



# International Journal of Engineering Research and Applications (IJERA)

## CERTIFICATE

It is certify that the paper entitled by *“Design Improvement in Salient-pole Synchronous Motor for torque pulsation reduction during starting by Non-Dominated Sorting Whale Optimization Algorithm (NSWOA)”* has been published in International Journal of Engineering Research and Applications (IJERA).

### **Your article has been published with following details:**

Author's Name: Mamidi Ramakrishna Rao  
Journal Name: International Journal of Engineering Research and Applications (IJERA)  
Journal Web: [www.ijera.com](http://www.ijera.com)  
Journal Type: Online & Print (Both)  
Review Type: Peer Review Refereed  
ISSN: 2248-9622  
Vol No.: 14  
Issue No.: 02  
Publication Month: February  
Publication Year: 2024



**Editor-In-Chief**  
**International Journal of Engineering Research and Applications (IJERA)**  
**E-mail ID: [ijera.editor@gmail.com](mailto:ijera.editor@gmail.com)**  
**Web: [www.ijera.com](http://www.ijera.com)**