

OIV Course

# BLOCKCHAIN

applied to the vine and wine sector

# ONLINE

4-7 JUNE 2024

OIV  100

## PROGRAMME

### DAY 1: INTRODUCTION TO BLOCKCHAIN

Opening words by OIV Director General and Head of Statistics and Digital Transformation Department

Lecturer: Milagros Santamaria (Megatex.tech, MMLAW)

#### 1. Introduction to Blockchain. Web 3.0. Smart Contracts and Tokens

- 1.1 What is Blockchain? Main characteristics. Benefits of its implementation.
- 1.2 Types of blockchains. Mining. Consensus mechanisms. The blockchain trilemma.
- 1.3 Characteristics and evolution from web 1.0 to web 3.0
- 1.4 Smart Contracts. Functionalities, attributes, risks.
- 1.5 Taxonomy of Tokens. Notions and types of crypto assets, cryptocurrencies, and tokens. Stablecoins and Central Bank Digital Currencies (CBDCs), NFTs

#### 2. DeFi. NFTs and Metaverse. DAOs. Token Economy

- 2.1 DeFi. Centralised and decentralised exchanges. Conflicts. New forms of investment. Wallets, custodial and non custodial.
- 2.2 Sovereign Identity.
- 2.3 Token Economy. Asset tokenization in diverse industries. Experiences and value enhancement. IoT
- 2.4 Token Economy and how we can apply it to different industries. Use cases for smart contracts and tokens in the private and in the public sector.
- 2.5 Asset tokenization in diverse industries. Real Estate, AgroBusiness, Insurtech. Supply chain. Experiences and value enhancement.

#### 3. Homework and Guest 1

- 3.1 Under instructions, download a non custodial wallet (i.e. Metamask, Trust).
- 3.2 Guest speaker: David Laurent (la WineTech)

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### DAY 2: BLOCKCHAIN INTEGRATION IN THE WINE INDUSTRY I

Lecturer: Milagros Santamaria (Megatex.tech, MMLAW)

#### 1. Evaluating Blockchain's Value and Risks

- 1.1 DAOs: Organizations in Web3. New companies. Use cases
- 1.2 The Metaverse as a new context. Types of metaverse. Use cases
- 1.3 How AI complements itself to these new technologies
- 1.4 What makes a Blockchain use case successful? Main considerations to take into account when designing a blockchain technology solution. When it make sense to use it?
- 1.5 Three main legs of all blockchain implementations: Legal, Financial and Tech + other complementary technologies: IoT, AI, NFCs.
- 1.6 HOMEWORK: Use of a Marketplace (i.e Opensea)

#### 2. Blockchain Characteristics and their Applicability in the Wine Industry

- 2.1 Pain points of the Wine industry
- 2.2 WEB3 as an economic and sustainable solution. Main Blockchain's characteristics. Traceability, transparency and immutability of ledger + Smart Contracts applies to the wine Industry
- 2.3 Tokenization in the Wine Industry
- 2.4 Supply chain, DOC. Self Certification.
- 2.5 Guests: André Soares (SOGRAPE), Rodolfo Neirotti (dVin)

### DAY 3: BLOCKCHAIN INTEGRATION IN THE WINE INDUSTRY II

Lecturers: Milagros Santamaria (Megatex.tech, MMLAW),  
Prof. Michael Paul Kramer and Prof. Jon Hanf (Geisenheim University)

#### 1. Continuance in the applicability of blockchain in the Wine Industry:

- 1.1 Carbon foot print, water footprint → tokenization → access to new ways of financing + voluntary markets.
- 1.2 Use case: Kilimo, ReFI DAO
- 1.3 Metaverse and Augmented reality.
- 1.4 Leveraging blockchain to stop wine fraud
- 1.5 Tokenization in the Wine Industry: Current use cases

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### DAY 4 (OPTION A): RECENT REGULATORY POLICIES FOR WINE TOKENS

Lecturers: Prof. Javier Ibañez Jimenez (ICADE Comillas Pontifical University) and Prof. Ana F. Muñoz Pérez (University Rey Juan Carlos)

#### 1. Session 1 (2 hours)

- 1.1 MiCA Regulatory Policies
- 1.2 NFT regulatory options

#### 2. Session 2 (2 hours)

- 2.1 Pilot-Regime Regulatory Policies
- 2.2 Other DeFi policies

### DAY 4 (OPTION B): WORKSHOP - APPLICATION OF BLOCKCHAIN IN WINERIES

Lecturer: Mike Tango Bravo (OpenVino)

Abstract of Workshop: Applying Tokenization, traceability and transparency at a winery:  
(Roles / impacted areas, Legal, Financial: Accounting / Taxation, Marketing, design, Certification, Viticulture and Enology, Logistics, IT – Web2/Web3)

#### 1. How it works and Gathering data from the winery

##### 1.1 Understand the winery's portfolio

- a. What wines are they currently selling
- b. Markets the winery is selling into now?
- c. How does/will certification play a role?
- d. What current loyalty programs exist? Consumer analysis?

##### 1.2 What is the wineries initial motivation for TTT?

- e. Tokenization
- f. Transparency
- g. Traceability

##### 1.3 Winery stakeholders

- h. Define roles
- i. Assess their knowledge/understanding/acceptance of blockchain/IoT/crypto

#### 2. Defining the specifics

- j. Tokenization: Which wine to tokenize?
- k. Transparency: What BioDigital certifications and Extreme Transparency methods are desirable?
- l. Traceability

#### 3. Hands to work. Token creation simulation

#### 4. Q&A