

Three Internal Seminars were organized at the Institute of Mechanics (IMech-BAS), Sofia, Bulgaria, in July and August 2017, with the seven seconded researchers from IPM-BSU, Belarus; SIPT, Georgia and Narrando, Italy. Five of the seconded researchers were hosted by IMech-BAS and two, by NanoTechLab.

On 7th July the ESRs Elizaveta Shashkova and Darya Meisak (INP-BSU, Belarus) reported at a seminar their training programs on nanoindentation mechanical testing, performed at Open Laboratory OLEM at IMech BAS.

On and 14th July, Dr. Leila Kalatozishvili (SIPT, Georgia) and Radost Ivanova (OLEM, IMECH-BAS, Bulgaria) presented a joint report on the rheological training program and experimental results on rheology of graphene-polymer nanocomposites. Darya Meisak presented the joint results on electromagnetic shielding of graphene-polymer nanocomposites in GHz and THz regions.

On 10th August, Dr. Alexandr Lubimov (INP-BSU, Belarus) presented his experience on the synthesis of Polystyrene/graphene nanocomposites by in situ polymerization and filament extrusion that he shared with OLEM researchers during his secondment at IMech-BAS. A lot of discussions were organized between Bulgarian project team and seconded researchers from INP-BSU, Dr. Dzmitry Bychanok and Dr. Artyom Plyushch. This resulted in preparation and submission of a joint publication on electromagnetic response of graphene-polymer nanocomposites. Dr. Marcello Casa (Narrando, Italy) and Hristiana Velichkova (OLEM, IMech-BAS) prepared samples of PLA nanocomposites based on RGO and exfoliated graphene, synthesized at Narrando, Italy.

The intensive research program of the seven seconded researchers at IMech-BAS and NanoTechLab has a significant impact on the research results obtained within the Graphene 3D project.