DR. RER.NAT. EBRU ERÜNAL ÜSDÜN

FIELDS OF RESEARCH: Material Science **|** Functional Ceramics **|** Polymers **|** Catalysis **|** Hydrogen Storage Materials **|** Nanotechnology **|** Petrochemical Technologies

Short Bio

Dr. Ebru Erünal Üsdün got her B.Sc. degree in Chemical Engineering from Gazi University and M.Sc. degree in Chemical Engineering from M.E.T.U in the field of catalysis. She finished her doctorate about interpretation of defects in lead-free perovskite ceramics at Albert-Ludwigs University of Freiburg (Germany). Afterwards, she worked as Chief of R&D in a petrochemical company where general purpose, high impact and expandable polystyrene were produced. After working several years in industry, she has been working as Assist. Prof. at Chemical Engineering Department of Çukurova University since 2016.

Projects

She works on interdisciplinary projects. Since the problems whose solutions are beyond the scope of a single discipline or area can easily be solved by integrating research groups from different fields. The nature and evolution of Chemical Engineering major have already lead to interdisciplinary research in material science, biotechnology, environmental, energy systems engineering and similar subjects. Especially applications of well-known materials or synthesis techniques in a certain field may bring diversity and new perspectives for a different field.

She has been conducting and participating in varies projects with groups from different disciplines and industries on national and international base. Hydrogen storage materials, nanotechnology, material processing methods, bio-based polymers, flame retardant additives, catalysts, kinetics on coupling reactions, radiological materials, electrocatalysts and functional ceramics are her current focus of interest. She conducts experimental and theoretical studies on these subjects.

Notable Honors and Grants

She was nominated as candidate for 2019 Eni Awards with her work on “Enhancement of Hydrogen Storage Capacity of Palladium Doped Multi-Walled Carbon”. She got a Research Fellowship in 2018 from Johannes Kepler University of Linz (Austria) with the project “Alternative

flame retardants for polystyrene”. She visited Institute of Science and Technology for Ceramics (ISTEC) in Faenza (Italy) with Staff Training Mobility (Erasmus +) in 2017. Her PhD project was granted by German Research Foundation (DFG) and conducted in collaboration with a group funded by Bosch and Siemens between 2007-2011.