



Title: Memorial Thyssen tragedy victims

CAPuS project acronym: OBJ3

Date: 20th June 2019

COLLECTED SAMPLES	
N°	DESCRIPTION (Sampling area, type of sample <sup>1</sup> , typology of material <sup>2</sup> )
01	OBJ3_1 - Black (background) - fragment from painting layer
02	OBJ3_2 - Grey (skyline) - fragment from painting layer
03	OBJ3_3 - Light yellow (flame) - fragment from painting layer
04	OBJ3_4 - Red (number) - fragment from painting layer
05	OBJ3_5 - Orange (flame) - fragment from painting layer
06	OBJ3_6 - Light grey (foam) - fragment from painting layer
07	OBJ3_7 - Yellow (foam) - fragment from painting layer
80	OBJ3_8 - White (flame) - fragment from painting layer
09	OBJ3_9 - Yellow (frame) - fragment from painting layer
10	OBJ3_10 - Grey (foam) - fragment from painting layer
11	OBJ3_11 - Red (fire extinguisher, on the basement) - fragment from painting layer
12	OBJ3_12 - Black (shadow of fire extinguisher) - fragment from painting layer
13	OBJ3_13 - Grey (writing) - fragment from painting layer
14*	OBJ3_14* - Support - fragment collected from ground
15	OBJ3_15 - Yellow (frame) - fragment from painting layer
16	OBJ3_16 - Red (numbers) - powder from painting layer
17	OBJ3_17 - Red (flame) - stratigraphy
18	OBJ3_18 - Yellow (preparation) - fragment from painting layer
19	OBJ3_19 - Red (numbers) - stratigraphy
20	OBJ3_20 - Red (flame) - stratigraphy
NOTES:	

 $<sup>^{\</sup>rm 1}$  Example: fragment / powder, aggregate (complete stratigraphy) / selective (single layer).  $^{\rm 2}$  Example: painting material / stone / biological material / overpainting







# SAMPLING POINTS LOCATION (on photo, drawing, etc)











**SAMPLING FORM** 

**Date:** 20<sup>th</sup> June 2019

# PICTURES OF THE SAMPLING POINT

# GENERAL DETAIL





### SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of black painting from the background, collected from the edge of a lacuna, in correspondence of a fracture, on the right lateral portion of the painting. Around the lacuna, the paint layer is partially detached from the substrate.

### **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

### PLANNED ANALYTICAL TECHNIQUES

FTIR, Py-GC/MS







SAMPLING FORM

**Date:** 20<sup>th</sup> June 2019

# PICTURES OF THE SAMPLING POINT

### GENERAL



### **DETAIL**



### SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of grey painting layer from the skyline, collected from the edge of a lacuna, in correspondence of a fracture, on the right lateral portion of the painting. Around the lacuna, the paint layer is partially detached from the substrate.

## AIM OF THE SAMPLING

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes) / Study of the stratigraphy.

### PLANNED ANALYTICAL TECHNIQUES

FTIR / SEM







**SAMPLING FORM** 

Date: 20th June 2019

## PICTURES OF THE SAMPLING POINT

# GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of lightyellow painting layer from the flame, collected from the edge of a flake, under the two points of "00:53". The paint layer is partially detached from the substrate.

### **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

## **PLANNED ANALYTICAL TECHNIQUES**

**FTIR** 





Sample n°: OBJ3\_4 SAMPLING FORM

**Date:** 20<sup>th</sup> June 2019

## PICTURES OF THE SAMPLING POINT

## GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of red painting layer collected from the edge of a lacuna, in correspondence of a fracture, on the right lateral portion of the painting. The paint layer is partially detached from the substrate.

## **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

## **PLANNED ANALYTICAL TECHNIQUES**

FTIR, Py-GC/MS







**SAMPLING FORM** 

**Date:** 20<sup>th</sup> June 2019

## PICTURES OF THE SAMPLING POINT

# GENERAL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of orange painting layer, collected from the edge of a large lacuna, on the central portion of the painting. Around the lacuna the paint layer is partially detached from the substrate.

## **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

## **PLANNED ANALYTICAL TECHNIQUES**

FTIR, Py-GC/MS







Sample n°: OBJ3\_6 SAMPLING FORM

**Date:** 20<sup>th</sup> June 2019

# PICTURES OF THE SAMPLING POINT

# GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of light grey painting layer from the foam, under the first zero of "00:53", collected from the edge of a lacuna, on the right lateral portion of the painting. Flakes around the lacuna are partially detached from the substrate.

### **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes) / Study of the stratigraphy.

### PLANNED ANALYTICAL TECHNIQUES

FTIR / SEM





Sample n°: OBJ3\_7 SAMPLING FORM

**Date:** 20<sup>th</sup> June 2019

## PICTURES OF THE SAMPLING POINT

## GENERAL



## **DETAIL**



## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of light yellow painting layer from the foam, under the first zero of "00:53", collected from a scale of the paint layer, on the right lateral portion of the painting.

### **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

## **PLANNED ANALYTICAL TECHNIQUES**

**FTIR** 







Sample n°: OBJ3\_8

Date: 20<sup>th</sup> June 2019

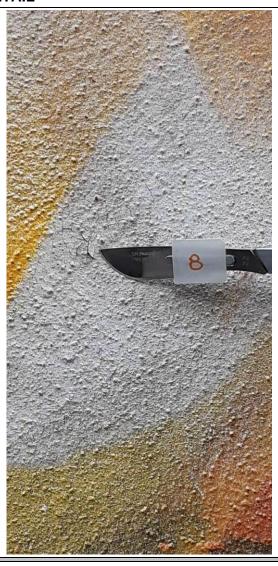
**SAMPLING FORM** 

## PICTURES OF THE SAMPLING POINT

## **GENERAL**



### **DETAIL**



## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of white painting layer from the flame under "2007", collected from a flake, on the central portion of the painting.

### **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes) / Study of the stratigraphy.

## **PLANNED ANALYTICAL TECHNIQUES**

FTIR / SEM







**SAMPLING FORM** 

**Date:** 20<sup>th</sup> June 2019

### PICTURES OF THE SAMPLING POINT

# GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of light yellow painting layer from the edge band, under the first zero of "2007", collected from a scale near to a lacuna, on the central portion of the painting.

## **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

### PLANNED ANALYTICAL TECHNIQUES

FTIR







**SAMPLING FORM** 

Date: 20th June 2019

## PICTURES OF THE SAMPLING POINT

# GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of grey painting layer from the background, under the first zero of "2007", collected from a scale near to a lacuna, on the central portion of the painting.

### **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

## **PLANNED ANALYTICAL TECHNIQUES**

**FTIR** 







Sample n°: OBJ3\_11 SAMPLING FORM

**Date:** 20<sup>th</sup> June 2019

## PICTURES OF THE SAMPLING POINT

# GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of red painting layer of the fire extinguisher, under the first zero of "2007", collected from the edge of the basement, on the left lateral portion of the painting.

### AIM OF THE SAMPLING

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes) / Study of the stratigraphy.

## **PLANNED ANALYTICAL TECHNIQUES**

FTIR, Py-GC/MS / SEM





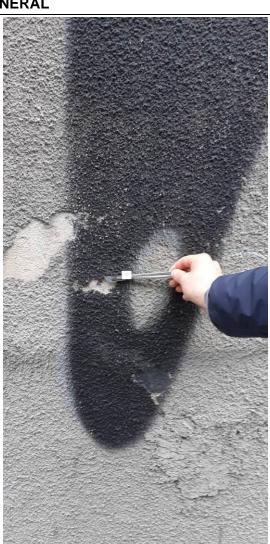


**SAMPLING FORM** 

**Date:** 20<sup>th</sup> June 2019

## PICTURES OF THE SAMPLING POINT

## **GENERAL**



### **DETAIL**



## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of black painting layer from the shadow of the fire extinguisher handle, collected from basement, on the left lateral portion of the painting.

### **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

## **PLANNED ANALYTICAL TECHNIQUES**

**FTIR** 





Sample n°: OBJ3\_13 SAMPLING FORM

Date: 20th June 2019

## PICTURES OF THE SAMPLING POINT

### GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment of dark grey painting layer from the inscription, under the first zero of "2007", collected from a scale near to a lacuna, on the central portion of the painting.

### AIM OF THE SAMPLING

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

### PLANNED ANALYTICAL TECHNIQUES

**FTIR** 





Sample n°: OBJ3\_15 SAMPLING FORM

**Date:** 27<sup>th</sup> June 2019

# PICTURES OF THE SAMPLING POINT

## GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Stratigraphy section with 3 superimposed layers: yellow layer, black paint layer and surface yellow layer.

### **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

# PLANNED ANALYTICAL TECHNIQUES

**FTIR** 





Sample n°: OBJ3\_16 SAMPLING FORM

**Date:** 27<sup>th</sup> June 2019

## PICTURES OF THE SAMPLING POINT

# GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Powder sample, scraped from a drop of the red painting used from the realization of numbers.

## **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

## **PLANNED ANALYTICAL TECHNIQUES**

**FTIR** 





Sample n°: OBJ3\_17 SAMPLING FORM

Date: 27th June 2019

## PICTURES OF THE SAMPLING POINT

## GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Complete stratigraphy from flames decoration (realized with spray paint) on black background (realized with brush paint).

## **AIM OF THE SAMPLING**

Study of the stratigraphy.

## PLANNED ANALYTICAL TECHNIQUES

OM, SEM





Sample n°: OBJ3\_18 SAMPLING FORM

**Date:** 27<sup>th</sup> June 2019

# PICTURES OF THE SAMPLING POINT

# GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Fragment from light yellow painting layer, under the black background, collected from a lacuna.

## **AIM OF THE SAMPLING**

Analysis of the chemical composition of the painting material (binders, additives, pigments and/or dyes).

## PLANNED ANALYTICAL TECHNIQUES

FTIR





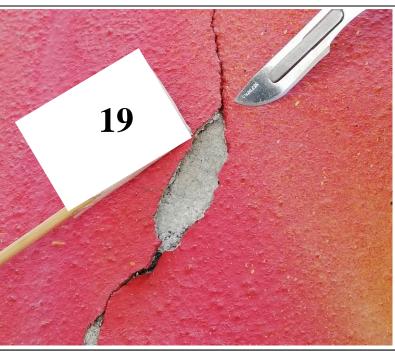
Sample n°: OBJ3\_19 SAMPLING FORM

**Date:** 27<sup>th</sup> June 2019

## PICTURES OF THE SAMPLING POINT

GENERAL DETAIL





### SAMPLE AND SAMPLING AREA DESCRIPTION

Stratigraphy section: red painting layer from numbers (realized with brush paint), flames decoration (realized with spray paint). It is not certain if the black background is also present under the red layer.

### **AIM OF THE SAMPLING**

Study of the stratigraphy.

### PLANNED ANALYTICAL TECHNIQUES

OM, SEM





Sample n°: OBJ3\_20 SAMPLING FORM

**Date:** 27<sup>th</sup> June 2019

# PICTURES OF THE SAMPLING POINT

# GENERAL DETAIL





## SAMPLE AND SAMPLING AREA DESCRIPTION

Stratigraphy section: black background layer (realized with brush/roller paint), flames decoration (realized with spray paint).

## **AIM OF THE SAMPLING**

Study of the stratigraphy.

## **PLANNED ANALYTICAL TECHNIQUES**

OM, SEM





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#### Authors:

Moira Bertasa, Tommaso Poli, Chiara Riedo, Dominique Scalarone (University of Torino) Arianna Scarcella, Michela Cardinali, Paola Croveri, Chiara Ricci (Fondazione Centro Conservazione e Restauro "La Venaria Reale")

### In collaboration with:

Martina Croce, Matilde Garrè, Giorgia Rosso, Marilena Verdi, (PFP1 III year, summer internship 2019)

Enrica Appi, Sara Bozzato, Federica Gastaldelli, Noemi Sanna. (PFP2 IV year, summer internship 2019)



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