Sunday, June 29, 2008

Opening Reception and Registration – Main Ballroom

6:00-9:00pm Informal gathering. Hors d'ouevres and beverages served. Entertainment by a Jazz ensemble.
A registration table will be open for the duration of the event for check-in and supplies.

Monday, June 30, 2008

Plenary Session – Opening and Tribute – Session Chair: Greg Olson – Main Ballroom

8:15-8:30am Opening remarks: GREGORY OLSON (Northwestern University)
Conference Welcome: DR. TOM BOWLES (Scientific Advisor to the Governor of New Mexico, Bill Richardson)
8:30-8:55am Tribute to Marvin Wayman: DRUCE DUNNE, KAZUHIRO OTSUKA, KEN'ICHI SHIMIZU
8:55-9:20am Tribute to Walter Owen: SCHOEN, MICA GRUJICIC, GREGORY OLSON
9:20-9:50am Tribute to F.E. Fujita: RYUICHIRO OSHIMA
9:50-10:15am Tribute to Juha Pietikainen: KARI ULLAKKO
10:15-10:40am Coffee break – Main Ballroom

Morning Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

M2A. Mechanism & Kinetics: Nucleation – Session Chair: David Edmonds

10:40-11:10am A.G. KHACHATURYAN (Rutgers University, New Jersey, USA)
Three-Dimensional Heterogeneous Nucleation in Martensitic Transformation (Invited)
11:10-11:30am M. HAYAKAWA, M. TAMAKI, AND S. HASE (Tottori University, Japan)
Density and Characterization of the Martensite Embryos in Yttria Doped Zirconia
11:30-11:50am A. IBARRA, J. SAN JUAN, D. CAILLARD, AND M.L. NO (EHU, Bilbao, Spain)
Martensite Nucleation on Dislocations in Cu-Al-Ni Shape Memory Alloys Studied by in situ TEM
11:50-12:10pm C. SHEN, J. LI, AND Y. WANG (Ohio State University, USA)
Activation Pathway of Martensitic Transformations

M2B. Advanced Characterization I – Session Chair: Takuya Ohba

10:40-11:10am L. MULLER, C. GUTT, A. MADSEN, G. GRUBEL, T.R. FINLAYSON, AND U. KLEMRADT (Aachen University, Germany)
Unexpected Dynamics in the Vicinity of the Martensitic Transformation of Au-Cd Revealed by Photon Correlation Spectroscopy of Coherent X-rays (Invited)
11:10-11:30am H.E. KARACA, I. KARAMAN, S. BADAKHSHAN, B. BASKARAN, Y. CHUMLYAKOV, D. NIKLASCH, AND H.J. MAIER (Texas A&M University, USA)
Shape Memory Behaviour of NiFeGa(Co) Ferromagnetic Shape Memory Single Crystals
11:30-11:50am D. NIKLASCH, H.J. MAIER, I. KARAMA, AND Y.I. CHUMLYAKOV (Univ. of Paderborn, Germany)
In-situ Characterization of Stress-Induced Martensite and Related Magnetic Domain Structure in Ni-Fe-Ga Ferromagnetic Shape Memory Alloy Single Crystals
11:50-12:10pm B. MALARD, G. GEANDIER, P. BASTIE, S. BERVEILLER, AND E. PATOOR (Institute of Physics, Prague, Czech Republic)
Microdiffraction Analysis During the Mechanically-Induced Martensite Phase Transformation by Synchroton Radiation

M2C. Physics of Phase Stability I – Session Chair: Winfried Petry

10:40-11:10am E.A. STERN (University of Washington, Seattle, USA)
Local Disorder in Structural Phase Transformations and the "Precursor" Martensite Transition (Invited)
11:10-11:30am M. MANLEY, J.W. LYNN, Y. CHEN, AND G.H. LANDER (Lawrence Livermore National Lab, USA)
Intrinsic Localized Mode in alpha-U as a Precursor to a Solid-State Transition

11:30-11:50am R. S. ELLIOTT, J. A. SHAW, AND N. TRIANTAFYLLIDIS (University of Minnesota, USA)
A Model of Stress- and Temperature-Induced Martensitic Transformations in Perfect Bi-atomic Crystals

11:50-12:10pm B.K. MUITE AND U. SALMAN (CNRS-ONERA, France)
A Numerical Comparison of Geometrically Linear and Nonlinear Elasticity Models for the Square to Rectangle Phase Transformation

12:10-2:00pm Lunch – Main Ballroom

Monday, June 30, 2008

Afternoon Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

M3A. Thermodynamics & Kinetics I – Session Chair: Shuichi Miyazaki

2:00-2:30pm P. MULLNER (Boise State University, Idaho, USA)
Twin-Microstructure, Line Defects, and Magnetoplasticity in Ni-Mn-Ga (Invited)

2:30-2:50pm S. AKSOY, T. KRENKE, M. ACET, E.F. WASSERMANN, X. MOYA, L. MANOSA, AND A. PLANES (University of Duisburg, Germany)
Influence of Magnetic Field on Martensite Nucleation in Ni-Mn-Based Heusler Magnetic Shape Memory Alloy

2:50-3:10pm A. KROGER, S. DZIASZYK, CH. SOMSEN, A. DLOUHY, AND G. EGGELER (Ruhr-Universitat Bochum, Germany)
In-situ TEM Observations of Martensitic Transformations in Ni-Rich Single Crystals with Coherent and Aligned Precipitates

3:10-3:30pm M. NISHIDA, N. KIZAKIBARU, AND M. MATSUDA (Kyushu University, Fukuoka, Japan)
Determination of Transformation Site of Multistage Martensitic Transformations in Aged Ni-Rich Ti-Ni Alloys

M3B. Advanced Characterization II – Session Chair: Yasukazu Murakami

2:00-2:30pm G. SPANOS, D.J. ROWENHORST, R.A. MASUMURA, K.E. KNIPLING, AND R.W. FONDA (Naval Research Lab, Washington D.C., USA)
Three Dimensional Analysis of Ferrous Martensites (Invited)

2:30-2:50pm S.P. VENKATESWARAN, A. BUDRUK, AND M. DE GRAEF (Carnegie Mellon University, Pittsburgh, USA)
Antiphase Boundaries and Magnetic Domain Reversibility in Heusler Ni2MnGa

2:50-3:10pm H. KUSHIDA, T. TERAI, T. FUKUDA, T. KAKESHITA, T. OSAKABE, AND K. KAKURAI (Osaka University, Japan)
Neutron Diffraction Study of Stress-Induced New Phase in Ni2MnGa

3:10-3:30pm S. KUSTOV, M. CORRO, E.CESARI, AND J. DUTKIEWICZ (Universitat de les Illes Balears, Palma de Mallorca, Spain)
Dynamics of Elastic and Magnetic Domain Boundaries in Ni-Fe-Ga Ferromagnetic Shape Memory Alloys Studied by Mechanomagnetic Spectroscopy

M3C. Physics of Phase Stability II – Session Chair: Bob Albers

2:00-2:30pm B. HARMON (Ames Lab, Iowa, USA)
Phonons, Energy Landscapes, and Electronic Structure (Invited)

2:30-2:50pm P. VORDERWISCH AND S.M. SHAPIRO (Bragg Institute, ANSTO, Australia)
Neutron Scattering Studies of the Ferromagnetic Shape Memory Alloy Ni2MnGa

2:50-3:10pm T. MEHADDENE, J. NEUHAUS, W. PETRY, K. HRADIL, P. LINK, AND PH. BOURGES (Technical University of Munich, Germany)
Lattice Dynamics of Ferromagnetic Shape Memory Alloys from Inelastic Neutron Scattering

3:10-3:30pm T.R. FINLAYSON (University of Melbourne, Australia)
Electronic Instabilities and Martensitic Transformations

3:30-4:00pm Coffee break – Main Ballroom

Monday, June 30, 2008

Late Afternoon Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

M4A. Thermodynamics & Kinetics II – Session Chair: Trevor Finlayson

4:00-4:20pm V. RECARTE, J.I. PEREZ-LANDAZABAL, C. GOMEZ-POLO, V. SANCHEZ-ALARCOS, J.E. CESARI, AND J. DUTKIEWICZ (Universidad Publica de Navarra, Spain)
A Magnetocaloric Effect Linked to Structural and Magnetic Transitions in Ferromagnetic Shape Memory Alloys

4:20-4:40pm I. KARAMAN, H.E. KARACA, B. BASARAN, Y. CHUMLYAKOV, AND H.J. MAIER (Texas A&M University, USA)
Magnetic Field-Induced Phase Transformation in NiMnCoIn Shape Memory Alloys

4:40-5:00pm M. YASUI, K. HATA, T. FUKUDA, AND T. KAKESHITA (Osaka University, Japan)
Stress-Temperature Phase Diagram of Ni2MnGa

5:00-5:20pm R. AHLUWALIA AND M. BOUVILLE (Institute of Materials Research and Engineering, Singapore)
Phase-Field Study of the Interplay Between Diffusive and Displacive Phase Transformations

5:20-5:40pm F.J. PEREZ-RECHE, L. TRUSKINOVSKY, AND G. ZANZOTTO (Ecole Polytechnique, Palaiseau, France)
Martensitic Transformations, Spin Models, and Automata

M4B. Transformation Kinematics & Interfaces I – Session Chair: Jim Smith

4:00-4:20pm T. NISHIURA AND M. NISHIDA (Kyushu University, Fukuoka, Japan)
Trace Analysis of Habit Plane Variants of B19' Martensite in Ti-Ni Shape Memory Alloy

4:20-4:40pm Y. SUZUKI, J. B. BETTS, T. SALEH, A. MIGLIORI (Los Alamos National Lab, USA)
Temperature as a Driver for Localization in Plutonium

4:40-5:00pm X. MA AND R.C. POND (South China University of Technology, Guangzhou, China)
Martensitic Transformation Crystallography in Pu-Ga Alloys

5:00-5:20pm A.J. CLARKE, R.D. FIELD, R.J. MCCABE, P.O. DICKERSON, J.G. SWADENER, C.M. CADY, D.W. BROWN, R.E. HACKENBERG, AND D.J. THOMAS (Los Alamos National Lab, USA)
Shape Memory Effect Deformation Structures in U-14at.%Nb Martensite

5:20-5:40pm V. KRAPOSHIN, A. TALIS, AND N. VAN THUAN (Moscow State Technical University, Russia)
Derivation of Unit Cells for the Monoclinic 7R(NiAl) and Rhombohedral R(NiTi) Martensites as Constructions of Algebraic Geometry

M4C. Polydomain Structure I – Session Chair: Armen Khachaturyan

4:00-4:30pm K. BHATTACHARYA (California Institute of Technology, USA)
Effective Properties of Polycrystalline Active Materials (Invited)

4:30-5:00pm T. LOOKMAN (Los Alamos National Lab, USA)
Ferroelastic Interfaces: Fringing Fields, Size and Shape Effects (Invited)

5:00-5:20pm J. BALL AND K. KOUMATOS (Oxford University, UK)
An analysis of Nonclassical Austenite-Martensite Interfaces in CuAlNi

5:20-5:40pm A. JACOBS (University of Toronto, Canada)
Testing the Theory of Domain Patterns in Ferroelastics

5:40-8:15pm Dinner – On your own

8:15-10:15pm Poster Session 1 – Mezzanine

Tuesday, July 1, 2008

Plenary Session – Grand Masters: Lessons from Historic Innovations – Session Chair: Ken'ichi Shimizu – Main Ballroom

8:30-9:00am IPS/WLR Theory: DAVID LIEBERMAN, MONROE WECHSLER
9:00-9:30am IPS/BM Theory: DRUCE DUNNE
9:30-9:50am Elastic Polydomain Theory: ALEKSANDER ROYTBURD
9:50-10:10am Nonlinear Physics/Barsch-Krumhansl: GERHARD BARSCH, AVADH SAXENA
10:10-10:30am Coffee break – Main Ballroom

Morning Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

T2A. Current Issues Workshop: Kinematics & Interfaces – Session Chair: Alan Crocker

10:30-11:00am P.M. KELLY (University of Queensland, Brisbane, Australia)
The Phenomenological Theory of Martensite Crystallography (PTMC) versus the Topological Model (TM) (Invited)

11:00-11:30am R.C. POND, X. MA, AND J.P. HIRTH (University of Exeter, UK)
A Dislocation Model of Parent-Martensite Interfaces (Invited)

11:30-12:00pm H. LEDBETTER AND S. KIM (University of Colorado, Boulder, USA)
Martensite Crystallography of the delta-alpha Plutonium Transformation

12:00-12:20pm W. ZHANG AND X.-F. GU (Tsinghua University, Beijing, China)
A Discussion on Approaches of Interfacial Misfit Analysis for Irrational Habit Planes (Invited)

T2B. Multiferroics I – Session Chair: Steve Shapiro

10:30-11:00am T. KAKESHITA, T. TERAI, AND T. FUKUDA (Osaka University, Japan)
Control of Crystallograhic Domain by Magnetic Field in Ferromagnetic Shape Memory Alloys and an Antiferromagnetic CoO (Invited)

11:00-11:20am R. KAINUMA, W. ITO, K. OIKAWA, AND K. ISHIDA (Tohoku University, Sendai, Japan)
The Ni-Mn-Based Matamagnetic Shape Memory Alloys

11:20-11:40am J.N. ARMSTRONG, M.R. SULLIVAN, A. PLANES, S.Z. HUA, AND H.D. CHOPRA (NSF, USA)
Discovery and Implications of Devil's Staircase in Multiferroics

11:40-12:00pm H. MORITO, K. OIKAWA, A. FUJITA, K. FUKAMICHI, R. KAINUMA, AND K. ISHIDA (Tohoku University, Sendai, Japan)
Stress-Induced Magnetic-Field-Induced Strain in the Co-Ni-Ga Ferromagnetic Shape Memory Alloy

12:00-12:20pm Y. TANAKA, Y. HIMURO, R. KAINUMA, Y. SUTOU, T. OMORI, AND K. ISHIDA (Tohoku University, Sendai, Japan)
Shape Memory and Pseudoelastic Effects due to gamma-->alpha' Martensitic Transformation in Fe-Ni-Co-Al-Based Ferromagnetic Alloys

T2C. Polydomain Structure II – Session Chair: Graeme Ackland

10:30-11:00am J. X. ZHANG AND L. Q. CHEN (Penn State University, USA)
Ferroelastic Switching in Piezoelectric and Multiferroic Response of Patterned Nanostructures (Invited)

11:00-11:20am O. KASTNER AND G.J. ACKLAND (Ruhr-Universitat Bochum, Germany)
Principal Investigation of the Dynamics of Martensitic Transformations in 2D Lennard-Jones Lattices

11:20-11:40am M.E. GRUNER, W.A. ADEAGBO, A.T. ZAYAK, AND P. ENTEL (University of Duisburg, Germany)
Ab initio Simulation of Magnetic Field Dependent Properties and Twin Boundary Motion in MSM Heusler Alloys

11:40-12:00pm M. BOUVILLE AND R. AHLUWALIA
Phase-Field Study of the Mechanical Properties of Shape Memory Alloy Nanowire

12:00-12:20pm A.A. LIKHACHEV (Institute for Metal Physics, Kiev, Ukraine)
Effect of Magnetostatic Energy on the Field Induced Superelasticity in Ni-Mn-Ga

12:20-2:00pm Lunch – Main Ballroom

Tuesday, July 1, 2008

Afternoon Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

T3A. Thermodynamics & Kinetics III – Session Chair: John Ball

2:00-2:30pm R.D. JAMES (University of Minnesota, USA)
A Relation Between Compatibility and Hysteresis and its Role in the Search for New Active Materials (Invited)

2:30-2:50pm A.L. ROYTBURD (University of Maryland, USA)
Thermodynamics of Polydomain Martensite

2:50-3:10pm Q. SUN AND Y. HE (The Honk Kong University of Science and Technology, Hong Kong)
Role of Material Internal Length Scales in Grain Size Dependence of Stress Hysteresis in SMA Polycrystals

3:10-3:30pm D.E. LAUGHLIN, N. JONES, A.J. SCHWARTZ, AND T.B. MASSALSKI (Carnegie Mellon University, Pittsburgh, USA)
Thermally Activated Martensite: Its Relationship to Non-Thermally Activated (Athermal) Martensite

T3B. Multiferroics II – Antoni Planes

2:00-2:30pm Y. MURAKAMI, D. SHINDO, R. KAINUMA, K. OIKAWA, AND K. ISHIDA (Tohoku University, Sendai, Japan)
Change in Magnetic Microstructure Near the Martensitic Transformation in a Ni-Fe-Ga Alloy (Invited)

2:30-2:50pm M. THOMAS, O. HECZKO, J. BUSCHBECK, U. ROSSLER, L. SCHULTZ, AND S. FAHLER (IFW Dresden, Germany)
Stress Induced Martensite and Magnetically Induced Reorientation in Constrained Epitaxial Ni-Mn-Ga Films

2:50-3:10pm R. CHULIST, M. POTSCHKE, A. BOHM, H.-G. BROKMEIER, U. GARBE, C.-G. OERTEL, AND W. SKROTZKI (Technische Universitat Dresden, Germany)
Variant Selection in Cast and Hot Rolled NiMnGa Alloys

3:10-3:30pm P. ZHAO, J. CULLEN, AND M. WUTTIG (University of Maryland)
Elastic and Magnetic Characterization of NiMnGa Premartensite

T3C. Physics of Phase Stability III – Ted Massalski

2:00-2:30pm D. GUPTA AND D.S. LIEBERMAN (IBM, Yorktown Heights, USA)
Role of Vacancies, Antisite Atoms and Their Complexes in Near Equiatomic beta' Au-Cd and Au-Zn Alloys on Diffusion and Martensitic Transformations (Invited)

2:30-2:50pm A. BATURIN, S. SHABALOVSKAYA, A. LOTKOV, AND B. HARMON (Katholieke University Leuven, Belgium)
The Role of Electronic Structure in Realization of Martensitic Transformations in Ti-Based B2 Intermetallic Alloys

2:50-3:10pm N. HATCHER, O. YU. KONTSEVOI, AND A.J. FREEMAN (Northwestern University, USA)
New Transformation Path of Martensitic NiTi

3:10-3:30pm D.W. BROWN C. N. TUPPER, T. A. SISNEROS, R. D. FIELD, B. CLAUSEN (Los Alamos National Lab, USA)
Crystallographic Reorientation During Shape Memory and Post-Shape Memory Deformation in Uranium 6 Wt% Niobium

3:30-4:00pm Coffee break – Main Ballroom

Tuesday, July 1, 2008

Late Afternoon Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

T4A. Transformation Kinematics & Interfaces II – Session Chair: Kaneaki Tsuzaki

4:00-4:20pm R. DELVILLE, D. SCHRYVERS, J. ZHANG, AND R.D. JAMES (University of Antwerp, Belgium)
TEM Investigation of Twinning in Ternary NiTiX Alloy with Special Lattice Parameters

4:20-4:40pm M. KRISHNAN (Bhabha Atomic Research Center, Mumbai, India)
The Relation Between Microstructural Reversibility, {114}B2 Twins and Intervariant Interfaces of the Martensitic Microstructure of Ni-Ti Alloys

4:40-5:00pm Y.W. CHAI, H.Y. KIM, H. HOSODA, AND S. MIYAZAKI (University of Tsukuba, Japan)
Interfacial Defects in Ti-Nb Shape Memory Alloys

5:00-5:20pm K. DAYAL, K. BHATTACHARYA (Carnegie Mellon University, USA)
Kinetics and Nucleation of Phase Boundaries in Peridynamics

T4B. Multiferroics III – Session Chair: Marc De Graef

4:00-4:20pm J.M. BARANDIARAN, P. LAZPITA, J. GUTIERREZ, J. FEUCHTWANGER, M. RICHARD, AND R.C. O'HANDLEY (EHU Bilbao, Spain)
Magnetic Moment Analysis on Non-Stoichiometric Ni-Mn-Ga Ferromagnetic Shape Memory Alloy

4:20-4:40pm L. ZHANG AND X. REN (Xi'an Jiaotong University, China)
Novel Electro-Shape-Memory-Effect in La Doped Pb(Zr,Ti)O3 Relaxor Ferroelectrics

4:40-5:00pm H. TIAN, D. SCHRYVERS, AND J. VAN HUMBEECK (University of Antwerp, Belgium)
Micro- and Nano-Structure of a Ni-Ti Shape Memory Micro-Wire

5:00-5:20pm J.H. ZHANG, J. MAN, W.Y. PENG, AND T.Y. HSU (Xi'an Jiao Tong University, China)
Antiferromagnetic Transition and Martensitic Transformation in Mn-Rich gamma-MnFe Alloy

T4C. Thermodynamics & Kinetics IV – Session Chair: Minoru Nishida

4:00-4:20pm E. BONNOT, R. ROMERO, LL. MANOSA, E. VIVES, AND A. PLANES (University of Barcelona, Spain)
Stress- and Strain-Driven Martensitic Transformations: An Acoustic Emission Study in Single-Crystalline Cu-Zn-Al

4:20-4:40pm O.U. SALMAN AND A. FINEL (CNRS-ONERA, France)
Avalanches in Fluctuationless Martensitic Transitions

4:40-5:00pm K.J.M. BLOBAUM, J.R. JEFFRIES, M.A. WALL, AND A.J. SCHWARTZ (Lawrence Livermore National Lab, USA)
Enabling the Upper-C Curve in Pu-Ga Alloy TTT Diagrams

5:00-5:20pm A.J. SCHWARTZ, M.A. WALL, D.L. FARBER, K.T. MOORE, AND K.J.M. BLOBAUM (Lawrence Livermore National Lab)
Isothermal Martensite and Pressure-Induced delta to alpha' Phase Transformations in a Pu-Ga Alloy

Plenary Talk – Introduction by Chris Wood, Vice President, Santa Fe Institute – Main Ballroom

5:30-6:00pm ALAN BISHOP (Los Alamos National Lab)
Complexity in Functional Materials

6:00-8:15pm Dinner – On your own

8:15-10:15pm Poster Session 2 – Mezzanine

Thursday, July 3, 2008

Early Morning Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

Th1A. Thermodynamics & Kinetics V – Session Chair: Yunzhi Wang

8:30-8:50am J.S. KIM, J.M. NAM, Y.W. KIM, AND T.H. NAM (Gyeongsang National University, South Korea)
Grain Size Dependence of Transformation Temperature in Ti-30Ni-20Cu(at%) Alloy Ribbons

8:50-9:10am V.V. KOKORIN (Institute of Magnetism, Kiev, Ukraine)
Temperature Hysteresis of Martensitic Transformations in Shape Memory Alloys

9:10-9:30am S. IGNACOVA, V. NOVAK, AND P. SITTNER (Institute of Physics, Prague, Czech Republic)
Transformation Behavior of Co(40)Ni(33)Al(27) Shape Memory Single Crystals

9:30-9:50am T. FURUHARA, G. MIYAMOTO, K. TAKAHASHI, T. YAMAGUCHI, AND T. MAKI (Tohoku University, Sendai, Japan)
Incomplete Bainite Transformation in Low-Carbon Low Alloy Steels

9:50-10:10am T. SAWAGUCHI, K. OGAWA, AND T. KIKUCHI (National Institute for Materials Science, Tsukuba, Japan)
The Stress-Induced Reverse Martensitic Transformation in Fe-Mn-Si Shape Memory Alloys

Th1B. Advanced Characterization III – Session Chair: Vicente Recarte

8:30-9:00am D. SCHRYVERS, B. BARTOVA, N. WIESE, AND J.N. CHAPMAN (University of Antwerp, Belgium)
Microstructure of Precipitates and Magnetic Domain Structure in an Annealed Co(38)Ni(33)Al(29) Ferromagnetic Shape Memory Alloys (Invited)

9:00-9:20am M. REINHOLD, LINDA KENOYER, W.B. KNOWLTON, AND P. MULLNER (Boise State University, Idaho, USA)
Characterizing Twin Structure and Magnetic Domain Structure of Ni-Mn-Ga Through Atomic Force Microscopy

9:20-9:40am S. YANG AND X. REN (National Institute for Materials Science, Tsukuba, Japan)
Evidence for Simultaneous Structural Change at Ferromagnetic Transition--A High Resolution Synchrotron XRD Study

9:40-10:00am M. MATSUDA, M. YAMASHITA, K. HIRAYAMA, T. HARA, AND M. NISHIDA (Kumamoto University, Japan)
Transmission Electron Microscopy of Antiphase Boundary-Like Structure Induced by Displacive Transformation in Ti-Pd Shape Memory Alloy

Th1C. Quasimartensitic Transformation/Strain Glass – Session Chair: Victor Myagkov

8:30-9:00am X. REN, Y. WANG, K. OTSUKA, AND A. SAXENA (National Institute for Materials Science, Tsukuba, Japan)
Strain Glass--A New Horizon of Martensite Research (Invited)

9:00-9:20am Z. Zhang, D. Wang, Y. Wang, Y. Zhou, G. Fan, X. Ding, X. Ren, and J. Sun (Xi'an Jiaotong University, China)
Composition Dependence of Strain Glass Transition in Ti(50-x)Ni(50+x)

9:20-9:40am Y. WANG, X. REN, AND K. OTSUKA (National Institute for Materials Science, Tsukuba, Japan)
Relaxation Spectrum of the Strain Glass Transition

9:40-10:00am X. DING, T. SUZUKI, X. REN, J. SUN, K. OTSUKA, AND M. SHIMONO (Xi'an Jiaotong University, China)
Molecular Dynamics Simulations of Strain Glass Transition

10:00-10:30am Coffee break – Main Ballroom

Thursday, July 3, 2008

Morning Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

Th2A. Managing Complexity: Materials Design – Session Chair: Etienne Patoor

10:30-11:00am FRANCISCA CABALLERO AND H.K.D.K. BHADESHIA (CENIM-CSIC, Madrid, Spain)
Design of Low-Temperature Bainite (Invited)

11:00-11:20am J.A. WRIGHT AND C. KUEHMANN (QuesTek Innovations, LLC, USA)
Materials by Design: High Performance Martensitic Steels

11:20-11:40am M.D. BENDER AND G.B. OLSON (Northwestern University, USA)
Designing a Precipitation-Strengthened, Superelastic, TiNi-Based Alloy for Endovascular Stents

11:40-12:00pm M. MANUEL (University of Florida, USA)
Thermodynamic and Thermomechanical Design of Self-Healing Shape Memory Alloy Reinforced Metal-Matrix-Composites

Th2B. Thermodynamics & Kinetics VI – Session Chair: Druce Dunne

10:30-10:50am T. LAGRANGE, G.H. CAMPBELL, P.E.A. TURCHI, B.W. REED, N.D. BROWNING, J.S. KIM, M. TAHERI, J.B. PESAVENTO, AND W.E. KING (Lawrence Livermore National Lab, USA)
In-situ Studies of Martensite Phase Transformations Using the Dynamic Transmission Electron Microscope

10:50-11:10am M.-S. CHOI, T. FUKUDA, AND T. KAKESHITA (University of Washington, Seattle, USA)
Iron Content Dependence of R-Phase Transformation Behavior in Ti(50-x)Ni(x)Fe Alloys

11:10-11:30am T. FUKUDA, T. KAKESHITA, AND T. OHBA (Osaka University, Japan)
An Interpretation of Premartensitic Behavior in Ti-Ni Based Shape Memory Alloys

11:30-11:50am S. QIU, V. B. KRISHNAN, S. A. PADULA II, R. D. NOEBE, D. W. BROWN, B. CLAUSEN, AND R. VAIDYANATHAN (University of Central Florida, Orlando, USA)
In situ Strain, Texture and Phase Fraction Measurements During Thermal-Mechanical Testing of Shape Memory NiTi

11:50-12:10pm M. NISHIDA, Y. YASUMOTO, AND M. MATSUDA (Kyushu University, Fukuoka, Japan)
Transmission Electron Microscopy Studies of Twins in Ni-Mn-Ga Alloy

Th2C. Physics of Phase Stability IV – Session Chair: Bob Pond

10:30-11:00am H. ZHANG, E. SALJE, A. PLANES, AND X. MOYA (University of Cambridge, UK)
Phase Transition and Landau Potential of the R-Phase in Martensitic NiTiFe (Invited)

11:00-11:20am M. SANATI (Texas Tech University, USA)
B2 to Omega-Phase Transformations in Ti3Al2Mo Alloy: A First Principles Approach

11:20-11:40am S. FARJAMI AND H. KUBO (Northwestern University, USA)
Incommensurate omega Phase Transformations in Zr-Nb System

11:40-12:00pm J. C. LASHLEY, S. M. SHAPIRO, B. L. WINN, C. P. OPEIL, M. E. MANLEY, A. ALATAS, W. RATCLIFFE, P. RISEBOROUGH, T. PARK, B. MIHAILA, R. A. FISHER, AND J. L. SMITH (Los Alamos National Lab, USA)
Observation of a Continuous Phase Transition in a Shape-Memory Alloy

12:00-2:00pm Lunch – On your own

Thursday, July 3, 2008

Afternoon Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

Th3A. Transformation Plasticity I – Session Chair: Gunther Eggeler

2:00-2:30pm V.I. LEVITAS (Texas Tech University, USA)
Strain-Induced Martensitic Transformations Under Compression and Shear of Materials in Rotational Diamond Anvil Cell (Invited)

2:30-2:50pm D. DUNNE, N. STANFORD, AND H. LI (University of Wollongong, Australia)
Shape Memory in FeMnSi-Based Alloys

2:50-3:10pm A.C.R. VELOSO, T.A.A. MELO, S.J.G. LIMA, AND R.M. GOMES (Federal University of Paraiba, Brazil)
Mechanical Properties of Cu(13.8)Al-Ni Alloys Containing V and Nb

3:10-3:30pm X.S. LIAO, X.D. WANG, X.F. LI, AND Y.H. RONG (Shanghai Jiao Tong University, China)
Design and Characterization for Advanced High Strength Nb-Containing Dual Phase Steels

Th3B. Advanced Characterization IV – Session Chair: Ryuichiro Oshima

2:00-2:30pm E. AEBY-GAUTIER, F. BRUNESEAUX, G. GEANDIER, M. DEHMAS, B. APPOLAIRE, S. DENIS, A. MAURO, AND T. BUSLAPS (Ecole des Mines de Nancy, France)
Analysis of the Martensitic Transformation in Ferrous Alloys by in situ High Energy X-ray Diffraction (Invited)

2:30-2:50pm S. PROKOSHKIN, A. KOROTITSKIY, V. BRAILOVSKI, AND K. INAEKYAN (Moscow Institute of Steel and Alloys, Russia)
X-ray Diffraction Studies of Thermally and Thermomechanically Treated Binary Ti-Ni Alloys

2:50-3:10pm T. OHBA, D. KITANOSONO, S. MORITO, T. FUKUDA, T. KAKESHITA, K. HIROTA, A.Q. BARON, AND S. TSUTSUI (Shimane University, Japan)
Inelastic Scattering of X-ray and Neutron by Ti-Ni(Fe) System

3:10-3:30pm R.P. HAGGERTY, P. SARIN, AND W.M. KRIVEN (University of Illinois, USA)
In situ X-ray Diffraction of the HfO2 Phase Transformation in Air at 1700 C

Th3C. Defect Interactions I – Session Chair: Philippe Vermaut

2:00-2:30pm G. FAN, K. OTSUKA, X. REN, T. SUZUKI, AND F. YIN (National Institute for Materials Science, Tsukuba, Japan)
On the Internal Friction due to the Twin Boundary-H Interaction in Martensite (Invited)

2:30-2:50pm J. BHATTACHARYA, A. PAUL, M. RAO, AND S. SENGUPTA (Raman Research Institute, Bangalore, India)
Plasticity and Reversibility of Structural Transitions in a Model Solid

2:50-3:10pm R. GROGER, T. LOOKMAN, A. SAXENA (LOS ALAMOS NATIONAL LAB, USA)
Dislocation-Induced Elastic Incompatibility and its Effect on Martensitic Phase Transformations

3:10-3:30pm B. YUAN, G. YAN, H. LI, C. Y. CHUNG, AND M. ZHU (South China University of Technology, Guangzhou, China)
Internal Friction Behavior of a Porous TiNi Shape Memory Alloy

3:30-4:00pm Coffee break – Main Ballroom

Thursday, July 3, 2008

Late Afternoon Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

Th4A. Aging Phenomena – Session Chair: George Krauss

4:00-4:20pm S. W. OOI, Y. R. CHO, J. K. OH, AND H. BHADESHIA (Pohang University of Science and Technology, South Korea)
Martensite and Auto Tempering During Quenching of Low Carbon Steels

4:20-4:40pm J. PIETIKAINEN AND G. YANLING (Helsinki University of Technology, Finland)
The Absence of Work Hardening in Steel Quenched and Tempered at Around 623 K

4:40-5:00pm M.J. KAUFMAN, H. KIM, R. BANERJEE, Y. KUANG, AND J.D. COTTON (Colorado School of Mines, USA)
Martensitic Transformations in Ti-6Al-4V and Ti-25Al-11Nb and Ti-25Al-11Nb Alloys--At What Point do Diffusion and Ordering Accompany the Transformation?

5:00-5:20pm A. BENETEAU, B. APPOLAIRE, E. AEBY-GAUTIER, G. GEANDIER, P. WEISBECKER, A. REIDJAIMIA, AND T. GANNE (Nancy Universite, France)
In situ Synchroton X-ray Analysis of the Behaviour of a Martensitic Stainless Steel During Ageing

Th4B. Novel SMA Processing – Session Chair: Kari Ullakko

4:00-4:20pm A. BANSIDDHI AND D. C. DUNAND (Northwestern University, USA)
Superelastic and Shape-Memory NiTi Foams

4:20-4:40pm J.I. PEREZ-LANDAZABAL, C. GOMEZ-POLO, V. RECARTE, V. SANCHEZ-ALARCOS, G. BADINI, AND M. VAZQUEZ (Universidad Publica de Navarra, Spain)
Production and Structural Characterization of Ni-Mn-Ga FSMA Wires

4:40-5:00pm V. BRAILOVSKI, S.D. PROKOSHKIN, K.E. INAEKYAN, V. DEMERS, AND I.Y. KHMELEVSKAYA (Ecole de Technologie Superieure, Montreal, Canada)
Structure and Functional Properties of the Dislocation-Free Nanostructured Binary Ti-Ni Shape Memory Alloys Obtained by Severe Cold Rolling and Post-Deformation Annealing

5:00-5:20pm K. TSUCHIYA, Y. HADA, T. KOIKE, M. KATAHIRA, T. KOYANO, Y. TODAKA, AND M. UMEMOTO (National Institute for Materials Science, Tsukuba, Japan)
Microstructures and Pseudoelasticity ofamorphous/Nanocrystalline TiNi Wires Produced by Severe Plastic Deformation.

Th4C. Thin Film/Nanosystems I – Session Chair: Martin Wagner

4:00-4:20pm J. SLUTSKER, A. ARTEMEV AND A. ROYTBURD (University of Maryland, USA)
Phase Field Modeling of Domain Structures of Confined Nanoferroelectrics

4:20-4:40pm J. SAN JUAN, M.L. NO, AND C.A. SCHUH (EHU, Bilbao, Spain)
Martensitic Transformation at Nano-Scale in Cu-Al-Ni Micro-Nano Pillars

4:40-5:00pm L. HELLER, P. SEDLAK, P. SITTNER, AND M. LANDA (Institute of Physics, Prague, Czech Republic)
Impact of Heat Effects on Superelasticity

5:00-5:20pm A. LUDWIG, R. ZARNETTA, S. HAMANN, A. SAVAN, AND S. THIENHAUS (Ruhr-Universitat Bochum, Germany)
Combinatorial Development of Conventional and Ferromagnetic Ternary SMA Thin Film Systems

6:30-7:30pm Reception, with music and hors d'oeuvres – La Terraza

7:30-10:00pm Dinner Banquet, with Native American music and dancers – Main Ballroom

Friday, July 4, 2008

Early Morning Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

F1A. Applications I – Session Chair: Rolf Gotthardt

8:30-9:00am M.H. WU (Edwards Corp., USA)
Applications and Future of Shape Memory Alloys (Invited)

9:00-9:20am O.W. BERTACCHINI AND D.C. LAGOUDAS (Texas A&M University, USA)
Transformation Induced Cyclic Behavior and Fatigue Properties of Nickel Rich NiTi Shape Memory Alloy Actuators

9:20-9:40am Y. CHEMISKY, A. DUVAL V.L. TAHIRI, A. EBERHARDT, AND E. PATOOR (ENSAM, Metz, France)
Modeling the Behavior of an SMA/Elastomer Composite

9:40-10:00am B. YUAN, M. ZHU, H. LI, M.Q. ZENG, AND Y. GAO (South China University of Technology, Guangzhou, China)
Surface Modification of Porous TiNi Shape Memory Alloys by Combining Treatment of Passivation and O-III Method

F1B. Defect Interactions II – Session Chair: Werner Skrotzky

8:30-9:00am J. BHATTACHARYA, M. RAO, AND S. SENGUPTA (S.N. Bose National Centre for Basic Sciences, Kolkata, India)
Dynamical Selection of Micro-structure in a Model Solid: a Molecular Dynamics Study (Invited)

9:00-9:30am Y. YACOBY AND Y. GIRSHBERG (Hebrew University, Jerusalem, Israel)
Ti Off-Center Displacements and the Oxygen Isotope Induced Phase Transition in SrTiO3 (Invited)

9:30-9:50am K.N. LIN, S.K. WU, AND S.H. CHANG (National Taiwan University, Taipei, Taiwan)
Annealing Effect on Transformation Behavior of Ni-Rich Ti(49)Ni(41)Cu(10) Shape Memory Alloy

9:50-10:10am J. RODRIGUEZ-ASEGUINOLAZA, I. RUIZ-LARREA, M.L. NO, A. LOPEZ-ECHARRI, AND J. SAN JUAN (Universidad del Pais Vasco, Bilbao, Spain)
Temperature Memory Effect in Cu-Al-Ni Shape Memory Alloys

F1C. Physics of Phase Stability V – Session Chair: Alphonse Finel

8:30-9:00am L. MANOSA, X. MOYA, A. PLANES, S. AKSOY, T. KRENKE, M. ACET, O. GUTFLEISCH, J. LYUBINA, M. DEL BARRIO, AND J.L. TAMARIT (University of Barcelona, Spain)
Effects of Pressure and Magnetic Field on the Magnetic Properties and Martensitic Transition of Ni-Mn-X Magnetic Shape Memory Alloys (Invited)

9:00-9:20am A.T. ZAYAK, S.P. BECKMAN, M.L. TIAGO, P. ENTEL, AND JAMES R. CHELIKOWSKY (University of Texas, Austin, USA)
Heusler Clusters

9:20-9:40am R.M. MCDONALD, A. MAICH, J. SINGLETON, D. THOMA, J. LASHLEY, J.L. SMITH, A. SAXENA, P.A. GODDARD, T. SUZUKI, AND H. HARIMA (Los Alamos National Laboratory, USA)
The Shape-Memory Effect in High Magnetic Fields: Electronically-Driven Phase Transitions and Bulk Nanostructure Revealed by the de Haas-van Alphen Effect

9:40-10:00am J. OLBRICHT, T. SIMON, CH. GROSSMANN, J. FRENZEL, AND G. EGGELER (Ruhr-Universitat Bochum, Germany)
Damping Characteristics of NiTi and NiTiCu Shape Memory Alloys with Single-Step and Two-Step Martensitic Transformations

10:00-10:30am Coffee break – Main Ballroom

Friday, July 4, 2008

Morning Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

F2A. Applications II – Session Chair: Jan Van Humbeeck

10:30-11:00am H. KUBO, S. FARJAMI, AND T. MARUYAMA (Kanto Polytechnic University, Oyama, Japan)
Industrial Applications of Fe-Mn-Si Based Shape Memory Alloys (Invited)

11:00-11:20am F. KHELFAOUI, M. KOHL, A. MECKLENBURG, AND R. SCHNEIDER (University of Karlsruhe, Germany)
Development of Single Crystalline Ni-Mn-Ga Foil Microactuators

11:20-11:40am B. KREVET, M. KOHL, AND S. SEELECKE (University of Karlsruhe, Germany)
Finite Element Simulation of Magnetic Shape Memory Microactuators

11:40-12:00pm H. HOSODA, R. TACHI, T. INAMURA, K. WAKASHIMA, AND S. MIYAZAKI (Tokyo Institute of Technology, Japan)
Shape Memory Characteristics of TiAuCo Biomedical Shape Memory Alloys

12:00-12:20pm G.A. LOPEZ, M. BARRADO, M.L. NO, AND J. SAN JUAN (Universidad del Pais Vasco, Bilbao, Spain)
Cu-Al-Ni Shape Memory Alloy Composites with Very High Damping Capacity

F2B. Defect Interactions III – Session Chair: Thomas Waitz

10:30-11:00am P. SITTNER, J. PILCH, V. GARTNEROVA, B. MALARD, AND M. LANDA (Institute of Physics, Prague, Czech Republic)
In situ Characterization of Deformation Processes Taking Place During Shape Setting of NiTi Wires (Invited)

11:00-11:20am T. INAMURA, H. HOSODA, K. WAKASHIMA, AND S. MIYAZAKI (Tokyo Institute of Technology, Japan)
Plane Defect Inside alpha''-Martensite Plate in Ti-Nb-Al Shape Memory Alloy

11:20-11:40am S. NANGA, A. PINEAU, B. TANGUY, L. NAZE, AND P.O. SANTACREU (Ecole des Mines de Paris, France)
Plasticity and Strain Induced Martensitic Transformation in Two Austenitic Stainless Steels

11:40-12:00pm B.C. MAJI AND M. KRISHNAN (Bhabha Atomic Research Center, Mumbai, India)
Effect of Nitrogen and Nickel on the Microstructure and the Shape Memory Behaviour of Fe-Mn-Si-Cr Alloys

12:00-12:20pm Z.Z. DONG, U. KOLTZ, AND A. BERGARMINI (Tianjin University, China)
Precipitated Phases and their Effect on Shape Memory Recovery of Fe-Mn-Si Based Shape Memory Alloys

F2C. Thin Film/Nanosystems II – Session Chair: Elisabeth Gautier

10:30-10:50am A. ISHIDA AND M. SATO (National Institute for Materials Science, Tsukuba, Japan)
Shape Memory Behavior of Ti(Ni,Cu)50 Thin Films

10:50-11:10am L.V. MYAGKOV, L.E. BYKOVA, AND G.N. BONDARENKO (Russian Academy of Sciences, Siberian Branch, Russia)
Solid-State Synthesis and Martensitic Transformations in Thin Films

11:10-11:30am M. HAGLER, C. POHL, V.A. CHERNENKO, M. OHTSUKA, S. BESSEGHINI, AND P. MULLNER (Boise State University, Idaho, USA)
Stress, Magnetic Anisotropy and Martensitic Transformation in Ni-Mn-Ga Thin Films on Si(001) Wafer

11:30-11:50am V.A. CHERNENKO, S. BESSEGHINI, V. RECARTE, R. LOPEZ ANTON, A. GAMBARDELLA, J.M. BARANDIARAN, S. DOYLE, AND M. OHTSUKA (Institute of Magnetism, Kiev, Ukraine)
Structural and Magnetic Phenomena in NiMnGa/Substrate Thin Films Composites

11:50-12:10pm O. HECZKO, N. SCHEERBAUM, J. LIU, S. FAHLER, AND O. GUTFLEISCH (IFW Dresden, Germany)
First Observation of Magnetically Induced Reorientation (MSM Effect) in Ni-Mn-Ga Fibers

12:10-2:00pm Lunch – On your own

Friday, July 4, 2008

Afternoon Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

F3A. Applications III – Session Chair: Qingping Sun

2:00-2:30pm K.W. BAE, H.S. KIM, K.W. KIM, H.J. AHN, AND T.H. NAM (Gyeongsang National University, South Korea)
Application of Ti-Ni Alloys to Li/Sulphide Secondary Battery (Invited)

2:30-2:50pm E. CHOI, M.C. KIM, T.H. NAM, B.S. CHO, AND Y.S. CHUNG (Hongik University, South Korea)
Variation of Dynamic Behavior of Shape Memory Alloy Bars in Tension and Compression under Cyclic Loadings

2:50-3:10pm H.J. CHOE AND T.H. NAM (Gyeongsang National University, South Korea)
Superelastic Cathode for Li Ion Battery Using Ti-Ni Alloys

3:10-3:30pm J. SAN JUAN, X. HUANG, Y. XU, AND A. G. RAMIREZ (Yale University, USA)
Mechanical Property and Shape Memory Behavior of NiTi Amorphous-Crystalline Composite Thin Films

F3B. Martensite Mechanical Behavior I – Session Chair: Petr Sittner

2:00-2:30pm S. GOLLERTHAN AND G. EGGELER (Ruhr-Universitat Bochum, Germany)
Fracture Mechanics and Microstructure of NiTi Shape Memory Alloys (Invited)

2:30-2:50pm S. DALY, D. RITTEL, AND A. DOROGOY (University of Michigan, USA)
Shear-Dominated Large Scale Deformation in Nitinol

2:50-3:10pm B. PIOTROWSKI, A. EBERHARDT, T. BEN ZINEB, AND E. PATOOR (Nancy-University, CNRS, France)
Analysis of the Effect of Niobium Precipitates on the Thermo-Mechanical Behavior of a NiTiNb Shape Memory Alloy

3:10-3:30pm D. CARPENTER, A. GELEYNSE, M. CHMIELUS, AND P. MULLNER (Boise State University, Idaho, USA)
Numerical Study of Mechanical Properties of Ni-Mn-Ga Martensite with Various Twin-Microstructures

F3C. High Temperature SMAs – Session Chair: Lluis Manosa

2:00-2:30pm S. MIYAZAKI, H.Y. KIM, AND Y. TAKEDA (University of Tsukuba, Japan)
Development of High Temperature Shape Memory Alloys (Invited)

2:30-2:50pm D.C. LAGOUDAS AND P.K. KUMAR (Texas A&M University, USA)
Transformation Behavior and Actuation Characteristics of a Ti(50)Pd(40)Ni(10) High Temperature Shape Memory Alloy

2:50-3:10pm H.Y. KIM, H. HOSODA, AND S. MIYAZAKI (University of Tsukuba, Japan)
Effect of Interstitial Alloying Elements on Superelastic Properties of Ti-Nb Alloys

3:10-3:30pm K. CHASTAING, A. DENQUIN, P. VERMAUT, R. PORTIER, D. CAILLARD, AND J. VAN HUMBEECK (ONERA, Chatillon, France)
High Temperature Shape Memory Alloys Based on the RuNb System

3:30-4:00pm Coffee break – Main Ballroom

Friday, July 4, 2008

Late Afternoon Sessions: A: La Terraza Room, B: New Mexico Room, C: Santa Fe Room

F4A. Transformation Plasticity II: Superelastic – Session Chair: David Dunand

4:00-4:20pm C. LEXCELLENT, K. LAVERNHE, S. CALLOCH, E. GIBEAU, AND J.Y. GAUTHIER (Universite de Franche-Comte, Besancon, France)
General Modeling of Phenomenological Thermomechanical Behavior of Shape Memory Alloys

4:20-4:40pm A. CROCKER (University of Surrey, UK)
Modeling the Propagation of Cracks Across Martensitic and Bainitic Products

4:40-5:00pm M. ELHADROUZ (ENSAM, Metz, France)
Micromechanical Modeling of Magnetic Shape Memory Alloy Ni2MnGa Single Crystals

5:00-5:20pm T. VIDENIC, M. BROJAN, AND F. KOSEL (University of Ljubljana, Slovenia)
One-Dimensional Model of Constrained Recovery in SMA with Non-Constant Young's Modulus

F4B. Martensite Mechanical Behavior II – Session Chair: Kaushik Bhattacharya

4:00-4:20pm K. TSUZAKI, Y. KIMURA, T. INOUE, AND F. YIN (National Institute for Materials Science, Tsukuba, Japan)
Enhanced Toughness in an Ultrahigh-Strength Martensitic Steel with Ultrafine Elongated Grain Structure

4:20-4:40pm D.S. GRUMMON, Y.-T. CHENG, AND X. FEI (Michigan State University, USA)
Thermo-Topodynamic Surfaces by Indentation and Planarization of NiTi SMAs

4:40-5:00pm H.X. ZHENG, J. PFETZING, J. FRENZEL, AND G. EGGELER (Ruhr-Universitat Bochum, Germany)
Reproducibility and Irreversibility of Nanoindentation in Ti(50)Ni(48)Fe(2)

5:00-5:20pm H. BEI, S. SHIM, E. DONOHOE, AND E.P. GEORGE (Oak Ridge National Lab, USA)
Size Effects in NiTi Shape Memory Alloy Investigated by Spherical Nanoindentation

F4C. Cyclic Stability – Session Chair: Hassel Ledbetter

4:00-4:20pm J. MA AND I. KARAMAN (Texas A&M University, USA)
Room Temperature Aging and Dynamic Strain Recovery During Pseudoelastic Cycling of Titanium-Based Shape Memory Alloys

4:20-4:40pm L. SAINT SULPICE, S. ARBAB CHIRANI, K. TAILLARD, AND S. CALLOCH (ENSIETA, Brest, France)
Multiaxial Cyclic Superelasticity of Shape Memory Alloys: Experiments and Modelization

4:40-5:00pm I. AALTIO, Y. GE, X. LIU, O. SODERBERG, AND S.-P. HANNULA (Helsinki University of Technology)
Effect of Magnetomechanical Cycling on 10M Ni-Mn-Ga Magnetic Shape Memory Material

5:00-5:20pm J. DADDA, H.J. MAIER, I. KARAMAN, AND H.E. KARACA (University of Paderborn, Germany)
Functional Degradation of CoNiAl and CoNiGa High-Temperature Shape Memory Alloy Single Crystals at Elevated Temperatures upon Cyclic Deformation

Plenary Session – Closing – Main Ballroom

5:30-5:45pm Conference closing