

DESCRIPTION OF COURSE UNIT FOR DOCTORAL STUDIES AT VILNIUS UNIVERSITY

Course Title	Scientific Area/Field	Faculty/Institute	Department
Academic Writing	Chemistry N 003	CHGF Institute of Chemistry	Department of Applied Chemistry
Study method	ECTS credits	Study methods	ECTS credits
Lecture	2	Consultations	
Self-study		Seminars	1

Course Description

Preparation of scientific presentations (oral and poster). Oral presentations (preparation of various oral presentations, conference presentations, preparation of popular science presentations, preparation for doctoral progress reviews, presentation of articles in laboratory meetings, lecturing, preparation of "lightning" talks). Preparation of visually organised slides (discussion of slide design, evaluation and improvement of doctoral students' slides). Poster presentations (preparation of posters for on-site and remote conferences, use and adaptation of software and templates). Distance learning (time management, maintaining motivation, participation in remote meetings and seminars, presenting reports remotely, moderating remote webinars). Preparation for public speaking (stress management during presentations, body language, importance of intonation, preparing for Q&A sessions, evaluating and accepting criticism). Personal branding (CV writing, self-presentation for scholarship applications, preparation of bio-data, and responsible use of social media platforms). Preparation of scientific articles. Ethics in scientific research. Preparation of research project proposals. Nomenclature of inorganic compounds. Nomenclature of organic compounds. Nomenclature of complex compounds. Common language errors. Requirements for document preparation. Vocabulary errors, loanwords, and incorrect compound words.

Basic Bibliography

- <https://hbr.org/>
- Barbara Gastel and Robert A. Day „How to Write and Publish a Scientific Paper“ 2016, 8th Ed Greenwood.
- „Guidlines for Research Ethics in Science and Technology“ The Norwegian National Research Ethics Committees, 2016 ISBN: 978-82-7682-075-1.
- https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en
- <https://www.lmt.lt/lt>, <https://www.esinvesticijos.lt/>
- A. Kareiva. *Kompleksinių junginių chemija*. Vilniaus universitetas, Vilnius, 2008, 81 p.
- K. Daukšas, J. Barkauskas, V. Daukšas, E. Daumantas, M. Kabailienė, A. Kareiva, Z. Mačionis, L. Naruškevičius, S. Sasnauskienė, V. Skučas. *Aiškinamasis chemijos terminų žodynas, Antrasis leidimas*. Mokslo ir enciklopedijų leidykla, Vilnius, 2003, 659 p.

Consulting lecture Name, Surname	Scientific degree	Most significant publications in the research field (branch) over the last 5 years
Julija Grigorjevaite	PhD	1. E. Ezerskyte, J. Grigorjevaite, A. Minderyte, S. Saitzek, A. Katelnikovas, „Temperature-Dependent Luminescence of Red-Emitting Ba₂Y₅B₅O₁₇: Eu³⁺ Phosphors with Efficiencies Close to Unity for Near-UV LEDs“, <i>Materials</i>, 2020, 13, 763, (doi: 10.3390/ma13030763), Impact factor – 3.057 (Q2) 2. J. Grigorjevaite, E. Ezerskyte, J. Paterek, S. Saitzek, A. Zabaliute-Karaliune, P. Vitta, D. Enseling, Th. Justel, A. Katelnikovas, „Luminescence and luminescence quenching of K₂Bi(PO₄)(MoO₄):Sm³⁺ phosphors for horticultural and general lighting applications“, <i>Materials Advances</i>, RSC, 2020, 1, 1427, (doi: 10.1039/d0ma00369g). 3. J. Grigorjevaite, A. Katelnikovas, „Synthesis and Optical Properties Investigation of Blue-Excitable Red-Emitting K₂Bi(PO₄)(MoO₄):Pr³⁺ Powders“,

		Journal of Materials Research and Technology, 2020, 9, 6, 15779-15787 (doi: 10.1016/j.jmrt.2020.11.054), Impact factor – 5.289 (Q1). 4. J. Grigorjevaite, A. Katelnikovas, "Luminescence and Luminescence Quenching of $K_2Bi(PO_4)(MoO_4):Eu^{3+}$ Phosphors with Efficiencies Close to Unity", ACS Applied Materials & Interfaces, 2016, 8, 31772-31782, (doi: 10.1021/acsami.6b11766), Impact factor – 8,456 (Q1). 5. J. Grigorjevaite, E. Ezerskyte, A. Minderyte, S. Stanionyte, R. Juskenas, S. Sakirzanovas, A. Katelnikovas, "Optical Properties of Red-Emitting $Rb_2Bi(PO_4)(MoO_4):Eu^{3+}$ Powders and Ceramics with High quantum Efficiency for White LEDs", Materials, 2019, 12, 3275, (doi: 10.3390/ma12193275), Impact factor – 2.972 (Q2).
Greta Merkininkaitė	PhD	1. G. Merkininkaitė, D. Gailevicius, S. Sakirzanovas, L. Jonusauskas. „Polymers for Regenerative Medicine Structures Made via Multiphoton 3D Lithography: a Review“. International Journal of Polymer Science. Vol. 2019, article ID 3403548, 23, 2019, doi: 10.1155/2019/3403548. 2. G. Merkininkaitė, E. Aleksandravicius, M. Malinauskas, D. Gailevicius, S. Sakirzanovas. „Laser additive manufacturing of Si/ZrO₂ tunable crystalline phase 3D nanostructures“. Opto-Electronic Advances. Vol. 5, No. 5, 210077, 2022, doi: 10.29026/oea.2022.210077. 3. G. Merkininkaitė, E. Aleksandravicius, S. Varapnickas, D. Gailevicius, S. Sakirzanovas, M. Malinauskas: „Multi-photon 3D lithography for sub-100 nm additive manufacturing of inorganics“, in book: „Ultrafast Laser Nanostructuring – The Pursuit of Extreme Scales“, Springer-Nature, Chapter No. 22, <i>in press</i> (2023). 4. D. Gonzalez-Hernandez, S. Varapnickas, G. Merkininkaitė, A. Ciburys, D. Gailevicius, S. Sakirzanovas, S. Juodkazis, M. Malinauskas, „Laser 3D Printing of Inorganic Free-Form Micro-Optics“. „Photonics“, 2021, 8(12), 577. doi: 10.3390/photonics8120577. 5. A. Butkute, G. Merkininkaitė, T. Jurksas, J. Stancikas, T. Baravykas, R. Vargalis, T. Tickunas, J. Bachmann, S. Sakirzanovas, V. Sirutkaitis, L. Jonusauskas. „Femtosecond Laser Assisted 3D Etching Using Inorganic-Organic Etchant“. Materials 2022, 15(8), 2817; doi: 10.3390/ma15082817.
Živilė Stankevičiūtė	PhD	1. Garškaitė, Edita; Estevez, Maria M.; Bystrom, Alexandra; Forsth, Michael; Stankevičiūtė, Živilė; Sokol, Denis; Steele, Matthew; Sandberg, Dick. Studying the application of fish-farming net-cleaning waste as fire-retardant for Scots pine (<i>Pinus sylvestris</i> L.) sapwood // EFB bioeconomy journal : Elsevier. ISSN 2667-0410. 2022, vol. 2, art. no. 100025, p. [1-12]. DOI: 10.1016/j.bioeco.2022.100025. 2. Januškevičius, Justinas; Stankevičiūtė, Živilė; Baltrūnas, Dalis Antanas; Mažeika, Kęstutis; Murauskas, Tomas; Drabavičius, Audrius; Kareiva, Aivaras. Membrane-assisted synthesis of selected mixed-metal ferrite

		nanotubes using sol-gel derived precursors // Solid state sciences. Amsterdam : Elsevier BV. ISSN 1293-2558. eISSN 1873-3085. 2022, vol. 132, art. no. 106983, p. 1-10. DOI: 10.1016/j.solidstatesciences.2022.106983. 3. Garškaitė, Edita; Estevez, Maria M.; Bystrom, Alexandra; Forsth, Michael; Stankevičiūtė, Živilė; Sokol, Denis; Steele, Matthew; Sandberg, Dick. Studying the application of fish-farming net-cleaning waste as fire-retardant for Scots pine (Pinus sylvestris L.) sapwood // EFB bioeconomy journal : Elsevier. ISSN 2667-0410. 2022, vol. 2, art. no. 100025, p. [1-12]. DOI: 10.1016/j.bioeco.2022.100025. 4. Inkrataitė, Greta; Stankevičiūtė, Živilė; Skaudžius, Ramūnas. Determination of different garnet films characteristics prepared via sol-gel spin or dip-coatings techniques // Journal of luminescence. Amsterdam : Elsevier Science BV. ISSN 0022-2313. eISSN 1872-7883. 2022, vol. 244, art. no. 118751, p. [1-9]. DOI: 10.1016/j.jlumin.2022.118751. 5. Januškevičius, Justinas; Stankevičiūtė, Živilė; Baltrūnas, Dalis Antanas; Mažeika, Kęstutis; Beganskienė, Aldona; Kareiva, Aivaras. Aqueous sol-gel synthesis of different iron ferrites: from 3D to 2D // Materials: special issue: Innovative technologies and materials for coatings and surface treatments. Basel : MDPI. eISSN 1996-1944. 2021, vol. 14, art. no. 1554, p. [1-12]. DOI: 10.3390/ma14061554.
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Certified during the Doctoral Committee session on January 20th, 2026. Protocol No. 15600-KT-228. Committee Chairman Prof. habil. dr. Audrius Padarauskas.
