

## Internship at Max Planck Institute

From 11.10.2018 to 27.10.2018 Head of the chair of «Physics», Doctor of Physics and math. science, professor, Corresponding Member of the NAS of RK. Within the framework of the grant «The best teacher of the university -2017» of the MES of RK, at the invitation of Professor E. Brening, Vladimir Kosov underwent an internship at Max Planck Institute in Koln, Germany. Max Planck Institutes Consortium is a worldwide recognized network of research organizations in the field of basic research.

Max Planck Institute in Koln is the largest center for interdisciplinary research in the field of natural and computer sciences. The internship took place in the laboratory of «Neural Circuits and Model Systems» headed by a famous scientist, Professor T. Korotkova.

Experiments are being carried out in the laboratory and new approaches are being developed to study molecular mechanisms in biophysical and multicomponent systems, and the phenomena of neural and molecular transfer in multiparameter objects are modeled. Professor Vladimir Kosov together with the scientists of the laboratory participated in the experiments and numerical experiments, made a scientific report.

The obtained knowledge and information about the cultural and educational specifics of design studies in Germany will further harmonize joint scientific contacts between scientists from Abai KazNPU and Max Planck Institute





Max Planck Institute  
Director: Prof. Dr. Jens Brüning

MPI for Metabolism Research, P.O. Box 41 08 26, 50866 Cologne, Germany

Prof. V.N. Kossov  
The Kazakh National Pedagogical University  
Almaty  
Kazakhstan

Dr. Tatiana Korotkova  
Max Planck Research Group Leader  
Research Group "Neuronal Circuits and  
Behavior"  
tatiana.korotkova@mf.mpg.de  
Tel.: +49 (0)221 4726-253

Cologne, 26.10.2018

**Certificate: internship at the Max Planck Institute in Cologne, Germany**

Dear Sir or Madam,

herewith I confirm that Prof. Vladimir Kossov successfully performed the internship from 11.10.2018 to 26.10.2018 at the Max Planck Institute for Metabolism Research in Cologne, where I lead a Max Planck Research Group. We worked on new approaches in the scientific research of molecular mechanisms in biophysical and model systems. In particular, we discussed and developed workflow in data acquisition, processing and analysis. Further, we explored novel ways of data analysis in complex multicomponent systems and discussed experimental and theoretical approaches and questions in this research field.

If you require any additional information, I would be happy to supply it.

Sincerely,

  
Tatiana Korotkova

MAX PLANCK INSTITUTE  
FOR METABOLISM RESEARCH  
Cologne, Straße 59  
50931 Cologne  
Germany

Steinle 57, 50  
50931 Cologne, Germany

Deutsche Bank München  
IBAN: DE 44 7207 0310 0166 1300 22

www.mpg.de