



University Mohamed El Bachir El IBRAHIMI of Bordj Bou Arreridj
Faculty of Sciences and Technology
Department of Matter Sciences
Laboratory of Materials Physics, Radiation and Nanostructures



Certificate of Participation

This is to certify that

Warda Darenfad

Has participated in the National Seminar of Physics, Chemistry, and Their Applications **Webinar (NSPCA'23)** which has been held in the Faculty of sciences and technology, University Mohamed El Bachir El Ibrahimy of Bordj Bou Arreridj, Algeria. March 6th-7th 2023 and have given the following Poster presentation:

Influence of divalent metals (Ni, Cu and Mg) on the physical properties of spinel Co_3O_4 thin films

With co-authors: Noubel Guermat, Kamel Mirouh

NSPCA'23 *chairman*



Head of the Laboratory

