ELIZAVETA ANASTASOVA

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GENERAL INFORMATION:

Date of birth: 19.04.1995
Age: 24
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SKILLS:

METHODS

- Experienced level: SEM (Tescan Vega 3), XRD (Rigaku Smartlab 3), Viscometry (Rotational Viscometer Fungilab Expert), Dynamic Light Scattering (Photocor Compact-Z), Spectrophotometry (Agilent Carry-60), Surface Analysis (Quantachrome NOVA-1200e)
- Familiar with: AFM (NT-MDT NEXT)

SYNTHESES

- Experienced level: Sol-gel synthesis, Microemulsion synthesis
- Familiar with: Solid State Sintering of Ceramics, Hydrothermal synthesis, Chemical Vapor Deposition, Lithographic methods, etc.

OTHERS

- Experienced level: ORIGIN, LaTeX, Adobe Illustrator, Adobe Photoshop, Adobe InDesign.

INTERNSHIPS:

HEBREW UNIVERSITY OF JERUSALEM, ISRAEL, JERUSALEM

April 2019 – June 2019
Developing the basics of the approach for mechanically assisted thrombolysis using enzymes and magnetic actuators that can penetrate a blood clot under the influence of a vector magnetic field.

TRINITY COLLEGE, IRELAND, DUBLIN

October 2017 – December 2017
Synthesis of thin two-dimensional cobalt-ferrite nanoparticles, modification of their surface, characterization of the obtained materials.

LANGUAGES:

English – Upper-Intermediate
Russian – Native
Ukrainian – Native

CAREER SUMMARY:

ITMO UNIVERSITY, ST. PETERSBURG, RUSSIA

Research Engineer, SCAMT Laboratory | 2016-present

The work was carried out with sol-gel systems, in particular the synthesis of magnetic nanoparticles and their characterization. Studies were in the field of inorganic, physical and medical chemistry, chemical and physical materials science, modern methods of analysis of solids and their surface.

SPBU, ST. PETERSBURG, RUSSIA

Research Engineer, Solid State Chemistry Dep. | 2014-2016

Synthesis of nanoparticles with specified physical, chemical and structural characteristics. Conducting research in the field of solid state chemistry.

ACADEMIC HISTORY:

PHD STUDENT | 2018- PRESENT

- International Laboratory “Solution Chemistry of Advanced Materials and Technologies” (SCAMT), ITMO University, St. Petersburg, Russia
- Graduation project: Synthesis and physico-chemical properties of biologically active materials based on nanostructured aluminum and iron oxides

MASTER OF SCIENCE | 2016-2018

- International Laboratory “Solution Chemistry of Advanced Materials and Technologies” (SCAMT), ITMO University, St. Petersburg, Russia
- Average score: 4,9
- Graduation project: Investigation of magnetite nanospheres for targeted drug delivery

BACHELOR OF SCIENCE | 2012-2016

- Chemistry, Physics and Material Mechanics, Saint-Petersburg State University (SPBU), St. Petersburg, Russia
- Average score: 4,5
- Graduation project: Synthesis of composite nanoparticles Fe_3O_4/SiO_2 and Fe_0/SiO_2 and investigation of their magnetic properties

CONFERENCE ABSTRACTS:

Anastasova E.I., Vinogradov V.V. Magnetite Hydrogel for Targeted Drug Delivery//ICONAN Roma conference 2018 Book of abstracts, IET - 2018;

Anastasova E.I., Ivanovski V., Omar S., Drozdov A.S., Vinogradov A.V., Vinogradov V.V. IR and Raman Investigation of a New Highly Magnetic Magnetite Hydrogel with Excellent Sorption Capacity//EastWest Chemistry Conference 2017 Book of abstracts, IET - 2017, pp. 94;

Fakhardo A.F., **Anastasova E.I.**, Investigation of the cytotoxicity of magnetite gel on cultures of untreated human cells // Fundamental Science and Clinical Medicine - 2017. - T. XX. - P. 577;

Anastasova E.I., Drozdov A.S., Vinogradov V.V., Magnetite gel: a new material for industrial and bioapplication// Collection of Abstracts and Reports // X International Conference of Young Scientists in Chemistry "MENDELEEV- 2017" Second School-Conference "Directional Design of Substances and Materials with Specified Properties ", IET - 2017, pp. 61;

Anastasova E.I., Ponomareva A.N., Zemtsova E.G., Smirnov V.M., XII International Scientific and Technical Conference: "New Materials and Technologies: Powder Metallurgy, Composite Materials, Protective Coatings, Welding", "SYNTHESIS OF NANO-DIMENSIONAL MAGNETIC MATERIALS BASED ON IRON AND MAGNETITH NANOPARTICLES FOR CREATING DIAGNOSTIC SYSTEMS IN MEDICINE", Belarus, Minsk, 2016;

Anastasova E.I., Ponomareva A.N., Zemtsova E.G., XLII International Scientific and Practical Extracurricular Conference "Natural and Mathematical Sciences in the Modern World", "SYNTHESIS AND INVESTIGATION OF AGGREGATE STABILITY OF Fe_3O_4@SiO_2 PARTICLES IN WATER SOLUTIONS ", Russia, Novosibirsk, 2016.

JOURNAL ARTICLES:

Fakhardo A.F., **Anastasova E.I.,** Gabdullina S.R., Solovyeva A.S., ... & Shtil A.A., Vinogradov V.V. (2019). Toxicity Patterns of Clinically Relevant Metal Oxide Nanoparticles - *submitted to RSC Nanoscale.*

Anastasova, E. I., Prilepskii, A. Y., Fakhardo, A. F., Drozdov, A. S., & Vinogradov, V. V. (2018). Magnetite Nanocontainers: Toward Injectable Highly Magnetic Materials for Targeted Drug Delivery. ACS applied materials & interfaces, 10(36), 30040-30044.

Vinogradov, V. V., Drozdov, A. S., Mingabudinova, L. R., Shabanova, E. M., Kolchina, N. O., **Anastasova, E. I**., ... & Precker, R. L. (2018). Composites based on heparin and MIL-101 (Fe): the drug releasing depot for anticoagulant therapy and advanced medical nanofabrication. Journal of Materials Chemistry B, 6(16), 2450-2459.

Anastasova, E. I., Ivanovski, V., Fakhardo, A. F., Lepeshkin, A. I., Omar, S., Drozdov, A. S., & Vinogradov, V. V. (2017). A pure magnetite hydrogel: synthesis, properties and possible applications. Soft matter, 13(45), 8651-8660.