

## Third Laureate Innovation

26<sup>th</sup> Khwarizmi International Award (KIA)



- **Project Title:** Designing and manufacturing of the 120mm high explosive extended – range (rocket-assisted) mortar round system
- **Executive Organization:** Defense Industrial Organization (DIO)
- **Collaborator Organizations:** Many Universities, Public & Private Companies

- **Abstract:**

This System has acquired the technology and technical knowledge needed for designing and manufacturing extended range ammunition and its Launcher. This product has been systematically designed and produced includes the design and production of the mortar tube, propelling charge, and the round. All of the assemblies and sub-assemblies of the system along with intersection points were conducted through system engineering processes. The round is unique in the world, and all the technology and design are domestically developed. The required simulation and designing soft-wares were provided and confirmed by domestic scientific institutes and universities. In comparison with conventional ammunition of the same caliber, this product enjoys many advantages over similar products.

The results of the plan:

- Acquiring the technology and technical knowledge needed for designing and manufacturing an extended range ammunition and its Launcher
- Indigenizing the required technology for mass production of the product
- Upgrading the capabilities needed for producing designing and simulation software>s used for this kind of munitions
- Acquiring the algorithms systematic designing of various kinds of ammunitions.

