















CERTIFICATE OF PARTICIPATION

This is to certify that

BUĞRA ER

participated in the 20th International Istanbul Scientific Research Congress on Life, Engineering, Architecture, and Mathematical Sciences on February 21-23, 2025 in Istanbul, Turkiye, orally & technical presented the paper entitled

"POWER MANAGEMENT AND PERFORMANCE ANALYSIS OF AN AUTOMOTIVE USB-PD CHARGER USING SYNCHRONOUS FOUR-

SWITCH BUCK-BOOST TOPOLOGY"

Prof. Ceyran MAHMUDOVA
Organization Committee Member

Given this on February 21-23, 2025 at Istanbul, Turkey.