



Fahriye Altındal

AKCOAT

Akcoat Advanced Chemical Coating Materials & Co.

RESEARCH AREA

MSc Altındal's research focuses on traditional ceramic science and functional ceramics to develop amorphous and glass-ceramic coatings with novel or broad functionality on ceramic substrates. Altındal Her research also addresses cost-reduction alternative materials, developing new products with high mechanical, chemical, and physical durability, and productivity for ceramic manufacturers.

EDUCATIONS

09/2012 – 06/2016 Mersin University

Bachelor of Science in Chemical Engineering (3.02)

02/2021 – 02/2024 Yıldız Technical University

Master of Science in Chemical Engineering (3.64)

RESEARCH & DEVELOPMENT EXPERIENCE / RESEARCH POSITIONS

10/2017 – 10/2019 Anka Ceramic R&D Department

R&D Engineer

Blackest Black and Whitest White Tile in the World

Cost reduction on floor tile engobes by using diopside opaque frit

12/2019 – 08/2022 Akcoat Ceramic Coating Department

R&D Assistant Specialist

Development of Granilla for Floor and Wall Tiles

Development of Anti-bacterial and Anti-viral Ceramic Surfaces

Development of Insulator Glazes for High and Low Voltage Power Lines

Development of Matt Frit for Tableware

Development of Anti-slip Additives for Floor Tiles and Glazed Porcelain Matt Glazes providing <R9 Anti-Slip Value

Development of Low-Temperature Sinterable (LTCC) Glass Ceramic Materials Used in Electronic Circuit and Wireless Communication Technologies

08/2022 – ... Akcoat Ceramic Coating Department

R&D Specialist

Cost-Reduction Studies for Frit, Glaze and Engobe Composition by Using Cost-Effective Alternative Raw Materials

Development of smart and functional roof coatings

To develop effective solutions in the field of sustainability and contribute to projects that benefit society (**Akcoat Sustainability Social Group Member**)

Ensuring field order and efficiency, optimizing processes and increasing operational efficiency in line with 5S principles (**Akcoat 5S Ceramic R&D Field Leader**)

PUBLICATIONS

Altindal, F., Anil, U. E., Varisli, S. O., & Ozturk, B. (2024). Investigation of the effect of BaO-Al₂O₃ variations for BAS glass-ceramic glaze: Insights into thermal, phase, microstructural and surface features. *Journal of the European Ceramic Society*, 44(5), 3200-3209.

Varışli, S. Ö., Taşkıran, F., Öztürk, B., & Çiçek, B. (2023). Effect of SiO₂/Al₂O₃ ratio on the whiteness of ceramic tile engobes with low zircon content. *Cerâmica*, 69, 254-260.

"Development of a Cost-effective Opacifier Alternative to Zircon for Porcelain Floor Tile Engobes" Varışli S.Ö., Taşkıran F., Akkaşoğlu U., Öztürk B., Çiçek B., *Journal of Turkish Ceramic Society*, 1(4), 2022, p7-11.

"Investigation of the Effect of Glaze Particle Size Distribution on Surface Properties of Floor Tile Glazes" Taskiran F., Varisli S.O., Akkasoglu U., Ozturk B. and Cicek B., *Seramik - Journal of the Turkish Ceramics Society*, 1(3)27-31 (2021).

"Biosynthesis, characterisation and determination of adsorbent properties of silver nanoparticles with cyprus acacia (acacia cyanophylla) leaf extract" Taşkıran F., Uzunoğlu D., & Özer A. (2017). *Anadolu University Journal of Science and Technology A-Applied Sciences and Engineering*, 18(3), 733-745.

Conferences & Symposium Papers

"Development of glazed porcelain tiles with Improved slip resistance " Taskiran F., Varisli S.O., Akkasoglu U., Ozturk B. and Çiçek B., 14th ECerS Conference for Young Scientists in Ceramics (CYSC-2021), 20-23.10.2021, Novi Sad, Serbia, Books of Abstracts, ISBN 978-86-6253- 136-0.

"The Effect of SiO₂/Al₂O₃ Ratio on the Opacity of Wall and Floor Tile Engobes" Varışli S.Ö., Taşkıran F., Akkaşoğlu U., Öztürk B., Çiçek B., 14th ECerS Conference for Young Scientists in Ceramics (CYSC-2021), 20-23.10.2021, Novi Sad, Serbia, Books of Abstracts, ISBN 978-86-6253- 136-0.

"Investigation of the Effect of Glaze Particle Size Distribution on Surface Properties of Floor Tile Glazes" Taskiran F., Varisli S.O., Akkasoglu U., Ozturk B. and Çiçek B., V. International Ceramic, Glass, Enamel, Glaze and Paint Congress (SERES'21), Eskişehir, Turkey, 13-15.10.2021, seres2021.org.

"Development of a Cost-effective Opacifier Alternative to Zircon for Porcelain Floor Tile Engobes" Varışli S.Ö., Taşkıran F., Akkaşoğlu U., Öztürk B., Çiçek B., V. International Ceramic, Glass, Enamel, Glaze and Paint Congress (SERES'21), Eskişehir, Turkey, 13-15.10.2021, seres2021.org.

PATENTS & DESIGN

An additive composition that provides non-slip properties to be used in ceramic tile glazes (*Applied*)

Glossy lappato glaze with high color perception and acid-base resistance to be used on dark colored ceramic tiles (*Applied*)

Glossy lappato glaze with high color perception and acid-base resistance, which does not contain wollastonite raw material (*Applied*)

A frit composition for use in ceramic tile glazes that increases color perception and prevents pore formation (*Applied*)

A non-slip floor tile matte glaze composition that does not contain the addition of hard particles (*Applied*)

Matt glaze composition that strengthens the perception of color and glossy effect in the prints on it (*Applied*)

Oil-spot glaze composition developed with a different technique for ceramic surfaces (*Applied*)

A whitening composition that reduces the amount of zircon in the engob composition of ceramic tiles and increases the degree of whiteness (*Applied*)

Transparent glaze composition for fast single firing wall tiles with strong dark color perception (*Applied*)

Development of colored inorganic coatings for roof tiles (*Applied*)

CONTACT

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