



**MARMARA UNIVERSITY
FACULTY OF ENGINEERING
ENVIRONMENTAL ENGINEERING DEPARTMENT**

**ENVE 4197/4198 ENGINEERING PROJECT
PROPOSAL FORM
FALL 2023-2024**

Instructor : Prof. Dr. S. Sinan Keskin

Project Title : Investigation of the impact of domestic forest fires on air pollutant concentrations in some Turkish cities.

Proposal No. : Sinan Keskin-1

Number of Students : 2-3

Requirements (from students) : Meteorological data retrieval, running a wind rose software, combining pollution data and wind rose plots to identify the possible impact of specific forest fires.

Scope of the Project :

Air pollution parameters measured in meteorology stations depend strongly on wind directions and intensities. Wind rose plots will be obtained for some cities in Türkiye on daily basis for selected periods by running a specific software. Air pollution parameters obtained on daily basis from local meteorology stations for the selected cities and predefined periods will be used to identify the possible impact of domestic forest fires on air pollution parameters.

Hardware/Software/Lab/Equipment Requirements :

Air pollution data from Turkish State Meteorological Service, Wind Rose production software, personal computer, spreadsheet and graphics software.

Development Plan :

Within the first semester, air pollution and wind data will be obtained for different meteorological stations in some cities possibly affected by the domestic forest fires. A wind rose graphics software will be obtained and training runs will be accomplished.

Within the second semester, the wind rose plots will be produced for the selected cities in predefined periods. Air pollution data on daily basis will be combined with wind rose plots to understand the impact of domestic forest fires on air pollution parameters in selected cities.