





Improvement of master-level education in the field of physical sciences in Belarusian universities

Participation of RSI for Nuclear Problems of BSU in the Physics project

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Improvement of master-level education in the field of physical sciences in Belarusian universities

Research Scientific Institute for Nuclear Problems of Belarusian State University (RSI NP BSU)

Participants:

- 1.Dr.-habil. Fedotova Julia Deputy of Director
- 2.Dr. Kasyuk Julia Senior Reseacher
- 3.Dr. Fedotov Alexander Chief Reseacher
- 4.Dr. Alexey Maximenko Young Research Fellow







RSI NP BSU team worked in close collaboration with BSU and RTU teams and also with associated partners (RANI and BPS) in:

- Reviewing of new Curricula "FNM" for the educational system (4+2);
- Reviewing of study programs for 3 courses for specialty "FNM";
- Development of 3 Chapters in e-Books "Functional Nanomaterials" and "Applied Physics"
- Trainings in RTU (as teachers) and CU (as trainee)
- Advising by 2 students and 1 master-level student of Faculty of Physics of BSU







Internet addresses of the developed Chapters:

https://dl.bsu.by/pluginfile.php/99857/mod_resource/content/2/09_versie_applied_physics_30_aug_2017.pdf (Ch. 4.4. Magnetometry, Ch. 4.6. Mossbauer Spectroscopy)

https://dl.bsu.by/pluginfile.php/98980/mod_resource/content/1/Chapter%209%20Magnetotransport%20and%20Magnetism%20in%20Nanocomposite%20and%20Multilayered%20Materials.pdf

(Chapter 9. Magnetotransport and Magnetism in Nanocomposite and Multilayered Materials);







Reviewing of study programs for 2 courses for specialty "FNM":

- Nanomaterials in Power
- Spintronics







Paricipation in trainings:

- 1. Lectures in RTU (as teachers):
- Granulat nanocomposites metal-semiconductor-insulator (A. Fedotov)
- Magnetism od nanostructured composites and multilayerd materials (J. Fedotova, J. Kasyuk);
- 2. Training in CU (as trainee): J. Kasyuk







Advising by students of Faculty of Physics of BSU:

- 1. Course work "Impedance spectroscopy of nanocomposites $(FeCoZr)_x(SiO_2)_{1-x}$ " (J. Fedotova)
- 2. Course work "Influence of cobalt nanoparticles on the parameters of weak localization in bilayer graphene" (V. Bayev)
- 3. Master-level course work "Investigation of electrical properties of ZnO-based ceramics doped with iron" (A. Fedotov)
- 4. Maser Thesis "Effect of doping by magnetic and nonmagnetic impurities on the structure and properties of nanoceramics based on ZnO" (A. Fedotov)
- 5. Course work "Influence of defects on charge carriers transport in graphene" (A. Fedotov)







Thank you for attention

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