

Centre of Biomedical Engineering Prof. Ivan Daskalov Bulgarian Academy of Sciences

Achievements of young scientists in Centre of Biomedical Engineering Prof. Ivan Daskalov

The Centre of Biomedical Engineering Prof. Ivan Daskalov is a research unit of the Bulgarian Academy of Sciencess. The activities of the Centre are directed to engineering approaches for studying biological and medical events and processes. Our work is motivated by the goals of improving diagnostics, optimizing therapeutic procedures, modelling and control of bioprocesses systems. Centre of Biomedical Engineering Prof. Ivan Daskalov was founded in 1994.

Research activities:

- Analysis and processing of biomedical signals;
- Electrical stimulation and defibrillation;
- Analysis and modeling of biomedical structures, processes and systems;
- Computer-aided decision making in biology and medicine;
- Modelling and optimization of bioprocess systems.

During the last years the young scientists achieved significant scientific attainments. We asked Prof. Mikhail Matveev, Director of Centre of Biomedical Engineering Prof. Ivan Daskalov, to tell us something more about this.



Prof. Mikhail Matveev,
Director of Centre of Biomedical Engineering
Prof. Ivan Daskalov

In the Centre of Biomedical Engineering Prof. Ivan Daskalov the support of the young scientist is tradition for the scientific and administrative board. It is important to outline activities like:

- Selection of young and motivated people for scientific research activities from the last years of bachelor and master courses in the in the universities and the assigning of concrete problems from the field of work of the section with the tendency to become thesis work; payment, if possible, for the research activities.
- Council from the scientific board for fast professional growth of the young scientists;

encouraging work with other scientists including those from different section with which the Centre of Biomedical Engineering Prof. Ivan Daskalov collaborates.

- Financial support: expense covering for the taxes for Bulgarian or international scientific conferences; prizes for acquiring a high scientific results; covering expenses for dissertation and academic rank.
- Active cooperation for the acquiring of housing.
- Priority funding for research materials and technical support needed for the research activities.
- Possibilities for specialization with international research groups.

As a result the scientist from the department can be proud with the numerous prizes of their young colleagues. For the twelve years of existence of the department and the small number of scientists – around 32 for the period, four received the Bulgarian Academy of Sciences "Prof. Marin Drinov" Award for young scientists under the age of 35 (Res. Assoc. Feras Al Hatib – 1997; Res. Assoc. Irena Jekova – 2002; Res. Assoc. Ivanka Tzakovska – 2003; Res. Assoc. Vessela Krasteva – 2006). Two researchers – Mitko Petrov and Tatiana Ilkova won the award for "Scientific and Technical Research, Development and Incorporation" from the Federation of Scientific Engineering Union (two times – 1997 and 1998); Ph.D. Ivanka Tzakovska as scientific advisor of a small group of scientists won a Honorary Diploma and First Prize from the Scientific Board "Scientific Researches" for her results on the "Young Scientists" project (1998-2000) and the "Evrika" award for scientific achievements for 2004 from "Evrika" foundation and the High Testimonial Commission.

Especially good for the young scientists at the Centre of Biomedical Engineering Prof. Ivan Daskalov was the year 2006. Ph.D. Vessela Krasteva added to hers high Academic Award the National Award for Scientific Breakthrough for young scientists less than 35 years of age from the Ministry of Education and Science; and Ph.D. Tania Pencheva won the Award for young scientist's achievements concourse of the Union of the Scientists in Bulgaria. Res. Assoc. Alexander Dimitrov has been awarded Fellowship support to attend the XXVIII International Congress in Clinical Neurophysiology, UK, by the International Federation of the Clinical Neurophysiology. A team of authors including young scientists from the section and Medical University – Sofia, received award for their work in the field of cardiology on the X National Congress of Cardiology. It is important to be noted that from the three nominees for the prize of the Medical Science Council, Medical University – Sofia, in the concourse for research papers for obtaining Ph.D., the winner – Ph.D. Todor Uzunov and the second place - Ph.D. Stefan Naidenov had a scientific advisor from the Centre of Biomedical Engineering Prof. Ivan Daskalov. During the year 2006 three young scientists (under the age of 35) – Ph.D. Tania Pencheva, Ph.D. Vessela Krasteva and Ph.D. Irena Jekova successfully attained academic rank – Assoc. Prof.

> Professor Mikhail Matveev, Director of Centre of Biomedical Engineering Prof. Ivan Daskalov



Assoc. Prof. Ph.D. Eng. Vessela Krasteva, winner for 2006 of the National Award for Scientific Breakthrough for young scientists less than 35 years of age from the Ministry of Education and Science and the Bulgarian Academy of Sciences "Prof. Marin Drinoy" Award



Assoc. Prof. Ph.D. Eng. Tania Pencheva, winner for 2006 of the Award for young scientist's achievements concourse of the Union of the Scientists in Bulgaria



Assoc. Prof. Ph.D. Eng. Irena Jekova winner for 2002 of the Bulgarian Academy of Sciences "Prof. Marin Drinov" Award for young scientists under the age of 35



Ph.D. Ivanka Tzakovska winner for 2002 of the Bulgarian Academy of Sciences "Prof. Marin Drinov" Award for young scientists under the age of 35 and of Honorary Diploma and First Prize from the Scientific Board "Scientific Researches" and the "Evrika" award for 2004