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XVI  
**ECerS**  
CONFERENCE

TORINO  
16-20 JUNE  
2019



**XVI CONFERENCE AND EXHIBITION OF THE EUROPEAN CERAMIC SOCIETY**



**THURSDAY 20 JUNE**  
**DAILY PROGRAMME**

Room	<b>3</b> <i>Corte Interrata</i>	<b>7</b> <i>Corte Interrata</i>	<b>10</b> <i>Corte Interrata</i>	<b>1</b> <i>Corte Interrata</i>	<b>2</b> <i>Corte Interrata</i>	<b>9</b> <i>Corte Interrata</i>	<b>5</b> <i>Corte Interrata</i>	<b>8</b> <i>Corte Interrata</i>
08.30 09.00		S1	S2			S6	S7	S8
09.00 10.30	S1			S4	S4			
10.30 11.00	Coffee break							
11.00 12.00	S1	S1	S2	S4	S4	S6	S7	S8
12.00 13.00	POSTER SESSION - <i>Pavilion T</i>							
13.00 14.30	Lunch							
14.30 16.30			S2	S4	S4	S6	S7	S8
16.30 17.00	Coffee break							
17.00 19.00							S7	

LEGENDA

- S1** Innovative processing and synthesis
- S2** HT Processes and Advanced Sintering
- S3** Modelling of ceramics together with IV Cermodel: "Modelling and simulation meet innovation in ceramics technology"
- S4** Advanced structural ceramics, composites and refractories
- S5** Ceramics and glasses for healthcare
- S6** Ceramics for energy conversion and storage
- S7** Functional Ceramics
- S8** Silicate Ceramics
- S9** Ceramics in Cultural Heritage and Art
- A&D** Art & Design in Ceramics

Programme updated to **Wednesday, 22 May, 2019**.  
The current, finally updated programme will be available in the conference **APP ECerS 2019**.

<b>S 01 - ADVANCED CERAMICS FROM POLYMER PRECURSORS 1 - 09:00-10:30</b>			
<b>Chair: Cekdar Vakifahmetoglu</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
09:00 09:30	Yuji Iwamoto <i>Invited Lecture</i>	POLYMER-DERIVED COBALT-DOPED AMORPHOUS SILICA NANOCOMPOSITES WITH HYDROGEN AFFINITY	528
09:30 09:45	Michelle Greenough	HYBRID SILICON AND CARBON-BASED POLYMERS: PROCESSING, CHARACTERIZATION AND PROPERTIES	593
09:45 10:00	Gabriela Mera	MOLECULAR APPROACH TO NOVEL MULTIFUNCTIONAL HYBRID SP <sup>2</sup> /SP <sup>3</sup> OD-NANOCARBON CONTAINING SILICON-BASED CERAMIC COMPOSITES	382
10:00 10:15	Christina Drechsel	INFLUENCE OF DIVINYLBENZENE ON THE PORE SIZE OF POLYMER DERIVED SiCN CERAMICS	672

<b>S 01 - ADVANCED CERAMICS FROM POLYMER PRECURSORS 2 - 11:00-12:00</b>			
<b>Chair: Enrico Bernardo</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
11:00 11:15	Cekdar Vakifahmetoglu	SiOC ADSORBENTS FOR CATIONIC DYE REMOVAL	93
11:15 11:30	Balanand Santhosh	THERMAL PROPERTIES OF DENSE AND POROUS, Si-BASED POLYMER DERIVED CERAMICS	209
11:30 11:45	Tugce Semerci	SiOC CERAMICS WITH OPEN AND PARTIALLY CLOSE POROSITY	193

<b>S 01 - NOVEL SHAPING METHODS 3 - 08:30-10:30</b>			
<b>Chair: Fabrice Rossignol</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
08:30 08:15	Kai Miao	CONTROLLING OF FABRICATION ACCURACY AND PERFORMANCE OF CERAMIC MOLDS WITH INTEGRAL CORE/SHELL FOR ADVANCED TURBINE BLADES	378
08:15 08:30	Hye-Yeong Park	IMPROVEMENT OF FRACTURE STRENGTH IN CERAMIC MOLD AND CORE THROUGH APPLICATION OF INORGANIC BINDER	303
08:30 08:45	Felix Quintero Martínez	END-LESS, CONTINUOUS AND SUPER-FLEXIBLE GLASS NANOFIBERS PRODUCED BY A NOVEL TECHNIQUE: CONTINUOUS LASER SUPERSONIC FIBERIZING	264
08:45 09:00	Roland Ramsch	PASSIVE MICRORHEOLOGY - A POWERFUL TOOL FOR THE OPTIMIZATION OF SOL-GEL PROCESSES	259
09:00 09:15	Olga Shilova	SOL-GEL-DERIVED POWDERS AND SUSPENSIONS FOR TREATMENT PLANTS	184
09:15 09:30	Amandeep Singh	PRESSURE CONTROL OF ABLATION LAYER COMPOSITION, NANOPARTICLES SIZE AND PHASE SYNTHESIZED BY PULSED LASER ABLATION IN SUPERCRITICAL CARBON DIOXIDE	174
09:30 09:45	Mira Khair	PROGRESS IN MANUFACTURING AND EVALUATION OF CHEMICAL PROPERTIES OF OXYGEN-BUFFERED UO <sub>2</sub> FUELS, USING SOLID REDOX BUFFERS	508
09:45 10:00	Florian La Lumia	PREPARATION OF UO <sub>2</sub> - PuO <sub>2</sub> MOX FUEL BY TWO INNOVATIVE WET PROCESSES: FREEZE GRANULATION AND SLIP CASTING	460

<b>S 01 - NOVEL SHAPING METHODS 4 - 11:00-12:00</b>			
<b>Chair: Enrico Bernardo</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
11:00 11:15	Siham Oummadi	SHRINKAGE BEHAVIOUR OF CERAMIC BODIES DURING DRYING: FOLLOWING EXTRUSION OR PRESSING	314
11:15 11:30	Shiwei Wang	JOINING OF ALUMINA CERAMICS BY SPONTANEOUS-COAGULATION-CAST CAKE	60

**S 02 - CONVENTIONAL SINTERING APPROACHES 1 - 08:30-10:30**

Chair: Peter Tatarko			
Time	Name	Title	ID Abs
08:30 09:00	Rajendra Bordia <i>Invited Lecture</i>	COUPLED EXPERIMENTAL AND NUMERICAL INVESTIGATION OF EVOLUTION OF ANISOTROPIC MICROSTRUCTURES DURING STRESS-ASSISTED SINTERING	792
09:00 09:30	Maksym Dosta <i>Invited Lecture</i>	DISCRETE ELEMENT MODELING OF SINTERING HETEROGENEOUS STRUCTURES	941
09:30 09:45	Shoko Baba	ANISOTROPIC SINTERING FOR C-AXIS PARTICLE-ORIENTATED (Sr,Ca) <sub>2</sub> NaNb <sub>5</sub> O <sub>15</sub> CERAMICS	831
09:45 10:00	Ali Saffarshamshirgar	ANISOTROPIC THERMAL CONDUCTION IN HIERARCHICALLY STRUCTURED COMPOSITE USING GRAPHENE-AUGMENTED ALUMINA NANOFIBERS	223
10:00 10:15	Ali Talimian	SINTERING OF LITHIUM HYDROXIDE DOPED MAGNESIUM ALUMINATE SPINEL	138
10:15 10:30	David Salamon	INTERACTION BETWEEN SiC AND Ti <sub>6</sub> Al <sub>4</sub> V IN THE SPS – FROM WETTING STUDIES TO JOINING	216

**S 02 - JOINING AND INTEGRATION - 11:00-12:00**

Chair: Richard Todd			
Time	Name	Title	ID Abs
11:00 11:15	Sinisa Mesarovic	INTERFACE ENERGY DRIVEN DIFFUSION BONDING OF ZIRCONIUM CARBIDE	380
11:15 11:30	Peter Tatarko	INTERACTION BETWEEN SiC AND Ti <sub>6</sub> Al <sub>4</sub> V IN THE SPS – FROM WETTING STUDIES TO JOINING	126

**S 02 - CONVENTIONAL SINTERING APPROACHES 2 - 14:30-16:30**

Chair: Suk-Joong Kang			
Time	Name	Title	ID Abs
14:30 14:45	Karel Maca	TRANSPARENT STRUCTURAL AND FUNCTIONAL ALUMINA CERAMICS PREPARED BY PRESSURE-LESS PRESINTERING AND HOT ISOSTATIC PRESSING	413
14:45 15:00	Sung Il Yun	THE MECHANICAL PROPERTIES AND GAS PERMEABILITY OF SINGLE AND DOUBLE LAYERED PORE STRUCTURE OF LIQUID PHASE SINTERED SiC	950
15:00 15:15	Suk-Joong Kang	MIXED MECHANISM PRINCIPLE OF MICROSTRUCTURAL EVOLUTION AND REPETITIVE GRAIN GROWTH IN MATERIALS	518
15:15 15:30	Mickaël Coëffe-Desvaux	EFFECTS OF SINTERING ADDITIVES ON DENSIFICATION MECHANISM OF ALUMINIUM NITRIDE. CORRELATIONS BETWEEN MICROSTRUCTURE AND ELECTRIC PROPERTIES OF FULL DENSE SPECIMENS	723
15:30 15:45	Sang Whan Park	EFFECTS OF REACTION SINTERING PROCESS ON MECHANICAL PROPERTIES OF B <sub>4</sub> C COMPOSITES	302
15:45 16:00	Jean-Marc Heintz	DE-DENSIFICATION MECHANISMS OF OXIDES	562
16:00 16:15	Felix Quintero Martinez	HIGH CONTRAST AND ENDURING LASER MARKING OF ALUMINA	275
16:15 16:30	María Luisa Sanjuán	HIGH-TEMPERATURE REDOX PROCESSES IN Ce <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2-x</sub> PHASES PRODUCED BY LASER-ASSISTED DIRECTIONAL SOLIDIFICATION	211

<b>S 04 - NANOCOMPOSITES 1 - 09:00-10:30</b>			
<b>Chair: Csaba Balázs</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
09:00 09:30	Sergio Rivera <i>Invited Lecture</i>	FROM MULTIFUNCTIONAL POWDERS TO HIGH-END CERAMIC PRODUCTS	244
09:30 09:45	Monika Furko	AN ECONOMIC AND FACILE METHOD FOR GRAPHENE OXIDE PREPARATION FROM GRAPHITE POWDER	633
09:45 10:00	Pilar Miranzo	GRAPHENE NANOFILLERS/YTTRIUM-STABILIZED CUBIC ZIRCONIA COMPOSITES WITH ENHANCED THERMAL PERFORMANCE	374
10:00 10:15	Ondrej Hanzel	SILICON CARBIDE-GRAPHENE COMPOSITES WITH HIGH ELECTRICAL AND THERMAL CONDUCTIVITY	566
10:15 10:30	Victor Morales-Florez	SOL-GEL ALUMINA-GRAPHENE OXIDE CERAMIC MATRIX COMPOSITES	363

<b>S 04 - NANOCOMPOSITES 2 - 11:00-12:00</b>			
<b>Chair: Arturo Dominguez Rodriguez</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
11:00 11:30	Csaba Balázs <i>Invited Lecture</i>	MULTIFUNCTIONAL SILICON NITRIDE/GRAPHENE THICK COATINGS FOR NEW EMERGING APPLICATIONS	824
11:30 11:45	Rosalía Poyato	MICROSTRUCTURE AND TOUGHENING MECHANISMS IN ZIRCONIA COMPOSITES WITH DIFFERENT GRAPHENE-BASED NANOSTRUCTURES AND VARIOUS POWDER PROCESSING ROUTINES	274
11:45 12:00	Rafael Cano Crespo	HARDNESS AND FRACTURE TOUGHNESS OF ALUMINA AND ZIRCONIA COMPOSITES WITH DIFFERENT AMOUNTS OF REDUCED GRAPHENE-OXIDE SINTERED BY SPARK PLASMA SINTERING	757

<b>S 04 - NANOCOMPOSITES 3 - 14:30-16:30</b>			
<b>Chair: Sergio Rivera</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
14:30 14:45	Victor Morales-Florez	MECHANICAL PROPERTIES OF CERAMICS REINFORCED WITH ALLOTROPIC FORMS OF CARBON	677
14:45 15:00	Soukaina Lamnini	WEAR MECHANISM OF SPARK PLASMA SINTERED MWCNTS REINFORCED ZIRCONIA COMPOSITES UNDER DRY SLIDING CONDITIONS	453
15:00 15:15	Pedro Rivero-Antúnez	MWCNT INTRAGRANULAR REINFORCEMENT OF ALUMINA-BASED CERAMIC COMPOSITES PREPARED VIA SOL-GEL AND SPARK PLASMA SINTERING	243
15:15 15:30	Makoto Nanko	SELF-HEALING Ni/Al <sub>2</sub> O <sub>3</sub> NANOCOMPOSITES AS VERSATILE CERAMICS	347

<b>S 04 - ADVANCED TESTING - 09:00-10:30</b>			
<b>Chair: Richard Todd</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
09:00 09:30	Finn Giuliani <i>Invited Lecture</i>	STABLE FRACTURE OF CERAMIC INTERFACES AT THE MICRON SCALE	613
09:30 09:45	Takuma Takahashi	OBSERVATION OF INTERNAL STRUCTURE OF Al <sub>2</sub> O <sub>3</sub> CERAMICS BY OPTICAL COHERENCE TOMOGRAPHY AND ITS APPLICATION FOR NONDESTRUCTIVE INSPECTION	139
09:45 10:00	Pascal Reynaud	MECHANICAL BEHAVIOUR OF OXIDE-BASED CERAMIC MATRIX COMPOSITES AND DAMAGE ANALYSIS BY ACOUSTIC EMISSION	247
10:00 10:15	Henry Ronan	MECHANICAL PROPERTIES CHARACTERIZATION OF POLYCRYSTALLINE CERAMICS AT A LOCAL SCALE	561
10:15 10:30	Robert Danzer	RELIABILITY OF CERAMIC COMPONENTS - THEORETICAL CONCEPT AND PRACTICAL EXPERIENCE	703

<b>S 04 - MATERIALS FOR SEVERE ENVIRONMENTS 1 - 11:00-12:00</b>			
<b>Chair: Robert Danzer</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
11:00 11:30	Jingyang Wang <i>Invited Lecture</i>	MATERIAL INFORMATICS ACCELERATES INNOVATIVE DESIGN OF MULTIFUNCTIONAL THERMAL ENVIRONMENTAL BARRIER COATING MATERIALS	62
11:30 11:45	Frantisek Lofaj	MECHANICAL AND TRIBOLOGICAL PROPERTIES OF DIRECT CURRENT AND HIGH POWER IMPULSE MAGNETRON SPUTTERED HIPIMS Hf-Zr-Ta-CONTAINING CARBIDE COATINGS	425
11:45 12:00	Jacob Shiby Mathew	THE EFFECT OF GRAPHITE AND ZIRCONIA DISTRIBUTIONS ON THE TRIBOLOGICAL PROPERTIES OF PLASMA SPRAYED ALUMINA COATINGS	391

<b>S 04 - MATERIALS FOR SEVERE ENVIRONMENTS 2 - 14:30-16:30</b>			
<b>Chair: Jingyang Wang</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
14:30 14:45	Wei Pan	EUTECTIC CERAMIC COMPOSITE FOR THERMAL BARRIER COATINGS	973
14:45 15:00	Gustavo Costa	THERMODYNAMIC PROPERTIES OF GAS-CERAMIC COATINGS AND INGESTED CMAS CORRODENTS	714
15:00 15:15	Willy Kunz	PARTICULATE INDUCED SELF-HEALING MATERIALS FOR ENVIRONMENTAL BARRIER COATINGS	466
15:15 15:30	Ravisankar Naraparaju	HIGH TEMPERATURE OXIDATION BEHAVIOUR OF Nb AND HfO <sub>2</sub> COATINGS ON ZrB <sub>2</sub>	346
15:30 15:45	Daejong Kim	HYDROTHERMAL CORROSION BEHAVIOUR OF ENVIRONMENTAL BARRIER COATINGS FOR SILICON CARBIDE FUEL CLADDING APPLICATIONS OF LIGHT WATER REACTORS	501
15:45 16:00	Enrique Sánchez	SACCHARIDE-BASED FEEDSTOCKS TO OBTAIN THERMAL BARRIER COATINGS BY AQUEOUS SUSPENSION PLASMA SPRAYING	751
16:00 16:15	Dominika Madej	GAMMA RADIATION SHIELDING PROPERTIES OF REFRACTORY CONCRETE MATERIALS CONTAINING Ba-, Sr-, Fe-DOPED CEMENTS	411
16:15 16:30	Aleksei Utkin	THE FORMATION OF Ta-Ir REFRACTORY INTERMETALLICS BY SOLID-STATE SYNTHESIS FROM TANTALUM AND TANTALUM CARBIDE	96

S 06 - CERAMIC MEMBRANES 1 - 08:30-10:30			
Chair: Vincenzo Esposito			
Time	Name	Title	ID Abs
08:30 09:00	Alessandra Sanson <i>Invited Lecture</i>	KEY ISSUES IN THE MANUFACTURING OF PROTON CONDUCTIVE MULTILAYERS CERAMICS	210
09:00 09:15	Umberto Anselmi-Tamburini	ENHANCED LOW-TEMPERATURE PROTON CONDUCTIVITY IN SULFUR-DOPED, BULK NANOSTRUCTURED OXIDES	838
09:15 09:30	Eva Deronzier	UNDERSTANDING THE OXYGEN TRANSPORT MECHANISMS THROUGH A MIXED-CONDUCTOR MEMBRANE	683
09:30 09:45	Fanlin Zeng	OPTIMIZATION OF $Ce_{0.8}Gd_{0.2}O_{1.9}-FeCo_2O_4$ DUAL PHASE MEMBRANES WITH VARYING HOMOGENEITY AND GRAIN SIZE OF $FeCo_2O_4$	19
09:45 10:00	Cecilia Mortalò	STRUCTURAL AND MECHANICAL STABILITY OF $BaCe_{0.65}Zr_{0.2}O_{Y_{0.15}O_{3-\delta}}-Ce_{0.85}Gd_{0.15}O_{2-\delta}$ COMPOSITE HYDROGEN SEPARATION MEMBRANE UNDER IN-SITU REDUCING CONDITIONS	359
10:00 10:15	Elisa Mercadelli	PRODUCTION OF AN ALL-CERAMIC ASYMMETRIC MEMBRANE WITH SUPERIOR HYDROGEN PERMEATION	381

S 06 - CERAMIC MEMBRANES 2 - 11:00-12:00			
Chair: Alessandra Sanson			
Time	Name	Title	ID Abs
11:00 11:15	Ursula Gude	DEVELOPMENT OF A CHEMICALLY STABLE CARBONATE-CERAMIC MEMBRANE FOR $CO_2$ SEPARATION IN WATER-GAS-SHIFT REACTORS	584
11:15 11:30	Adrian Simon	DEVELOPMENT OF HIGHLY HYDROGEN SELECTIVE PALLADIUM-BASED MEMBRANES ON ASYMMETRIC POROUS, CERAMIC SUBSTRATES WITH HIGH SPECIFIC FLUX	178
11:30 11:45	Shotaro Tada	POLYMER-DERIVED GROUP III-NITRIDE CERAMICS WITH UNIQUE HYDROGEN STORAGE PROPERTIES	141

S 06 - NUCLEAR APPLICATIONS - 14:30-16:30			
Chairs: Olivier Guillon, Federico Smeacetto			
Time	Name	Title	ID Abs
14:30 15:00	Dirk Bosbach <i>Invited Lecture</i>	CERAMIC MATERIALS IN NUCLEAR WASTE MANAGEMENT	789
15:00 15:15	Sasa Novak	CEMENTED CARBIDES AS CANDIDATE MATERIALS FOR HIGH-HEAT-FLUX APPLICATION IN FUTURE FUSION REACTORS	326
15:15 15:30	Alexander Leide	ION IMPLANTATION, MICROMECHANICAL TESTING, AND RESIDUAL STRESSES IN REACTION-BONDED SILICON CARBIDE FOR FUSION REACTOR BLANKETS	443

<b>S 07 - FERROELECTRICS &amp; PIEZOELECTRICS 3 - 08:30-10:30</b>			
<b>Chair: Tadej Rojac</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
08:30 09:00	Jingfeng Li <i>Invited Lecture</i>	(K,Na)NbO <sub>3</sub> -BASED LEAD-FREE PIEZOCERAMICS: TOWARDS TEMPERATURE-INSENSITIVE HIGH PIEZOELECTRICITY	439
09:00 09:15	Myong Ho Kim	GIANT STRAIN OF LEAD-FREE BISMUTH FERRITE-BASED PIEZOCERAMICS	498
09:15 09:30	Jurij Koruza	ENHANCED THERMAL STABILITY IN QUENCHED LEAD-FREE (1-x)(Na <sub>1/2</sub> Bi <sub>1/2</sub> )TiO <sub>3</sub> -xBaTiO <sub>3</sub> PIEZOCERAMICS	892
09:30 09:45	Catherine Bishop	MULTI-PHASE FIELD FORMULATION FOR FERROELECTRICS NEAR THE POLYMORPHIC PHASE BOUNDARY: INSIGHTS INTO BZT-BCT	800
09:45 10:00	Pascal Marchet	TEXTURATION OF LEAD-FREE BaTiO <sub>3</sub> BASED PIEZOELECTRIC CERAMICS	885
10:00 10:15	Guoyang Ye	THE PROCESSING OF PURE KNN CERAMICS: TWO-STEP SINTERING VS CONVENTIONAL ONE-STEP SINTERING	33
10:15 10:30	Jürgen Rödel	FRACTURE BEHAVIOR OF LEAD-FREE KNN PIEZOELECTRIC CERAMICS	231

<b>S 07 - FERROELECTRICS &amp; PIEZOELECTRICS 4 - 11:00-12:00</b>			
<b>Chair: Jingfeng Li</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
11:00 11:30	Tadej Rojac <i>Invited Lecture</i>	COMPLEX INTERACTIONS BETWEEN DOMAIN WALLS AND PINNING CENTERS: IMPLICATIONS TO PIEZOELECTRIC NONLINEARITY AND HYSTERESIS	876
11:30 11:45	Lukas Riemer	DIELECTRIC AND PIEZOELECTRIC NON-LINEARITIES: DECRYPTING ELECTRO-MECHANICAL COUPLING OF RELAXOR-FERROELECTRICS	877
11:45 12:00	Adelina-Carmen Ianculescu	GRAIN SIZE-DEPENDENCE OF FUNCTIONAL PROPERTIES IN SOME BaTiO <sub>3</sub> -BASED CERAMICS	902

<b>S 07 - MULTIFERROICS AND MAGNETOELECTRICS - 14:30-16:30</b>			
<b>Chair: Catherine Elissalde</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
14:30 15:00	Miguel Algueró <i>Invited Lecture</i>	MULTIFERROIC CERAMIC MATERIALS FOR ROOM TEMPERATURE MAGNETOELECTRICITY: RECENT ADVANCES IN SINGLE-PHASE AND COMPOSITE APPROACHES	847
15:00 15:15	Stephane Cauberg	CRYSTAL CHEMISTRY AND MAGNETISM OF IRON-TUNGSTEN MIXED OXIDE	918
15:15 15:30	Premysl Vanek	GaV <sub>4</sub> S <sub>8</sub> AND GaV <sub>4</sub> Se <sub>8</sub> POWDERS AND CERAMICS FOR THE INVESTIGATION OF MULTIFERROIC SKYRMIONS	866
15:30 15:45	Teresa Jardiel	COMBINATION OF STRUCTURAL AND MICROSTRUCTURAL EFFECTS IN THE MULTIFERROIC RESPONSE OF Nd AND Ti CO-DOPED BiFeO <sub>3</sub> BULK CERAMICS	900
15:45 16:00	Uros Prah	MULTICALORIC PROPERTIES OF (1-x)Pb(Fe <sub>0.5</sub> Nb <sub>0.5</sub> )O <sub>3</sub> -xBiFeO <sub>3</sub> SOLID SOLUTIONS	880

<b>S 07 - FERROELECTRICS &amp; PIEZOELECTRICS 5 - 17:00-19:00</b>			
<b>Chair: Miguel Algueró</b>			
<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
17:00 17:15	Fazli Akram	EFFECT OF DIFFERENT PEROVSKITES ON THERMALLY-STABLE DIELECTRIC PROPERTIES OF BISMUTH FERRITE-BARIUM TITANATE CERAMICS	851
17:15 17:30	Michael Brova	ROLE OF ZnO-DOPANT IN SINTERING AND ELECTROMECHANICAL PROPERTIES OF HIGH COERCIVE FIELD LEAD ZINC NIOBATE BASED PIEZOELECTRICS	776
17:30 17:45	Haidee Mana-Ay	IMPROVED MICROSTRUCTURE AND FERROELECTRIC PROPERTIES IN B-SITE Ti <sup>4+</sup> -SUBSTITUTED (Bi <sub>0.86</sub> Sm <sub>0.14</sub> )FeO <sub>3</sub> POLYCRYSTALLINE CERAMICS	407
17:45 18:00	Goran Brankovic	ELECTRO-MECHANICAL COUPLING IN YSZ DUE TO REORIENTATION OF CATION-OXYGEN VACANCY CLUSTERS	921



## S 07 - FERROELECTRICS &amp; PIEZOELECTRICS 5 - 17:00-19:00

Time	Name	Title	ID Abs
18:00 18:15	Alexander Sigov	NEW TECHNIQUE FOR DEAD LAYER ANALYSIS IN THIN FILM FERROELECTRIC CERAMICS	872
18:15 18:30	Andrea Nesterovic	INFLUENCE OF Ba <sup>2+</sup> ADDITION ON STRUCTURE AND FUNCTIONAL PROPERTIES OF Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> PIEZOCERAMICS	949

## S 08 - GEOPOLYMERS AND CEMENTS 3 - 08:30-10:30

Chair: Maria Chiara Bignozzi			
Time	Name	Title	ID Abs
08:30 09:00	Kriven Waltraud <i>Invited Lecture</i>	QUALITY OF PRECURSORS AND NANOSTRUCTURAL EVOLUTION OF SILICATE BINDING PHASES IN SLAG-FLY ASH-METAKAOLIN-BASED BINDERS	958
09:00 09:15	Karine Goulart De Oliveira	GEOPOLYMERIC 3D-PRINTED STRUCTURES WITH ZEOLITES AND ACTIVE CARBON FOR WATER PURIFICATION	599
09:15 09:30	Leire Hernando Buruberrri	USE OF ANODIZING SLUDGE TO CONTROL THE POROSITY OF GEOPOLYMER FOAMS	560
09:30 09:45	Manuel Houmard	FREEZE-CASTING TECHNIQUE TO FABRICATE CEMENT PASTE STRUCTURES WITH ORIENTED POROSITY	549
09:45 10:00	Elettra Papa	SHAPING TECHNIQUES OF POROUS ALKALI BONDED CERAMICS FOR ADSORPTION APPLICATIONS	305
10:00 10:15	Marianne Saba	STUDY OF VARIOUS POROSITY RATIOS USING SODIUM AND POTASSIUM BASED ALKALI ACTIVATORS IN LEBANESE METAKAOLIN GEOPOLYMER MORTARS.	228
10:15 10:30	Paolo Scanferla	3D PRINTING OF GEOPOLYMERS: THE PATH TO INNOVATIVE CERAMIC COMPOSITES	200

## S 08 - GEOPOLYMERS AND CEMENTS 4 - 11:00-12:00

Chair: Isabella Lancellotti			
Time	Name	Title	ID Abs
11:00 11:15	Claudio Finocchiaro	APPLICATION OF NEURAL NETWORK FOR THE BEST VOLCANIC ACTIVATED MATERIALS FORMULATIONS	646
11:15 11:30	Alberto Conte	DEVELOPMENT OF ZEOLITE BASED BRAKE PADS FOR BRAKE DISC TECHNOLOGY	720
11:30 11:45	Agnès Smith	SINTERING OF YE'ELIMITE	171

**S 08 - INDUSTRIAL CERAMICS 5 AND INDUSTRIAL CERAMICS AND INDUSTRY 4.0 - 14:30-16:30****Chair: Servet Turan**

<b>Time</b>	<b>Name</b>	<b>Title</b>	<b>ID Abs</b>
14:30 15:00	Giuliana Bonvicini <i>Invited Lecture</i>	SUSTAINABILITY OF CERAMIC PROCESS: ENVIRONMENTAL IMPACT AND SILIFE PROJECT	793
15:00 15:30	Andrea Bresciani <i>Invited Lecture</i>	LATEST PROCESS INNOVATIONS IN CERAMIC TILES MANUFACTURING	778
15:30 15:45	Eva Magdalena Gualtieri	TOWARDS A CIRCULAR ECONOMY IN THE CERAMIC TILE INDUSTRY - CONSIDERING THE RAW MATERIALS ORIGIN AND TRANSPORTATION MODE IN NOVEL MATERIALS DESIGN	586
15:45 16:00	Vicente Sanz	GLAZED CERAMIC TILES WITH IMPROVED UPEC CLASSIFICATION	205
16:00 16:15	Patricia Rabelo Monich	UPCYCLING OF CONDITIONED MSWI BOTTOM ASH INTO POROUS CERAMICS BY MEANS OF STRONG OR WEAK ALKALI ACTIVATION	262
16:15 16:30	Pervin Gencoglu	A COMPARATIVE STUDY OF PHYSICAL PROPERTIES OF GYPSUMS AS A MOULD MATERIAL IN SANITARYWARE INDUSTRY	620



## Organizing Secretariat



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