

# XRD Analysis Results



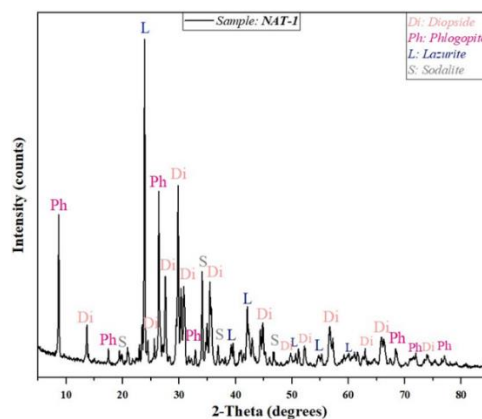
**The bird of Mesarka**

The SciArt Project  
2024

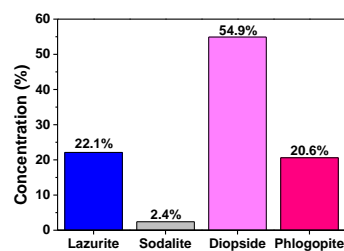
## Results Report

### Point of Interest 1: Blue painting layer

This is the XRD pattern of the blue painting layer.



The analysis of the pattern shows that the blue paint layer is composed of the minerals lazurite, diopside, sodalite, and phlogopite, with concentrations that are presented in the graph.



Lapis lazuli has been mined in Afghanistan since antiquity, but in the last century it has also been found in Russia and Chile. Its composition varies depending to the mining area.



Minerals	Afghanistan	Chile	Russia
Lazurite	20%-25%	20-40%	20%-25%
Sodalite	2%-5%	2%-15%	2%-5%
Diopside	50%-60%	5%-15%	45%-55%
Flogopite	18%-25%	-	18%-25%
Wollastonite	-	35%-65%	-
Hauyne	-	-	5%-12%

## Point of Interest 2: Potato sac

This is the XRD pattern of fibers collected from Point of Interest 2. Cellulose is identified, which is characteristic of fibers of plant origin.

