



**3rd WORLD CONGRESS ON
GLYCATION**

GLYCATION - MAILLARD 2016

GLYCATION 2016: TARGETING GLYCATION IN HEALTH & DISEASES

MAY 26-27, 2016

HUNGARIAN ACADEMY OF SCIENCES

BUDAPEST, HUNGARY

3rd World Congress on

Maillard Reaction & Glycation

Health & Diseases – Agro-Food Industries

May 26-27, 2016

Academy of Sciences, Budapest, Hungary

Scientific Agenda



www.glycation-site.com

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Maillard Reaction & Glycation**

**May 26-27, 2016
Academy of Sciences, Budapest, Hungary**

Dear Colleagues,

On behalf of the International Society of Antioxidants in Nutrition and Health (ISANH), it is a pleasure to welcome you for the **3rd World Congress on Maillard Reaction** which will be held at **Academy of Sciences, Budapest, Hungary** on **May 26-27, 2016**.

The Maillard Reaction Congress will be divided in two parts:

- Part 1 will be dedicated to **Maillard Reaction & Glycation in Health & Diseases** and will highlight the following topics:
 - Recent Scientific Advances & Directions
 - Maillard Reaction in Pathologies & Diseases
 - Ageing, Redox Process & Ageing-related pathologies
 - Strategies & Innovations
- Part 2 will be dedicated to **Maillard Reaction & Glycation in Agro-Food Industry** and will highlight the following topics:
 - Recent Scientific Advances & Directions
 - Maillard Reaction & Acrylamid
 - Impact on taste and organoleptic aspects
 - Strategies & Innovations in Agro-Food Industry

To conclude this congress, a **general discussion** will be held between speakers, scientists and industry sector about Maillard Reaction, Glycation and what about tomorrow. We will discuss about where we are now in the glycation science and what kind of strategies we need urgently to target clinical diseases related to glycation.

The other point is how we can clarify the situation with the agro-food industry mainly in term of how to decrease the intake of the glycated products in food.

We look forward welcoming you during Maillard Reaction congress.

Pr Ladislav Robert - President of Maillard Reaction 2016

Pr Marvin Edeas - Chairman of the Scientific Committee

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Maillard Reaction & Glycation

May 26-27, 2016
Academy of Sciences, Budapest, Hungary

Day 1: May 26, 2016

Maillard Reaction & Glycation in Health & Diseases

7h30 Opening of Registration – Welcoming of attendees

8h55 Introduction Remarks by Chairpersons
Prof. Ladislav Robert & Prof. Marvin Edeas

With the participation of the honorary committee:

Prof. Gyorgy Kosztolanyi, President of the Medical Section of the Hungarian Academy of Sciences, Budapest, Hungary

Prof. Tamas Freund, Vice President of Hungarian Academy of Sciences, Budapest, Hungary

Prof. Anna Kadar, Medical University Semmelweis, Budapest, Hungary

Prof. Karoly Kocsis, President of the council of external members of the Hungarian Academy of Sciences

Prof. Karoly Lapis, Medical University Semmelweis, Budapest, Hungary

Prof. Sylvester Vizedy, Past President of Hungarian Academy of Sciences, Budapest, Hungary

9h30 Science in Hungary & Hungary in Science

István Hargittai, Budapest University of Technology and Economics, Budapest, Hungary

Session 1: Recent Scientific Advances & Directions

10h00 Introductory Lecture: The History of Redox Biology, from "Reduktiones" of Hans von Euler to Free Radicals, exemplified by the Maillard Reaction and the Elastin Receptor, their role in Atherogenesis
Ladislav Robert & Jacqueline Labat-Robert, Hôtel Dieu, Paris, France

10h45 Coffee Break & Posters Session

11h15 Oxidative Stress, Glycation & Redox 2016: Questions, controversies & perspectives in Health and Diseases
Marvin Edeas, Chairman of ISANH, Paris, France

11h45 Extracellular matrix glycation, redox status and cross-linking
Sylvie Ricard-Blum, Université Lyon 1, Lyon France

12h15 Poly(ADP-ribose) signalise in oxidative stress
Laszlo Virag, University of Debrecen, Debrecen, Hungary

12h45 Lunch Break & Posters Session

14h00 Concepts and misconceptions regarding the nature of oxygen free-radicals in the living systems
Imer Zs Nagy, University of Debrecen, Debrecen, Hungary

Session 2: Maillard Reaction in Pathologies & Diseases

- 14h30 **AGE-RAGE interaction in fibrosis of the eye**
Ram Nagaraj, University of Colorado School of Medicine, Colorado, USA
- 15h00 **Microbiota & Maillard Reaction: Metabolization of Maillard reaction products by the human colonic microbiota**
Michael Hellwig, Technische Universität, Dresden, Germany

15h30 Coffee Break & Posters Session

- 16h00 **AGE-RAGE axis: implication in fibrosis and aging**
Eric Boulanger, INSERM-Lille2, Lille, France
- 16h30 **Effect of AGE intake on inflammation and ageing: state of sciences and perspectives**
Ivan Bautmans, Vrije Universiteit, Brussels, Belgium
- 17h00 **Supra-additive impact of mitochondrial dysfunction and subsequent oxidative stress in central nervous system pathology**
Beata Sperlagh, Hungarian Academy of Sciences, Hungary
- 17h30 **Short oral presentations upon abstracts submission**

Among the presentations selected:

Glycated Human Albumin Triggers Mitochondrial Metabolism of Preadipocyte Cells
Philippe Rondeau, UMR Diabète Athérombose Thérapies Réunion Océan Indien (DéTROI), France

Glycation Abolishes The Cardioprotective Effects of Albumin during Ischemia-Reperfusion
Faadiel Essop, Stellenbosch University, South Africa

Prevention of glycosylation by natural and synthetic antioxidants
Izabela Sadowska-Bartosz, University of Rzeszów, Poland

Glycated apolipoprotein A-I exacerbates cellular senescence in human umbilical vein endothelial cells accompanied by impaired insulin secretion activity and embryo toxicity
Kyung-Hyun Cho, Yeungnam University, Korea

Endothelial cell dysfunction caused by diabetes and age related reactive dicarbonyls
Andreas Simm, Martin-Luther-University Halle-Wittenberg, Germany

High-density lipoprotein oxidation in type 2 diabetic patients: is it a glycation-catalyzed process?
Annunziata Lapolla, University of Padova, Italy

18h30 **End of First Day**

20h00 **Speakers Dinner**
To participate to this dinner, please register online.

Day 2: May 27, 2016

- 8h55 Introduction of the second day
- 9h00 Diet-induced accumulation of AGEs contribute to metabolic diseases onset by interfering with SREBP-1c activity
Raffaella Mastrocola, University of Turin, Turin, Italy
- 9h30 The role of hemoglobin derived heme in the pathogenesis of vascular disorders
György Balla, University of Debrecen, Debrecen, Hungary
- 10h00 Exercise and brain function: is it redox regulated?
Zsolt Radak, University of Physical Education, Budapest, Hungary

10h30 Coffee Break & Posters Session

Session 3: How to Evaluate Glycation & Glycated-End Products in Health & Diseases?

- 11h00 Detection of AGEs as markers for carbohydrate metabolism and protein denaturation
Ryogi Nagai, Tokai University, Kumamoto, Japan
- 11h30 Glycation of lens proteins in diabetes & its non-invasive assessment
Jan Skrha, Charles University, Prague, Czech Republic
- 12h00 Skin collagen pentosidine and fluorescence in diabetes are predictors of creatinemia increase and retinopathy progression already 6 years after punch-biopsy
Michel Sternberg, Université René Descartes, Paris, France

12h30 Lunch Break & Posters Session

Session 4: AGEs & RAGEs: Strategies & Innovations

- 14h00 Delayed intervention with pyridoxamine improves metabolic function and prevents adipose tissue inflammation and insulin resistance
Casper G. Schalkwijk, Maastricht University, Maastricht, The Netherlands
- 14h30 i-RAGE as a novel carboxymethylad peptide to prevent AGE-induced apoptosis and endoplasmic reticulum stress in vascular smooth muscle cells
Jean-Sébastien Maltais, Sherbrooke University, Québec, Canada
- 15h00 What do Dietary Maillard Reaction Products and in vivo AGEs have in common? Are they a risk to human health?
Frédéric Tessier, Faculté de Médecine, Université Lille 2, Lille, France

15h30 Coffee Break & Posters Session

- 16h00 Short oral presentations upon abstracts submission
- Dietary advanced glycation end-products and chronic kidney disease: Higher consumption of AGEs through dietary fat
Hanieh-Sadat Ejtahed, Shahid Beheshti University of Medical Sciences, Iran
- Immunogenicity of biological macromolecules damage by advanced glycation endproducts (AGEs): A Probable Bio-marker for the Auto-immune Diseases
Saheem Ahmad, Integral University, Lucknow, India
- 17h00 Round Table Discussion: AGEs 2016: Between Prevention & Therapeutics
In the presence of Organizers & Speakers from scientific committee
- Maillard Reaction Awards 2016
- 17h30 End of Maillard Reaction 2016