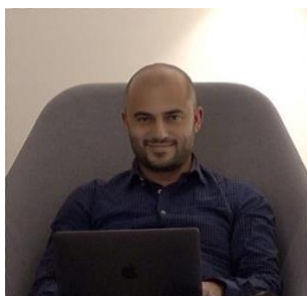




PERSONAL INFORMATION



Evgeni Hristov Ivanov

 Sofia (Bulgaria)
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 ivanov_evgeni@yahoo.com
 http://www.imbm.bas.bg/index.php/en_US/olem

Sex Male | Date of birth | Nationality Bulgarian

WORK EXPERIENCE

-
- Vice Director**
13.12.2018 - Present
at the Institute of Mechanics, Bulgarian Academy of Sciences, „Acad. G. Bonchev” St, Bl. 4, Sofia (Bulgaria)
- Professor**
31.10.2018 – Present
Open Laboratory on Experimental Micro and Nano Mechanics (OLEM), Institute of Mechanics, Bulgarian Academy of Sciences, „Acad. G. Bonchev” St, Bl. 4, Sofia (Bulgaria)
- Associate Professor**
08/12/2011 – 24.10.2018
Open Laboratory on Experimental Micro and Nano Mechanics (OLEM), Institute of Mechanics, Bulgarian Academy of Sciences, „Acad. G. Bonchev” St, Bl. 4, Sofia (Bulgaria)
- CEO**
04/07/2013 - Present
at Research and Development of Nanomaterials and Nanotechnologies, NanoTechLab Ltd.; „Acad. G. Bonchev” St, Bl. 4, Sofia (Bulgaria)
- Assistant Professor**
02/09/2008 – 08/12/2011
Institute of Mechanics, Bulgarian Academy of Sciences, „Acad. G. Bonchev” St, Bl. 4, Sofia (Bulgaria)
- Assistant**
03/04/2007 – 02/09/2008
Central Laboratory of Physico-Chemical Mechanics, Bulgarian Academy of Sciences, „Acad. G. Bonchev” St, Bl. 1, Sofia (Bulgaria)
- Chemical Engineer**
01/02/2007 – 03/04/2007
Central Laboratory of Physico-Chemical Mechanics, Bulgarian Academy of Sciences, „Acad. G. Bonchev” St, Bl. 1, Sofia (Bulgaria)

EDUCATION AND TRAINING

2007: PhD. Thesis Title: “Rheological Behaviour and Properties of Composites Based on Thermoset Polymers with Nanosized Carbon Fillers”
Bulgarian Academy of Sciences, Sofia (Bulgaria)

1998: Master of Sciences in Chemical Engineering. Thesis Title: “Energy Integration of Columns in Technology Scheme for Drying”

and Regeneration of Phenol”

University of Chemical Technology and Metallurgy of Sofia, Department of Organic Technology and Chemical Engineering, Sofia (Bulgaria)

International experience:

2007: Italy (Istituto per i Polimeri, Compositi e Biomateriali (IPCB) - Consiglio Nazionale delle Ricerche (CNR)) - 2 weeks

2008: Italy (Istituto per i Polimeri, Compositi e Biomateriali (IPCB) - Consiglio Nazionale delle Ricerche (CNR)) - 2 weeks

2010: Germany (Max-Planck-Institut für Eisenforschung GmbH) - 2 weeks; **UK** (Centre for Advanced Microscopy at the University of Reading) - 2 weeks; **USA** (Centre for Tribology, California) - 1 month; **Italy** (Istituto per i Polimeri, Compositi e Biomateriali (IPCB) - Consiglio Nazionale delle Ricerche (CNR)) - 2 weeks

2011: UK (Centre for Advanced Microscopy at the University of Reading) - 2 weeks; **Italy** (Istituto per i Polimeri, Compositi e Biomateriali (IPCB) - Consiglio Nazionale delle Ricerche (CNR)) - 2 weeks

2012: France (Ales School of Mines) - 1.5 months

2013: Italy (Istituto per i Polimeri, Compositi e Biomateriali (IPCB) - Consiglio Nazionale delle Ricerche (CNR)) - 1.5 months; **UK** (Centre for Advanced Microscopy at the University of Reading) - 2 weeks

2017: Italy (University of Salerno) - 1 month; **Italy** (Istituto per i Polimeri, Compositi e Biomateriali (IPCB) - Consiglio Nazionale delle Ricerche (CNR)) - 1 month; **Italy** (Istituto per i Polimeri, Compositi e Biomateriali (IPCB) - Consiglio Nazionale delle Ricerche (CNR)) - 1 month; **China** (Polymer Research Institute, Sichuan University) - 1 month; **Brazil** (MackGraphe, MACKENZIE Presbyterian University, Sao Paulo) – 1 month

2018: Brazil (MackGraphe, MACKENZIE Presbyterian University, Sao Paulo) - 2 months; **China** (Polymer Research Institute, Sichuan University) - 2 months

2019: Belgium (University of Namur) – 2 weeks; **Belarus** (Institute for Nuclear Problems, Belarusian State University, Minsk) – 1 month; **Italy** (Consiglio Nazionale delle Ricerche, Istituto per i Polimeri, Compositi e Biomateriali - Napoli/Portici) – 1 week.

Participation in more than **50** international conference, workshops, seminars and meetings.

PERSONAL SKILLS

Mother tongue(s) Bulgarian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C2
Russian	C1	B2	B2	B2	B1
Deutsch	A1	A2	A1	A1	A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
[Common European Framework of Reference for Languages](http://www.cerl.eu/)

Communication skills Experience in working with multinational team. Participation with posters and presentations at international conferences in the country and abroad.

Organisational / managerial skills Experience in project work with a multinational team. Supervisor of PhD students.

Job-related skills	Polymer nanocomposites: rheological, structural, thermal, physical, mechanical properties; rheology-structure-property relationship. Multifunctional polymer nanocomposites with graphene and carbon nanotubes: rheological, micro and nanomechanical study of reinforcing effects of nanofillers in polymers. Rheology of nanodispersions, low viscosity liquids, polymers and polymer melts, oils, foods, cosmetics and pharmaceutical materials, biomaterials. Nanoindentation and scanning with Atomic Force Microscopy. Microindentation and Scratch. Friction and wear. Macro Mechanical tests: tensile, bending, torsion and compressive mode. Thermogravimetric analysis. Differential Scanning Calorimetry. Electrical and thermal conductivity of polymer nanocomposites. Scanning Electron Microscopy. Testing of small samples, fibres, films and coatings of polymers, ceramics, metals, bio-medical materials, cosmetics & pharmaceuticals, dental materials, materials for electronics and wide range of engineering materials. Electrospinning, filament production and 3D printing.
Computer skills	Microsoft Office; Origin; Photoshop; Video Software; ImageJ; MacintoshOS ; Work with specialized software.

ADDITIONAL INFORMATION

- Publications
- <https://www.scopus.com/authid/detail.uri?authorId=55912544200>
 - https://scholar.google.bg/citations?user=VvIq_rQAAAAJ&hl=en
 - https://www.researchgate.net/profile/E_Ivanov
 - <https://publons.com/researcher/2202498/evgeni-h-ivanov/>

Chapters of books:

- 1. Evgeni Ivanov**, Rumiana Kotsilkova. Chapter 17: Reinforcement Effects of Carbon Nanotubes in Polypropylene: Rheology, Structure, Thermal Stability, and Nano-, Micro-, and Macromechanical Properties. Handbook of Nanoceramic and Nanocomposite Coatings and Materials. (Eds. A. S. H. Makhlof, D. Scharnweber) Elsevier, 2015, 357-388 (ISBN: 978-0-12-799947-0) (612 pages).
<http://www.sciencedirect.com/science/article/pii/B9780127999470000171>
- Kotsilkova R, **Ivanov E**, Krusteva E, Silvestre C, Cimmino S, Duraccio D. Evolution of rheology, structure and properties around the rheological flocculation and percolation thresholds in polymer nanocomposites. In: "Ecosustainable Polymer Nanomaterials for Food Packaging" (Silvestre C, Cimmino S, Eds), Taylor & Francis Books, Inc., Ch.3 (2013) pp. 55-86, ISBN: 978-90-04-20737-0.
<https://www.taylorfrancis.com/books/e/9780429098123/chapters/10.1201/b13754-7>
- Kotsilkova R, **E. Ivanov**, E. Krusteva. Polymer Nanocomposites of Epoxy Resin and Multiwall Carbon Nanotubes: Processing-Structure-Properties Relationships. In: Mechanics of Nanomaterials and Nanotechnology (Eds. V. Kavardzhikov, L. Parashkevova, A. Baltov), Sci. Series, Bulgarian Academy of Sciences, Part II, Ch.1 (2012), 51-90, ISSN: 1314-3034.
https://www.researchgate.net/publication/259867357_Polymer_nanocomposites_of_epoxy_resin_and_multiwall_carbon_nanotubes_processing-structure-properties_relationships
- Ivanov E**, I. Borovanska, B. Milosheva, R. Kotsilkova. Experimental Nano and Micro Mechanics of Nanostructured Materials. In: Mechanics of Nanomaterials and Nanotechnology (Eds. V. Kavardzhikov, L. Parashkevova, A. Baltov), Sci. Series, Bulgarian Academy of Sciences, Part IV, Ch.3 (2012), 287-326, ISSN: 1314-3034.
https://www.researchgate.net/publication/259867367_Experimental_Nano_and_Micro_Mechanics_of_Nanostructured_Materials

Articles:

- Spinelli G, Guarini R, Kotsilkova R, **Ivanov E**, Romano V. Experimental, Theoretical and Simulation Studies on the Thermal Behavior of PLA-Based Nanocomposites Reinforced with Different Carbonaceous Fillers. *Nanomaterials*. 2021; 11(6):1511. **IF: 4.324**.

<https://www.mdpi.com/2079-4991/11/6/1511>

6. **Evgeni Ivanov**, Todor Batakaliyev, Rumiana Kotsilkova, Martin Otto & Daniel Neumaier. Study on the Adhesion Properties of Graphene and Hexagonal Boron Nitride Monolayers in Multilayered Micro-devices by Scratch Adhesion Test. Journal of Materials Engineering and Performance, 2021. **IF: 1.652**.

<https://link.springer.com/article/10.1007/s11665-021-05877-z>

7. Todor Batakaliyev, Vladimir Georgiev, Cristiane Kalupgian, Pablo A. R. Muñoz, Hélio Ribeiro, Guilhermino J. M. Fachine, Ricardo J. E. Andrade, **Evgeni Ivanov** & Rumiana Kotsilkova. Physico-chemical Characterization of PLA-based Composites Holding Carbon Nanofillers. Applied Composite Materials, 2021. **IF: 2.199**.

<https://link.springer.com/article/10.1007%2Fs10443-021-09911-0#citeas>

8. Anna Paula Godoy, Leice G. Amurim, Alexandre Mendes, Emerson S. Gonçalves, Anderson Ferreira, Carolina Santos de Andrade, Rumiana Kotsilkova, **Evgeni Ivanov**, Marino Lavorgna, Lúcia A.M. Saito, Hélio Ribeiro, Ricardo J.E. Andrade. Enhancing the electromagnetic interference shielding of flexible films with reduced graphene oxide-based coatings. Progress in Organic Coatings 158 (2021) 106341. **IF: 4.469**.

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9. Batakaliyev, T., Georgiev, V., Angelov, V., **Ivanov, E.**, Kalupgian, C., Muñoz, P., Fachine, G., Andrade, R., Kotsilkova R. Synergistic Effect of Graphene Nanoplatelets and Multiwall Carbon Nanotubes Incorporated in PLA Matrix: Nanoindentation of Composites with Improved Mechanical Properties. Journal of Materials Engineering and Performance (2021). **IF: 1.652**.

<https://doi.org/10.1007/s11665-021-05679-3>

10. Gorokhov, G.; Bychanok, D.; Gayduchenko, I.; Rogov, Y.; Zhukova, E.; Zhukov, S.; Kadyrov, L.; Fedorov, G.; **Ivanov, E.**; Kotsilkova, R.; Macutkevicius, J.; Kuzhir, P. THz Spectroscopy as a Versatile Tool for Filler Distribution Diagnostics in Polymer Nanocomposites. Polymers 2020, 12, 3037. **IF: 3.426**.

<https://www.mdpi.com/2073-4360/12/12/3037>

11. Spinelli, G.; Kotsilkova, R.; **Ivanov, E.**; Georgiev, V.; Ivanova, R.; Naddeo, C.; Romano, V. Dielectric Spectroscopy and Thermal Properties of Poly(lactic) Acid Reinforced with Carbon-Based Particles: Experimental Study and Design Theory. Polymers 2020, 12, 2414. **IF=3.426**.

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12. Shaohong Shi, Zilin Peng, Jingjing Jing, Lu Yang, Yinghong Chen, Rumiana Kotsilkova, and **Evgeni Ivanov**. Preparation of Highly Efficient Electromagnetic Interference Shielding Polylactic Acid/Graphene Nanocomposites for FDM 3D Printing. Industrial & Engineering Chemistry Research, 2020, 59 (35), 15565-15575, DOI: 10.1021/acs.iecr.0c02400. **IF: 3.573**.

<https://pubs.acs.org/doi/10.1021/acs.iecr.0c02400>

13. V. A. Angelov, T. T. Batakaliyev, V. F. Georgiev, **E. H. Ivanov**, R. K. Kotsilkova. Preparation and electromagnetic properties of epoxy/organoclay/MWCNT/gold nanocomposites. Bulgarian Chemical Communications, Volume 52, Issue 2 (pp. 297-299) 2020. **IF: 0.238**.

http://www.bcc.bas.bg/BCC_Volumes/Volume_52_Number_2_2020/BCC-52-2-297-299-Angelov-BCS-2.pdf

14. Kotsilkova, R.; **Ivanov, E.**; Georgiev, V.; Ivanova, R.; Menseidov, D.; Batakaliyev, T.; Angelov, V.; Xia, H.; Chen, Y.; Bychanok, D.; Kuzhir, P.; Di Maio, R.; Silvestre, C.;

Cimmino, S. Essential Nanostructure Parameters to Govern Reinforcement and Functionality of Poly(lactic) Acid Nanocomposites with Graphene and Carbon Nanotubes for 3D Printing Application. *Polymers* 2020, 12, 1208. **IF: 3.164.**

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15. Radost Ivanova, Rumiana Kotsilkova, **Evgeni Ivanov**, Ricardo K. Donato, Guilhermino J.M. Fechine, Ricardo J.E. Andrade, Rosa di Maio, ClaraSilvestre. Composition dependence in surface properties of poly(lactic acid)/graphene/carbon nanotube composites. *Materials Chemistry and Physics*, 2020. **IF: 2.781.**

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16. Spinelli, G.; Kotsilkova, R.; **Ivanov, E.**; Petrova-Doycheva, I.; Menseidov, D.; Georgiev, V.; Maio, R.D.; Silvestre, C. Effects of Filament Extrusion, 3D Printing and Hot-Pressing on Electrical and Tensile Properties of Poly(Lactic) Acid Composites Filled with Carbon Nanotubes and Graphene. *Nanomaterials* 2020, 10, 35. **IF: 4.034.**

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17. Spinelli, G.; Lamberti, P.; Tucci, V.; Kotsilkova, R.; **Ivanov, E.**; Menseidov, D.; Naddeo, C.; Romano, V.; Guadagno, L.; Adami, R.; Meisak, D.; Bychanok, D.; Kuzhir, P. Nanocarbon/Poly(Lactic) Acid for 3D Printing: Effect of Fillers Content on Electromagnetic and Thermal Properties. *Materials* 2019, 12, 2369. **IF: 2.972.**

<https://www.mdpi.com/1996-1944/12/15/2369>

18. Batrakov, K. G., Volynets, N. I., Paddubskaya, A. G., Kuzhir, P. P., Prete, M. S., Pulci, O., **Ivanov, E.**, Kotsilkova, R., Kaplas, T. and Svirko, Y. (2019) Stretching and Tunability of Graphene-Based Passive Terahertz Components. *Phys. Status Solidi B*. doi:10.1002/pssb.201800683; **IF: 3.729.**

<https://onlinelibrary.wiley.com/doi/10.1002/pssb.201800683>

19. M. V. Shuba, D. I. Yuko, G. Gorokhov, D. Meisak, D. S. Bychanok, P. P. Kuzhir, S. A. Maksimenko, P. Angelova, **E. Ivanov** and R. Kotsilkova. Frequency and density dependencies of the electromagnetic parameters of carbon nanotube and graphene nanoplatelet based composites in the microwave and terahertz ranges *Mater. Res. Express* 6, 095050 (2019). **IF: 1.449.**

<https://iopscience.iop.org/article/10.1088/2053-1591/ab2edf>

20. Rumiana Kotsilkova, Ivanka Petrova-Doycheva, Dzhihan Menseidov, **Evgeni Ivanov**, Alesya Paddubskaya, Polina Kuzhir. Exploring thermal annealing and graphene-carbon nanotube additives to enhance crystallinity, thermal, electrical and tensile properties of aged poly(lactic) acid-based filament for 3D printing. *Composites Science and Technology*, 181 (2019) 107712. **IF: 6.309.**

<https://www.sciencedirect.com/science/article/pii/S0266353819313193?dqid=coauthor>

21. G. Gorokhov, D. Bychanok, D. Meisak, I. Shlyk, A. Liubimau, P. Angelova, C. Menseidov, **E. Ivanov**, R. Kotsilkova, M. Casa, P. Ciambelli and P. Kuzhir. Carbon nanotubes vs graphene nanoplatelets for 3D-printable composites. 2019, *IOP Conference Series: Materials Science and Engineering*, 503, 012010. **SJR: 0.19.**

<https://iopscience.iop.org/article/10.1088/1757-899X/503/1/012010/meta>

22. **Evgeni Ivanov**, Rumiana Kotsilkova, Hesheng Xia, Yinghong Chen, Ricardo K. Donato, Katarzyna Donato, Anna Paula Godoy, Rosa Di Maio, Clara Silvestre, Sossio Cimmino and Verislav Angelov. PLA/Graphene/MWCNT Composites with Improved Electrical and Thermal Properties Suitable for FDM 3D Printing Applications. *Appl. Sci.* 2019, 9(6), 1209. **IF: 2.217.**

<https://www.mdpi.com/2076-3417/9/6/1209>

23. Giovanni Spinelli, Patrizia Lamberti, Vincenzo Tucci, Radost Ivanova, Sonia Tabakova,

Evgeni Ivanov, Rumiana Kotsilkova, Sossio Cimmino, Rosa Di Maio, Clara Silvestre. Rheological and electrical behaviour of nanocarbon/poly(lactic) acid for 3D printing applications. *Composites Part B* 167 (2019) 467–476. **IF: 6.864**.

<https://www.sciencedirect.com/science/article/pii/S1359836818318183?dgcid=co-author>

24. Todor Batakliiev, Ivanka Petrova-Doycheva, Verislav Angelov, Vladimir Georgiev, **Evgeni Ivanov**, Rumiana Kotsilkova, Marcello Casa, Claudia Cirillo, Renata Adami, Maria Sarno, Paolo Ciambelli. Effects of Graphene Nanoplatelets and Multiwall Carbon Nanotubes on the Structure and Mechanical Properties of Poly(lactic acid) Composites: A Comparative Study. *Appl. Sci.* 2019, 9, 469. **IF: 2.217**.

<https://www.mdpi.com/2076-3417/9/3/469>

25. Kotsilkov S, **Ivanov E**, Vitanov NK. Release of Graphene and Carbon Nanotubes from Biodegradable Poly(Lactic Acid) Films during Degradation and Combustion: Risk Associated with the End-of-Life of Nanocomposite Food Packaging Materials. *Materials*. 2018; 11(12):2346. **IF: 2.972**.

<https://www.mdpi.com/1996-1944/11/12/2346>

26. Spinelli G, Lamberti P, Tucci V, Kotsilkova R, Tabakova S, Ivanova R, Angelova P, Angelov V, **Ivanov E**, Di Maio R, Silvestre C, Meisak D, Paddubskaya A, Kuzhir P. Morphological, Rheological and Electromagnetic Properties of Nanocarbon/Poly(lactic) Acid for 3D Printing: Solution Blending vs. Melt Mixing. *Materials*. 2018; 11(11):2256. **IF: 2.972**.

<https://www.mdpi.com/1996-1944/11/11/2256>

27. Angelov V, **Ivanov E**, Kotsilkova R. TEM analysis of gold nanoparticles attached on the surface of organoclay and obtained by two different methods. *Bulgarian Chemical Communications*, Volume 50, Special Issue F (pp. 49–53) 2018. **IF: 0.238**.

<http://bcc.bas.bg/>

28. Todor Batakliiev, Vladimir Georgiev, **Evgeni Ivanov**, Rumiana Kotsilkova, Rosa Di Maio, Clara Silvestre, Sossio Cimmino. Nanoindentation analysis of 3D printed poly(lactic acid)-based composites reinforced with graphene and multiwall carbon nanotubes. *Journal of Applied Polymer Science*, 2019. **IF: 1.9**.

<https://onlinelibrary.wiley.com/doi/abs/10.1002/app.47260?af=R>

29. Rumiana Kotsilkova, Irena Borovanska, Peter Todorov, **Evgeni Ivanov**, Dzhihan Menseidov, Sudip Chakraborty and Chiranjib Bhattacharjee. Tensile and Surface Mechanical Properties of Polyethersulphone (PES) and Polyvinylidene Fluoride (PVDF) Membranes. *Journal of Theoretical and Applied Mechanics*. Vol.48 No.3 (2018) pp. 85-99. **SJR: 0.217**.

<https://content.sciendo.com/view/journals/itam/48/3/article-p85.xml>

30. Egiziano, L., Lamberti, P., Spinelli, G., Tucci, V., Kotsilkova, R., Tabakova, S., **Ivanov, E.**, Silvestre, C. and Di Maio, R., 2018, July. Morphological, rheological and electrical study of PLA reinforced with carbon-based fillers for 3D printing applications. In *AIP Conference Proceedings* (Vol. 1981, No. 1, p. 020152). AIP Publishing. **SJR: 0.18**.

<https://aip.scitation.org/doi/abs/10.1063/1.5046014>

31. E. Karteva, N. Manchorova, **E. Ivanov**, D. Pashkouleva, S. Vladimirov. Influence of ageing and endodontic treatment on the hardness and elastic modulus of human root dentin. *Series on Biomechanics*, Vol.32, No.1 (2018), 38-46. **SJR: 0.118**.

http://jsb.imbm.bas.bg/page/en/details.php?article_id=269&tab=en&leptoken=b25ec16d1c41511fb0191z1528097576

32. Victoria I. Michailova, Denitsa B. Momekova, Hristiana A. Velichkova, **Evgeni H. Ivanov**, Rumiana K. Kotsilkova, Daniela B. Karashanova, Elena D. Mileva, Ivaylo V. Dimitrov, and Stanislav M. Rangelov. Self-Assembly of a Thermally Responsive Double-Hydrophilic Copolymer in Ethanol–Water Mixtures: The Effect of Preferential Adsorption and Co-Nonsolvency. *J. Phys. Chem. B*, 2018, 122 (22), pp 6072–6078. **IF: 3.177**.

<https://pubs.acs.org/doi/pdf/10.1021/acs.jpcc.8b01746>

33. Marina Tretjak, Sandra Pralgauskaite, Jan Macutkevici, Jonas Matukas, Juras Banyas, Polina

Kuzhir, **Evgeni Ivanov**, Rumiana Kotsilkova. Influence of carbon nanotube surface treatment on resistivity and low frequency noise characteristics of epoxy based composites. *Polymer Composites*, 39, E1224-E1230, 2018. DOI: 10.1002/pc.24775. **IF: 2.324**.

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34. Bychanok, Dzmitry; Angelova, Polya; Paddubskaya, Alesia; Meisak, Darya; Shashkova, Lizaveta; Demidenko, Marina; Plyushch, Artyom; **Ivanov, Evgeni**; Krastev, Rumen; Kotsilkova, Rumiana; Ogrin, Feodor; Kuzhir, Polina. Terahertz absorption in graphite nanoplatelets/poly(lactic acid) composites. *Journal of Physics D: Applied Physics*, 51, 145307, 2018. **IF: 2.829**.

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35. Velichkova, H., Petrova, I., Kotsilkov, S., **Ivanov, E.**, Vitanov, N. K. and Kotsilkova, R. (2017), Influence of polymer swelling and dissolution into food simulants on the release of graphene nanoplates and carbon nanotubes from poly(lactic) acid and polypropylene composite films. *J. Appl. Polym. Sci.*, 134, 45469, doi: [10.1002/app.45469](https://doi.org/10.1002/app.45469), **IF: 1.64**.

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<http://www.ar.ethz.ch/cgi-bin/AR/view?DOI=10.3933/AppRheol-27-24469>

38. R. Kotsilkova, **E. Ivanov**, P. Todorov, I. Petrova, N. Volynets, A. Paddubskaya, P. Kuzhir, V. Uglov, I. Biró, K. Kertész, G. I. Márk, and L. P. Biró. Mechanical and electromagnetic properties of 3D printed hot pressed nanocarbon/poly(lactic) acid thin films. *J. Appl. Phys.* 121, 064105 (2017); doi: 10.1063/1.4975820, **IF: 2.04**.

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40. Rumiana Kotsilkova, Peter Todorov, **Evgeni Ivanov**, Tommi Kaplas, Yuri Svirko, Alesia Paddubskaya, Polina Kuzhir. Mechanical properties investigation of bilayer graphene/poly(methyl methacrylate) thin films at macro, micro and nanoscale. *Carbon*, 100, 2016, 355-366 (ISSN: 0008-6223), **IF: 6.196**.

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41. I. Petrova, R. Kotsilkova, **E. Ivanov**, P. Kuzhir, D. Bychanok, K. Kouravelou, Th. Karachalios, A. Soto Beobide, G. Voyiatzis, D. Codegoni, F. Somaini, L. Zanotti. Nanoscale reinforcement of polypropylene composites with carbon nanotubes and clay: dispersion state, electromagnetic and nanomechanical properties. *Polymer Engineering & Science*, Vol. 56 (3), 269-277, 2016 (Online ISSN: 1548-2634), **IF: 1.52**.

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42. I. Petrova, **E. Ivanov**, R. Kotsilkova. Structure and properties of polypropylene containing organo-clay and carbon nanotubes as fillers. *Bulgarian Chemical Communications*, Volume 47, Special Issue B (pp. 95–102) 2015 (ISSN: 0324-1130), **IF: 0.349**.

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Projects **Management Committee Member of “European Cooperation in Sciences and Technology” - COST Actions:**

1. Management Committee Member from NanoTechLab Ltd of CA COST Action CA19118 - High-performance Carbon-based composites with Smart properties for Advanced Sensing Applications 21/10/2020-20/10/2024.
2. Management Committee Member of CA COST Action CA15107 “Multi-Functional Nano-Carbon Composite Materials Network (MultiComp)”, 07/04/2016- 06/04/2020. Financial support for the COST CA15107 – contract DKOST 01/7, 20.06.2017 with NSF-MER of Bulgaria.
3. Management Committee Member of MPNS COST Action MP1303 “Understanding and Controlling Nano and Mesoscale Friction”, 08/10/2013- 07/10/2017.
4. Management Committee Member of MPNS COST Action MP1105 “Sustainable flame retardancy for textiles and related materials based on nanoparticles substituting conventional chemicals (FLARETEX)”, 23/05/2012-22/05/2016.

Coordinator of projects from IMech-BAS:

1. Bilateral Collaboration (BAS-CNR): “Multifunctional Graphene-Based Polymer Nanocomposites for 3D Printing Applications”. Bilateral Collaboration BAS-CNR, Italy (2019-2021). Coordinator for Bulgaria Prof. Dr. E. Ivanov.
2. Co-financing of the COST CA15107 – contract DKOST 01/7, 20.06.2017 NSF, Bulgaria.

Partner in European projects as a Manager of NanoTechLab Ltd:

1. H2020-Graphene Flagship Core 3 (2020 - 2023).
2. H2020-Graphene Flagship Core 2 (2018 - 2020).
3. H2020-MSCA-RISE-2016 Graphene 3D “Multifunctional Graphene-based Nanocomposites with Robust Electromagnetic and Thermal Properties for 3D-printing Application” (2017-2021).
4. H2020-Graphene Flagship Core 1 “Graphene-based disruptive technologies” (2016-2018).
5. Co-financing of the project Graphene Flagship “Graphene-Based Revolutions in ICT and Beyond” (2014-2016) from NSF, Bulgaria.
6. Graphene Flagship “Graphene-Based Revolutions in ICT and Beyond” (2014-2016). With a budget of €1 billion, the Graphene Flagship represents a new form of joint, coordinated research on an unprecedented scale, forming Europe's biggest ever research initiative. The Graphene Flagship is tasked with bringing together academic and industrial researchers to take graphene from the realm of academic laboratories into European society in the space of 10 years, thus generating economic growth, new jobs and new opportunities.

Participation in projects with external funding for Bulgaria:

1. Nano-XCT (FP7-NMP) "Compact X-ray computed tomography system for non destructive characterization of nano materials" (01.05. 2012-2015) – FP7 of EC. Coordinator for Bulgaria Prof. D. Sc. R. Kotsilkova (participant 20 months).
2. BY-NanoERA - (FP7-INCO) "Industrial developments of applied nanoelectronics", (01.11.2010- 30.10.2013) - FP7 of EC. Coordinator for Bulgaria Prof. D. Sc. R. Kotsilkova (participant 36 months).
3. Napolynet (FP7- NMP) "Setting up research intensive clusters across the EU on characterization of polymer nanostructures" (01.04.2008-31.03.2011r) - FP7 of EC. Coordinator for Bulgaria Prof. D. Sc. R. Kotsilkova (participant 36 months).
4. EC-FP7-NMP1-TeAm “Improving the Services of the NMP-NCP Network Through Trans-

national Activities" (01.04.2009 - 30.09.2011). FP7 of EC. Coordinator for Bulgaria Prof. D. Sc. R. Kotsilkova (participant 6 months).

5. HUNTSMAN Collaborative research project: "An Understanding of the Rheology and Superstructure of Isocyanate-Nanoclay Dispersions", Sponsored by Huntsman Polyurethanes, Belgium. (3 contracts X 3 months for 2009; 2010 and 2011 г.). Coordinator for Bulgaria Prof. D. Sc. R. Kotsilkova (participant 9 months).

Participation in projects with national financing:

1. Project № BG05M20P001-1.002-0011 „Centre for Competence MIRACle – Mechatronics, Innovation, Robotics, Automation, Clean Technologies. (participant).
2. European Regional Development Fund within the OP "Science and Education for Smart Growth 2014 - 2020", Project CoE "National center for/of mechatronics and clean technologies", № BG05M20P001-1.001-0008-C01. (participant).
3. Research Infrastructure Project OLEM (DO-02-53) "Setting up Open Laboratory on Experimental Mechanics of Micro-and Nanostructured Materials" – supported by National Science Fund - MES, Bulgaria (12.2008-12.2011). Coordinator Prof. D. Sc. R. Kotsilkova (participant 36 months).
4. ДНТС/India 01/10–24.06.2013 "Nano-photocatalysis membrane in energy conversion for water treatment". Bilateral Collaboration Bulgaria-India; supported by National Science Fund - MES, Bulgaria (24.06.2013-23.06. 2016). Coordinator for Bulgaria Prof. D. Sc. R. Kotsilkova (participant 36 months).
5. Bilateral Collaboration (BAS-CNR): Structure and nanomechanics of nanoreinforced polymeric materials. Bilateral Collaboration BAS-CNR, Italy (2013-2015). Coordinator for Bulgaria Prof. D. Sc. R. Kotsilkova (participant 36 months).
6. Bilateral Collaboration (BAS-CNR): An Intergrated Approach to Designing Polymer Nanocomposites with Layered Silicates and Carbon Nanotubes. Bilateral Collaboration BAS-CNR, Italy (2010-2012). Coordinator for Bulgaria Prof. D. Sc. R. Kotsilkova (participant 36 months).
7. Bilateral Collaboration (BAS-CNR): Multifunctional Composites of Carbon Nanotubes and Alumina Nanofillers in Polymers for Engineering Applications. Bilateral Collaboration BAS-CNR, Italy (2007-2009). Coordinator for Bulgaria Prof. D. Sc. R. Kotsilkova (participant 12 monts).
8. D01-469/06 "New Polymer Nanocomposites for Electronic Purpose Applications", National Science Fund (2006-2010), Team Leader: Assist. Prof. Eng. E. Krusteva (participant 2009, 2010).
9. DO-02-138/15.12.2008 (2008-2010) "Mechanical and Structural Investigations of Polymer Nanocomposites with Industrial Application" National Science Fund (2008-2011) Coordinated by the Higher Transport School "T. Kableshev", NSF-BG Call: "Stimulating the Scientific Investigations in the State Higher Schools" (2008). Team leader: Prof. G. Zamfirova (participant 2009, 2010).
10. Human resources: "Support for Training and Realization for Ph.D. Students, Postdoctors and Young Scientists in Polymer Chemistry, Physics and Engineering." BG051PO001/07/3.3.-02/51, NSF, European Social Fund (2008-2010). Participant 2 years.

PhD Students

4

Memberships

Union of Scientists in Bulgaria