

# Applied Research

## Second Winner

- **Project Title:**  
Pilot plant for production of sulfuryl chloride
- **Initiator:**  
ACECR branch of Tehran Coworker
- **Representative:**  
Ali Tabatabaei Qomi (Eng.)
- **Contributors:**  
Iranian Organization for Industrial Renovation and Development The Ministry of Industries, The Ministry of Agricultural Jihad
- **Colleagues:**  
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### Abstract:

Sulfuryl chloride is a key chemical for manufacturing chlorophenols, sulphonyl chlorides and sulphonic acids or sulphonates. These products are frequently use as intermediate in the production of pharmaceutical active ingredients, crop protection agents, disinfectants, and dyestuff. As coupling product only gaseous compounds which means that the product is to isolate. Chlorination of hydrocarbons with sulfuryl chloride takes place more selectively, that is important for fine chemicals world and chemical industries. At this project the best model has been manufacturing sulfuryl chloride with compatible technology in Iran. Expensive international transport, Inexpensive raw material, and know how are important items. At this improved method in liquid catalytic processes  $\text{SO}_2$  produced by reaction oleum and sulfur with one flow chlor gas interacted to produce sulfuryl chloride. The product is easy to isolate.