

2<sup>nd</sup> Algeria - German  
International Conference  
on  
New Technologies and their  
Applications



## CERTIFICATE OF PARTICIPATION

This is to certify that **M. Hadjab**

Attended the Second Algerian German International on new Technologies and their Applications „AGICNT 2019“ held at the university Ferhat Abbas- Sétif 1, Algeria, on September 22-23, 2019 and presented in poster session a communication entitled :

**«First-principles calculations and numerical modeling on the structural and optoelectronic properties of chalcopyrite materials for solar cell application»**

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*On behalf of the steering committee*

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