

Suggested Program – Symposium N – High and Ultra High Temperature Ceramics

All presentations will be in Room Sonata 2

June 18 th - Monday			
Chairs: Jon Binner (University of Birmingham-UK) and Carolina Tallon (Virginia Tech-USA)			
Time	ID	Presentation	Presentation Time
8:30h	SN-1:IL01 (Invited)	Future Research Needs for Ultra-High Temperature Ceramics W. Fahrenholtz, Missouri University of Science and Technology	30 min
9:00h	SN-1:IL02 (Invited)	Exposure of high temperature ceramics to molten sand and combustion flows for gas turbine engine applications A. Nieto, M. Walock, M. Murugan, A. Ghoshal, U.S. Army Research Laboratory	30 min
9:30h	SN-1:IL03 (Invited)	Advances in the Processing and Characterization of UHTC-Composites for Aerospace D. Sciti, A. Vinci, P. Galizia, L. Silvestroni, L. Zoli, National Research Council of Italy	30 min
10:00h	SN-1:IL05 (Invited)	Study of UHTC Microstructures for Hypersonic Applications via Finite Element Method R. A. Angélico ⁽ⁱ⁾ , M. F. Dos Santos ⁽ⁱⁱ⁾ , V. F. Sciuti ⁽ⁱⁱⁱ⁾ , R. B. Canto ⁽ⁱⁱ⁾ , V. C. Pandolfelli ⁽ⁱⁱⁱ⁾ , ⁽ⁱ⁾ Universidade de São Paulo and ⁽ⁱⁱⁱ⁾ Universidade Federal de São Carlos	30 min
10:30h	Coffee-Break		
Chairs: Frédéric Roulet (Saint Gobain-France) and Sido Sinnema (Tata Steel-Netherlands)			
Time	ID	Presentation	Presentation Time
10:50h	SN-2:IL01 (Invited)	Arc Melted High Temperature Oxides: Recent Developments, Opportunities and Challenges P. Bonadia, G. Gelbmann, RHI Magnesita	20 min
11:10h	SN-2:IL02 (Invited)	The Wettability at High Temperatures in the Technological Development of Materials S. Ribeiro, Escola de Engenharia de Lorena	20 min
11:30h	SN-2:L01	Energy Savings in Iron and Steel Vessels by Refractory Lining Design M. F. Dos Santos ⁽ⁱ⁾ , M. G. G. Campos ⁽ⁱ⁾ , P. B. G. B. Pelissari ⁽ⁱ⁾ , E. Y. Sako ⁽ⁱⁱ⁾ , R. A. Angélico ⁽ⁱⁱⁱ⁾ , V. R. Salvini ^(iv) , V. C. Pandolfelli ⁽ⁱ⁾ , ⁽ⁱ⁾ Universidade Federal de São Carlos, ⁽ⁱⁱ⁾ Saint Gobain, ⁽ⁱⁱⁱ⁾ Universidade de São Paulo and ^(iv) FATEC Sertãozinho	20 min
11.50h	Plenary Talk 1		
Chairs: Victor C. Pandolfelli (Universidade Federal de São Carlos-Brazil) and Carl Zetterstrom (Imerys Aluminates-France)			
Time	ID	Presentation	Presentation Time
14:00h	SN-3:IL01 (Invited)	Why Should a Steel Producer Bother About Refractories S. Sinnema, Ceramics Research Centre, Tata Steel Europe	25 min
14:25h	SN-3:IL02 (Invited)	Extreme Temperature in Refractory Applications: Some Examples from the Field F. Roulet, L. San-Miguel, O. Francy, N. Boumahdi, I. Cabodi, Saint-Gobain CREE	25 min

14:50h	SN-3:IL03 (Invited)	Carbon Bonded Refractories Binding Systems: Technical, Economical and Environmental Challenges E. Gueguen, K. Hill, S. L. Cabral da Silva, RHI Magnesita	25 min
15:15h	SN-3:IL04 (Invited)	The Relevance of Carbon in Ceramics M. Braun, W. Boenigk, RÜTGERS Germany GmbH	25 min
15:40h	SN-3:L01	On the Non-Linear Mechanical Behavior of Carbon-Bonded Alumina at High Temperatures B. Luchini ⁽ⁱ⁾ , J. Grabenhorst ⁽ⁱ⁾ , J. Fruhstorfer ⁽ⁱ⁾ , V. C. Pandolfelli ⁽ⁱⁱ⁾ , C. G. Aneziris ⁽ⁱ⁾ , ⁽ⁱ⁾ Institute of Ceramics, Glass and Construction Materials - TU- Freiberg and ⁽ⁱⁱ⁾ Universidade Federal de São Carlos	20 min
16:00h Coffee-Break			
Chairs: Paschoal Bonadia (RHI-Magnesita-Brazil) and M.F. dos Santos (Universidade Federal de São Carlos – Brazil)			
Time	ID	Presentation	Presentation Time
16:30h	SN-4:IL01 (Invited)	High Performance Thermal Insulator Ceramic Foams with Tailored Microstructure P. B. G. B. Pelissari ⁽ⁱ⁾ , R. A. Angélico ⁽ⁱⁱ⁾ , V. R. Salvini ⁽ⁱⁱⁱ⁾ , V. C. Pandolfelli ⁽ⁱ⁾ , ⁽ⁱ⁾ Universidade Federal de São Carlos, ⁽ⁱⁱ⁾ Universidade de São Paulo and ⁽ⁱⁱⁱ⁾ FATEC Sertãozinho	20 min
16:50h	SN-4:L01	Macroporous Ceramics for Thermal Insulation at High Temperatures Derived from Greener and Ultrastable Liquid Foams T. Santos Junior ⁽ⁱ⁾ , C. I. Pereira ⁽ⁱ⁾ , V.R. Salvini ⁽ⁱⁱ⁾ , V. C. Pandolfelli ⁽ⁱ⁾ , ⁽ⁱ⁾ Universidade Federal de São Carlos and ⁽ⁱⁱ⁾ FATEC Sertãozinho	20 min
17:10h	SN-4:L02	Development and Testing of Exchangeable Carbon-Bonded Alumina Foam Filter Systems for the Continuous Casting of Steel T. Wetzig, S. Dudczig, J. Hubálková, C. G. Aneziris, TU Bergakademir Freiberg	20 min

June 19th - Tuesday			
Chairs: Bill Fahrenholtz (Missouri University of Science and Technology-USA) and Diletta Sciti (Institute of Science and Technology for Ceramics-Italy)			
Time	ID	Presentation	Presentation Time
8:30h	SN-5:IL01 (Invited)	High and Ultra-High Temperature Ceramic Matrix Composites J. Binner ⁽ⁱ⁾ , V. Rubio ⁽ⁱ⁾ , M. Porter ⁽ⁱ⁾ , A. D'Angio ⁽ⁱⁱ⁾ , W. Hillman ⁽ⁱ⁾ , ⁽ⁱ⁾ University of Birmingham and ⁽ⁱⁱ⁾ National Composites Centre	25 min
8:55h	SN-5:IL02 (Invited)	Material Design of and Processing of Sustainable Compositions in the Alumina-Calcium Field for Ultra High Temperature Applications C. Zetterstrom, C. Parr, Imerys Aluminates	25 min
9:20h	SN-5:IL03 (Invited)	Structural Stability of UHTCs at Extreme Environments D. D. Jayaseelan ⁽ⁱ⁾ , E. Zapata-Solvas ⁽ⁱⁱ⁾ , S. Grasso ⁽ⁱⁱⁱ⁾ , C. Iasi ⁽ⁱ⁾ , E. Valenzuela ⁽ⁱ⁾ , O. Cedillos-Barraza ^(iv) , W.E. Lee ⁽ⁱⁱⁱ⁾ , ⁽ⁱ⁾ Kingston University London, ⁽ⁱⁱ⁾ Imperial College London, ⁽ⁱⁱⁱ⁾ Queen Mary University London and ^(iv) The University of Texas at El Paso	25 min
9:45h	SN-5:IL04 (Invited)	Tungsten-Based Ceramic Composites in Extreme Fusion Reactor Environments S. Humphry-Baker ⁽ⁱ⁾ , G. Smith ⁽ⁱⁱ⁾ , W. Lee ⁽ⁱ⁾ , L. Vanderperre ⁽ⁱ⁾ , ⁽ⁱ⁾ Imperial College London and ⁽ⁱⁱ⁾ Tokamak Energy Ltd	25 min

10:10h	SN-5:L01	Mechanical Properties and Oxidation Resistance of ZrB₂-SiC Composites Prepared with Nano-Sized Particles by Spark Plasma Sintering X. Jin ⁽ⁱ⁾ , P. Li ⁽ⁱⁱ⁾ , X. Wang ⁽ⁱ⁾ , X. Fan ⁽ⁱ⁾ , T. Wang ⁽ⁱ⁾ , ⁽ⁱ⁾ Xi'an Jiaotong University and ⁽ⁱⁱ⁾ North University of China	20 min
10:30h Coffee Break			
Chairs: Dietmar Koch (German Aerospace Center-Germany) and Andy Nieto (U.S. Army Research Laboratory-USA)			
Time	ID	Presentation	Presentation Time
10:50h	SN-6:IL01 (Invited)	Creep of HfB₂-Based UHTCs up to 2000°C or How Important Structural/Dimensional Stability Could Be on Hypersonic Applications E. Zapata-Solvas ⁽ⁱ⁾ , D. Gomez-Garcia ⁽ⁱⁱ⁾ , A. Dominguez-Rodriguez ⁽ⁱⁱⁱ⁾ , W. Lee ⁽ⁱ⁾ , ⁽ⁱ⁾ Imperial College London and ⁽ⁱⁱ⁾ Universidad de Sevilla	20 min
11:10h	SN-6:IL02 (Invited)	Spark Plasma Sintering of Textured GNPs reinforced Advanced Ceramic Matrices J. Renotte, G. Bister, J. Erauw, V. Dupont, V. Lardot, F. Cambier, Belgian Ceramic Research Center	20 min
11:30h	SN-6:L01	Cost-Effective Production and Oxidation Protection of CFCC's for Moderate and High Temperature Applications S. Martelli, D. De Bastiani, Vesuvius USA	20 min
11:50h Plenary Talk 2			
Chairs: Davide Bigoni (University of Trento-Italy) and Carmen Baudin (Instituto de Cerámica y Vidrio-Spain)			
Time	ID	Presentation	Presentation Time
14:00h	SN-7:IL01 (Invited)	Design Silicon Nitride Ceramics for Energy Technology Applications H. T. Lin, Guangdong University of Technology	25 min
14:25h	SN-7:IL02 (Invited)	Progress of Silicon Nitride Ceramics, Microstructure Evolution and Mechanical/Thermal Properties T. Ohji, National Institute of Advanced Industrial Science and Technology (AIST)	25 min
14:50h	SN-7:IL03 (Invited)	New Nitrides and Carbides for High Temperature Application P. Sajgalik, Institute of Inorganic Chemistry SAS	25 min
15:15h	SN-7:IL04 (Invited)	Thermal Transport in SiBN Ceramics: Density Functional Theory Calculations and Molecular Dynamics Simulations P. Kroll, UT Arlington	25 min
15:40h	SN-7:IL05 (Invited)	Hermetic Ceramic Feedthroughs for Sensors Used in Extreme Environments M. Murray, A. Patnaik, V. Sarker, J. Antalek, A. Bakshi, D. Bray, Morgan Advanced Materials	20 min
16:00h Coffee Break			
Chairs: Erwan Gueguen (RHI-Magnesita Refractories-Germany) and Ana P. Luz (Universidade Federal de São Carlos-Brazil)			
Time	ID	Presentation	Presentation Time
16:30h	SN-8:IL01 (Invited)	A New Non-Classified, Pollution Resistant High Temperature Insulation Fibre A. Wynn, G. Jubb, F. Modarresifar, Morgan Advanced Materials – Thermal Products Division	20 min
16:50h	SN-8:IL02 (Invited)	Eco Design of Insulating Ceramic Foams for High Temperature Application V. R. Salvini ⁽ⁱ⁾ , V. C. Pandolfelli ⁽ⁱⁱ⁾ , J. A. Rodrigues ⁽ⁱⁱ⁾ , P. B. G. B. Pelissari ⁽ⁱⁱⁱ⁾ , T. Santos Junior ⁽ⁱⁱⁱ⁾ , ⁽ⁱ⁾ FATEC Sertãozinho and ⁽ⁱⁱ⁾ Universidade Federal de São Carlos	20 min

17:10h	SN-8:IL03 (Invited)	High Temperature Ceramic Coatings for Energy Saving Applications E. Y. Sako ⁽ⁱ⁾ , V. C. Pandolfelli ⁽ⁱⁱⁱ⁾ , P. B. G. B. Pelissari ⁽ⁱⁱⁱ⁾ , C. E. de Meo ⁽ⁱⁱⁱ⁾ , ⁽ⁱ⁾ Saint Gobain and ⁽ⁱⁱ⁾ Universidade Federal de São Carlos	20 min
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June 20th – Wednesday

Chairs: Bill Lee (Imperial College-UK) and Hua-Tay Lin (Guangdong University of Technology-China)

Time	ID	Presentation	Presentation Time
8:30h	SN-9:IL01 (Invited)	Multi-Scale Porous UHTCs: Dual Approach to Passive Cooling Components Design and Manufacturing C. Tallon, Virginia Tech	25 min
8:55h	SN-9:IL02 (Invited)	Sol-Gel Processing for Porous Ultra-High Temperature Ceramics G. J. Zhang ⁽ⁱ⁾ , F. Li ⁽ⁱ⁾ , X. Huang ⁽ⁱⁱⁱ⁾ , ⁽ⁱ⁾ Donghua University and ⁽ⁱⁱⁱ⁾ Shanghai Institute of Ceramics	25 min
9:20h	SN-9:IL03 (Invited)	Manufacturing of Damage Tolerant Fiber Reinforced Ceramic Composites with SiC and UHTC Based Matrices via Reactive Melt Infiltration D. Koch, M. Küttemeyer, B. Mainzer, German Aerospace Center	25 min
9:45h	SN-9:IL04 (Invited)	Characteristics of UHTC Composites and Coatings Fabricated by Reactive Melt Infiltration Method S. Dong, X. Chen, C. Xue, Y. Kan, H. Zhou, D. Ni, Shanghai Institute of Ceramics, Chinese Academy of Sciences	25 min
10:10h	SN-9:IL05 (Invited)	ZrB₂-SiC Laminates Produced by Aqueous Tape Casting with Low Binder Concentration R. M. Rocha, F. G. Petraconi, C. C. P. Rita, F. F. Sene, Instituto de Aeronautica e Espaço	20 min

10:30h Coffee Break

Chairs: Sebastião Ribeiro (Universidade de São Paulo-Brazil) and Eric Y. Sako (Saint Gobain-Brazil)

Time	ID	Presentation	Presentation Time
10:50h	SN-10:IL01 (Invited)	Slag Corrosion of Steelmaking Refractories – The Use of Thermodynamic Simulation Models A. G. Tomba Martinez, Instituto de Investigación em Ciencia y Tecnología de Materiales	20 min
11:10h	SN-10:IL02 (Invited)	CA₆ Reinforcing Role in High-Alumina Refractory Castables Containing CAC or CaCO₃ as Binders A. P. Luz ⁽ⁱ⁾ , L. Consoni ⁽ⁱ⁾ , A. H. G. Gabriel ⁽ⁱ⁾ , C. G. Aneziris ⁽ⁱⁱⁱ⁾ , V. C. Pandolfelli ⁽ⁱ⁾ , ⁽ⁱ⁾ Universidade Federal de São Carlos and ⁽ⁱⁱⁱ⁾ TU Bergakademie Freiberg	20 min
11:30h	SN-10:IL03 (Invited)	Aluminum Industry Challenge: “Lower” Temperature Applications with High Technological Demands M. Braulio ⁽ⁱ⁾ , V. C. Pandolfelli ⁽ⁱⁱⁱ⁾ , ⁽ⁱ⁾ 4Cast Consulting and ⁽ⁱⁱⁱ⁾ Universidade Federal de São Carlos	20 min

11:50h Plenary Talk 3

Chairs: Victor C. Pandolfelli (Universidade Federal de São Carlos-Brazil) and Ricardo A. Angélico (Universidade de São Paulo-Brazil)

Time	ID	Presentation	Presentation Time
14:00h	SN-11:IL01 (Invited)	Constitutive Modelling of Refractories at Liquid Steel Temperature D. Bigoni, University of Trento	25 min

14:25h	SN-11:IL02 (Invited)	Thermomechanical Behaviour of Refractories, from Model Materials to Industrial Ones M. Huger , Université de Limoges	25 min
14:50h	SN-11:IL03 (Invited)	Fracture Energy, R-Curve Behaviour and Resistance to Crack Propagation in Refractory Ceramics J. A. Rodrigues , R. V. Maginador, R. B. Canto, Universidade Federal de São Carlos	25 min
15:15h	SN-11:IL04 (Invited)	Materials Formulated in the ZrO₂-MgO-CaO System for Advanced Structural Applications C. Baudin , A. Silva, P. Pena, Instituto de Cerámica y Vidrio - CSIC	25 min
15:40h	SN-11:L01	Application of Refined Digital Image Correlation for the Investigation of the Fracture Behaviour of Magnesia-Based Refractories I. Khlifi⁽ⁱ⁾ , O. Pop ⁽ⁱ⁾ , J. Dupre ⁽ⁱⁱⁱ⁾ , P. Doumalin ⁽ⁱⁱⁱ⁾ , M. Huger ⁽ⁱ⁾ , ⁽ⁱ⁾ Université de Limoges and ⁽ⁱⁱ⁾ Université de Poitiers	20 min
16:00h Coffee Break			
Chairs: Bruno Luchini (TU Bergakademie Freiberg-Germany) and Rosa M. Rocha (Instituto de Aeronáutica e Espaço-Brazil)			
Time	ID	Presentation	Presentation Time
16:30h	SN-12:IL01 (Invited)	New Types of Chrome-free Refractories for the Copper Production H. Jansen , REFRATECHNIK Steel	20 min
16:50h	SN-12:L01	Magnesium Borate Fibers by Electrospinning E. Storti⁽ⁱ⁾ , P. Colombo ⁽ⁱⁱⁱ⁾ , C. G. Aneziris ⁽ⁱ⁾ , ⁽ⁱ⁾ TU Bergakademie Freiberg and ⁽ⁱⁱⁱ⁾ Università Studi di Padova	20 min
17:10h	SN-12:IL02 (Invited)	Effect of Reinforcement Additions on Mechanical, Thermal, Oxidation and Ablation Properties of ZrB₂ Based Ultra-High Temperature Ceramic Composites S. Kashyap ⁽ⁱ⁾ , M. Mallik ⁽ⁱⁱ⁾ , R. Mitra⁽ⁱ⁾ , ⁽ⁱ⁾ Indian Institute of Technology Kharagpur and ⁽ⁱⁱ⁾ National Institute of Technology Durgapur	20 min
17:30h	SN-12:L02	Production of Ultra-High Temperature Diboride Nanoceramics by Magnesiothermic Combustion Synthesis M. Jalaly , Iran University of Science and Technology	20 min

Poster Session - Symposium N - High and Ultra High Temperature Ceramics

June 18 th – Monday – 17:30h	
ID	Poster
14-026	<p align="center">Is it Possible to Sinter Binderless Si₃N₄ Bodies for Metalworking Purpose?</p> <p>M. Filgueira⁽ⁱ⁾, A. L. Nascimento⁽ⁱ⁾, D. Souza⁽ⁱ⁾, R. S. Guimarães⁽ⁱ⁾, C. Santos⁽ⁱⁱ⁾, ⁽ⁱ⁾Universidade Estadual do Norte Fluminense and ⁽ⁱⁱⁱ⁾Universidade Estadual do Rio de Janeiro</p>
14-044	<p align="center">Evaluation of SiC Sintering via Liquid Phase Using as Additive the Systems TiO₂/Al₂O₃ and TiO₂/Y₂O₃</p> <p>M. R. Oliveira, S. Ribeiro, Escola de Engenharia de Lorena</p>
14-059	<p align="center">Effect of the Adhered Ladle Slag on the Decarburization of MgO-C Bricks</p> <p>M. N. Moliné⁽ⁱ⁾, P. Galliano⁽ⁱⁱⁱ⁾, A. G. Tomba Martinez⁽ⁱ⁾, ⁽ⁱ⁾Instituto de Investigación em Ciencia y Tecnología de Materiales and ⁽ⁱⁱⁱ⁾Center for Industrial Research</p>
14-069	<p align="center">Analysis of Resistance to Thermal Shock and Fracture Energy of High Alumina Refractory</p> <p>J. C. M. Oliveira, F. J. S. Silva, E. Fagury Neto, A. A. Rabelo, Universidade Federal do Sul e Sudeste do Pará</p>
14-076	<p align="center">Development of Thermal Spray System of Ceramic Powder – Using Plasma Torch of Long Arc</p> <p>R. J. da Silva, C. C. P. Rita, H. S. Maciel, G. Petraconi Filho, Instituto Tecnológico de Aeronáutica</p>
14-077	<p align="center">Ceramic Covering of SiO₂ by Using a Long Arc Thermal Plasma Torch</p> <p>R. J. da Silva, C. C. P. Rita, H. S. Maciel, G. Petraconi Filho, Instituto Tecnológico de Aeronáutica</p>
14-083	<p align="center">Influence of the Addition of Man-Made Ceramic Fiber on the Physical Properties of Refractory Concretes</p> <p>R. L. Ribeiro, G. F. B. Lenz e Silva, Escola Politécnica da Universidade de São Paulo</p>
14-086	<p align="center">Thermal Conductivity Study of Zirconia Co-Doped with Ytria and Niobia for TBC Application</p> <p>R. J. Takahashi⁽ⁱ⁾, J. M. K. Assis⁽ⁱⁱⁱ⁾, F. P. Neto⁽ⁱⁱⁱ⁾, D. A. P. Reis⁽ⁱ⁾, ⁽ⁱ⁾Universidade Federal de São Paulo and ⁽ⁱⁱⁱ⁾Instituto de Aeronáutica e Espaço</p>
14-089	<p align="center">Microstructure Characteristics of EB-PVD Perovskite Thermal Barrier Coatings</p> <p>B. Vasile⁽ⁱ⁾, V. A. Surdu⁽ⁱⁱⁱ⁾, A. Birca⁽ⁱ⁾, O. Vasile⁽ⁱ⁾, E. Andronescu⁽ⁱ⁾, R. Trusca⁽ⁱ⁾, R. Piticescu⁽ⁱⁱⁱ⁾, A. Sobetkii⁽ⁱⁱⁱ⁾, ⁽ⁱ⁾Polytechnical University (Faculty of Appl. Chem. & Mater. Science), ⁽ⁱⁱⁱ⁾University Politechnica of Bucharest and ⁽ⁱⁱⁱ⁾Development Institute for Non-Ferrous and Rare Metals (IMNR)</p>

June 19th – Tuesday – 17:30h

ID	Poster
14-031	Brazilian Refractory Grade Bauxite: A New Alternative to Refractories Makers and Users A. L. Pereira, M. A. dos Reis, L. L. H. C. Ferreira, P. M. Nakachima, Mineração Curimbaba
14-032	Densification and Microstructure of Si₃N₄-TiN Ceramic Composites T. S. Ferreira ⁽ⁱ⁾ , F. M. S. Carvalho ⁽ⁱⁱⁱ⁾ , C. C. Guedes-Silva ⁽ⁱ⁾ , ⁽ⁱ⁾ Instituto de Pesquisas Energéticas e ⁽ⁱⁱ⁾ Nucleares and Universidade de São Paulo
14-045	Effect of MgO Addition on Mullite Synthesis “In Situ” T. A. Olcoski ⁽ⁱ⁾ , A. S. A. Chinelatto ⁽ⁱ⁾ , A. L. Chinelatto ⁽ⁱ⁾ , R. E. P. Salem ⁽ⁱⁱ⁾ , ⁽ⁱ⁾ Universidade Estadual de Ponta Grossa and ⁽ⁱⁱⁱ⁾ Universidade de São Paulo
14-060	Multicriteria Optimization of Furnace Thermal Insulation Lining P. B. G. B. Pelissari ⁽ⁱ⁾ , D. P. Santos ⁽ⁱ⁾ , M. F. dos Santos ⁽ⁱ⁾ , M. Moreira ⁽ⁱ⁾ , V. R. Salvini ⁽ⁱⁱⁱ⁾ , R. F. Mello ⁽ⁱⁱⁱ⁾ , V. C. Pandolfelli ⁽ⁱ⁾ , ⁽ⁱ⁾ Universidade Federal de São Carlos, ⁽ⁱⁱ⁾ FATEC Sertãozinho and ⁽ⁱⁱⁱ⁾ Universidade de São Paulo
14-070	The Insulation and Safety Layer Function in the Performance of Steel Ladles M. G. G. Campos ⁽ⁱ⁾ , M. F. dos Santos ⁽ⁱ⁾ , P. B. G. B. Pelissari ⁽ⁱ⁾ , E. Y. Sako ⁽ⁱⁱ⁾ , R. A. Angélico ⁽ⁱⁱⁱ⁾ , V. C. Pandolfelli ⁽ⁱ⁾ , ⁽ⁱ⁾ Universidade Federal de São Carlos, ⁽ⁱⁱ⁾ Saint Gobain and ⁽ⁱⁱⁱ⁾ Universidade de São Paulo
14-084	Processing and Characterization of Cf/C Composites with ZrB₂ and ZrC Addition R. M. Rocha ⁽ⁱ⁾ , L. C. Pardini ⁽ⁱⁱⁱ⁾ , M. A. M. Souza ⁽ⁱ⁾ , ⁽ⁱ⁾ Instituto de Aeronáutica e Espaço and ⁽ⁱⁱ⁾ Instituto de Ciencia e Tecnologia Aeroespacial
14-087	Ablative Properties of ZrB₂-Based Ceramic Materials Tested in a Hypersonic Plasma Wind Tunnel C. C. P. Rita ⁽ⁱ⁾ , T. M. B. Campos ⁽ⁱ⁾ , F. R. Caliar ⁽ⁱ⁾ , R. M. Rocha ⁽ⁱⁱ⁾ , A. M. Essiptchouk ⁽ⁱⁱⁱ⁾ , G. Petraconi Filho ⁽ⁱ⁾ , ⁽ⁱ⁾ Instituto Tecnológico de Aeronáutica, ⁽ⁱⁱ⁾ Instituto de Aeronautica e Espaço and ⁽ⁱⁱⁱ⁾ Universidade Estadual Paulista
14-090	Investigation of the Ablation Process of ZrB₂-SiC Materials by Mass Spectrometry C. C. P. Rita ⁽ⁱ⁾ , F. S. Miranda ⁽ⁱ⁾ , R. J. da Silva ⁽ⁱ⁾ , R. M. Rocha ⁽ⁱⁱ⁾ , A. M. Essiptchouk ⁽ⁱⁱⁱ⁾ , G. Petraconi Filho ⁽ⁱ⁾ , ⁽ⁱ⁾ Instituto Tecnológico de Aeronáutica, ⁽ⁱⁱ⁾ Instituto de Aeronautica e Espaço and ⁽ⁱⁱⁱ⁾ Universidade Estadual Paulista

June 20 th – Wednesday - 17:30h	
ID	Poster
14-025	Processing and Characterization of a Novel CBN/Nb-Ni Cutting Tool Material M. Filgueira ⁽ⁱ⁾ , M. P. Oliveira ⁽ⁱ⁾ , R. S. Guimarães ⁽ⁱ⁾ , R. A. Barros ⁽ⁱ⁾ , M. M. Karimi ⁽ⁱⁱⁱ⁾ , U. U. Gomes ⁽ⁱⁱⁱ⁾ , ⁽ⁱ⁾ Universidade Estadual do Norte Fluminense and ⁽ⁱⁱⁱ⁾ Universidade Federal do Rio Grande do Norte
14-058	Sialon-Based Composites Prepared from the Aluminium Oxynitride SHS-Derived Powders M. Bucko, AGH University Science and Technology
14-065	Impact of Thermal Coatings on the Optimization of an Industrial Furnace C. E. de Meo ⁽ⁱ⁾ , V. C. Pandolfelli ⁽ⁱ⁾ , E. Y. Sako ⁽ⁱⁱ⁾ , P. B. G. B. Pelissari ⁽ⁱ⁾ , R. Béttega ⁽ⁱ⁾ , ⁽ⁱ⁾ Universidade Federal de São Carlos and ⁽ⁱⁱ⁾ Saint Gobain
14-080	Evaluation of the Use of Hydraulic Alumina for the Production of Calcium Hexaluminate V. M. C. Leite ⁽ⁱ⁾ , E. P. Gonçalves ⁽ⁱ⁾ , R. Salomão ⁽ⁱⁱ⁾ , I. R. Oliveira ⁽ⁱ⁾ , ⁽ⁱ⁾ Universidade do Vale do Paraíba and ⁽ⁱⁱ⁾ Universidade de São Paulo
14-085	Dense HfC with High Fracture Toughness Through Microstructure Design Using a Novel SiCN-C Sintering System N. Ni, Shanghai Jiao Tong University
14-088	Hypersonic Plasma Wind Tunnel Testing of Ceramic Composite Based on ZrB₂-SiC C. C. P. Rita ⁽ⁱ⁾ , F. S. Miranda ⁽ⁱ⁾ , R. M. Rocha ⁽ⁱⁱ⁾ , T. M. B. Campos ⁽ⁱ⁾ , A. M. Essiptchouk ⁽ⁱⁱⁱ⁾ , G. Petraconi Filho ⁽ⁱ⁾ , ⁽ⁱ⁾ Instituto Tecnológico de Aeronáutica, ⁽ⁱⁱ⁾ Instituto de Aeronautica e Espaço and ⁽ⁱⁱⁱ⁾ Universidade Estadual Paulista
14-091	Graphene Oxide and Multi Walled Carbon Nanotubes Introduced in Al₂O₃-SiC-SiO₂-C Refractory Castable Used in Blast Furnace Trough: Effects on Rheology and High-Temperature Properties N. R. Oliveira Jr ⁽ⁱ⁾ , M. A. Brito ⁽ⁱ⁾ , F. Ribeiro ⁽ⁱⁱⁱ⁾ , C. Furtado ⁽ⁱⁱⁱ⁾ , A. P. Santos ⁽ⁱⁱⁱ⁾ , M. R. F. Fernandes ⁽ⁱⁱⁱ⁾ , ⁽ⁱ⁾ RHI Magnesita, ⁽ⁱⁱⁱ⁾ Centro de Desenvolvimento de Tecnologia Nuclear and ⁽ⁱⁱⁱ⁾ Universidade Católica de Minas Gerais