Address of Pr Salim Daccache s.j., Rector of Saint Joseph University of Beirut on wednesday the 3<sup>rd</sup> of May 2017, in the Opening Ceremony of the "18<sup>th</sup> ISANH Middle East World Congress - Beirut Antioxidants 2017" – Auditorium François Bassil CIS USJ

I would like to welcome you to this Opening Ceremony of "18th ISANH Middle East World Congress - Beirut Antioxidants 2017" which takes place today in this auditorium François Bassil of the University's Innovation and Sport Campus St Joseph University of Beirut. Thanks Excellency Hajj Hasan to be with us in many events! You are a great supporter for our mission. It is important for me to welcome the researchers and speakers from several countries such as France, China, Russia, etc ... this ISANH symposium in its 18th version appears as a summit of biological and chemical science on antioxidants to identify the elements which can threaten them and other components that can protect them to promote the good health of human beings.

Like Mr Jourdain Molière in the *Bourgeois Gentilhomme* who boasted of speaking prose without knowing it, I can say that we also use antioxidants in the food we eat without knowing it. Your international colloquium on Antioxidants is a good way to know how to deal in industry and in our kitchen with these antioxidants in their simplest and most complicated details, and I am sure that your colloquium will be a relevant step in a new look on many issues concerning Antioxidants. In fact I discovered that these Antioxidants and especially phenolic compounds are bioactive molecules found in several fruits and vegetables. They are currently of growing interest due to their functional properties in promoting human health and this through their antioxidant properties.

Like Mr. Jourdain who also loved his stomach and good food, we can be sure that antioxidants are well components to our advantage and to the benefit of good health. They present a well-known capacity to scavenge free radicals and they show anti-inflammatory, anti-carcinogenic, anti-allergic effects and coronary heart disease reducing properties.

In fact, we know that food industries processes generate every year millions of tons of wastes. Consequently, the disposal of these byproducts without any particular treatment or management create health and environmental concerns. More than one trillion dollars' worth of food are wasted in the Middle East each year (The National, UAE, April 9 2016). Countries in the Middle East waste 1.3 billion tons of food every year. Wastage accounts for about 50 per cent of agricultural crops (The National, UAE, April 9 2016). Food waste includes organic wastes generated in hotels, restaurants, canteens, cafeterias, shopping malls and food industries.

Due to the increasing environmental awareness, many standards have been imposed in the industries regarding waste reduction and disposal. Prevention has been stated as a prior waste management strategy, whereas the re-use or recycling of these materials are preferred to the waste-to-energy scenarios.

At this scenario, the Faculty of sciences at Saint-Joseph University of Beirut, since almost 15 years, has been interested, through collaborations with several Lebanese food industries, in:

I- Optimization of red grapes harvesting and production of wine of a high quality through the evaluation of the extractability of grape phenolic compounds during winemaking

II- Optimization of phenolic compounds extraction from food industrial byproducts

III- Assessment of their bioactive effects on cellular mechanisms and characterization of their biological properties

Our researchers developed several innovative procedures in order to optimize the antioxidants extraction from different food matrices such as: grape pomace, wine shoots, orange and pomegranate peels. They are able to produce highly purified powder enriched with natural antioxidants, this powder could be used for several industrial applications. They emphasized as well on the antioxidants molecules anti-microbial properties, anti-cancer effects and anti-aging processes. Since 2002, they published more than 30 scientific papers in highly ranked journals in this field and participated to 25 international

meetings in order to present their state-of-the art technology for antioxidants extraction and characterization from food byproducts.

Since 2014 the Faculty of sciences contributes closely with the International Society of Antioxidants in Nutrition and in Health (ISANH). ISANH is a non-profit-making international organization and has many aims in the field of nutrition. I would like to take the opportunity to thank Pr Marvin Edeas, Chairman of ISNAH for this fruitful collaboration with our university. It is to be mentioned that Pr Richard Maroun has been assigned as the Chairman of ISANH in the Middle East since 2016.

At the end I would like to enumerate the benefits of our collaboration with local food industries at both levels of innovation and valorization. For our University the benefits are: the implementation of original research projects, the development of existing university curricula (Masters and PhD degrees), the publication of scientific articles, the patenting of technological innovation, the participation in international meetings and the better valorization of academic research by possible creation of spinoffs and startups. For local industries the benefits could be: a better management of their wastes and byproducts, the production of high added value natural products, a better implementation of academic research results and the solicitation of local expertise and thus the reduction of external dependence.