Second Laureate
Fundamental Research

- **Research Work Title:** **Resource Recovery: Conversion of agricultural wastes and residuals to biofuels and biomaterials**
- **Researcher:** **Prof. Mohammad Taherzadeh**
- **Field:** **Environmental biotechnology**
- **Country of Residence:** **Sweden**
- **Scientific Affiliation:** **University of Borås**

Abstract:

Our vision is that “agricultural waste” is a “resource”, but our knowledge has not been developed enough to convert it to product, so we don’t use it and it remains waste that we want to get rid of it. If we look as molecules and atoms of any wastes, we should be able to find out many methods and many valuable products to use the wastes and products. In this research, we have developed methods to convert sugars, starch, cellulose and hemicellulose present in agricultural wastes, industrial wastes and municipal wastes into several products including biofuels such as ethanol and biogas and also animal feed and biopolymers using bacteria and filamentous fungi. This knowledge is now transferring to several companies in Sweden, Germany, Iran, etc.

Biography:

Prof. Mohammad Taherzadeh received his BSc and MSc in chemical engineering and PhD in bioscience, he then developed his area in the border of these sciences and applied research. He worked at several universities including Isfahan University of Technology in Iran and Lund University and Chalmers University of Technology in Sweden until 2004 that he works as full professor at University of Borås in Sweden. He worked also part time as the chairman of biotechnology chemical engineering committee at Swedish Research Council during 2015-2012. He has developed industrial biotechnology, contributed to several companies in Iran and Sweden, published more than 200 books, book chapters and papers in scientific journals and was active in transferring knowledge and technology to different countries in the field of waste management and and resource recovery.