

A project seminar „Surface modification of aluminum with nanoparticles by means of intensity energy flows“ (project ДН 07/16, supported by BNSF) has taking place from February 25 to 27 in a pleasant work atmosphere in Koprivshitsa.



The results of the second phase of the project and the plan of work to the end of the project were discussed according to a pre-established program.

Work seminar on project „Surface modification of aluminum with nanoparticles by means of intensity energy flows“, ДН 07/16, supported by BNSF, taking place from 25 to 27 February 2019 in the hotel “Father’s home”, Koprivshitsa

Time table

Seminar programme, moderator – sen. ass. Rossitza Dimitrova, Dr.

25.02.2019		
		Time
Departure to Koprivshitz from the IMSETHAC - BAS and IE - BAS		11h
Arrival at the hotel		13h
Accommodation, lunch		13-14h

25.02.2019		
Report	Presented by:	Time
1. Aluminum surface nanocomposite obtained by high energy beam technology (Introduction. Aluminum surface nanocomposite characterization. Strengthening mechanisms acting in aluminum surface nanocomposite. Aluminum surface nanocomposite application)	Prof. Dr. R. Lazarova IMSETHAC “Acad. A. Balevski” - BAS	14:00-14:30
2. Aluminum surface nanocomposite obtained by high energy beam technology (Metals and alloys modifying by electron beam treatment. Nanopowder surface layers (surface nanocomposite) obtaining by electron beam technology. Influence of the electron beam technology parameters on surface layer’s characteristics)	Prof. D.Sc. P. Petrov - IE „Akad. E. Djakov“ - BAS	14:30-15:00
Coffee break		15:30-16:00
Leisure		16:00-19:00
Dinner		19:00-20:00

26.02.2019		
Breakfast		08:00-09:00
Report	Presented by:	Time
1. Strengthening of TiCN aluminum nanocomposite L. Anestiev, R. Lazarova, P. Petrov, S. Valkov, V. Dyakova	Assoc. prof. Dr. L. Anestiev – IMSETHAC “Acad. A. Balevski” - BAS	09:30:10:00
2. Tribological Properties of TiCN Nanosized Powder Reinforced Aluminum, Mihail Kolev, Stefan Valkov, Rummyana Lazarova, Peter Petrov and Rossitza Dimitrova	sen. ass. Rossitza Dimitrova, Dr. - IMSETHAC “Acad. A. Balevski” - BAS	09:00-09:30
3. Basic Coupling Mechanisms in Treatment of Materials by High Energy Fluxes	Prof. D.Sc. P. Petrov - IE „Akad. E. Djakov“ - BAS	10:00-10:45

Coffee break		10:45-11:00
4. Heat processes during electron beam surface alloying aluminium with TiCN nanoparticles	Ph.D. St. Maria Ormanova - IE „Akad. E. Djakov“ - BAS	11:00-11:30
5. Discussions		11:30-12:00
Lunch		12:00-13:00
6. Graphen reinforced metal matrix nanocomposites	sen. ass. Todor Hikov, Dr. - IE „Akad. E. Djakov“ - BAS	14:00-14:30
7. Synthesis and investigation of intermetallic compounds by high energy fluxes	Dr. Stefan Valkov - IE „Akad. E. Djakov“ - BAS	14:30-15:00
8. Discussions of the program for the second stage of the project	All members	15:00-15:30
Leisure		15:30-19:00
Dinner		19:00-20:00

27.02.2019		
Breakfast		08:00-09:00
Relax		09:00-12:00
Lunch		12:00-13:00
Departure to Sofia		13:00