



**November 22-24, 2023**  
**Ternopil, UKRAINE**  
**Opole, POLAND**

<https://ittap.tntu.edu.ua/>

# **INFORMATION TECHNOLOGIES: THEORETICAL AND APPLIED PROBLEMS (ITTAP-2023)**

## **The 3rd International Workshop**

### **WORKSHOP PARTICIPANT CERTIFICATE**

*Tetyana Smirnova*

**Comparative Analysis of Cryptocurrency Trading  
Platforms Using the Analytic Hierarchy Process**

GENERAL CHAIR:

**Prof. Iaroslav Lytvynenko**

A handwritten signature in blue ink, appearing to read "Iaroslav Lytvynenko", with a stylized flourish below the name.

**Prof. Serhii Lupenko**

A handwritten signature in blue ink, appearing to read "Serhii Lupenko", with a stylized flourish below the name.



Total number of hours of participation:  
15 academic hours  
(0.5 ECTS credits)