

Sigma Xi
The Scientific Research Honor Society



Devoted to the Promotion of Research in Science

By this Certificate Warrants that

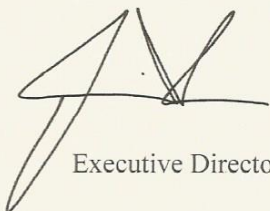
Joao P. Catalao

was duly elected a Full Member

by the

*Committee on Qualifications and Membership
of the Society in the year 2023*

*and has accepted the privileges and responsibilities of this
membership as specified by the constitution and bylaws.*



Executive Director



President