

### **Dariia Chernomorets**

Nationality: Ukrainian 📞 ( Date of birth: Gender: Female Email address:

Address: Address:

### WORK EXPERIENCE

#### Internship

CNR-ISTEC, National Research Council of Italy, Institute of Science and Technology for Ceramics 06/2022 - Current 1

Address: Via Granarolo 64, 48018 Faenza (Italy) - https://www.istec.cnr.it/

City: Faenza Country: Italy

Preparation of powder mixtures by ball milling;

- Obtaining Y<sub>2</sub>O<sub>3</sub>transparent ceramics by dry pressing followed by cold isostatic pressing (CIP) and vacuum sintering;
- Preparation of samples for SEM analysis and evaluation of microstructure information from SEM images;

Hands-on experience in polishing ceramics;

- Analysis of obtained results:
- Analysis of literary sources;

### **Engineer of Department of Complex Crystalline Materials** Institute for Single Crystals of NAS of Ukraine [ 04/2021 - Current ]

Address: Nauky Ave. 60, 61072 Kharkiv (Ukraine) - http://isc.kharkov.ua/

City: Kharkiv Country: Ukraine

Synthesis of Y<sub>2</sub>O<sub>3</sub>-MgO nanopowders by the sol-gel method;

Preparation of powder mixtures by ball milling;

Obtaining Y<sub>2</sub>O<sub>3</sub>, YAG IR-transparent ceramics by the slip casting method;

Hands-on experience working with the spectrophotometer;

Preparation of samples for SEM analysis and evaluation of microstructure information from SEM images;

Hands-on experience working with the viscometer;

- Hands-on skills in determining the size and electrokinetic potential of colloidal particles using the Zetasizer Nano Series ZS Malvern Instruments.
- Research of rheological properties of slips;
- Analysis of obtained results;

Analysis of literary sources;

Presentation at the conferences, writing and submission of scientific articles.

### Teaching Assistant as Student Practice V.N. Karazin Kharkiv National University, Chemistry Faculty. [10/2020 - 11/2020]

City: Kharkiv Country: Ukraine

- conducting laboratory classes in colloidal chemistry;
- survey and evaluation of students.

# Teaching as Student Practice Kharkiv Gymnasium № 6 [ 09/2018 - 10/2018 ]

City: Kharkiv Country: Ukraine

- giving lessons in chemistry;
- o preparation of the lesson plan;
- o organization and conduct of extracurricular activities.

#### **EDUCATION AND TRAINING**

#### Internship

CNR-ISTEC, National Research Council of Italy, Institute of Science and Technology for Ceramics [ 06/2022 - Current]

Address: Via Granarolo 64, 48018 Faenza (Italy)

https://www.istec.cnr.it/

The stay was covered by a grant from the JECS Trust.

 $\circ$  Preparation and characterisation of transparent Y2O3 ceramics;

Study of the influence of milling parameters on microstructure and optical properties.

#### Ph.D. student

Institute for Single Crystals of NAS of Ukraine [ 11/2021 - Current ]

Address: Nauky Ave. 60, 61072 Kharkiv (Ukraine)

http://isc.kharkov.ua/

Field(s) of study: Material Sciences

Thesis: Obtaining of yttrium aluminum garnet ceramics by the slip casting method

### Master's Degree in Chemistry.

V.N. Karazin Kharkiv National University, Chemistry Faculty. [09/2019-05/2021]

Address: Kharkiv (Ukraine)
<a href="http://www.univer.kharkov.ua">http://www.univer.kharkov.ua</a>
Field(s) of study: Chemistry

Final grade: Diploma with Honours (94/100).

Thesis: Protolytic equilibria of imidazole derivatives in water and in micellar solutions of surfactants.

### Bachelor's Degree in Chemistry

V.N. Karazin Kharkiv National University, Chemistry Faculty. [09/2015-06/2019]

Address: Kharkiv (Ukraine) http://www.univer.kharkov.ua Field(s) of study: Chemistry

Final grade: 87/100

Thesis: Specific salt effects in micellar solutions of anionic dimeric surfactant.

### LANGUAGE SKILLS

Mother tongue(s): Ukrainian

Other language(s):

English

Russian

LISTENING B2 READING B2 WRITING B2

LISTENING C2 READING C2 WRITING C1

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2 SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

### **NETWORKS AND MEMBERSHIPS**

### I.M. Frantsevich Ukrainian Materials Science Society

[ 2022 - Current ]

### **European Ceramic Society**

[2022 - Current]

### HONOURS AND AWARDS

### 2nd place at the Conference-competition of Scientific Works of Young Scientists of SSI of ISC 2022

State Scientific Institution "Institute for Single Crystals" of NAS of Ukraine [ 2022 ]

### 1st place at the XI Ukrainian scientific conference of students and postgraduates "Karazin Chemical Readings - 2019".

V.N. Karazin Kharkiv National University [ 04/2019 ]

### **PUBLICATIONS: JOURNAL ARTICLES**

## Optimization of rheological properties of slurries for obtaining IR-transparent Y<sub>2</sub>O<sub>3</sub> ceramics

D.G. Chernomorets, O.S. Kryzhanovska, N.A. Safronova, S.V. Parkhomenko, A.G. Doroshenko, I.O. Vorona, R.P. Yavetskiy. Optimization of rheological properties of slurries for obtaining IR-transparent Y2O3 ceramics, Functional Materials, 29 (2), 2022, 244-251.

https://doi.org/10.15407/fm29.02.244

### **PUBLICATIONS: ABSTRACTS IN BOOKS OF ABSTRACTS**

## Complex Shaped Composite Ceramics by Slip Casting: The Case of Y₂O₃-MgO

D.G. Cheronomorets, O.S. Kryzhanovska, N.A. Safronova et al. // The 8th Shaping Conference, 14-16 September 2022: abstr. - Dubendorf, 2022. To be published.

### Optimization of Rheological Properties of High Solid Loading Suspensions For Obtaining Y<sub>2</sub>O<sub>3</sub> IR-**Transparent Ceramics**

D.G. Chernomorets, O.S. Kryzhanovska, N.A. Safronova et al. // VIII TH International Samsonov Conference «Materials Science of Refractory Compounds. MSRC-2022», 24-27 May 2022: abst. - Kyiv, 2022. - p. 9.

https://umrs.org.ua/activities/conferences/msrc-2022/boa 2022/

## Effect of Green Body Annealing on Optical Properties of Y2O3 Ceramics

A. Balabanov, R. Yavetskiy, D. Chernomorets et al. // International Young Scientists Conference on Materials Science and Surface Engineering, 7-9 September 2021: abstr. - Lviv, p. 50. ISBN 978-966-02-9671-8.

https://www.ipm.lviv.ua/msse2021/files/Proceedings\_MSSE2021.pdf

# Ukrainian-English translated. Evolution of the structural-phase state of Y₂O₃ −MgOnanopowder.

A. Balabanov, I. Vorona, **D. Chernomorets** et al. // III Ukrainian Young Scientists Conference «Modern Materials Science. Materials and Technologies. MMSMT-2021», 25-28 October 2021: abstr. - Kyiv, 2021. - p. 2.

https://www.imp.kiev.ua/mmsmt/wp-content/uploads/2021/10/матеріали-ш-всеукраїнської-конференції.pdf

### **CONFERENCES AND SEMINARS**

### The 8th Shaping Conference

[ Dubendorf, Switzerland, 14/09/2022 - 16/09/2022 ]

Abstract: Complex Shaped Composite Ceramics by Slip Casting: The Case of  $Y_2O_3$ –MgO / D.G. Cheronomorets, O.S. Kryzhanovska, N.A. Safronova et al.

# VIIITH International Samsonov Conference "Materials Science of Refractory Compounds. MSRC-2022"

[Kyiv, Ukraine, 24/05/2022 - 27/05/2022]

Abstract: Optimization of Rheological Properties of High Solid Loading Suspensions For Obtaining Y<sub>2</sub>O<sub>3</sub> IR-Transparent Ceramics / **D.G. Chernomorets**, O.S. Kryzhanovska, N.A. Safronova et al.

# III Ukrainian Young Scientists Conference "Modern Materials Science. Materials and Technologies. MMSMT-2021"

[Kyiv, Ukraine, 25/10/2021 - 28/10/2021]

Abstract "Evolution of the structural-phase state of  $Y_2O_3$ -MgO nanopowder" / A. Balabanov, I. Vorona, **D.** Chernomorets et al.

# International Young Scientists Conference on Materials Science and Surface Engineering [Lviv, Ukraine, 07/09/2021 - 09/09/2021]

Abstract: Effect of Green Body Annealing on Optical Properties of  $Y_2O_3$  Ceramics / A. Balabanov, R. Yavetskiy, **D.** Chernomorets et al.

# XI Ukrainian scientific conference of students and postgraduates "Karazin Chemical Readings – 2019

[Kharkiv, Ukraine. 22/04/2019 - 24/04/2019]

Abstract: Specific salt effects in micellar solutions of anionic dimeric surfactant / **D.G. Chernomorets**, N.O. Vodolazka.

Section: Physical Chemistry.

First-degree diploma.

## Conference-competition of Scientific Works of Young Scientists of SSI of ISC 2022

[ Kharkiv, Ukraine. 08/02/2022 - 10/02/2022 ]

#### DIGITAL SKILLS

### My Digital Skills

Microsoft Office (Excel PowerPoint Word) - advanced level / OriginPro (Intermediate) / Google tools (Gmail Drive Google forms etc) / Knowledge of communication platforms (Skype, Zoom)

## COMMUNICATION AND INTERPERSONAL SKILLS

Experienced at giving speeches and presentations to large audiences. Good conversation skills with people of different ages and cultures.

Team work: have worked in research teams.

## ORGANIZATION AND LEADERSHIP SKILLS

Skills of organization and planning of working hours;

Student representative [ 2021-2022 ];

The leader of the team at the Intellectual Games tournament "What? Where? When?" [2012-2015];

The leader of the team at the Ukrainian Tournament of the Young Biologists [ 2014 ].

Aware of the criminal penalties in the case of false declarations, I declare that what is stated in this curriculum vitae corresponds to the truth.

Faenza, 9 September 2022

Dariia Chernomorets

