

Candidate application to the ISGS Board of Directors

Prof./Dr. Name Vladimir Valentinovich Vinogradov

Age: 34

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CV with main research interests (no longer than 1/2 page)

Educational Background:

Ivanovo State University of Chemistry and Technology Ivanovo, Russia

2002 - 2007 Student

Institute of Solution Chemistry of Russian Academy of Sciences, Ivanovo, Russia

2007 - 2010 Ph.D.

Thesis «Synthesis of mesoporous catalytically active nanoarchitectures based on alumina»,
Date of defense 09.10.2010

2019 Honored Doctor of Chemical Science – Inorganic Chemistry

Thesis «Nanostructured materials on the basis of oxyhydroxide aluminum. Solution synthesis, structure, properties»
Date of defense 18.12.2018

Work Experience/Employment:

2002 – 2007 – Regional Scientific Coordinative Center, advertising manager,
2007 – 2011 – Institute of Solution Chemistry of RAS, junior research worker,
2012 – 2014 – The Hebrew University of Jerusalem, Israel, PostDoc,
2014 – ITMO University, Head of the Laboratory of Solution Chemistry of Advanced Materials and Technologies

Scientific Research Activity:

1. Sol-Gel materials: basic science and their applications in chemistry and biochemistry.
2. Low-temperature sol – gel synthesis of crystalline materials
3. Heterogeneous Catalysis and Catalysts

Publications and Lectures:

Over 107 scientific papers, More 90 lectures (2019).

Other Activity:

The Ulrich Award owner (2017)
Chair of The 20th International Sol-Gel Conference

5 representative publications:

A. Frosiniuk, D.S. Kolchanov, V.A. Milichko, A.V. Vinogradov and V.V. Vinogradov. Optical interference-based sensors for the visual detection of nano-scale objects. *Nanoscale*, 2019,11, 6343-6351

E.I. Anastasova, A.Y. Prilepskii, A.F. Fakhardo, A.S. Drozdov, V.V. Vinogradov. Magnetite Nanocontainers: Toward Injectable Highly Magnetic Materials for Targeted Drug Delivery. *ACS Appl. Mater. Interfaces* 2018, 10, 36, 30040-30044

A.V. Yakovlev, V.A. Milichko, V.V. Vinogradov, and A.V. Vinogradov. Inkjet Color Printing by Interference Nanostructures. *ACS Nano* 2016, 10, 3078–3086.

L.R. Mingabudinova, V.V. Vinogradov, V.A. Milichko, E. Hey-Hawkins and A.V. Vinogradov. Metal–organic frameworks as competitive materials for non-linear optics. *Chem.Soc.Rev.*, 2016, 45, 5408-5431.

A.V. Vinogradov, H. Zaake-Hertling, E. Hey-Hawkins, A.V. Agafonov, G.A. Seisenbaeva, V.G. Kessler and V. V. Vinogradov. The first depleted heterojunction TiO₂/MOF-based solar cell. *Chem. Commun.*, 2014, 50, 10210-10213.

Statement of interest

Dear Sol-Gel board members,

With this letter let me emphasize my willingness to become a board member of ISGS.

As a Sol-Gel scientist, an Ulrich Award holder and the head of the international laboratory, where the applied materials and Sol-Gel science are the major, I believe that it is my duty to participate actively in the life of the sol-gel community. Currently, my lab (SCAMT ITMO) consists of 10 independent research groups engaged in various interdisciplinary projects ranging from chemistry to materials science, to food science, to microbiology and more. Besides I am a leader of two international master`s degree educational programs. As far as I am tightly in touch with the students, I understand that only personal example can give inspi-

ration to young scientists to follow their dream and to do their best for their career. Receiving Ulrich Award made my students be proud of me and to work harder in the field of Sol-Gel science, I hope that becoming an ISGS Board member will also show them that aims are not easy, but are real to achieve. I think being a member of Sol-Gel board member will also let me deliver the proper information about the latest advanced trends of sol-gel science to my students.

On the other hand, working close to the top sol-gel researches that form the ISGS board will bring me to the new level of career and I will be able to work deeper not only in the scientific field but also in the field of innovation management.

As you may know, currently, I am working on the organization of the 20th International Sol-Gel Conference. Being in touch with the ISGS board provides me the experience of quality scientific management and I understand the significant contribution of board members to the development of sol-gel science and technology, that makes my wish to become one of the ISGS board stronger.

I hope that if I become the first Russian member of ISGS board, it will inspire more Russian scientists to join the international sol-gel society. I am in communication with many Russian researchers, who play a very important role in the formation of the trajectory of the development of the science of the new generation. I think ISGS will seem for them more trustable if they know that there is a reliable person in the board from their country, thus I will be able to promote missions of ISGS frequently.

I believe that in cooperation with Russian scientists and me as the representative we would be able to more sol-gel science and technology to a new advanced level.