



CERTIFICATE OF ORAL PRESENTATION

This is to certify that

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Has successfully presented a scientific paper titled

Hybrid Metaheuristic Algorithms MPPT Under Partial Shading Condition

in the 4th International Conference on Recent Innovations in Engineering ICRIE 2023,

University of Duhok, College of Engineering,

13th - 14th September 2023.

A handwritten signature in green ink that reads 'James H. Haido'.

Professor Dr. James H. Haido

Chairman of the Conference & Dean of Engineering College

