

**CERTIFICATE**

*Of*

**PARTICIPATION**

**Idris Bouchama**

has participated in 5th International Conference on Applied Engineering and Natural Sciences on 10-12 July  
in 2023 at Konya/Turkey.

**PAPER TITLE**

*Advancing the Properties of  $CuInX-1GaXS_2$  Compounds using the CASTEP  
Program: A Computational Exploration of Structural, Electronic, and  
Optical Characteristics*

**PRESENTATION  
TYPE**

*Oral*

**ICAENS 2023 CONFERENCE CHAIRMAN**

**Asst. Prof. Dr. Umut ÖZKAYA**

