ECT 2010 - Program Overview

Opening Ceremony*

Chairman Ing. **Matteo CODECASA** Chairman's welcome
Deputy Mayor **Ezia MOLINARI** Welcome of Comune di Como, assessorato Università
Dott. **Stefano BESSEGHINI** Head of the CNR-Lombardy's project work-package, brief overview of Thermoelectrics in CNR-RL Project
Prof. **Giulio CASATI** Scientific Secretary of Centro Volta, introduction to first plenary talk

Wednesday, September 22

16.30–19.55	**REGISTRATION**
17.00–19.55	**WELCOME COCKTAIL**

Thursday, September 23

8.00–12.55			**REGISTRATION**
8.00–9.25			**OPENING CEREMONY***
9.00–9.25		I-1	**Invited talk 1: L. Anatychuk "ON THE DISCOVERY OF THERMOELECTRICITY BY A. VOLTA"**
9.30–9.40	MATERIALS 1 - part a chair: Hubert SCHERRER	M1-01	S. Schlecht, "Microstructure analysis and thermoelectric properties of different ball-milled AgPbmSbTem+2 -type matenals"
9.45		P1-01	S. Laumann
9.50–9.55		M1-02	M.I. Fedorov, "Lattice thermal conductivity of the Mg2Si, Mg2Sn and Mg2Ge compounds"
10.05		P1-02	B. Landschreiber
10.10–10.20		M1-03	C. Fanciulli, "Microstructure and thermoelectric properties of n-type calcogenide nanopowders sintered by ECAE"
10.25		P1-03	M. Sonne
10.30–10.40		M1-04	R. Rostek, "Optimization of Galvanostatically Deposited Bi2Te3 Thin Films"
10.45		P1-04	K. Bertram
10.50–11.05			**COFFEE BREAK (Sala Pasta)**
11.10–11.20	MATERIALS 1 - part b chair: Anke WEIDENKAFF	M1-05	A. Kikuchi, "Optimizing Holding Time for Maximizing Figure of Merit of La-Doped SrTiO3 Prepared by Combustion Synthesis and post Spark Plasma Sintering"
11.25		P1-05	N. Geyer
11.30–11.40		M1-06	E. Guilmeau, "Thermoelectric properties of Oxygen Deficient Fluorite Derivative Ga3-xIn5+xSn2O16 compounds"
11.45		P1-06	J. Lybeck
11.50–11.55		M1-07	A. Denoix, "Thermoelectric properties of Zn4Sb3 material processed by chemical route and sintered by SPS."
12.05		P1-07	C. Okamura
12.10–12.20		M1-08	P. Rauwel, "Nanostructuring in thermoelectric Zn4-6 Sb3 with varying Zn concentrations"
12.25		P1-08	C. Godart
12.30–12.40		M1-09	P.H.M. BöTtger, "Electronic structure of the thermoelectric Zn-Sb system"
12.45		P1-09	C. Drasar
12.50–13.55			**LUNCH (Sala Pasta + Sala Zodiaco)**
14.00–14.05	THEORY - part a chair: Xantippi ZIANNI	I-2	**Invited talk 2: G. Casati, "Increasing thermoelectric efficiency: Dynamical models unveil microscopic mechanisms"**
14.20–14.30		T-01	R. Viennois, "Physical properties of pure and doped thallium tellurides: a first principles study of the origin of their good thermoelectric properties"
14.35		P1-10	A. Jacquot
14.40–14.50		T-02	V.M. Fomin, "Enhanced thermoelectric efficiency due to electronic minibands in nanostructured InAs/GaAs"
14.55		P1-11	D.A. Pshenay-Severin
15.05–15.15		T-03	J.E. Velazquez-Perez, "The role of non-equilibrium charge carriers in thermoelectric cooling"
15.20		P1-12	A. Jacquot
15.25–15.30		T-04	Ishida, "Seebeck effect in PbS and SnTe-based semiconductors"
15.35		P1-13	L. Anatychuk
15.40–16.25			**COFFEE BREAK (Sala Pasta) + POSTER SESSION (Sala Turca)**
16.30–16.40	THEORY - part b chair: Giulio CASATI	T-05	X. Zianni, "Thermoelectric properties of nano-waveguides"
16.45		P1-14	H. Le-Quoc
16.50–16.55		T-06	N. Neophytou, "Atomistic analysis of thermoelectric properties of Si nanowires"
17.05		P1-15	S. Boldrini
17.10–17.20		T-07	O.M. Lovvik, "Solubility and mobility of Zn species in Zn4Sb3 - a combined computational and experimental study"
17.25		P1-16	J. Tervo
17.30–17.40		T-08	G.H. Fecher, "Thermoelectric properties of Heusler compounds calculated by ab-initio methods."
17.45		P1-17	N. Schaeuble
17.50–17.55		T-09	M.A. Korzhuev, "On a way of discovery of thermoelectricity by Thomas J. Seebeck"
18.10–18.50			
19.00–22.30			**30' boat trip to TORNO (Ristorante Il Vapore) CONFERENCE SOCIAL BANQUET 15' boat trip back to COMO**

Friday, September 24

8.00–8.55		I-3	**Invited talk 3: J.W. Fairbanks "Vehicular Thermoelectric Application for the Green Economy"**
9.00–9.10	APPLICATIONS - part a chair: John STOCKHOLM	A-01	J. Kitte, "Thermoelectrics – a competing and cooperating method for CO2 - reduction in regards to different ways of heat recovery in the vehicle"
9.15		P2-01	S. Piva
9.20–9.40		A-02	V. Semenyuk, "Prospects for Thermal Management of Powerful Microprocessors Using Thermoelectrics"
9.45		P2-02	J. Benallal
9.50–9.55		A-03	Y. Hyun, "Thermoelectric property of silicon based thermoelectric device"
10.10		P2-03	F. Montagner
10.15–10.20		A-04	D. Samson, "Optimization of a Heat Storage Device for an Aircraft Specific Thermoelectric Power Generator"
10.25		P2-04	A. Rodriguez Garcia
10.30–10.35		A-05	R. Joardar, "Development of a Novel High Efficiency Photothermovoltaic Concentrator Solar Cell"
10.40		P2-05	C.A. Gould
10.45–11.05			**COFFEE BREAK (Sala Pasta)**
11.10–11.20	APPLICATIONS - part b chair: David M. ROWE	A-06	K. Bartholome, "Energy autarkic sensors in aircrafts"
11.25		P2-06	D. Champier
11.30–11.40		A-07	C. Suter, "Thermoelectric converters driven by concentrated solar irradiation: Heat transfer analysis and cavity-receiver designThermoelectric converters driven by concentrated solar irradiation: Heat
11.45		P2-07	J.G. Vián
11.50–11.55		A-08	D. Magnetto, "HeatReCar - Reduced Energy Consumption by massive Thermoelectric Waste Heat Recovery in Light Duty Trucks"
12.05		P2-08	K.M. Paraskevopoulos
12.10–12.20		A-09	A. Maignan, "Themoelectric oxides: state of the art"
12.25		P2-09	A. Sesselmann
12.30–12.45		A-10	D. Narducci, "Opportunities and challenges in the use of heavily doped polycrystalline silicon as a thermoelectric material. An experimental study."
12.50–13.55			**LUNCH (Sala Pasta + Sala Zodiaco)**
14.00–14.05	MATERIALS 2 - part a and part b chair: Krystof WOJCIECHOWSKI, Claude GODART, Antoine MAIGNAN	I-4	**Invited talk 4: M. Winkler "Nanoalloying - An approach for creating thermoelectric compounds in the material group (Bi,Sb)2(Se,Te)3"**
14.20–14.30		M2-01	G.F. Cerofolini, "Industrially scalable process for silicon nanowires as Seebeck generators"
14.35		P2-10	C. Candolfi
14.40–14.50		M2-02	M. Aguirre, "Transport properties and crystal structure of PrCo1-xNixO3 mixed-valence oxides"
14.55		P2-11	R. Carlini
15.05–15.15		M2-03	D. Hauser, "Growth and electrical characterization of doped monocrystalli SiGe-based quantum dots superlattices"
15.20		P2-12	J. Navratil
15.25–15.30		M2-04	M. Trottmann, "Nanostructured Nb substituted CaMnO3 n-type thermoelectric Material, prepared by Ultrasonic Spray Pyrolysis"
15.35		P2-13	K. Wojciechowski
15.40–15.45		M2-05	M. Falmbigl, "Crystal structure and physical properties of new clathrate compounds close to the semiconductor-metal transition"
15.50		P2-14	Q.-G. Cao
15.55–16.25			**COFFEE BREAK (Sala Pasta) + POSTER SESSION (Sala Turca)**
16.30–16.40		M2-06	J.D. KöNig, "Thermoelectric properties of n-type (Pb,Sn)Se thin films and bulk single crystals"
16.45		M2-07	J. Dadda, "Thermoelectric and microstructural Characteristics of Quenched and Annealed AgPb18SbTe20 (LAST-18) Compounds"
16.50–16.55		M2-08	M. Wagner, "RuIn3 - a new intermetallic thermoelectric material"
17.05		M2-09	S. Ouardi, "Doped NiTiSn as a n- and p-type thermoelectric material pair in almost one material"
17.10–17.20		M2-10	
17.25–18.20			**FAREWELL**