# Curriculum Vitae Kolosova Olga

PhD, Senior Scientific Researcher

### **PERSONAL**

Date and place of birth: July 05, 1981, Kharkiv, Ukraine

Citizenship: Ukraine

**Affiliation:** Institute of Chemistry of Functional Materials of the State Scientific

Institution "Scientific and Technological Complex 'Institute of Single Crystals' of the National Academy of Sciences of Ukraine (NASU)" (60

Nauki Ave., 61072, Kharkov, Ukraine)

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Languages: Ukrainian (fluently), Russian (fluently), English (fluently), Deutsch (B1

DTZ)

## **PROFESSIONAL CAREER**

**Present Affiliation:** 

12.2020 -

**present time** Senior Scientific Researcher at the Krasovitsky Department of Luminescent

Materials and Dyes, Institute of Chemistry of Functional Materials, State Scientific Institution "Scientific and Technological Complex 'Institute of

Single Crystals' of the NASU"

**Previous Affilations:** 

**08.2019 – 11.2020** Researcher, SSI "Institute for Single Crystals" NASU

**06.2013 – 07.2019** Junior Researcher, SSI "Institute for Single Crystals" NASU

**01.2008 – 05.2013** Senior Engeneer, SSI "Institute for Single Crystals" NASU

**01.2005 – 12.2007** Engineer 2 deg., SSI "Institute for Single Crystals" NASU

**07.2004** – **12.2004** Engineer 2 deg., Institute for Scintillation materials NASU

**07.2003 – 06.2004** Institute for Single crystals NASU

### **EDUCATION AND ACADEMIC STATUSES**

**08.1998 – 07.2003** Student of V.N. Karazin Kharkiv National University

11.2004 – 11.2007 PhD SSI "Institute for Single Crystals" NASU

Master (MS) with honor – Chemistry, July 7, 2003, V. N. Karazin Kharkiv National University

Candidate of Chemical Sciences (PhD) – Organic Chemistry, April 3, 2014, Bogatsky Institute of Physics and Chemistry of the National Academy of Sciences of Ukraine

Senior Researcher – Chemistry, April 27, 2023, SSI "Institute for Single Crystals" NASU

### **RESEARCH PROFILE AND PUBLICATIONS**

https://www.scopus.com/authid/detail.uri?authorId=15755570500 — Hirsch Index 8

https://scholar.google.com.ua/citations?view op=list works&hl=ru&user=bOMWWPQAAAAJ

https://orcid.org/0000-0002-1240-0146

## Curriculum Vitae Kolosova Olga

PhD, Senior Scientific Researcher

The total number of scientific publications is 89, including 15 patents and scientific papers published in domestic and international peer-reviewed professional journals, including 12 publications included in the Scopus database, 7 articles over the past 10 years were published in the 1st-2nd quartile journals.

### **SCIENTIFIC WORK OUTSIDE OF UKRAINE**

**05.2022** – **07.2022**: working as an Academic Employee at the Brandenburg University of Technology Cottbus-Senftenberg, Germany.

**08.2022** – **07.2023**: implementation of the project 9B908 "Synthesis and characterization of thin films and nanoparticles from a new electrically conductive chemosensitive polymer with sugar receptors" funded by the Volkswagen Foundation (Program for Refugee and Ukrainian Scientists) at the Brandenburg University of Technology in Zenftenberg, Germany.

**08.2023** – **09.2023**: research internship at the Brandenburg University of Technology Cottbus-Senftenberg, Germany (<a href="https://pubs.acs.org/doi/10.1021/acsanm.4c00216">https://pubs.acs.org/doi/10.1021/acsanm.4c00216</a>).

#### <u>UKRAINIAN AND INTERNATIONAL RESEARCH PROJECTS</u>

### Supervisor, responsible executor:

**2022** — **2023**: 9B908 "Synthesis and characterization of thin films and nanoparticles from a new electrically conductive chemosensitive polymer with sugar receptors".

**2017** — **2019:** Projects No. 0119U101294 and No. 0117U005088 supported by the NASU: "Development of new dyes as fluorescent labels and methods for labeling fuels and lubricants".

**2007** — **2012:** Partner project of the STCU (Grant # P313 with the support of SETA BioMedicals, USA).

### Implementor (selected projects):

**2022** — **present time:** Partner project of the STCU (grant No. P548b with the support of SETA BioMedicals, USA): "Fluorescent probes and markers for biomedical applications".

**2022** — **present time:** "Synthesis and study of halogen-containing polymethine dyes and phosphors" (code: Methine), customer: NASU.

**2020** — **2021**: "Creation of fluorescent diagnostic materials for hybridization analyzes and studies by polymerase chain reaction", National Research Foundation of Ukraine Project, competition 'Science for Human and Society Security' (2020.01/0516), SSI "Institute for single Crystals" NASU.

**2017** — **2021:** "Fundamental principles of creation of organic dyes for fluorescent medical diagnostics, display elements and photonic devices" (code: Veselka), customer: NASU.

#### RESEARCH INTERESTS

- Fluorescent probes and markers for bio-medical, pharmaceutical, environmental and life sciences applications;
- Development, research and application of organic dyes and luminophores;
- Synthesis and reactivity of organic compounds;
- Molecular spectroscopy and fluorescence;
- Chemistry of cyanine and squaraine dyes;
- Studies of affinity and binding constants;
- Development and research of new chemosensitive sensors based on organic dyes and nanoparticles;
- Development and improvement of measurement methods by HPLC.