
Tomar Meeting Mar 10-15, 2019 (Sunday evening to Friday noon)

Sunday Evening: Dinner at the Hotel 6PM-9PM

**Overview: 7 oral presentations in the morning before lunch and 6 in the afternoon session before dinner, Interspersed with Poster Displays, Discussions and Coffee Breaks.
(Approximately 52 oral and 35 poster presentations)**

**AM Schedule
Mon, Tue, Wed, Thu
(see below for Fri)**

Start	8:30 AM
4 talks	8:30 AM to 10:00 AM
Break	10:00 AM to 10:30 AM
Poster Highlights and Visitation	11:00 AM - 12 noon
3 talks	12 noon - 1:00 PM

Lunch 1:00 PM to 2:30 PM

**PM Schedule
Mon, Tue, Thu.**

Start	2:30 PM
3 talks	2:30 PM to 3:45 PM
Posters and Coffee	3:45 to 4:30 PM
"All-hands-present" Discussion: Posters and Oral Presentations	4:30 PM to 5:30 PM
3 talks (w/extended discussion)	5:30 PM to 7:00 PM

PM (Wednesday)

Excursion(s) in and around town. Back to the Hotel for Dinner

Dinner Approx. 7:00 to 8:30 PM (Su, Mo, Tu, We, Th))

Posters

**Mon, Tue, Wed, Thu
Approx. 8:30 PM to 11 PM**

Friday AM Schedule

Start	8:30 AM
3 talks, w/extended discussion	9:00 AM to 10:30 AM
Break	10:30 AM to 11:00 AM
3 talks, w/extended discussion	11:00 AM to 12:30 PM

	Ghose	Sanjit	sghose@bnl.gov	NSLS II, Brookhaven National Laboratory	USA	2P	In-Situ X-ray Characterization of Phase Evolution during Solid-State Reactions of Multicomponent Systems
	Kaplan	Wayne D.	kaplan@technion.ac.il	Technion - Israel Institute of Technology	Israel	2P	Solute-Drag vs Solute-Acceleration During Microstructural Evolution of Alumina
	Jayan	B. Reeja	breeja@cmu.edu	Carnegie Mellon University	USA	2P	Anisotropic lattice expansion in Titania under microwave radiation: Evidence for field-driven, non-thermal effects
	Vilarinho	Paula M.	paula.vilarinho@ua.pt	University of Aveiro	Portugal	2P	Dielectric behaviour of FLASH sintered KNN
NP-5	Campos	João Vitor	joao2.campos@usp.br	University of São Paulo	Brazil	2P	Influence of 3YSZ sample height at the onset temperature of flash sintering
NP-6	Wagner	Avital	avitalwa@post.bgu.ac.il	Ben-Gurion University of the Negev	Israel	2P	Photoluminescence in SPS-processed transparent Ce:YAG ceramics
NP-7	Fagnard	Jean-Francois	fagnard@montefiore.ulg.ac	Electrical Engineering and Computer, University of Liege	Belgium	2P	In situ measurements of partial discharge patterns on porous YSZ pellets pressed between planar platinum electrodes used for flash sintering
NP-8	Becker	Mattan	mattan14@gmail.com	Technion	Israel	2P	A Novel System for Quenching during Flash Sintering
NP-9	Schwarzbach	Danny	danny.schwarzbach@phys.uni	Georg-August-University Goettingen	Germany	2P	In-situ Electron Microscopy Studies of Electric Field Assisted Sintering of Oxide Ceramics
NP-10	Grigoryev	Evgeny	eugenrig@mail.ru	ISMAN	Russia	2P	Tensile strength of materials obtained by electric pulse consolidation of powders
NP-11	Ratzker	Barak	ratzkerb@post.bgu.ac.il	Ben-Gurion University of the Negev	Israel	2P	Microstructure evolution during high-pressure spark plasma sintering (HPSPS) of transparent alumina
NP-12	Preusker	Jan	jan.preusker@kit.edu	KIT	Germany	2P	Impact of an external electric field on grain growth in oxides: comparison of flash sintered samples to field assisted grain growth.
	Jongmanns	Malte	Malte.Jongmanns@uni-due.c	University of Duisburg-Essen	Germany	3P	Formation of defect-enriched phases far from equilibrium as a flash sintering mechanism
				Tuesday (AM): 8:30 AM to 1 PM (Please see Front Page for the Schedule)			
							3P: Theory (3 oral) 4P: Ionic and Glass (4 oral)
	Kalia	Rajiv	rkalia@usc.edu	University of Southern California	USA	3P	Deep Learning of CVD Growth and Phase-Transition Pathways in Layered Materials*

	Serrazina	Ricardo	serrazina@ua.pt	University of Aveiro	Portugal	3P	Modeling of Joule heating in KNN FLASH sintering
	Pereira da Silva	João	joao.silva@fz-juelich.de	Forschungszentrum Jülich	Germany	3P	Thermal Runaway, Dynamic Stability and Process Control in Flash Sintering
NP-13	Engelke	Lukas	lukas.engelke@uni-due.de	University of Duisburg-Essen	Germany	3P	Pattern formation during current sintering (Simulation)
	Chaim	Rachman	rchaim@technion.ac.il	Technion-Israel, Materials Science and Engineering	Israel	4P	Kinetics of liquid-assisted densification during flash sintering of ceramic nanoparticles
	Ramírez González	Julia	jramirezgonzalez1@sheffield.ac.uk	The University of Sheffield	UK	4P	Impedance characterization of calcia-stabilised zirconia as a function of applied field
	MORITA	Koji	morita.koji@nims.go.jp	National Institute for Materials Science (NIMS)	Japan	4P	High Temperature Tensile Behavior of Zirconia Ceramics under dc Current
	Ren	Ke	renke@mail.nwpu.edu.cn	Northwestern Polytechnique University	China	4P	Densification and grain growth kinetics of 3mol% Y2O3 stabilized zirconia during flash sintering
	Tuesday (PM): 2:30 PM to 6:30 PM (Please see Front Page for the Schedule)						4P: Ionic and Glass (6 oral)
	Cho	Jaehun	cho299@purdue.edu	Purdue University	USA	4P	Deformation mechanisms of flash sintered yttria stabilized zirconia via in-situ micromechanical testing
	Wesner	Anne	anne.wesner@ikts.fraunhofer	Fraunhofer IKTS	Germany	4P	Hybrid/FAST sintering on Glass/Alumina
	Yoshida	Hidehiro	YOSHIDA.Hidehiro@nims.go.jp	National Institute for Materials Science	Japan	4P	Low temperature and high strain rate superplastic flow in structural oxide ceramics induced by flash event
	Liu	Jinling	liujinling@swjtu.edu.cn	Southwest Jiaotong University	China	4P	The Onset of Flash Sintering 8YSZ
	Grimley	Carolyn	cajensen@ncsu.edu	North Carolina State University	USA	4P	Comparison of the Electrical and Structural Properties of Flash Sintered Yttria-stabilized Zirconia
	Yadav	Devinder	devinder@iitp.ac.in	IIT, Patna, India and University of Colorado Boulder	India	4P	Study of flash phenomena on single crystals of cubic 8 mol% yttria stabilized zirconia
	Wednesday (AM): 8:30 AM to 1 PM (Please see Front Page for the Schedule)						4P: Ionic and Glass (1 oral) 5P: Future (6 oral)

	Jain	Himanshu	h.jain@lehigh.edu	Lehigh University	USA	4P	Electric field induced softening of glass: what can it tell about the mechanism of flash sintering?
NP-14	Lavagnini	Isabela R.	isabela.lavagnini@usp.br	University of São Paulo	Brazil	4P	Microstructural evolution of 3YSZ flash sintered with current ramp control
NP-15	Storion	Ana	anagstorion@usp.br	University of Sao Paulo	Brazil	4P	Influence of the conformation method on flash sintering of ZnO ceramics
NP-16	Liu	Dianguang	dianguang@swjtu.edu.cn	Southwest Jiaotong University	China	4P	Dc Electric Field Assitd 3ysz Ceramic Superplastic Deformation
	Perez-Maqueda	Luis A.	maqueda@cica.es	Instituto de Ciencia de Materiales de Sevilla (CSIC- Spain US)		5P	Reaction flash sintering for producing high quality functional ceramics within seconds
	Garcia	Edwin	redwing@purdue.edu	Purdue University	USA	5P	Charged Grain Boundaries and the Microstructural Evolution of Ionic Ceramics
	Vendrell	Xavier	xavier.vendrell.villafra	Universitat Politècnica de Catalunya, University of Sheffield	Spain	5P	Enhanced ionic conductivity of 8 mol% Ytria Stabilised Zirconia by flash sintering
	Shoemaker	Daniel	dpshoema@illinois.edu	University of Illinois	USA	5P	Local structure and kinetics of defect accumulation in titania flash events
	Riess	ILan	riess@technion.ac.il	Technion, Faculty of Physics Israel		5P	Mixed ionic electronic conductivity and flash sintering
	Wurster	Stefan	stefan.wurster@oeaw.ac.at	Erich Schmid Institute of Materials Science	Austria	5P	Metastable Nanomaterials and Nanocomposites obtained by High Pressure Torsion Powder Consolidation
Thursday 8:30 AM to 1 PM (Please see Front Page for the Schedule)							5P: Future (1 oral) 6P: SPS and Microwave (6 oral)
	West	Anthony	a.r.west@sheffield.ac.uk	University of Sheffield	UK	5P	Some observations on the response of oxides to an applied field
NP-17	Cho	Jaehun	cho299@purdue.edu	Purdue University	USA	5P	Field-induced mass transport phenomena in flash sintered high temperature ceramics explored by in situ SEM and TEM
NP-18	Avila	Viviana	viviana.avila@colorado.edu	University of Colorado Boulder	USA	5P	Flash sintering of ceramic films: the influence of surface to volume ratio
NP-19	Jo	Seohyeon	seohyeon.jo@colorado.edu	University of Colorado Boulder	USA	5P	Transition to partial electronic conductivity at the onset of Flash measured by in-situ impedance spectroscopy
NP-20	Kathiria	Rushi K.	rushi.kathiria@colorado.edu	University of Colorado Boulder	USA	5P	In-situ measurements of the elastic modulus of Zirconia polycrystals held in a state of flash induced by an electric field

NP-21	Yoon	Bola	bola.yoon@colorado.edu	University of Colorado Boulder	USA	5P	Unusual atom displacements in TiO ₂ during flash sintering
NP-22	Avila	Viviana	viviana.avila@colorado.edu	University of Colorado Boulder	USA	5P	Powders of four elemental oxides transformed and sintered by reactive flash
NP-23	Raj	Rishi	rishi.raj@colorado.edu	University of Colorado Boulder	USA	5P	Lattice Softening
NP-24		Yoed	tsur@technion.ac.il	Technion, Israel Institute of Technology	Israel	5P	A short review of FS mechanisms
	Rybakov	Kirill I.	rybakov@ipfran.ru	Institute of Applied Physics, Russian Academy of Sciences	Russia	6P	Ultra-rapid microwave sintering of ceramics and powder metals
	Suzuki	Tohru S.	suzuki.tohru@nims.go.jp	National Institute for Materials Science	Japan	6P	Effective colloidal processing for densification before SPS
	Nakamura	Nathan J.	nnakamur@andrew.cmu.edu	Carnegie Mellon University	USA	6P	The Role of Defects in Microwave-Assisted Synthesis of Cubic ZrO ₂
	Mishra	Tarini Prasad	t.mishra@fz-juelich.de	Forschungszentrum Jülich GmbH	Germany	6P	Electric field assisted densification of 10 mol. % Gadolinium Doped Ceria (GDC 10)
	Elissalde*	Catherine	catherine.elissalde@icmcb.cnrs	ICMBC/CNRS	France	6P	Some strategies to (co)-sinter refractory functional oxides at low temperature by Spark Plasma Sintering
	Josse*	Michaël	michael.josse@icmcb.cnrs	Université de Bordeaux, ICMCB	France	6P	Cool-SPS: pulling down the temperature, pushing up the reactivity
Thursday 2:30 PM to 6:30 PM (Please see Front Page for the Schedule)						6P: SPS and Microwave (1 oral) 7P: Metallic and Carbon Based (5 oral)	
	Kim	Byung-Nam	kim.byung-nam@nims.go.jp	National Institute for Materials Science	Japan	6P	Grain growth behavior during spark plasma sintering of ceramics
NP-25	Raethel	Jan	jan.raethel@ikts.fraunhofer	Fraunhofer IKTS, Dresden, Germany	Germany	6P	Reproducibility of Fast/sps Experiments
NP-26	Grigoryev	Evgeny	eugenrig@mail.ru	ISMAN	Russia	6P	β-SiAlON-based ceramic composites by combustion synthesis and spark plasma sintering
NP-27	El Khoury*	Liza	elkhouryliza@gmail.com	ICMBC, UMR 5026, F-33600 Pessac, Bordeaux University	France	6P	Evidence for microstructure-dependent hysteresis in SCO molecular ceramics prepared by Cool-SPS
NP-28	Moskovskikh	Dmitry	mos@misis.ru	National University of Science and Technology, MISiS	Russia	6P	Spark plasma sintering of Hf _{0.2} Ta _{0.2} Ti _{0.2} Nb _{0.2} Zr _{0.2} C and Hf _{0.2} Ta _{0.2} Ti _{0.2} Nb _{0.2} Mo _{0.2} C high-entropy ultra-high temperature ceramics

	Leich	Lennart	lennart.leich@rub.de	Ruhr-Universität Bochum, Lehrstuhl Werkstofftechnik	Germany	7P	Densification of NdFeB Magnets by Electro-Discharge Sintering - Microstructure, Mechanical and Magnetic Properties
	Wang	Yiguang	wangyiguang@bit.edu.cn	Beijing Institute of Technology	China	7P	Electrical-field assisted flash joining of ceramic oxide-ceramic oxide and ceramic oxide-metal
	Rosenberger	Andrew	andrew.rosenberger3.ctr@n	Oak Ridge Associated Universities, Army Research Laboratory	USA	7P	Flash Sintering of Armor Materials: Challenges and Opportunities
	Mégret	Alexandre	alexandre.megret@umons.ac	University of Mons	Belgium	7P	Effect of the addition of doped-cobalt on the properties of recycled tungsten carbide powder sintered by SPS
	de Knoop	Ludvig	ludvig.deknoop@chalmers.se	Chalmers University of Technology	Sweden	7P	Electric field-induced surface roughening of gold observed in situ at atomic resolution using transmission electron microscopy
NP-29	Vilémová	Monika	vilemova@ipp.cas.cz	Institute of Plasma Physics AS CR, v.v.i.	Czech Rep	7P	W-Cr solid solution: Comparison of alloying in SPS and by ball milling
NP-30	Biesuz	Mattia	mattia.biesuz@outlook.com	Queen Mary University of London	UK	7P	Flash joining of graphite with polymer derived ceramic interlayer
NP-31	Brede	Thomas	tbrede@gwdg.de	Institute of Materials Physics	Germany	7P	The effect of high current densities on iron-carbon alloy thin films
NP-32	Yoon	Bola	bola.yoon@colorado.edu	University of Colorado Boulder	USA	8P	Insights into reactive flash sintering of MgO-Al ₂ O ₃ -(8YSZ) by in-situ synchrotron X-ray diffraction
NP-33	O'Toole	Rebecca	rebecca.otoole@colorado.edu	University of Colorado Boulder	USA	8P	Flash sintering of zirconia/alumina powders
NP-34	Marder	Rachel	rachelma@tx.technion.ac.il	Technion- Israel Institute of Technology	Israel	8P	The Influence of Carbon on the Microstructure of Sintered Alumina
NP-35	Molinari*	Flora	flora.molinari@icmcb.cnrs.fr	ICMCB-CNRS, Université de Bordeaux	France	8P	Densification of classic and fragile ferroelectrics by Cool-SPS

Friday 8:30 AM to 12:30 PM
(Please see Front Page for the Schedule)

7P: Metallic and Carbon Based (3 oral)
8P: Complex Oxides (3 oral)

	Maccari	Fernando	maccari@fm.tu-darmstadt.de	Technical University of Darmstadt	Germany	7P	Effect of electric current annealing in phase transition of Mn-Al alloy
	Körkemeyer	Franz	koerkemeyer@iw.uni-hannov	Institut für Werkstoffkunde, Leibniz- Universität Hannover	Germany	7P	Anomalous twinning in AZ 31 magnesium alloy during electrically assisted forming
	Fudger	Sean J.	sean.j.fudger.civ@mail.mj	US Army Research Laboratory	USA	7P	Evidence of localized, incipient melting during field-assisted sintering of oxide dispersion strengthened, nanocrystalline metals

HU	YU	huyuhj@gmail.com	Ionotec Ltd	UK	8P	Flash sintering of beta"-alumina solid electrolytes for sodium battery applications
Mascotto	Simone	simone.mascotto@chemie.ur	University of Hamburg	Germany	8P	Triggering the catalytic activity of SrTiO3-based ceramics by flash sintering
Senos	ana	anamor@ua.pt	University of aveiro	Portugal	8P	Atmosphere assisted FLASH sintering of KNN