

## CURRICULUM VITAE

### PERSONAL DATA:

**Name:** Sofiya P. Voronovich-Solonevich  
**Date of Birth** 22th December, 1989  
**Place of Birth** Grodno, Belarus  
**Nationality:** Belarus  
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**Business address:** Belarusian State University, Research Institute for Nuclear Problems, 11 Bobruiskaya Str., app. 306, 220030 Minsk, Belarus  
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### EDUCATION:

- M. Sc. in Physics, June 2013, Belarus State University, Physical Department, Minsk, Belarus.

### EXPERIENCE:

#### **Institute for Nuclear Problems, Belarus State University, Minsk, Belarus**

08/2012 – *Present* (Junior Researcher , NanoElectroMagnetics Lab).

#### **Belarus State University, Minsk, Belarus**

09/2013 – 05/2014 (Assistant, Physical Department, Chair of higher mathematics and mathematical physics)

11/2013 – *Present* (PhD Student).

#### **Specialization (*specify*)**

(i) **main field** electromagnetic waves interaction with condensed matter

(ii) **current research interest**

Electromagnetic materials for microwave: The theoretical and experimental research of electromagnetic response of graphene, ultrathin pyrolytic carbon nanofilms, carbon porous structures like foams.

### PUBLICATIONS

1. С.П. Воронович, Распространение и неустойчивость плазмонов в графене, **Актуальные вопросы физики и техники. Материалы I Республиканской научной конференции студентов, магистрантов и аспирантов**, в 2-х ч., Гомель, **2012** г., Гомель: ГГУ им. Ф. Скорины. – 2012. – Ч.1. – С. 112-115
2. С.П. Воронович, Моделирование неустойчивости электронного пучка в нанотрубке, **Физика конденсированного состояния**, сб. научн. стат. в 2-х ч., Гродно, **2012**. - Гродно: ГрГУ, 2012. – Ч.2. - С. 24-28.
3. K. Batrakov, P. Kuzhir, S. Voronovich, Self-Amplified Spontaneous Emission in carbon nanotubes and graphene, **Fundamental and Applied NanoElectroMagnetics FANEM'12**, conference proceedings, **2012**.
4. S. Voronovich, K. Batrakov, Stimulated Cherenkov emission in carbon nanotubes, **The International Summer School “NANOTECHNOLOGY: from fundamental research to innovations”**, **2012**, Bukovel, Ukraine, book of abstracts.
5. Polina Kuzhir, Nadzeya Valynets, Alesya Paddubskaya, Sophia Voronovich, Konstantin Batrakov, Sergey Maksimenko, Tommi Kaplas and Yuri Svirko, Multi-layered graphene in microwaves, **International**

- conference «**Functional materials and Nanotechnologies-2013**», Tartu, Estonia, **2013**, book of Abstracts.
6. K. Batrakov, S. Voronovich, P. Kuzhir, T. Kaplas, Microwave absorption in pyrolytic carbon nanofilms: experiment and modeling // **Physics, Chemistry and Applications of Nanostructures: Reviews and Short Notes. - 2013.** – p. 246-250.
  7. K. Batrakov, P. Kuzhir, S. Maksimenko, A. Paddubskaya, S. Voronovich, T. Kaplas, and Yu. Svirko, Enhanced microwave shielding effectiveness of ultrathin pyrolytic carbon films, **Applied Physics Letters**, **103**, **073117 (2013)**; doi: 10.1063/1.48186802013 (published online 16 August 2013) [BY-NanoERA, CACOMEL, F11arm-006]
  8. Batrakov K., Voronovich S., Paddubskaya A., Kuzhir P., Maksimenko S., Kaplas T., Svirko Yu. , Anomalous absorption of ultra-thin pyrolytic carbon films, **Book of abstracts. International Conference Advanced Carbon Nanostructures ACNS-2013**, St.Petersburg, **2013**, p.265.
  9. Sofia Voronovich, Alesya Paddubskaya, Konstantin Batrakov, Polina Kuzhir, Sergey Maksimenko, Tommi Kaplas, Yuri Svirko, Electromagnetic properties of Graphene-like films in Ka-band, Manuscript ID applsci-51803, **Appl Sci.** **2014**, 4, 255-264; doi:10.3390/app4020255 [EU FP7 projects CACOMEL FP7-247007 and FP7-PEOPLE-2013-IRSES-610875 NAMiceMC]
  10. K. Batrakov, P. Kuzhir, S. Maksimenko, A. Paddubskaya, S. Voronovich, Ph Lambin, T. Kaplas & Yu Svirko, Flexible transparent graphene/polymer multilayers for efficient electromagnetic field absorption, **Scientific Reports** **4**, Article number:7191 doi:10.1038/srep07191
  11. K. Batrakov, P. Kuzhir, S. Maksimenko, S. Voronovich, A. Paddubskaya, J. Macutkevicius, T. Kaplas, and Y. Svirko, Extraction of carrier density and  $\pi$ -electron relaxation constant in terahertz wave transmission experiments with graphene sandwich structures, «**The Fourth International Workshop on Nanocarbon Photonics and Optoelectronics (NPO 2014)**», 2014, Finland, p.40.
  12. D. Bychanok , A. Plyushch , K. Piasotski , A. Paddubskaya , S. Varanovich, P. Kuzhir, S. Baturkin, A. Klochkov, E. Korovin, M. Letellier, S. Schaefer, A. Szczurek, V. Fierro and A. Celzard, Electromagnetic properties of polyurethane template-based carbon foams in Ka-band, **Physica Scripta**, Volume 90, Number 9 **2015**
  13. K. Batrakov, P.Kuzhir, S. Maksimenko, N. Volynets, S.Voronovich, A. Paddubskaya, G. Valusis, T. Kaplas, Yu. Svirko, and Ph. Lambin, Enhanced microwave-to-terahertz absorption in Graphene, **Appl.Phys. Lett.** **108**, **123101 (2016)** [http://dx .doi.org/10.1063/ 1.4944531](http://dx.doi.org/10.1063/1.4944531)
  14. K. G. Batrakov, A. G. Paddubskaya, N. I. Valynets, S. P. Voronovich-Solonevich, P. P. Kuzhir, S. A. Maksimenko, T. Kaplas, and Yu. Svirko, MICROWAVE ABSORPTION IN GRAPHENE FILMS: THEORY AND EXPERIMENT, **Journal of Applied Spectroscopy**, **Vol. 83, No. 4, September, 2016** (Russian Original Vol. 83, No. 4, July–August, 2016) DOI 10.1007/s10812-016-0342-x