

Foreign Winner		4
Second Winner	Rank	4
Basic Sciences	Category	4
Prof. Dimitar Klissurski	Researcher	4
Bulgarian	Nationality	4
Technical University of Sofia-Bulgaria	University	4
Scientific bases of the synthesis of highly efficient catalysts	Project Title	4
Abstract		4

The research achievements of Prof. Dimitar Klissurski are in three important areas of chemistry: catalysis, inorganic synthesis and mechanochemistry.

In an ingenious way, Prof. Klissurski discovered the decisive role of the oxygen bonding energy in oxide type catalysts for their activity and selectivity in catalytic oxidation reactions. Later, he showed the validity of similar correlation also for catalytic dehydrogenation and dehydration. In such way, he created a bridge between two large areas of temporary heterogeneous catalyses. Prof. Klissurski also developed many new highly efficient and highly selective catalysts. He created also various new original methods for study, testing and synthesis of new inorganic materials. Part of them is now used in research laboratories. Other are applied in industry with impressive economic impact.