



ISFD-13 Event Schedule

Sunday, October 2, 2016

Conference Registration at Coast Coal Harbour Hotel	4:00 pm - 8:00 pm
Welcome Reception at Coal Harbour A and Foyer	6:00 pm - 8:00 pm

Monday, October 3, 2016

Conference Registration/Information	7:30 am - 7:00 pm
Opening and Plenary Session I (Coal Harbour A)	8:00 am - 10:00 am
Morning Coffee/Tea Break	10:00 am - 10:30 am
Concurrent Sessions (Coal Harbour A & B)	10:30 am - 12:20 pm
Lunch	12:20 pm - 2:00 pm
Concurrent Sessions (Coal Harbour A & B)	2:00 pm - 3:50 pm
Afternoon Coffee/Tea Break	3:50 pm - 4:20 pm
Concurrent Sessions	4:20 pm - 6:00 pm
Poster Session	6:00 pm - 7:30 pm

Tuesday, October 4, 2016

Conference Registration/Information	8:00 am - 7:00 pm
Plenary Session II (Coal Harbour A)	8:30 am - 10:00 am
Morning Coffee/Tea Break	10:00 am - 10:30 am
Concurrent Sessions (Coal Harbour A & B)	10:30 am - 12:20 pm
Lunch	12:20 pm - 2:00 pm
ISFD International Advisory Committee Meeting (Okabe)	12:20 pm - 2:00 pm

Concurrent Sessions (Coal Harbour A & B)	2:00 pm - 3:50 pm
Afternoon Coffee/Tea Break	3:50 pm - 4:20 pm
Concurrent Sessions (Coal Harbour A & B)	4:20 pm - 6:00 pm
Conference Dinner	7:00 pm - 9:00 pm

Wednesday, October 5, 2016

Conference Registration/Information	8:00 am - 6:00 pm
Concurrent Sessions (Coal Harbour A & B)	8:30 am - 10:00 am
Morning Coffee/Tea Break	10:00 am - 10:30 am
Concurrent Sessions (Coal Harbour A & B)	10:30 am - 12:20 pm
Lunch	12:20 pm - 2:00 pm
Concurrent Sessions (Coal Harbour A & B)	2:00 pm - 3:20 pm
Afternoon Coffee/Tea Break	3:20 pm - 3:50 pm
Plenary Session III (Coal Harbour A)	3:50 pm - 5:20 pm

Thursday, October 6, 2016

Visit to Simon Fraser University & 4D LABS	9:00 am - 12:00 pm
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ISFD-13 Technical Program

Sunday, October 2, 2016

4:00pm - 8:00pm	Conference Registration at Coast Coal Harbour Hotel (1180 West Hasting Street, Vancouver)
6:00pm - 8:00pm	Welcome Reception at Coal Harbour A & Foyer

Monday, October 3, 2016

	Coal Harbour A	Coal Harbour B
Sessions	Plenary Section I <i>Chair: Zuo-Guang Ye</i>	
8:00am - 8:30am	Opening & Tributes to Professor Jan Fousek Dr. Kenji Kitamura Professor Hans Schmid	
8:30am - 9:15am	M-PL-1 <u>Ramamoorthy Ramesh (60)</u> <i>Observation of polar vortices in oxide superlattices</i>	/
9:15am - 10:00am	M-PL-2 <u>Xiaoqing Pan (88)</u> <i>Atomic structures and switching dynamics of ferroelectric domain walls</i>	
10:00am - 10:30am	Break	
Sessions	Domain Walls & Interfaces I <i>Chair: Alexei Gruverman</i>	Advanced Techniques <i>Chair: Alain Pignolet</i>
10:30am - 11:00am	M-A-1-I <u>Chang-Beom Eom (20)</u> <i>Polar metals by geometric design</i>	M-B-1-I <u>Rama Vasudevan (40)</u> <i>Rapid and rigorous: breakneck acquisition of local hysteresis loops, and a quantitative understanding of piezoresponse force microscopy</i>

11:00am - 11:30am	<p style="text-align: center;">M-A-2-I <u>Dennis Meier (61)</u></p> <p style="text-align: center;"><i>Advanced domain-wall functionality in semiconducting improper ferroelectrics</i></p>	<p style="text-align: center;">M-B-2-I <u>Yoshiaki Uesu (7)</u></p> <p style="text-align: center;"><i>Strategy for 3D nondestructive observations of domains and domain walls using SHG microscope</i></p>
11:30am - 12:00pm	<p style="text-align: center;">M-A-3-I <u>Patrycja Paruch (94)</u></p> <p style="text-align: center;"><i>Controlling the physics of domains and domain walls in ferroelectric thin films: boundary conditions vs defects</i></p>	<p style="text-align: center;">M-B-3-I <u>Werner Kaminsky (16)</u></p> <p style="text-align: center;"><i>Automated microscope add-ons to quantify birefringence images</i></p>
12:00pm - 12:20pm	<p style="text-align: center;">M-A-4-O <u>Andrei Artemev (29)</u></p> <p style="text-align: center;"><i>Morphological stability and switching properties of 180° domain structures in ferroelectric thin films</i></p>	<p style="text-align: center;">M-B-4-O <u>Karen Kavanagh (84)</u></p> <p style="text-align: center;"><i>Imaging electronic junctions, magnetization, and polarized boundaries by electron holography</i></p>
12:20pm - 2:00pm	Lunch	
Sessions	Domains in Multiferroics I <i>Chair: Wei Ren</i>	Theory & Simulations <i>Chair: Jiri Hlinka</i>
2:00pm - 2:30pm	<p style="text-align: center;">M-A-5-I <u>Ho Nyung Lee (32)</u></p> <p style="text-align: center;"><i>Reversible control of interfacial magnetism in ferroelectric/ferromagnetic heterostructures</i></p>	<p style="text-align: center;">M-B-5-I <u>Long-Qing Chen (28)</u></p> <p style="text-align: center;"><i>Domain structures and topological defects in hexagonal manganites</i></p>
2:30pm - 3:00pm	<p style="text-align: center;">M-A-6-I <u>Alain Pignolet (62)</u></p> <p style="text-align: center;"><i>Twin domains in epitaxial thin films exhibiting multiferroic properties at room temperature</i></p>	<p style="text-align: center;">M-B-I-6 <u>Alexander Roytburd (35)</u></p> <p style="text-align: center;"><i>New development in the theory of elastic domains</i></p>
3:00pm - 3:30pm	<p style="text-align: center;">M-A-7-I <u>Chi-Shun Tu (41)</u></p> <p style="text-align: center;"><i>Domain structure, electronic state and phase transition in rare-earth doped BiFeO₃ multiferroics</i></p>	<p style="text-align: center;">M-B-7-I <u>Randy Fishman (48)</u></p> <p style="text-align: center;"><i>The inelastic signatures of multiferroic domains</i></p>
3:30pm - 3:50pm	<p style="text-align: center;">M-A-8-O <u>Lun-Wei (Brian) Su (8)</u></p> <p style="text-align: center;"><i>The polar domain structure of multiferroic BiFeO₃-based ceramics and single crystals</i></p>	<p style="text-align: center;">M-B-8-O <u>Sergei Prokhorenko (34)</u></p> <p style="text-align: center;"><i>Finite-temperature stability of domain wall junctions in proper ferroelectrics</i></p>
3:50pm - 4:20pm	Break	

Sessions	Domain Structures & Properties <i>Chair: Dennis Meier</i>	Domain-Related Applications I <i>Chair: Dragan Damjanovic</i>
4:20pm - 4:50pm	M-A-9-I <u>Lane Martin (10)</u> <i>Controlling polarization profiles, mesostructures, and field-driven response in ferroelectric thin films</i>	M-B-9-I <u>Jae-Hyeon Ko (57)</u> <i>Elastic anomalies of perovskite-structured ferroelectrics and relaxors in their paraelectric phase revealed by Brillouin light scattering</i>
4:50pm - 5:20pm	M-A-10-I <u>Krystian Roleder (21)</u> <i>Coexisting interactions in ABO_3 perovskites - intricate, induced or simply natural?</i>	M-B-10-I <u>Pavlo Zubko (82)</u> <i>Negative capacitance in multidomain ferroelectrics</i>
5:20pm - 5:40pm	M-A-11-O <u>Joshua Agar (24)</u> <i>Exploring ferroelastic domain structure and response in compositionally-graded $PbZr_{1-x}Ti_xO_3$ using multidimensional metrology</i>	M-B-11-O <u>Carlota Canalias (22)</u> <i>Sub-micrometer domain engineering in bulk Rb-doped $KTiPO_4$ for novel optical applications</i>
5:40pm - 6:00pm	M-A-12-O <u>Dariusz Kajewski (23)</u> <i>Unexpected behavior of $PbZrO_3$ single crystal doped with niobium</i>	M-B-12-O <u>Yuji Noguchi (96)</u> <i>Giant photovoltaic effect of ferroelectric domain walls in perovskite crystals</i>
6:00pm - 7:30pm	Poster Session <i>Chair: Alexei Bokov</i>	

Tuesday, October 4, 2016

	Coal Harbour A	Coal Harbour B
Sessions	Plenary Section II <i>Chair: Nava Setter</i>	
8:30am - 9:15am	T-PL-1 <u>Sergei Kalinin (68)</u> <i>Chemical boundary conditions and emergence of coupled electrochemical-ferroelectric states on the nanoscale</i>	/
9:15am - 10:00am	T-PL-2 <u>Lukas Eng (85)</u> <i>Nanoscale topologies in multiferroics - from Bloch & Néel-type skyrmions to conductive domain walls</i>	

10:00am - 10:30am	Break	
Sessions	Domains & Wall Dynamics I <i>Chair: Lane Martin</i>	Domains in Piezocrystals I <i>Chair: Christopher Lynch</i>
10:30am - 11:00am	T-A-1-I <u>Beatriz Noheda (79)</u> <i>Ferroelastic switching of in-plane-polarized ferroelectric films</i>	T-B-1-I <u>Shujun Zhang (31)</u> <i>Observation of relaxor-PT single crystals at cryogenic temperature</i>
11:00am – 11:30am	T-A-2-I <u>Gustau Catalan (50)</u> <i>Switchable mechanical properties of ferroelectric domains</i>	T-B-2-I <u>Peter Gehring (47)</u> <i>Diffuse scattering from relaxor ferroelectric PMN-xPT</i>
11:30am - 12:00pm	T-A-3-I <u>Vladimir Shur (51)</u> <i>Forward domain growth and formation of the charged domain walls</i>	T-B-3-I <u>Guangyong Xu (38)</u> <i>Phonon coupling to dynamic short-range polar order in PZN-xPT and PMN-xPT relaxor ferroelectrics</i>
12:00pm - 12:20pm	T-A-4-O <u>Hoda Kianirad (17)</u> <i>Domain dynamics in stoichiometric lithium tantalate revealed by etching and on-line second harmonic generation</i>	T-B-4-O <u>Zeng Luo (11)</u> <i>Growth and domain structures of high Curie-temperature ferroelectric BiScO₃-Pb(Cd_{1/3}Nb_{2/3})O₃-PbTiO₃ single crystals</i>
12:20pm - 2:00pm	Lunch	
Sessions	Domains & Wall Dynamics II <i>Chair: Patrycja Paruch</i>	Domains in Piezocrystals II <i>Chair: Peter Gehring</i>
2:00pm - 2:30pm	T-A-5-I <u>Dragan Damjanovic (49)</u> <i>Domain walls, conductivity, defects and electro-mechanical coupling in ferroelectrics</i>	T-B-5-I <u>Peter Finkel (83)</u> <i>Simultaneous field and stress control of ferroelectric phases in nonlinear ferroics</i>
2:30pm - 3:00pm	T-A-6-I <u>Alexei Bokov (86)</u> <i>Observation of domain wall dynamics in ferroelectrics by means of x-ray photon correlation spectroscopy</i>	T-B-6-I <u>Zhuo Xu (63)</u> <i>Electrostrictive effect and multiscale domains in Pb(Mg_{1/3}Nb_{2/3})O₃-xPbTiO₃ crystals</i>

3:00pm - 3:30pm	T-A-7-I <u>Alexei Gruverman (70)</u> <i>Flexoelectric control of ferroelectric properties</i>	T-B-7-I <u>Christopher Lynch (80)</u> <i>Toward energetics of domain structures and phase transformations in ferroelectric single crystals</i>
3:30pm - 3:50pm	T-A-8-O <u>Nitish Kumar (12)</u> <i>BaTiO₃-Bi(Zn_{1/2}Ti_{1/2})O₃ relaxor dielectrics</i>	T-B-8-O <u>Zenghui Liu (90)</u> <i>Domain structure, electric properties and phase transition in novel Pb(Mg_{1/3}Nb_{2/3})O₃-PbTiO₃-Bi(Zn_{2/3}Nb_{1/3})O₃ crystals</i>
3:50pm -4:20pm	Break	
Sessions	Domain Wall Dynamics III <i>Chair: Beatriz Noheda</i>	Domains in Piezocrystals III <i>Chair: Shujun Zhang</i>
4:20pm - 4:50pm	T-A-9-I <u>Xueyun Wang (27)</u> <i>Topological structural vortices in ferroelectric hexagonal manganites</i>	T-B-9-I <u>Nazanin Bassiri-Gharb(78)</u> <i>Mesosopic investigations of the dynamics of in relaxor-ferroelectric single crystals via piezoresponse force microscopy</i>
4:50pm - 5:20pm	T-A-10-I <u>Yuji Noguchi (9)</u> <i>Defect-polarization control in ferroelectric BaTiO₃</i>	T-B-10-I <u>Nan Zhang (59)</u> <i>Lattice strain and domain contributions to piezoelectricity in PZT single crystals</i>
5:20pm - 5:40pm	T-A-11-O <u>Vladimir Shur (52)</u> <i>Domain shape and domain wall motion in KTP single crystals</i>	T-B-11-O <u>Chao He (64)</u> <i>Domain pattern, self-polarized high piezoelectricity and piezoelectric memory effect in ferroelectric single crystals</i>
5:40pm - 6:00pm	T-A-12-O <u>Arkady Levanyuk (98)</u> <i>Vitaly Ginzburg: A singular personality in life and science - on the 100th anniversary of his birth</i>	T-B-12-O <u>Reagan Belan (89)</u> <i>Domain structure and phase transitions in piezo-/ferroelectric Pb(Mg_{1/3}Nb_{2/3})O₃-PbTiO₃-Bi(Zn_{1/2}Ti_{1/2})O₃ ternary single crystals</i>
7:00pm - 9:00pm	Conference Dinner (Coal Harbour A)	

Wednesday, October 5, 2016

	Coal Harbour A	Coal Harbour B
Sessions	Domain-Related Applications II <i>Chair: Nazanin Bassiri-Gharb</i>	Domains in Multiferroics II <i>Chair: Vladimir Shur</i>
8:30am - 9:00am	W-A-1-I <u>Jiangyu Li (77)</u> <i>Photo-induced ferroelectric switching in perovskite CH₃NH₃PbI₃ films</i>	W-B-1-I <u>Ziyao Zhou (69)</u> <i>Voltage switching of magnetism in multiferroic heterostructures for reconfigurable electronic devices</i>
9:00am - 9:30am	W-A-2-I <u>Akash Bhatnagar (33)</u> <i>Photoelectronic processes in multiferroic materials</i>	W-B-2-I <u>Annette Bussmann-Holder (4)</u> <i>Strong coupling spin-charge-dipole interactions in the complex almost multiferroic perovskite EuTiO₃</i>
9:30am - 10:00am	W-A-3-I <u>Emmanuel Defay (3)</u> <i>What to improve in electrocaloric materials for future cooling applications?</i>	W-B-3-I <u>Ye Cao (14)</u> <i>Exploring flexoelectricity effect in nanoscale ferroelectric oxides</i>
10:00am - 10:30am	Break	
	Inhomogeneities & Relaxors I <i>Chair: Yuji Noguchi</i>	Domains in Thin Films <i>Chair: Gustau Catalan</i>
10:30am - 11:00am	W-A-4-I <u>Wolfgang Kleemann (1)</u> <i>Interfacial creep and segmental relaxation in the superdipolar glass ground state of relaxor ferroelectrics</i>	W-B-4-I <u>Hiroshi Funakubo (25)</u> <i>Domain structure of tensile and compressive strained epitaxial Pb(Zr,Ti)O₃ films with {100} orientation</i>
11:00am - 11:30am	W-A-5-I <u>Yousra Nahas (13)</u> <i>Underlying topological features in ferroelectrics</i>	W-B-5-I <u>Peng Wang (66)</u> <i>Ferroelectric polarization modulated interfacial fine structures in PZT-LAO-STO film heterostructures</i>

11:30am - 12:00pm	<p style="text-align: center;">W-A-6-I <u>Arkady Levanyuk (97)</u></p> <p style="text-align: center;"><i>Ferroelectric-paraelectric multilayers: challenges for consistent theory</i></p>	<p style="text-align: center;">W-B-6-I <u>Wei Ren (2)</u></p> <p style="text-align: center;"><i>Domain investigation in $Bi_{0.5}Na_{0.5}TiO_3$ based thin films and ceramics by piezoresponse force microscope</i></p>
12:00pm - 12:20pm	<p style="text-align: center;">W-A-7-O <u>Gian Guzmán-Verri (36)</u></p> <p style="text-align: center;"><i>The random electric field problem in relaxors</i></p>	<p style="text-align: center;">W-B-7-O <u>Lyndsey Denis (15)</u></p> <p style="text-align: center;"><i>Domain reorientation in polycrystalline $PbZr_{0.3}Ti_{0.7}O_3$ thin films</i></p>
12:20pm - 2:00pm	Lunch	
Sessions	Inhomogeneities & Relaxors II <i>Chair: Wolfgang Kleemann</i>	Domain Walls & Interfaces II <i>Chair: Krystian Roleder</i>
2:00pm - 2:30pm	<p style="text-align: center;">W-A-8-I <u>Jiri Hlinka (30)</u></p> <p style="text-align: center;"><i>Domain structure, waterfalls and piezoelectric activity of relaxor ferroelectrics</i></p>	<p style="text-align: center;">W-B-8-I <u>Peng Gao (71)</u></p> <p style="text-align: center;"><i>Direct measurements of local polarization at defects in ferroelectric thin films by annular bright field imaging</i></p>
2:30pm - 3:00pm	<p style="text-align: center;">W-A-9-I <u>Satoshi Wada (26)</u></p> <p style="text-align: center;"><i>Piezoelectric enhancement of new bismuth -based piezoelectric materials with pseudo-cubic symmetry and its origin based on nano/macro complex-domain configurations</i></p>	<p style="text-align: center;">W-B-9-I <u>Mark Senn (67)</u></p> <p style="text-align: center;"><i>Emergence of long-range order in $BaTiO_3$ from local symmetry-breaking distortions</i></p>
3:00pm - 3:20pm	<p style="text-align: center;">W-A-10-O <u>Shuai Wang (75)</u></p> <p style="text-align: center;"><i>Phase field modeling of relaxor ferroelectrics and ferroelectric/relaxor composites</i></p>	<p style="text-align: center;">W-B-10-O <u>Joe Evans (95)</u></p> <p style="text-align: center;"><i>Domain switching as seen by the ferroelectric tester</i></p>
3:20pm - 3:50pm	Break	

Sessions	Plenary Session III Chair: Sergei Kalinin	
3:50pm - 4:35pm	W-PL-1 <u>Andrew Rappe (87)</u> <i>Intrinsic ferroelectric domain wall motion revealed by first-principles based molecular dynamics</i>	/
4:35pm - 5:20pm	W-PL-2 <u>Nava Setter (72)</u> <i>Negative pressure in ferroelectrics and the resulting nano-to micro structures with enhanced properties</i>	

Thursday, October 6, 2016

9:00am - 12:00pm	Visit to Simon Fraser University & 4D LABS (Departure from Coast Coal Harbour Hotel Entrance/Lobby at 9:00am)
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