

IMSTEC 2018

Nevşehir Hacı Bektaş Veli University

3.

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Material Science and Technology
in **Cappadocia**

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in Cappadocia
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PREFACE

3.International Conference on Material Science and Technology in Cappadocia (IMSTEC'18) organised by Nevsehir Haci Bektas Veli University and İSABET MEDIA is held in September 17- 19, 2018 in Nevsehir, Turkey. This symposium is aimed at bringing together academics, researchers and engineers, iron and steel manufacturers, exporters and importers, suppliers, technology producers and non-governmental organizations around the world to share and discuss their latest works and the new methodologies to improve the structure and properties of the materials. The topics of IMSTEC'18 covered are Metallurgy and materials, Casting, Heat treatment, coating and corrosion, welding and cutting, forming and machining, Energy and environment, Marketing and finance, Automation, Occupational health and safety.

The Symposium includes invited papers of national and international academicians and the papers submitted by academia in all aspects of the material industries.

Cappadocia region, the capital of Nevşehir, has one of the most interesting and spectacular landscapes in the World, which is the first settlements dating back to 3000 BC; The oldest name was "Nyssa". It is the perfect starting point to visit the area. The castle standing at the highest point in the city which comes from seljuks period is also one of the most intersting ruins. The Kursunlu Mosque has an impressive complex of buildings and a medrese surrounding it which dates back to 1726. The museum displays a rich collection of the local finds. Gulsehir, and Hacibektas which is the town where Haci Bektas Veli settled in the 14th century, and set up his own Bektas Dervish order which was based on love and humanism. We would like to express our sincere thanks to those who spend great effort to make this event take place. We would also like to thank to İSABET MEDIA and other sponsors of IMSTEC'18 as their names and company logos stated. We also express our gratitude to the members of Honorary Committee, Scientific Committee, Organizing Committee, Secretarial Assistance, and Students for their great effort to make the event successful. Lastly, we would like to thank to academicians, practitioners, and the experts who were joined to IMSTEC'18 inorder to share their knowledge.

With the wishes to see you all at the next International Symposium…

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USAGE OF SEDIMENTARY CLAY FROM ASLANTAŞ DAM LAKE AS ENGOBE IN THE CERAMIC ART

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Abstract

Aslantaş Dam Lake is a dam with a shore adjacent to Karatepe-Aslantaş Open-Air and Closed Museum. The history of this region dates back to the Late Hittite Period (8th century BC). Late Hittite site Karatepe Aslantaş was discovered in 1946 and today, works are exhibited in this museum. The artifacts unearthed from the region that is based on the production of rock and soil also reveals the existence of a work of art. In this study, it is aimed that, usage of sedimentary clay from Aslantaş Dam Lake, Osmaniye as engobe for ceramic art was investigated. Ceramic engobes are coating materials used for smoothening surfaces in the desired color or decoration. Engobe from sedimentary clay from Aslantaş Dam Lake was obtained by sedimentation. It was filtered, dwelled and colored, then applied over the different body compositions. Products were fired at different temperatures (900 ºC, 1000 ºC and 1100 ºC). As a result, it created strong bond with the surface during firing. This study has shown that, the local raw material deposited in the lake could be used as engobe to provide a range of decorative effects and create wide range of potential imagery.

Keywords: Ceramic, Engobe, Color, Decoration