

Magnettech Award 2007



The Magnettech Award Winners:

On the left: Prof. Thomas Munzel, MD (Mainz, Germany)

On the right: Dr. Andrei L. Kleschyov, PhD (Mainz, Germany)

In the middle: Eberhard Friese, Magnettech GmbH, Germany

Magnettech Award for Biomedical Research

The Magnettech GmbH has longstanding interest in applications of electron paramagnetic resonance in biology and medicine. To stimulate advances in this field, Magnettech GmbH has found in 2007, the Magnettech Award for Biomedical Research.

Conditions

- 1) The award is granted biannually to one or two individuals for an outstanding work in the field of Biomedical EPR.
- 2) A board of Magnettech, Ltd Trustees decides on the bestowal of the award. Legal steps against the decision of the Board of Trustees are not possible.
- 3) The award comprises of diploma, special prize – “EPR quantum” and bank check of 6.000 Euro (or two checks of 3.000 Euro in the case of joint award).
- 4) The award ceremony is taking place during the “NO Forum of German-speaking countries” to be held in Mainz, Germany (usually in October every odd year). The laureate is expected to give a 30 min lecture. The laureate’s travel expenses to conference will be covered.
- 5) Preferably, candidates for the Magnettech award should be nominated by a peer. However, self-nomination is also acceptable.
- 6) Letter(s) of support, curriculum vitae, short abstract of the work and selected publications should be submitted electronically at e.friese@magnettech.de by August 1.



Magnettech GmbH / Louis - Blériot - Str. 5 / 12487 Berlin - Germany

phone: +49 30 - 67 80 25 26 fax: +49 30 - 63 22 41 01

eMail: info@magnettech.de / internet: www.magnettech.de

News

The 2007 Magnettech Award is granted to Prof. Thomas Munzel and Dr. Andrei L. Kleschyov, both from the Johannes Gutenberg University (Mainz, Germany) for the development of new EPR-based approach for quantification of vascular nitric oxide using colloid iron-dithiocarbamate. Please see the articles attached.

Nitric oxide (NO) is a short-lived mediator, produced by the inner layer of blood vessels (endothelium) in response to several physiological stimuli and is considered to be a key regulator of blood flow. Recent studies suggest that compromised production of vascular NO (endothelial dysfunction) is an early sign of cardiovascular pathology, including such widespread diseases like atherosclerosis, hypertension and diabetes mellitus. Due to low concentrations and short half-life time, the quantification of vascular NO by commonly used analytical methods, was problematical. The EPR-based approach elaborated by the team of Thomas Munzel and Andrei Kleschyov allows direct detection and quantification of the minute amounts of vascular NO. The method has been successfully validated in different animal species and most types of blood vessels, as well as in cell culture. This direct method for evaluation of vascular NO is now used both in pathophysiological studies as well as in searching for new drugs regulating vascular NO levels. Being first published in 2000, the method became popular in many cardiovascular laboratories worldwide.

