Ash for Insulation

Aldweikat, Dia'a (School: Modern Systems School)

It has become an important matter to replace commercial mineral wool because it is not Eco-friendly since it does not biodegrade, with an Eco-friendly material that gives better efficiency in thermal insulation than mineral wool. The problem of the project helps to find an innovative way for thermal insulation to replace commercial mineral wool. Through a plethora of sequential experiments that were done in the school’s laboratory, it has been proven that ash gives better efficiency in thermal insulation than mineral wool, and that ash has the ability to reduce wasting thermal energy compared to mineral wool when exposed to heat. Ash can be used within a wide range in the industrial field and in central heating. This project helps to benefit from the leftovers of combustion that produces ash.

Awards Won: