

Einladung zum Vortrag

Zeit: **Donnerstag, 27. November 2008**
17:00 Uhr

Ort: **Hörsaal C 264**
Im Chemie-Gebäude der TU Berlin
Straße des 17. Juni 135
10623 Berlin

Es spricht: **Professor Dr. Igor Mikhailopulo**
Dept of Nucleosides and Oligonucleotides,
Institute of Bioorganic Chemistry
National Academy of Sciences of Belarus, Minsk, Belarus

"Enzymes of Nucleic Acid Metabolism in Biotechnology of Nucleosides: State of the Art and Prospects"

The following areas and applications of nucleosides will be discussed

1. RNA – inexhaustible source of natural ribonucleosides, which, in turn, are valuable material for the preparation of vast diversity of base and sugar modified nucleosides of biological importance; bacterial productivity is high, very efficient and can supply unlimited quantity of RNA.
2. DNA–salmon sperm is the only source of natural 2'-deoxyribo-nucleosides, which are very desirable material for the preparation of modified 2'-deoxynucleosides. However, the desired individual 2'-deoxynucleosides can be isolated in low yield (ca. 55 kg of four 2'-deoxynucleosides from 100 metric tons of salmon (Pure Appl. Chem. 2001, 73 (1), 175-180). The continuously growing demand for natural 2'-deoxynucleosides as well as their derivatives stimulates the search for alternative sources of these compounds on practical level.
3. Nucleoside phosphorylases [thymidine (TP), uridine (UP) and purine nucleoside (PNP)] – main enzymes of biotechnology of nucleosides.
4. New approaches to the synthesis of nucleosides.

Gastgeber und Anfragen: Prof. Dr. Peter Neubauer (peter.neubauer@tu-berlin.de)