



CERTIFICATE OF PARTICIPATION

This is to certify that

Principal Author: EL MANSOURI Oualida

Co-Authors: KEBAILI Farida, LABED Chaima and LACHETAR Chahinez

have participated in *National Conference of Applied Sciences and Engineering NCASE'24* in an online talk, entitled

Proposed Simulation Models for Comparative Analysis of WDM-PON and CWDM-PON Systems

Held in November 17 and 18, 2024 and Organized by the Applied Sciences Laboratory (LSA) of the National Higher School of Advanced Technologies (ENSTA).

This conference brought together researchers, academics, and industry professionals to share insights and advances in applied sciences and engineering.

Conference Chair GRAMEZ Abdelghani, PhD

Chair of the Scientific Committee ZEMMOURI Hassiba, PhD

Luft.