

**Tuesday** **OMNI Hotel - Fleming Room**

18:00-20:00 Welcoming Reception

**Wednesday**

8:15 Shuttle Bus to Workshop in Petturuti Lounge

8:30 REGISTRATION

**Soft Materials in High Magnetic Fields - Chair: Yamamoto**

9:15	I	P.C. M. Christianen	Magnetic Manipulation of Polymeric Nanostructures
10:00	C	Masafumi Yamato	Birefringence of Nanocomposite Gels polymerized in a Magnetic Field
10:30		BREAK	
10:50	I	Chinedum Osuji	Processing functional nanostructured soft materials by magnetic
11:35	I	Tohru S. Suzuki	Crystallographic orientation control in ceramics by colloidal processing in a high magnetic field
12:20	C	Rei Nakayama	Effect of Amorphous Region on Magnetic Orientation of Poly(lactic acid) Blend Films with Different Molecular Weight

12:50 LUNCH

**Phase Formation and Crystallization in High Magnetic Fields - Chair: Yasuda**

14:00	I	Yoshifuru Mitsui	Selective Crystallization in Mn-based Alloys by In-field Heat Treatment
14:45	C	R. Kobayashi	In-Magnetic-Field Synthesis for Ferromagnetic Mn-Al Alloys
15:15		BREAK	
15:45	C	Takashi Fukuda	Time-temperature-transformation diagram under magnetic field in a Ni <sub>45</sub> Co <sub>5</sub> Mn <sub>36.5</sub> In <sub>13.5</sub> magnetic shape memory alloy
16:15	C	Hayato Otsuka	Magnetic field effects on phase transformation of an ionic liquid, N,N,N-trimethylpropylammonium tetrasulfonylimide
16:45	C	Jun Wang	Characterization of liquid-liquid structure transition by in-situ magnetization measurement

17:15 SET UP POSTERS

18:00 DINNER

19:30 Shuttle Bus to OMNI

Thursday

8:45

Shuttle Bus to Workshop in Petturuti Lounge

Biology and Environmental Remediation - *Chair: Hill*

9:15	I	Tomonori Sakurai	The effects of strong static magnetic fields on mammalian cells
10:00	C	T. Oka	Novel Magnetic Separation Technique for Recycling Ni Compounds from Plating Waste with Use of HTS Bulk Magnets
10:30	C	Hidehiko. Okada	Development of a magnetic separation system of boiler feed water scale in thermal power plants

11:00 BREAK

Physical Effects in High Magnetic Fields - *Chair: Christianen*

11:35	I	Vesna Mitrovic	Using magnetic fields to decipher novel quantum states and manipulate spin in presence of strong spin-orbit coupling
12:20	I	Richard J. A. Hill	Studies of spinning and charged droplets using diamagnetic levitation

13:05 LUNCH

Novel Structures Generated by High Magnetic Fields - *Chair: Mitsui*

14:00	I	Katherine Mirica	Magnetic Levitation as a Portable Platform for Density-Based Analysis, Separations, and Self-Assembly
14:45	I	H. Yasuda	Bulk $\beta$ -FeSi <sub>2</sub> crystal with three- dimensional alignment produced by an oscillating magnetic field
15:30	C	Meng Dong	Fabrication of symmetrically graded microstructures by solidification under high magnetic field gradients
16:00		BREAK	
16:30	I	Anne-Lise Daltin	Doping and Magnetic Field Effects on the Properties of Electrodeposited Metal Oxides
17:15	C	Isao Yamamoto	Magnetic Field Effects on Crystallization of Dendrite Ice

18:00 DINNER

19:30

Shuttle Bus to OMNI

Friday

8:45

Shuttle Bus to Workshop in Petturuti Lounge

Generating Extremes! - *Chair: Suzuki*

9:15	I	David Larbalestier	New Possibilities for Ultra-high Field Superconducting Magnets
10:00	C	Atom Hamasaki	Magnetic orientation of carbon materials prepared from anthracene pitch
10:30		BREAK	
10:50	I	Takuma Takahashi	Innovative low magnetic field orientation process using multilayered-graphene-coated $\beta$ -Si <sub>3</sub> N <sub>4</sub> seed particles to fabricate c-axis oriented Si <sub>3</sub> N <sub>4</sub> ceramics
11:45			NEWPORT EXCURSION
18:30			BANQUET "a New England Clambake"
21:00			Shuttle Bus to OMNI

Saturday

8:45

Shuttle Bus to Workshop in Petturuti Lounge

More Physical Phenomena in High Magnetic Fields - *Chair: Valles*

9:15	C	N.N. Bogulubov, Jr.	On improvable upper bounds for confined polaron-type systems placed in external constant magnetic field
9:45	I	N. Hirota	In-situ observation of the behaviour of feeble magnetic materials under high magnetic fields
10:30		BREAK	
10:50	C	Yuri Mizukawa	Analysis of Light Reflection from Biogenic Guanine Crystals by 3-Dimensional Diamagnetic Micromanipulations
11:20	C	Tie Liu	High Magnetic Field Gradient-Controlled Migrations of solute and particles and Their Effects on Solidification Microstructure
11:50			Summary
12:30			Shuttle Bus to OMNI