizing Co-rich amorphous wires”
Evgeni Sorkine	“Embeddable temperature sensors”
Leonid Butko	“Wire Structure with Simultaneously Negative Permeability and Permittivity”
Eider Berganza	“Spin configuration of a single modulated nanowire”
Valentina Zhukova	“Comparative magnetic studies of amorphous glass-coated

	microwires manipulated by annealing”
J. Mino	“Annealing effects on the GMR microwires with CuCo composition”
Partha Sarkar	“GMI device using CoFeSiBCr amorphous/nanostructured microwire for NDE applications”
Horia Chiriac	“The influence of annealing conditions and reduction parameter on the magnetic properties of thin finemet cold-drawn microwires”
Jingshun Liu	“Rotating magnetic field annealing evoked remarkable improvement of GMI property of microwires”
Dmitrii Kalganov	“Tunable microwave filters based on magnetoelectric composites”
Elvina Dilmieva	“Magnetic microactuator based on shape memory composite microwires”
Oksana Pavlakhina	“Modeling of heat transfer processes in Ni-Mn-In magnetic wires”
Elena Kostitsyna	“Estimation of mechanical properties and internal stresses in ferromagnetic glass covered microwires”
Juan Luis Palma	“Controlling magnetization reversal in planar nanostructures with wire-ring morphology”
Juan Escrig	“A soft/hard magnetic nanostructure based on multisegmented conical nanowires”
Sergey Shevyrtalov	“Internal stresses influence on magnetic properties of ni-mn-ga glass-coated microwires”
Dmitrii Pavlov	“Measurement of microwave radiation absorption for localized hyperthermia”
Fanny Béron	“Dielectrophoretic manipulation of individual magnetic nanowires”
Margarita Churyukanova	“Magnetostriction investigation of soft magnetic microwires”

	<u>Friday, July 3, 2015</u>
9:00-10:50	Session: Giant magnetoimpedance effect in thin wires and applications Chair H. Chiriac
9:00-9:30	Invited talk: L. Panina , National University of Science and Technology, “MiSIS”, Moscow, Russia / University of Plymouth, Plymouth, UK: “ <i>Off diagonal magnetoimpedance (mi) in amorphous microwires for low-field magnetic sensors</i> ”
9:30-10:00	Invited talk: T. Uchiyama , University of Nagoya, Nagoya, Japan: “ <i>Biomagnetic field measurement using developed highly precise</i> ”

	<i>gradiometer based on off-diagonal GMI element</i>
10:00-10:30	Invited talk: M. Ipatov , University of the Basque Country, San Sebastian, Spain: <i>“Magneto-impedance hysteresis in amorphous microwires”</i>
10:30-10:50	Oral talk: I. Polacek , Technical University of Kosice, Kosice, Slovakia: <i>“Addition of a molybdenum into a amorphous glass coated microwires usable as a temperature sensors in biomedical applications”</i>
10:50-11:15	<u>Coffee break</u>
11:15-11:45	Session: Giant magnetoimpedance effect in thin wires and applications (continuation) Chair A. Chizhik
11:15-11:45	Invited talk: Y. Honkura , Aichi Steel Corporation, Nagoya, Japan: <i>“The study on electromagnetic coupling with amorphous wire and micro coil excited by GHz pulse current”</i>
11:45-13:25	Session: Novel magnetic wires with functional properties Chair: A. Yelon
11:45-12:15	Invited talk: N. Lupu , University B-dul Carol I, Iasi, Romania: <i>“The influence of induced crystallographic texture on magnetic properties and magnetostriction of Fe-Ga and Fe-Ga-B microwires”</i>
12:15-12:45	Invited talk: K. Pirotta , Universidade Estadual de Campinas, Campinas, Brazil: <i>“Fabrication of a new class of intermetallic nanowires by a new synthesis method”</i>
12.45-13:05	Oral talk: L. Galdun , Pavol Jozef Šafárik University, Kosice, Slovakia / Universidad de Oviedo, Oviedo, Spain: <i>“Magneto-structural properties in half-metallic glass-coated Ni₂FeSi heusler microwires”</i>
13:05-13:25	Oral talk: V. Larin , MFTI Ltd., Kishinev, Republic of Moldova: <i>“Directed crystallisation of glass-coated microwires”</i>
13:25-15:00	<u>Lunch</u>
15:00-16:30	Panel session and discussion (Moderator M. Vázquez) Confirmed participants: M. Vazquez, D. Menard, A. Zhukov, L. Panina, D. Atkinson, N. Lupu
16:30	Closure

Sponsors:



Organizers:



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