PREFACE

The present volume, a Supplement of Acta Biologica Szegediensis involves the proceedings for the 5th Congress of the Hungarian Society for Free Radical Research, held in Szeged, Hungary, 27-29 August, 2009.

It contains contributions from several special fields of free radical research, namely, molecular base of oxidative and nitrosative stress; role of free radicals in the patomechanism of diseases; oxidative damages and antioxidant defence systems is plants, animals and human; oxidative stress, life style and natural antioxidants; neurodegeneration, and oxidative processes; new methods for determination of free radical damages.

The papers contained by the current volume, although represent only a part of the oral and poster presentations, offer a good overview of this unique conference. There were participant from several field of sciences; physicians, biologists, molecular biologists, veterinary, agrarians, chemists. The connection between them is the common research topic, but different aspects.

The history of free radical research in Hungary is very rich and eventful.

The birth date of free radical research in Hungary is 1978 – almost three decade before. That time was organised the first round table conference in Szeged according to proposition Prof. Béla Matkovics. Interest was growing up from time to time and more and more scientist joined to free radical research. Next two-days conference was held in Pécs in the year 1984 organised by Prof. Béla Török. Two years later in 1986 Prof. Matkovics Béla organised conference in Szeged entitled "Oxygen free radicals and tissue damage". In 1989 two big Hungarian towns – Debrecen and Szeged - organised a conference together. Proceedings of the conference was published by the Akadémiai Kiadó (Budapest) entitled "Radicals, ions and tissue damage". In 1991 Prof. János Fehér and Dr. Anna Blázovics organised conference in Balatonaliga entitled "Role of free radicals in biological systems". The Free Radical Section of the Liver Foundation was established in that year, too. Our Free Radical Society was joined to the Society for Free Radical Research European Region (SFRR Europe) in 1992 in Turin. From this year our conferences were organised with international participants. For example the conference entitled "Oxygen free radicals and scavengers in the biological and medical sciences" was organised by Prof. Gyula Mózsik and Dr. Áron Vincze in the year 1993. Important date of our society was the year 1995, when the President of SFRR Europe – Prof. G. Poli asked the Hungarian Section to organise a Summer School in Budapest. Organisers were Prof. János Fehér and Dr. Anna Blázovics. Next symposium was held together with 26th membrane Transport Conference in Sümeg in 1996 organised by Prof. Sándor Imre from Debrecen University of Medicine. At the end of August, 1997 Prof. Miklós Mézes organised the 5th Free Radical Conference in Gödöllő at the University of Agricultural Sciences.

Next years gave us a few less possibilities to hold conferences, but we met almost every year. In the even years one day workshops (mostly in Budapest organised by Dr. Anna Blázovics), every two years two and half days conferences were set up in the different towns (Szeged – 2002, Debrecen-2005, Pécs – 2007) .

There is an interesting situation this year, because our conference is 5th again. The cause is that the society is renewed as Hungarian Society of Free Radical Research at the end of nineties.

We have established the "Matkovics Béla" Plaquette for those who made their best in the working of Hungarian Society of Free Radical Research. First researcher who got this plaquette in 2007 was Prof. János Fehér, everlasting honorary president of our society. This year in "Szeged Conference" prize-winner was Prof. Anna Blázovics, present vice-president.

I express my gratitude and thanks to my colleagues, people and institutions who helped to organize this Congress.

Dr. Ilona Szőllősi Varga organizer