

Curriculum vitae et studiorum

SONIA CONTE



Nationality: Italian
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WORKING EXPERIENCES

Contract type: **Postdoctoral fellowship, B type**
Work contract: created by the Institute of Science and Technology of Ceramic Materials - National Research Council (ISTEC-CNR), as part of the research program: Traditional Ceramics: New Technologies and Innovative Materials: PRIN 2017 - **MiReLaP PROJECT:** Mineral reactivity, a key to understand large-scale processes: from rock forming environments to solid waste recovering / lithification. CUP: B54I19000250001. Contract ISTEC Protocol CNR 0002152/2019 of 10/21/2019

Period: **21/10/2019 – today**

Place: ISTEC-CNR, Faenza (RA).

Activities: Incorporation of urban and industrial waste into ceramic mixtures: mineralogical transformations as a key to understanding the inertization-mobilization mechanisms of the elements during firing and designing new formulations with high chemical stability.

Contract type: **Professionalizing fellowship**
Work contract: created by the Institute of Science and Technology of Ceramic Materials - National Research Council (ISTEC-CNR), as part of the Emilia Romagna Regional Project POR-FESR 2014-2020 - Title: **HIGH PERFORMANCE ENCLOSURE** - "Innovative, adaptive and sustainable systems for the high energy performance building envelope" CUP: J42F17000130009. Contract Prot. ISTEC CNR n.588 of 20/03/2019

Period: 3/04/2018 – 20/10/2019

Place: ISTEC-CNR, Faenza (RA).

Activities: Selection, study and characterization of fluids capable of improving the technological, thermal and thermo-hygrometric performance of materials and systems used in the cladding of buildings.

Contract type: **Professionalizing fellowship**
Work contract: created by the Institute of Science and Technology of Ceramic Materials - National Research Council (ISTEC-CNR), as part of the Emilia Romagna Regional Project POR-FESR 2014-2020 - Title: "**MATER_SOS** - Sustainable materials for restoration and construction of new buildings "CUP E32I16000020007. Contract Prot. ISTEC CNR n.1295 of 03/04/2017

Period: **3/04/2017 – 2/04/2018**

Place: ISTEC-CNR, Faenza (RA).

Activities: Processes for the surface functionalization of ceramics and building components. Mechanical and functional optical properties of the surfaces after deposition of nanostructured coatings for wettability control. Design of self-cleaning, anti-soiling surfaces with high durability.

Contract type: **Ministerial Internship of MiBACT**
Work contract: created by the Ministry of Cultural Heritage and Activities and Tourism (MiBACT), as part of the project: Training internships for 130 young people up to 29 years of age. Circular 11 MiBACT-DG-ER. REP. Decrees 02/03/2016 N ° 29.
Period: **1st April – 30 September 2016**
Place: **National Archaeological Museum of Florence**
Activities: Trainee directly for the Director of the museum, Dr. Mario Iozzo.
-Participation in the scientific direction of the exhibition “Winckelmann, Florence and the Etruscans. The Father of Archeology in Tuscany ”, also collaborating on the organizational and bureaucratic aspects relating to the loan practices of the works and insurance documentation;
- Collaboration in the organization of the educational exhibition "Games and competitions ... from Antiquity to the Museum", organized as part of the activities provided by the National Association of Families at the Museum;
-Collaboration with the Exhibitions Office, through the preparation of technical-scientific and conservative files of Greek, Magno-Greek, Etruscan, Italic and Roman finds on loan from the Archaeological Museum to other museum institutions for temporary exhibitions;
- Drafting of inventory sheets (on the ministerial computerized program) of the 80 Greek, Magno-Greek, Italic and Roman finds from the G. Colombo Collection, acquired by the State for the Museum.

Contract type: **Post-doc research grant**
Work contract: Research fellowship within the ARLR_RIC_LOC_14_01 project created by the University of Turin. Prot. N. 318 of 26/06/2015
Period: **1st July – 1st October 2015**
Place: Department of Earth Sciences, University of Turin.
Title of the project: *PROTOHISTORIC GLASS MATERIALS: CHEMICAL CHARACTERIZATION AND STUDY OF TRACE ELEMENTS*
Supervisor: Prof. Rossella Arletti
Activities: Determination of the major, minor and trace elements present in protohistoric glass materials by (E) SEM-EDS, EMPA, XRPD, LA-ICPMS analyses, for chemical and technological characterization and the study of the artefacts provenance.

Contract type: **CO.CO.CO. (collaboration agreement)**
Work contract: created by the University of Messina. Prot. N. 57572 of 12/09/2014
Period: **12th September – 12th November 2014**
Place: Department of Physics and Earth Sciences of Messina.
Title of the project: X-ray diffraction and analysis of minor and trace elements of microporous materials and silicate glasses.
Supervisor: Prof. Simona Quartieri
Activities: X-ray diffraction and analysis of minor and trace elements of microporous materials and silicate glass through XRD and LA-ICPMS, for the chemical and mineralogical characterization of ancient and modern materials.

RESEARCH ACTIVITIES and SCIENTIFIC SKILLS

Activities: **Design, coordination and performance of activities in the context of technical / scientific consultancy contracts and technology transfer with various companies; author of technical and scientific reports; speaker at the Client of the various projects.**

Scientific skills within the study of: DESIGN AND DEVELOPMENT OF MATERIALS, EXECUTION OF ANALYSES AND TECHNOLOGICAL TESTS WITH INTERPRETATION OF THE RESULTS, WITH PARTICULAR REFERENCE TO MINERALOGICAL ANALYSIS AND

CALCULATIONS OF THE PHYSICAL PROPERTIES OF THE LIQUID PHASE PRESENT AT HIGH TEMPERATURE IN BODIES OF PORCELAIN STONEWARE.

IMPROVEMENT OF SCRATCH RESISTANCE OF LAPED CERAMIC TILES

Design and coordination of activities, execution of analysis and technological tests with interpretation of the results relating to the study of porcelain stoneware and the corresponding scratched surfaces (diffraction, optical and electronic microscopy, profilometer, image analysis, ...).

INNOVATIVE CERAMIC SLABS WITH HIGH CONTENT OF INDUSTRIAL WASTE PRODUCED WITH ADVANCED AND ECO-SUSTAINABLE SOLUTIONS

Design and coordination of activities, execution of analyses and technological tests with interpretation of the results relating to the study and characterization of raw materials, scraps and mixtures for porcelain stoneware (raw and fired). Objective: production of large ceramic slabs with mixtures containing secondary raw materials (various types of waste) with technological characteristics suitable for partially and / or totally replacing the raw materials currently in use in porcelain stoneware.

ECOTILE: ECO-SUSTAINABLE CERAMIC PRODUCT WITH OPTIMIZATION OF PRODUCTION PARAMETERS AND USE OF NATIONAL RAW MATERIALS

Design and coordination of activities, design and development of new mixtures, execution of analysis and technological tests with interpretation of the results relating to the study and characterization of national raw materials and related mixtures for porcelain stoneware obtained (raw and fired). Objective: creation of an eco-sustainable ceramic product with optimization of production parameters and use of national raw materials (ECOTILE)

Type of qualification::

Period:

Project:

Participant in the activities

17 February – 22 February 2020.

Experiments at the ELETTRA-SINCROTRONE beam line in Trieste. VUO EXPERIMENT - Proposal - 20195184.

Scientific Direction:

Activities:

Dr. Ardit Matteo (Department of Physics and Earth Sciences, University of Ferrara)

Synthesis in the laboratory of perovskites with Ca-Ti-Ge formula with different doping, in the previous months. High temperature experiments at ELETTRA in February 2020 for the study of perovskites synthesized in the laboratory.

Type of qualification::

Period:

Project:

Participant in the activities

28 June 2018 – present

Bilateral CNR: GAE P0000279, UO 000.301 Scientific Cooperation Agreement CNR / HCST-NRCD (Jordan) biennium 2018-2019 - GUALTIERI / ABZAKH Project, entitled: "CONSTRUCTIONS IN RAW EARTH: STUDY, RECOVERY, AND INNOVATION IN MATERIALS AND TECHNIQUES HISTORICAL BUILDINGS ". Objective: to formulate "innovative" mixtures compatible with ancient artefacts.

Scientific Direction:

Activities:

Dr. Sabrina Gualtieri (Italy), Dr. S. M. Abzakh (Jordan)

First year: Sampling of raw materials, raw earth bricks and plasters in selected Jordanian sites, characterization by invasive and non-invasive techniques (microstructural, chemical and physical investigations) of the materials taken.

Type of qualification::

Period:

Project:

Participant in the activities

24 July 2017 – 27 September 2018

Technical / scientific consultancy contract and technology transfer N. CO-2017/08 with United National Industrial Development Organization - UNIDO entitled: "CAPACITY-BUILDING FOR INDUSTRIAL RESEARCH AND DEVELOPMENT IN RWANDA" - Project number 150442 (SAP ID) - Testing of Rwandan raw materials to assess their appropriateness for the production of ceramic tiles and sanitaryware.

Scientific Direction: Dr. Chiara Zanelli
Activities: Execution of analysis and technological tests with interpretation of the results, see Technical Report RT -2017-89, 12 October 2018 - "Testing of Rwandan raw materials to assess their appropriateness for the production of ceramic tiles and sanitaryware" Prot. ISTECCNR - N ° 0002163 of 12/10/2018.

Type of qualification: **Participant in the activities**
Period: **24 February – 27 February 2018.**
Project: Experiments at the beamline of the EUROPEAN SYNCHROTRON RADIATION FACILITY in Grenoble - France (**ESRF**). Experiment Ref. No 76173, Final No. CH-5252

Scientific Direction: Dr. Ardit Matteo (Department of Physics and Earth Sciences, University of Ferrara)
Activities: Synthesis in the laboratory of perovskites with formula La-Mn-Ga / Ca-Ti-Ge / Sc-Y-Al in the previous months. High pressure and high temperature experiments at ESRF in Grenoble in February 2018 for the study of perovskites synthesized in the laboratory.

Type of qualification: **XRPD analyst**
Period: **3 April 2017 – today**
Project: Qualified operator in the X-ray diffraction laboratory for the collection of diffraction patterns from powders, within various ongoing projects within the Traditional Ceramics group.

Scientific Direction: Dr. Michele Dondi; Dr. Chiara Zanelli
Activities: X-ray diffractometry analysis of raw materials and related ceramic products (porcelain stoneware, bricks, refractories, pigments, glazes, inks, etc.).

Type of qualification: **Member of the Scientific Team**
Period: **March 2013 – February 2015**
Project: Punta di Zambrone (Italy). Joint archaeological mission: Institute for Eastern and European Archeology, Austrian Academy of Sciences, Vienna / Department of Humanities, Federico II University of Naples

Scientific Direction: Prof. Reinhard Jung, Prof. Marco Pacciarelli
Activities: Chemical-physical analysis of the glassy materials found on the site, through (E) SEM-EDS, XRPD and LA-ICPMS.

Type of qualification: **Member of the Scientific Team**
Period: **February 2013 – February 2015**
Project: *Sarno Valley Project*, archaeological mission conducted by the La Sapienza University of Rome in collaboration with the Superintendency of Salerno, Avellino, Benevento, and Caserta.

Scientific Direction: Dr. Francesca Mermati
Activities: Chemical-physical analysis of the vitreous materials found in the Sarno Valley necropolis, through (E) SEM-EDS, EMPA, XRPD, LA-ICPMS.

Type of qualification: **Member of the Scientific Team**
Period: **February 2011 – June 2012**
Project: Archaeological excavation of the protohistoric site of S. Vincenzo - Stromboli (ME). Joint mission: Department of Earth Sciences, University of Modena and Reggio Emilia / CNR Institute for Studies on the Ancient Mediterranean (ISMA), Rome.

Scientific Direction: Prof. Sara Levi, Dr. Marco Bettelli, Dr. Andrea Di Renzoni
Activities: Collaboration to the scientific direction as a member of the study team and carrying out excavation, laboratory and documentation activities: stratigraphic excavation, US cards, graphic documentation, samplings, classification of findings and computerization of data (GIS). Field collaboration for in situ analysis via portable XRF.

EDUCATION

Type of qualification: **PhD in “Multiscale Modelling, Computational Simulation and Characterization in Material and Life Sciences”**
Academic field: 04 / A1 - Geochemistry, mineralogy, petrology, volcanology, georesources and applications. Scientific-disciplinary sector: GEO / 09 Mining georesources and mineralogical-petrographic applications for the environment and cultural heritage.

Period: **January 2012 – February 2015**

Place: Department of Chemical and Geological Sciences. University of Modena and Reggio Emilia.

Project: *“PROTOHISTORIC VITREOUS MATERIAL FROM SOUTHERN ITALY: Chemical characterization and trace elements study.”*

Supervisor: Prof. Alessandro Gualtieri

Activities: The project involved the archaeometric (chemical-physical) study of glassy materials (faience, glassy faience, glass) dated from the Bronze Age to the Iron Age, in order to determine the raw materials used in production, the technological level reached by the glassmakers of the time and the provenance of the artefacts. The research was carried out through (E) SEM-EDS, EMPA, XRPD and LA-ICPMS analyses.

Type of qualification: **MSc Degree in “Science for the Recovery and Conservation of Archaeological Heritage”, class 12/S**

Period: **January 2009 – April 2011**

Place: Department of Earth Sciences. University of Modena and Reggio Emilia.

Project: *"The protohistoric settlements of the Capo Graziano facies of the Acropolis of Lipari and Montagnola of Filicudi: analysis of the structures of the villages; functional analysis and proposed nomenclature of vascular forms; analysis of the function of spaces on the basis of the distribution of the identified vascular forms. "*

Supervisors: Prof. Sara Levi and Dr. Andrea Di Renzoni

Score: 110/110 cum laude

Activities: Analysis of pottery and settlement structures found in the Aeolian Bronze Age sites of Lipari and Filicudi, to determine the functionality of the vases and of the spaces.

Type of qualification: **BSc Degree in “Science of Cultural Heritage”, class 13**

Period: **September 2005 – December 2008**

Place: Department of Earth Sciences. University of Modena and Reggio Emilia.

Project: *"Archaeometrical investigation of 14th century mosaic tesserae from important Italian monuments."*

Supervisors: Prof. Rossella Arletti, Prof. Maria Giovanna Vezzalini

Score: 110/110 cum laude

Activities: Chemical-physical characterisation of glass mosaic tesserae coming from the medieval mosaic of the Florence Baptistery, in order to determine the raw materials and the production technology employed. The study was carried out by SEM-EDS, EMPA, XRPD and FORS analyses.

TRAINING

International School: **“Crystallography School – 2017”**

Period: **29-31 May – 5-7 and 12-16 June 2017**

Place: University of Turin

Realised by: Interdepartmental Center for the Development of Crystallography (CrisDi).

Activities: Theoretical course of crystallography in the first block of May, practical course of X-ray diffraction and quantitative interpretation of the patterns using the Rietveld-RIR method in the following blocks of June.

- International School:** **“3rd Training Camp of Iperion CH.it on the Advanced non-invasive diagnostic on Cultural Heritage”**
- Period:** **25 - 30 September 2016**
- Place:** Gallery of Bellomo Palace, Siracusa
- Realised by:** Opificio delle Pietre Dure together with CNR, INFN, ENEA and INSTM, sponsored by the University of Catania and the financial support of the Ministry of Education (Italy).
- Activities:** In situ analyses of a medieval painted panel through NON-INVASIVE techniques: multiVIS-NIR for IR reflectography, multispectral imaging, RX radiography, XR Fluorescence, Colorimetry.
- Research abroad:** **PhD period abroad**
- Period:** **10 - 14 February 2014**
- Place:** Institut de Recherche sur les ArchéoMATériaux (IRAMAT) - CNRS/Université d'Orléans, France.
- Supervisor:** Prof. Bernad Gratuze, Director of IRAMAT Center
- Activities:** LA-ICPMS (Laser Ablation-Inductively Coupled Plasma-Mass Spectrometry) analysis of ancient glasses for the determination of major, minor and trace elements.
- National School:** **“Perspectives in the field of archaeometry and cultural heritage diagnostics”.**
- Period:** **6 - 8 November 2013**
- Place:** Centro di Conservazione e Restauro La Venaria Reale, Turin
- Realised by:** National Institute of Nuclear Physics (INFN) and “Centro di conservazione e restauro La Venaria Reale, Turin, Italy
- International School:** **“6th Intensive School on Conservation Science”**
- Period:** **17 - 24 July 2012**
- Place:** University of Evora, Portugal
- Realised by:** University of Evora (Portugal) and the European Chemistry Thematic Network Association.
- Internship:** **Master degree Internship**
- Period:** **1 May 2010 – 30 September 2011**
- Place:** S. Vincenzo - Stromboli (ME)
- Supervisors:** Prof. Sara Levi - Department of Earth Sciences, University of Modena and Reggio Emilia; Dr. Marco Bettelli and Dr. Andrea Di Renzoni - CNR Institute of Studies on the Ancient Mediterranean (ISMA), Rome.
- Activities:** Stratigraphic excavation of the protohistoric site and laboratory documentation. U.S. cards, graphic documentation, geoarchaeological and palaeobotanical samples, treatment and classification of the finds.
- International School:** **Erasmus Intensive Program IP- “CHERMAT” - “Materials and Patrimony: Stone, glass, ceramics and concrete durability and conservation”**
- Period:** **12 - 23 January 2009**
- Place:** University of Paris-Est Marne la Vallée, France
- Realised by:** University of Paris-Est Marne la Vallée, France
- Internship:** **Bachelor degree Internship**
- Period:** **27 August – 28 September 2007**
- Place:** Superintendence for the Historical and Ethno-anthropological Heritage of Modena and Reggio Emilia
- Supervisor:** Prof. Nicoletta Giordani
- Activities:** Revision and reorganization of the documentation of the Este Gems Collection at the Catalogue Office: completion of cataloguing and management of computer data.

SCHOLARSHIPS AND AWARDS

April 2017

Marie Skłodowska-Curie Actions Seal of Excellence – for the proposal **747772, BEADTRACE** “The archaeometric study of Iron Age glass from Central Italy: technological aspects and determination of the impact of the Mediterranean trade on the formation of the indigenous civilisations.” Submitted in Horizon 2020’s **Marie Skłodowska-Curie actions** call H2020-MSCA-IF-2016 del 14 September 2016. Evaluation 91/100.

May 2014

Scholarship - 40th International Symposium on Archaeometry, ISA 2014, May 19-23, Los Angeles (scholarship to cover inscription fees and accommodation costs at UCLA).

January 2012 – January 2015

Ministerial Research Doctorate Scholarship

EDITORIAL ACTIVITIES

Referee for High Impact Factor Archaeometry journals (Journal of Archaeological Science, Archeometry, Journal of Cultural Heritage).

TECHNICAL AND COMPUTER SKILLS

- a) Excellent knowledge of techniques for the characterization of materials: optical microscope, scanning electron microscope and X-ray microanalysis (SEM-EDS), electronic micro-probe for chemical analysis (EPMA), X-ray powder diffraction (XRPD), mass spectrometry plasma coupled with laser ablation for trace element analysis (LA-ICPMS); hot stage microscope (HSM), thermal analysis (TG-DTA), dilatometer and optical fleximeter (ODP).
- b) Software: excellent knowledge and use of Microsoft and Office applications, in particular Excel, Word and Power Point; good knowledge and use of software for data processing such as PLASMALAB and INCA; good knowledge and use of image processing software (Photoshop, GIMP, Image PRO); basic knowledge of GIS and MATLAB.

LANGUAGES:

Mother tongue: Italian

Other languages: English: read, written and spoken: level B2. French: beginner level.

ARTICLES in INTERNATIONAL JOURNALS with PEER REVIEW

- 1) Arletti, R., **Conte, S.**, Vandini, M., Fiori, C., Bracci, S., Bacci, M., Porcinai, S., (2011). Florence Baptistery: chemical and Mineralogical Investigation of glass mosaic tesserae. *Journal of Archeological Science* 38, 1, 79-88. <https://doi.org/10.1016/j.jas.2010.08.012>
- 2) **Conte, S.**; Chinni, T.; Arletti, R.; Vandini M. (2014). Butrint (Albania) between Eastern and Western Mediterranean glass production: EMPA and LA-ICP-MS of Late Antique and Early Medieval finds. *Journal of Archaeological Science*, 49, 6-20. [doi:10.1016/j.jas.2014.04.014](https://doi.org/10.1016/j.jas.2014.04.014)
- 3) **Conte, S.**, Matarese, I., Quartieri, S., Arletti, R., Jung, R., Pacciarelli, M., Gratuze, B (2015). Bronze Age Vitreous Materials from Punta Di Zambrone (Southern Italy). *European Journal of Mineralogy*, 27, 337–351. DOI: [10.1127/ejm/2015/0027-2450](https://doi.org/10.1127/ejm/2015/0027-2450)
- 4) **Conte, S.**, Arletti, R., Merlati, F., Gratuze, B.(2016a). Unravelling the Iron Age glass trade in Southern Italy: the first trace element analyses. *European Journal of Mineralogy*, 28, 2, 409-433. [DOI: 10.1127/ejm/2016/0028-2516](https://doi.org/10.1127/ejm/2016/0028-2516)
- 5) **Conte, S.**, Arletti, R., Henderson, J., Degryse, P., Blomme, A. (2016b). Different glassmaking technologies in the production of Iron Age black glass from Italy and Slovakia. *Archaeological and Anthropological Sciences*, pp. 1-19. [DOI 10.1007/s12520-016-0366-4](https://doi.org/10.1007/s12520-016-0366-4)
- 6) Fiorentino, S., Chinni, T., Cirelli, E., Arletti, R., **Conte, S.**, Vandini, M. (2017). Considering the effects of the Byzantine-

Islamic transition: Umayyad glass tesserae and vessels from the qasr of Khirbat al-Mafjar (Jericho, Palestine). *Archaeological and Anthropological Sciences* 10 (12), DOI: [10.1007/s12520-017-0495-4](https://doi.org/10.1007/s12520-017-0495-4)

7) **Conte, S.**, Matarese, I., Vezzalini, G.; Pacciarelli, M., Scarano, G., Vanzetti, A., Gratuze, B., Arletti, R. (2018). How much is known about glassy materials in Bronze and Iron Age Italy? New data and general overview. *Archaeological and Anthropological Sciences*, 1-29, <https://doi.org/10.1007/s12520-018-0634-6>

8) Zanelli, C.; Soldati, R.; **Conte, S.**; Guarini, G.; Ismail, A.I.M.; El-Maghraby, M.S.; Cazzaniga, A; Dondi, M. (2018). Technological behavior of porcelain stoneware bodies with Egyptian syenites. *International Journal of Applied Ceramic Technology*, 1–11. <https://doi.org/10.1111/ijac.13102>

9) **Conte, S.**; Zanelli, C.; Ardit, M.; Cruciani, G.; Dondi, M. (2018). Predicting Viscosity and Surface Tension at High Temperature of Porcelain Stoneware Bodies: A Methodological Approach. *Materials* 2018, 11(12), 2475; <https://doi.org/10.3390/ma11122475>

10) Zanelli, C.; Domínguez, E.; Iglesias, C.; **Conte, S.**; Soldati, R.; Guarini, G.; Dondi, M. (2018). Ceramic recycling of boron-bearing sludge from the Tincalayu mine, Argentina. *Boletín de la sociedad española de cerámica y vidrio*, <https://doi.org/10.1016/j.bsecv.2019.01.002>

11) Matarese, I.; **Conte, S.**; Jung, R.; Pacciarelli, M. (2018). Ornamenti in materiale vetroso dell'età del bronzo dall'Italia meridionale e dall'area siciliano-eoliana: un inquadramento d'insieme alla luce di nuovi dati. *Rivista di Scienze Preistoriche*, Volume LXVIII 2018.

12) Dondi M., Guarini G., **Conte S.**, Molinari C., Soldati R., Zanelli C. (2019). Deposits, composition and technological behavior of fluxes for ceramic tiles. *Periodico di Mineralogia*, 88, 235-257.

13) **Conte S.**, Zanelli C., Ardit M., Cruciani G., Dondi M. (2020). Phase evolution during reactive sintering by viscous flow: Disclosing the inner workings in porcelain stoneware firing. *Journal of the European Ceramic Society* 40, 1738–1752. <https://doi.org/10.1016/j.jeurceramsoc.2019.12.030>

FACTSHEETS in CATALOGS and PROCEEDING in CONFERENCE ACTS

1) **Conte, S.** (2016c). Scene di battaglia: urna cineraria da Chiusi, in A. Ciancio – F. Rossi (edd.), “*Annibale. Un viaggio*”, catalogo della mostra Barletta 2016, Bari 2016, pp.86-87

2) **Conte, S.**, Dondi, M., Ardit, M., Cruciani, G., Zanelli, C. (2018). High temperature viscosity of porcelain stoneware bodies. *Proc. 15th World Congress on Ceramic Tile Quality*, QUALICER 2018, Castellón (Spain).

3) Zanelli, C.; Ardit, M.; **Conte, S.**; Soldati, S.; Cruciani, G.; Dondi, M. (2018). Viscous flow sintering of porcelain stoneware revisited *Proc. 15th World Congress on Ceramic Tile Quality*, QUALICER 2018, Castellón (Spain).

4) **Conte, S.**; Zanelli, C.; Ardit, M.; Cruciani, G.; Dondi, M. (2018). Reactive sintering of porcelain stoneware bodies: phase evolution and related liquid phase physical properties. *Proceedings of the First Workshop for Young Ceramists*, Bologna, November 26-27, 2018. ISBN 978-88-7586-599-3

5) **Conte S.**, Zanelli C., Molinari C., Guarini G., Dondi M. (2020). Can we predict the sintering kinetics of porcelain stoneware? The case of glassy waste-based bodies. *Proc. 16th World Congress on Ceramic Tile Quality*, QUALICER 2020, Castellón (Spain).

6) Zanelli C., **Conte S.**, Melchiades F. G., Nastri S., Hernandez-Sánchez M. Y., Boschi A. O., Dondi M. (2020). Phyllite as feldspar substitute in porcelain stoneware tiles: effect on sintering behavior and phase composition. *Proc. 16th World Congress on Ceramic Tile Quality*, QUALICER 2020, Castellón (Spain).

CONGRESS

ORAL with ABSTRACT in the CONFERENCE PROCEEDINGS

1) Arletti, R., **Conte, S.**, Vandini, M., Fiori, C., Griffo, A., Cagnini, A., Bogi, T., Porcinai, S. Characterization of glass mosaic tesserae from Florence Baptistery: the use of materials coming from different ateliers. *Geoitalia 2009, VII Italian forum of Earth Sciences*, Rimini, 9-11 September 2009.

2) Arletti, R., **Conte, S.**, Vandini, M., Fiori, C., Bacci, M., Bracci, S., Bogi, T., Porcinai, S. Characterization of Glass

Mosaic Tesserae from Florence Baptistery: a Multitechnique approach, *AIAR National Congress, Science and Cultural Heritage*, Pavia, 12-15 February 2010

3) **Conte, S.** Arletti, R., Vandini, M., Chinni, T. Archaeometrical analyses of Late and Post Roman glass from Butrint (Albania), *5th Natural Silicate Glasses, Glasses and melts from natural conditions to industrial processes*. August 22-24, 2013. Florence, Italy.

4) **Conte, S.** Arletti, R., Mermati, F. First Archaeometrical Data of Glass From Sarno Necropolis (9th-6th Century BC). *VII Congresso Nazionale di Archeometria. Scienze e Beni Culturali: stato dell'arte e prospettive*. Bologna 5-7 Febbraio 2014.

5) **Conte, S.** Arletti, R., Mermati, F. First Archaeometrical Data of Glass From Sarno Necropoleis (9th-6th century BC). *International Symposium on Archaeometry, ISA Los Angeles-USA*, May 19-23, 2014.

6) **Conte, S.** Arletti, R., Mermati, F. First Archaeometrical Data Of Glass From Sarno Necropoleis (9th-6th century BC). *International Mineralogical Association Conference*, Sandton, South Africa September 1-5, 2014.

7) **Conte, S.** Arletti, R., Pacciarelli, M. Protohistoric glass from Southern Italy: from Early Bronze Age to Advanced Iron Age (18th-6th cent. BC). *Geosciences: a tool in a changing world, Congress SIMP-SGI- SOGEI-AIV*, Pisa September 3-6, 2017.

8) **Conte, S.** Dondi, M., Ardit. M., Cruciani, G., Zanelli, C. High temperature viscosity of porcelain stoneware bodies. *Geosciences: a tool in a changing world, Congress SIMP-SGI-SOGEI-AIV*, Pisa September 3-6, 2017.

9) **Conte, S.** Dondi, M., Ardit. M., Cruciani, G., Zanelli, C. High temperature viscosity of porcelain stoneware bodies). *Twelfth Conference for Young Scientists in Ceramics*, in Novi Sad, Serbia, October 18-21, 2017.

10) **Conte, S.** Dondi, M., Ardit. M., Cruciani, G., Zanelli, C. High temperature viscosity of porcelain stoneware bodies. *Proc. 15th World Congress on Ceramic Tile Quality, QUALICER 2018*, Castellón (Spain), February 12-13, 2018.

11) **Conte, S.;** Zanelli, C.; Ardit, M.; Cruciani, G.; Dondi, M. Phase transformations and related liquid phase physical properties: evolution during the viscous flow sintering in porcelain stoneware tiles. *CIMTEC 2018 14th International Ceramics Congress and 8th Forum on New Materials*, Perugia, June 10-14, 2018.

12) **Conte S.** Matarese I., Pacciarelli M., Arletti R. Quanto sappiamo dei materiali vetrosi dell'età del bronzo del meridione? Nuovi dati e panoramica della circolazione di materiali vetrosi in Italia. *V Incontro Annuale di Preistoria e Protostoria, Materiali preziosi, semipreziosi e inconsueti nell'età del Rame e nell'età del Bronzo italiana Archeologia, archeometria e paleotecnologia*, Padova, May 29, 2018.

13) **Conte, S.;** Dondi, M.; Ardit, M.; Cruciani, G.; Zanelli, C. High temperature viscosity of the vitreous phase into porcelain stoneware bodies. *PNCS-ESG, 15th International Conference on the Physics of Non-Crystalline Solids + 14th conference of the European Society of Glass*. Saint Malò France, July 9-13, 2018.

14) **Conte, S.;** Arletti, R. Archaeometrical investigation of protohistoric glass from southern Italy: from Early Bronze Age to Advanced Iron Age (18th-6th century BC). *PNCS-ESG, 15th International Conference on the Physics of Non-Crystalline Solids + 14th conference of the European Society of Glass*. Saint Malò France, July 9-13, 2018.

15) **Conte S.** Zanelli C., Soldati R., Molinari C., Dondi M. Glassy wastes as feldspar substitutes in porcelain stoneware bodies: effect on sintering behavior. *Sgi-SIMP "Geoscience for the environment, natural hazards and cultural heritage"*, Catania, September 12-14, 2018.

16) **Conte S.** Arletti R. Iron age black glass from Italy and Slovakia: technological evolution of early natron glass vs wood ash technology. *Sgi-SIMP "Geoscience for the environment, natural hazards and cultural heritage"*, Catania, September 12-14, 2018

17) Mermati F., **Conte S.** Perle di vetro dalle necropoli della Valle del Sarno, Campania (metà IX sec. a.C.-VI sec. a.C.). Indagini archeometriche e interpretazione archeologica. *IX International Congress of Phoenician and Punic Studies*, Merida-Spain, October 22-26, 2018.

18) **Conte S.** Iron age black glass from Italy and Slovakia: technological evolution of early natron glass vs wood ash technology. *MATERIALS.IT 2018*, Bologna, October 22-26, 2018.

19) **Conte S.** Zanelli C., Ardit M., Cruciani G., Dondi M. Reactive sintering of porcelain stoneware bodies: phase evolution and related liquid phase physical properties. *First Workshop for Young Ceramists*, Bologna, November 26-27,

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20) Conte S., Zanelli C., Molinari C., Guarini G., Dondi M. (2020). Can we predict the sintering kinetics of porcelain stoneware? The case of glassy waste-based bodies. *Proc. 16th World Congress on Ceramic Tile Quality, QUALICER 2020, Castellón (Spain).*

21) Zanelli C., Conte S., Melchiades F. G., Nastri S., Hernandez-Sánchez M. Y., Boschi A. O., Dondi M. (2020). Phyllite as feldspar substitute in porcelain stoneware tiles: effect on sintering behavior and phase composition. *Proc. 16th World Congress on Ceramic Tile Quality, QUALICER 2020, Castellón (Spain).*

ORAL COMMUNICATIONS BY INVITATION

1) **Conte S.,** *Use of the Trace Elements in the Study of the Ancient Glass.* Forty years of the *Centro Interdipartimentale Grandi Strumenti* of the University of Modena and Reggio Emilia. Thematic afternoon Dedicated to Inorganic Mass Spectrometry. Modena, October 3, 2014.

2) **Conte S.,** *Mineralogy of large ceramic slabs.* CONSTRUCTION MATERIALS AND STRUCTURES: CHARACTERISTICS, USES AND RE-USES. University of Chieti and Pescara, Chieti, 22 March 2019.

This Curriculum is made in the form of a substitute declaration of certification and a substitute declaration of the deed of notoriety pursuant to articles 46 and 47 of the Presidential Decree 445/2000. To this end, the undersigned declares to be aware of the criminal liability provided for by art. 76 of the aforementioned decree for the hypothesis of falsehood in false documents and declarations indicated therein. The undersigned authorizes the processing of the personal data contained therein and for the purposes related to the use of the same pursuant to Legislative Decree no. 196/03 and subsequent amendments and additions.

Faenza, 24/02/2020

SIGNATURE (**)

