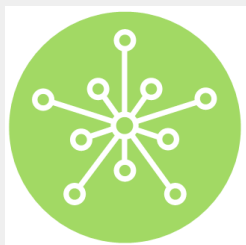


Organizer

**European
C-MAC**

Coorganizers



Institute of Physics



<http://cmacdays2014.ifs.hr/>

CMACdays2014@ifs.hr

**European
C-MAC**

European Integrated Center for the
Development of New Metallic Alloys
and Compounds – European C-MAC

C-MAC Days 2014

Programme

December, 8-11, 2014

Institute of Physics



Zagreb, Croatia

Monday, December 8th 2014

Arrival/Registration
Dinner

Tuesday, December 9th 2014

8:50 – 21:00

Welcome

Slobodan Milošević, director of the Institute of Physics
Marc de Bossieu, **EUROPEAN C-MAC** director

Thermoelectric clathrates: From phonons to correlations

Silke Paschen

Thermoelectric properties of $\text{Ba}_8\text{Au}_{5.25}\text{Ge}_{40.3}\square_{0.45}$ type-I clathrates

Petr Tomeš

Phonon propagation and thermal conductivity in the $\text{Ba}_8\text{Ge}_{40.3}\text{Au}_{5.25}$ clathrate and approximant-crystal $\text{o-Al}_{13}\text{Co}_4$

Pierre-François Lory

Crystal growth of FeSb_2 and CoSb_3 by a modified Bridgman technique

Peter Gille

Insights into charge stripe order in a co-doped cuprate superconductor from nonlinear response

Damjan Pelc

11:10 – 11:30 Coffee break

High-entropy alloys: growth, microstructure and defects

Michael Feuerbacher

$\text{Ta}_{34}\text{Nb}_{33}\text{Hf}_8\text{Zr}_{14}\text{Ti}_{11}$ – The First Observation of Superconductivity in High-Entropy Alloys

Primož Koželj

Eutectic High-Entropy Alloys

Sheng Guo

12:35 – 14:30 Lunch break

Strongly correlated electrons in icosahedral Yb quasicrystals and approximants

Kazuhiko Deguchi

Geometrically frustrated magnetism of spins on icosahedral clusters: The $\text{Gd}_3\text{Au}_{13}\text{Sn}_4$ quasicrystalline approximant

Stanislav Vrtnik

Kondo lattice – fluctuating valence transition in $\text{Ce}(\text{Cu}_{1-x}\text{Ni}_x)_4\text{Al}$ compounds

Magdalena Wencka

Complex Magnetic Order - the Skyrmion Lattice

Ivica Živković

16:20 – 16:45 Coffee break

Graphene: from synthesis to composites

László Forró

"Chemical" and "Mechanical" Engineering of Epitaxial Graphene

Marko Kralj

Many-Body Contact Repulsion of Soft Disks

Antonio Šiber

The first-order transition in magnetocaloric $\text{LaFe}_{11.8}\text{Si}_{1.2}$ probed by in-situ synchrotron XRD

Anja Waske

Magnetic characterization and 3D-imaging of epoxy-bonded magnetocaloric composites

Bruno Weise

18:40 – 19:30 Dinner

Poster session (19:30 – 21:00)

Wednesday, December 10th 2014

9:00 – 18:30

The Surface Dynamics of Intermetallic Compounds in Catalysis

Marc Armbrüster

Surface Science Investigations on Structures and Adsorption Sites of Single Crystal PdGa Surfaces

Roland Widmer

In Situ microscopic study of surfaces of intermetallic compounds for catalysis

Abdullah Al-Mahboob

DFT modeling and transport properties of PdGa and PdIn compounds

Ivo Batistić

In Situ Investigation of Bulk ZnPd: Different Synthesis – New Results

Dennis Ivarsson

Investigation of thermal stability of Al-Mo thin films

Marija Sorić

11:25 – 11:45 Coffee break

Chemical bonding networks and their role on the structure of $\text{Al}_{13}\text{TM}_4$ (TM= Fe, Ru) surfaces

Julian Ledieu

Influence of the 3-dimensional cluster and preparation conditions on the structure of $\text{Al}_5\text{Co}_2(2\bar{1}0)$ and (100) surfaces

Matthias Meier

Comprehensive model of metadislocation motion in $\text{o-Al}_{13}\text{Co}_4$

Markus Heidelmann

12:50 – 14:40 Lunch break

Surface chemistry of CMAs

Marie-Geneviève Barthés-Labrousse

Mechanical properties of Al/Al-Cu-Fe composites newly elaborated by Spark Plasma Sintering

Aurélie Joseph

Molecular dynamics simulations of the deformation behavior of bulk metallic glass composites exhibiting stress-induced martensitic transformation

Daniel Söpu

16:05 – 16:20 Coffee break

Statistics of intermetallic compounds

Julia Dshemuchadse

Cluster-based growth algorithm for decagonal quasicrystals

Pawel Kuczera

Simple decoration model for icosahedral quasicrystals based on AUC approach

Radosław Strzałka

Investigating Al-CVD using DMEAA: Experiments and modeling of the kinetics and the surface roughness

Yiannis G. Aviziotis

Can we help establish complex metallic systems center in Zagreb?!

Davor Pavuna

Concluding remarks, Ana Smontara & Ronan McGrath

19:30 C-MAC Days dinner

Thursday, December 11th 2014

9:00 – 12:00

Science Board, Governing Board and General Assembly