






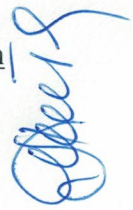



**2nd SEMINAR ON INVESTIGATIONS AND MODELING OF  
NANOCOMPOSITES STRUCTURES**

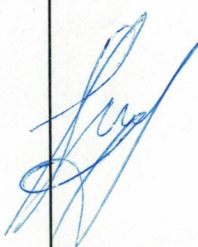

		<b>Title</b>	<b>Authors</b>	<b>Affil</b>	<b>e-mail</b>	<b>Signature</b>
1	PL-01	SH wave scattering by a nanocrack in a graded piezoelectric half-plane with nanorelief	Tsviatko Rangelov <sup>1,*</sup> , Petia Dineva <sup>2</sup>	1Institute of Mathematics and Informatics, Bulgarian Academy of Sciences; 2Institute of Mechanics, Bulgarian Academy of Sciences	<a href="mailto:rangelov@math.bas.bg">rangelov@math.bas.bg</a>	
2	PL-02	Closed-form analysis of debonding initiation in multi-layered systems	Debora Linn, Wilfried Becker *	TU Darmstadt, Institute of Applied Dynamics, Darmstadt, Germany	<a href="mailto:becker@fsm.tu-darmstadt.de">becker@fsm.tu-darmstadt.de</a>	
3	KL-01	Optimal safety intervals for geometry and loads in polymer nanocomposites by multi-parameter optimization	Tatyana Petrova <sup>1,*</sup> , Elisaveta Kirilova <sup>1</sup> , Alexander Moravski <sup>2</sup> , Rayka Vladova <sup>1</sup> , Apostol Apostolov <sup>1</sup>	Institute of Chemical Engineering, Bulgarian Academy of Sciences, Bulgaria; 2Faculty of Mathematics and Informatics, Sofia University "St. Kliment Ohridski"	<a href="mailto:tancho66@yahoo.com">tancho66@yahoo.com</a>	
4	KL-02	Producing and characterization of PtCoP alloy coatings on powdered carbon support	Jenia Georgieva <sup>1,*</sup> , Angeliki Banti <sup>2</sup> , Sotiris Sotiropoulos <sup>2</sup> , Rositsa Mechkova <sup>1</sup>	1Rostislaw Kaischew Institute of Physical Chemistry, Bulgarian Academy of Sciences, Sofia, Bulgaria; 2Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki	<a href="mailto:jenia@ipc.bas.bg">jenia@ipc.bas.bg</a>	

5	KL-03	Low temperature synthesis of corundum ceramics and study of the effect of specially introduced nanoadditives	Adriana Georgieva, Margarita Georgieva*, Irena Markovska	Prof. Dr. Assen Zlatarov University Burgas, Faculty of Technical Sciences, Department of Chemical Technology, Burgas, Bulgaria	<a href="mailto:margaritageorgieva727@gmail.com">margaritageorgieva727@gmail.com</a>	
6	KL-04	Multi-parameter optimization of layered Ti3C2 Mxene/PMMA nanocomposite under mechanical loading	Alexander Moravski1,*, Tatyana Petrova2, Elisaveta Kirilova2, Rayka Vladova2, Apostol Apostolov2	1Faculty of mathematics and informatics, Sofia University "St. Kliment Ohridski", Sofia, Bulgaria; 2 Institute of Chemical Engineering, Bulgarian Academy of Sciences, Sofia, Bulgaria	<a href="mailto:alexmoravski@protonmail.com">alexmoravski@protonmail.com</a>	
7	NE-01	Calcium carbonate nanoparticles as a filler for gelatin-based biofilms: preparation, characterization and properties	Dimitrina Kiryakova1,*, Antoniya Ilieva2, Ganka Kolchakova1	1Department of Materials Science, Assen Zlatarov University, Burgas, Bulgaria; 2Department of Chemical Technologies, Assen Zlatarov University, Burgas, Bulgaria	<a href="mailto:dskiryakova@abv.bg">dskiryakova@abv.bg</a>	
8	NE-02	Synthesis and properties of Cu - doped fine dispersed ceramic pigments	Fila Yovkova*, Mariela Minova, Adriana Georgieva, Irena Markovska	Prof. Dr. Assen Zlatarov University Burgas, Faculty of Technical Sciences, Department of Chemical Technology, Burgas, Bulgaria	<a href="mailto:fila_03@abv.bg">fila_03@abv.bg</a>	






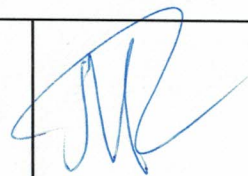


9	NE-03	Synthesis and properties of Ni-doped fine dispersed ceramic pigments	Mariela Minova*, Fila Yovkova, Irena Markovska, Adriana Georgieva	Prof. Dr. Assen Zlatarov University Burgas, Faculty of Technical Sciences, Department of Chemical Technology, Burgas, Bulgaria	<a href="mailto:minova_m@abv.bg">minova_m@abv.bg</a>	
10	NE-04	Electrically-induced bending of electrically-poled flexible PVDF films	Todor Vlahov*, Yordan Marinov, Angel Dimitrov, Georgi Hadjichristov, Georgi Nadiakov	Institute of Solid State Physics, Bulgarian Academy of Sciences, Sofia, Bulgaria	<a href="mailto:todor_vlahov@issp.bas.bg">todor_vlahov@issp.bas.bg</a>	
11	NE-05	Preparation of epoxy/ organoclay composites. Structural characterization of composites and study of their mechanical properties	Verislav Angelov *, Rumen Krastev, Todor Batakliiev	Institute of Mechanics, Bulgarian Academy of Sciences, Sofia, Bulgaria	<a href="mailto:v.angelov@imbm.bas.bg">v.angelov@imbm.bas.bg</a>	
12	NE-06	Synthesis, characterization and application aspects of barium titanate-based ceramic samples with graphene nanostructures introduced	Adriana Georgieva*, Fila Yovkova, Krasi Panayotova	Prof. Dr. Assen Zlatarov University Burgas, Faculty of Technical Sciences, Department of Chemical Technology, Burgas, Bulgaria	<a href="mailto:adriana_georgieva79@yahoo.com">adriana_georgieva79@yahoo.com</a>	


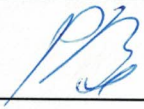

13	NE-07	Adhesive bond between dentin and nanocomposite material crown tec	Mariana Dimova- Gabrovska <sup>1,*</sup> , Yoana Brusarska <sup>1</sup> , Elisaveta Kirilova <sup>2</sup> , Spartak Yanakiev <sup>3</sup> , Dobrinka Damyanova <sup>4</sup> , Stefan Rangelov <sup>1</sup>	1 Department of Prosthetic Dental Medicine, Faculty of Dental Medicine, Medical University – Sofia, Bulgaria; 2 Institute of Chemical Engineering, Bulgarian Academy of Sciences, Sofia, Bulgaria; 3 Medical College “Yordanka Filaretova” – Sofia, Medical University – Sofia, Bulgaria; 4 Department of Pediatric Dental Medicine, Faculty of Dental Medicine, Medical University “Prof. Dr. Paraskev Stoyanov” – Varna, Bulgaria	<a href="mailto:marianadimova@abv.bg">marianadimova@abv.bg</a>	
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14	NE-08	Wear resistance of nanocomposite structures	Mariana Dimova-Gabrovska <sup>1</sup> , Yoana Brusarska <sup>1</sup> , Elisaveta Kirilova <sup>2</sup> , Dobromira Shopova <sup>3</sup> , Dobrinka Damyanova <sup>4</sup> , Stefan Rangelov <sup>1,*</sup>	1Department of Prosthetic Dental Medicine, Faculty of Dental Medicine, Medical University – Sofia, Bulgaria; 2 Institute of Chemical Engineering, Bulgarian Academy of Sciences, Sofia, Bulgaria; 3Department of Prosthetic Dental Medicine, Faculty of Dental Medicine, Medical University -Plovdiv, Bulgaria; 4 Department of Pediatric Dental Medicine, Faculty of Dental Medicine, Medical University “Prof. Dr. Paraskev Stoyanov” – Varna, Bulgaria		
15	NE-09	Optimal safe loading and geometry of layered nanocomposites, used for preliminary fixed prosthodontic appliances	Mariana Dimova-Gabrovska <sup>1</sup> , Radina Moskova <sup>2,*</sup> , Stefan Rangelov <sup>1</sup>	1Department of Prosthetic Dental Medicine, Faculty of Dental Medicine, Medical University – Sofia, Bulgaria; 2 Faculty of Dental Medicine, Medical University - Sofia, Bulgaria		



16	NE-10	Structural properties of ion-conducting polymer-nematic liquid-crystalline nanocomposites with single-walled carbon nanotube additives	Todor Vlachov*, Georgi Hadjichristov, Yordan Marinov, Angel Dimitrov	Georgi Nadjakov Institute of Solid State Physics, Bulgarian Academy of Sciences, Sofia, Bulgaria	<a href="mailto:todor1987@abv.bg">todor1987@abv.bg</a>	
17	NM-01	Analytical and numerical modelling of the behaviour of a concrete nanocomposite with a central crack under monotonically increasing temperature	Gergana Nikolova*	Institute of Mechanics, Bulgarian Academy of Sciences, Sofia, Bulgaria	<a href="mailto:gery@imbm.bas.bg">gery@imbm.bas.bg</a>	
18	NM-02	The influence of the crack geometry - length and orientation angle, temperature and nano-SiO <sub>2</sub> content on the behaviour of a concrete nanocomposites with a central crack	Gergana Nikolova*	Institute of Mechanics, Bulgarian Academy of Sciences, Sofia, Bulgaria	<a href="mailto:gery@imbm.bas.bg">gery@imbm.bas.bg</a>	

19	NO-01	Aplication of Me- pan nanocomposite membrane in two-stage ultrafiltration of industrial wastewater	Milena Miteva <sup>1</sup> , Violeta Raykova <sup>2,*</sup>	1 Burgas State University “Prof.Dr. Assen Zlatarov”, Burgas, Bulgaria; 2 Technical University of Sofia - Faculty and College of Sliven, Sliven, Bulgaria	<a href="mailto:rmkpetrovi@abv.bg">rmkpetrovi@abv.bg</a>	
20	NO-02	Analysis of parameters influencing delamination in thermo- mechanically loaded graphene/polymer layered nanocomposites	Apostol Apostolov*, Tatyana Petrova, Elisaveta Kirilova, Rayka Vladova	Bulgarian Academy of Sciences, Institute of Chemical Engineering, Sofia, Bulgaria	<a href="mailto:a_apostolov@iche.bas.bg">a_apostolov@iche.bas.bg</a>	
21	NS-01	Degradation of synthetic dyes by the use of nanosized composite catalysts and microorganisms	Nadezhda Shukova <sup>1</sup> , Nadia Armenova <sup>1,*</sup> , Dzhamal Uzun <sup>2</sup> , Adriana Gigova <sup>2</sup> , Ognian Dimitrov <sup>2</sup> , Mariela Dimtrova <sup>2</sup> , Ljutzkan Ljutzkanov <sup>1</sup> , Elena Razkazova- Velkova <sup>1</sup>	1 Institute of Chemical Engineering, Bulgarian Academy of Sciences, Sofia, Bulgaria; 2 Institute of Electrochemistry and Energy Systems, Bulgarian Academy of Sciences, Sofia, Bulgaria	<a href="mailto:nadq.armenova@gmail.com">nadq.armenova@gmail.com</a>	

22	NS-02	Nanosized ZrO <sub>2</sub> as a composite catalyst for oxidation processes	Nadezhda Shukova <sup>1</sup> , Dzhamal Uzun <sup>2</sup> , Adriana Gigova <sup>2</sup> , Ognian Dimitrov <sup>2</sup> , Mariela Dimtrova <sup>2</sup> , Ljutzkan Ljutzkanov <sup>1</sup> , Elena Razkazova-Velkova <sup>1,*</sup> , Konstantin Petrov <sup>2</sup>	<sup>1</sup> Institute of Chemical Engineering, Bulgarian Academy of Sciences, Sofia, Bulgaria; <sup>2</sup> Institute of Electrochemistry and Energy Systems, Bulgarian Academy of Sciences, Sofia, Bulgaria	<a href="mailto:nastemi1@abv.bg">nastemi1@abv.bg</a>	
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			Elena Angelova		angelova@isspbos.bg	Stilz