

NIKOLETTA SKORDAKI, ESR14

ENVIRONMENTAL FACTORS IN DIGITAL CULTURAL HERITAGE

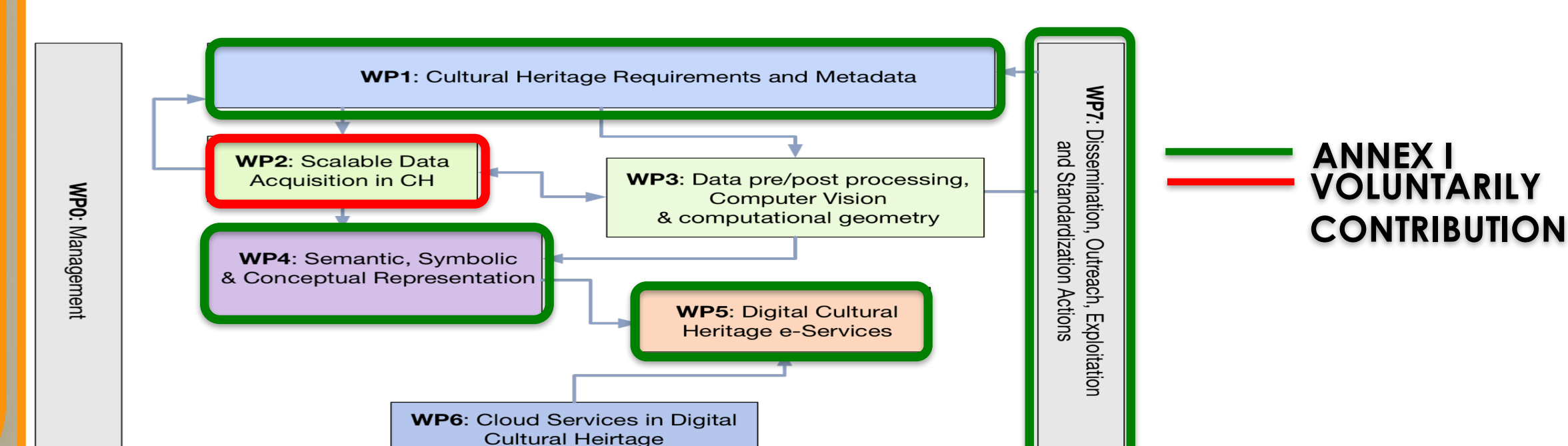
- Study of the long-term environmental factors and their influence on the built Cultural Heritage
- Study of the decay processes
- Examination of materials physicochemical properties
- Assessment of the environment's impact to buildings' structure
- Study of the application of 3D models for the real time protection of the movable and immovable Cultural Heritage



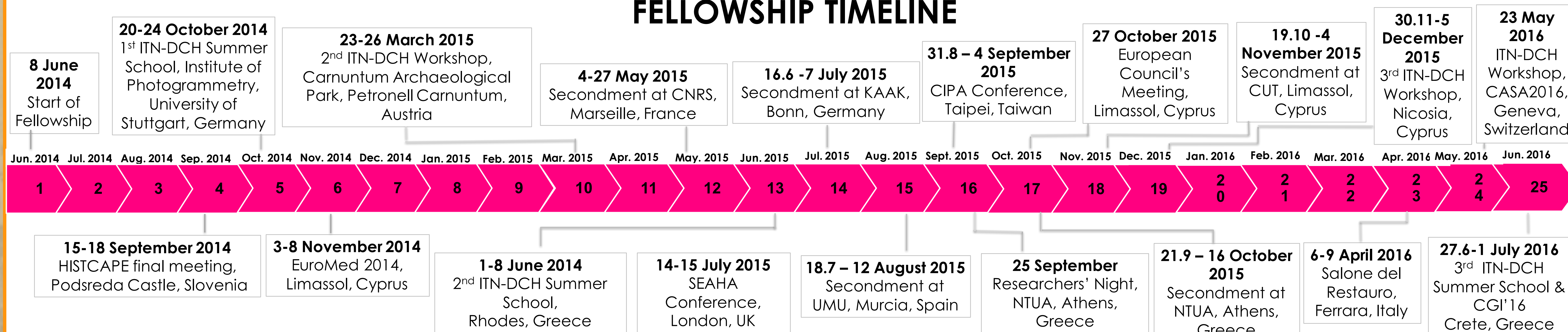
SCIENTIFIC BACKGROUND

- Chemical Engineer, School of Chemical Engineering, National Technical University of Athens (NTUA), Greece
- MSc 'Mathematical Modeling in Modern Technologies and Financial Engineering', School of Applied Mathematical and Physical Sciences, NTUA, Greece
- MSc 'Protection of monuments Direction: Materials and maintenance intervention', School of Architecture, NTUA, Greece

WORKPACKAGES INVOLVEMENT



FELLOWSHIP TIMELINE



LONG TERM ENVIRONMENTAL FACTORS' CATEGORIES

The categorization is based on the EU-Chic project (<http://www.eu-chic.eu>)

EU-CULTURAL IDENTITY CARD - CHICBERG



ENVIRONMENTAL RISKS	
A	LONG TERM INFLUENCES
A1	Bio-attack
A2	Climate conditions fluctuations
A3	Aeolic impact
A4	Water (Ground, Atmospheric)
A5	Solar radiation
A6	Particle matter & aerosols
A7	Long term loading
A8	Geological conditions (including local particularities)

3D MODELS & THE PROTECTION OF CULTURAL HERITAGE



Figure 1. 3D Model of St. George, Asinou Church, Cyprus

ADVANTAGES

- Inspection of asset's details
- Regular monitoring
- Cost effective
- High resolution of documentation
- Breakthrough solution for disputed restoration actions



Figure 2. 3D Reconstruction of an ancient vase



Home Country



Host Country



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Host Organization

