

CITIZEN SCIENCE IN LITHUANIA:

DOES OUR SCIENCE AND INNOVATION ECOSYSTEM ANTICIPATE THE INPUT OF CITIZENS?

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Citizen science is when the public voluntarily helps conduct scientific research.

definition: CITIZEN SCIENCE

<u>A LOT</u> of definitions available Field is still growing & evolving

In the most basic sense:







ZOØNIVERSE





examples of large scale citizen science projects world wide

CITIZEN AND OPEN SCIENCE IN EU

H2020 = pilots of Open Science and citizen engagement activities Horizon Europe = the importance of openness in science established

Open science is not limited to freely available research data and open-access databases. Openness is also sought through collaboration - by expanding the audiences, developing new methods of research organization and engaging the public in various forms.





DEVELOPMENTS RELATED TO CITIZEN SCIENCE IN LITHUANIA

- Public policy debate and legislation related to Citizen Science in Lithuania are still limited (focus mostly Open Access aspects);
- BUT > plenty of initiatives by scientists, librarians, university administrations and citizens themselves.

CITIZEN SCIENCE ASSOCIATION ESTABLISHED IN 2020



PILIEČIŲ MOKSLAS BENDRUOMENĖ TARPTAUTINĖ PATIRTIS NAUJIENOS



CITIZEN SCIENCE RELATED EVENTS

Perspectives of Citizen Science in Lithuania

September 13th, 15:00 - 18:00

Vilnius TechPark, Antakalnio g. 12







Event organizers:



Programa "Horizontas 2020"





- Misijos
- Teminės sritys ir nacionalinių kontaktinių atstovų (NCP) paslaugos
- Kas naujo "Europos horizonto" programoje?
- o "Europos horizonto" kvietimai
- Renginiai
- o 2022 m. rudens "Europos horizonto" renginių ciklas
- Partnerių paieška



Seminaras, skirtas piliečių įtraukimo į mokslą klausimams

🗇 2021-11-15 🛛 🖻 "Europos horizonto" renginiai

Lietuvos mokslo tarybos Nacionaliniai kontaktiniai atstovai (NCP) kviečia į seminarą "Piliečių įtraukimas į mokslą". Pranešimą piliečių įtraukimo į mokslą tema skaitys Europos Komisijos politikos pareigūnas Linden Farrer. Lietuvos mokslininkų patirtimi pasidalys dr. Eglė Butkevičienė (Kauno technologijos universitetas) ir dr. Greta Gyraitė (Klaipėdos universitetas). Dr. Eglė Butkevičienė pristatys Piliečių mokslo asociacijos veiklą ir savo patirtį įtraukiant piliečius į mokslo tyrimus. Dr. Greta Gyraitė supažindins su piliečių dalyvavimo aplinkosauginiuose tyrimuose patirtimi ir rezultatais. Programoje (atsiųsti programą) numatytos klausimų ir atsakymų sesijos.

CITIZEN SCIENCE HUB IN VILNIUS TECH ESTABLISHED IN 2022

Objectives of the Hub

- to raise awareness about benefits of Open Science, CS, and principles of RRI;
- to prepare training resources in local language;
- to promote the implementation of RRI, CS and Open Science principles into different stages of the research process;
- to create networking opportunities for community members willing to participate in co-creative research;
- to facilitate the development of new competencies and skills in Vilnius Tech.

VILNIUS Tech **Faculty of Creative Industries Studies** Creative Industries > Research and innovation > Citizen Science Hub

VILNIUS TECH - CITIZEN SCIENCE HUB

Vision: To create a platform supporting community and partners of Vilnius Tech in conducting Research & Innovation based on active engagement of civil society and principles of RRI





OPEN SCIENCE GUIDELINES DEFINED BY VILNIUS UNIVERSITY IN 2022 (WITH AN EMPHASIS ON CITIZEN ENGAGEMENT)

"The <u>Guidelines</u> for the Open Science Policy of Vilnius University (hereinafter referred to as "the Guidelines") set out the main policy directions of Vilnius University (hereinafter referred to as "the University") related to open access to scientific (artistic) publications and research data, open educational resources, open science assessment, infrastructure, data protection and competence development, citizen science and other aspects of open science. The purpose of the Guidelines is to establish and consolidate the basic principles and provisions that guide the implementation of the University's open science policy."



EXAMPLES PROJECTS WITH CITIZEN SCIENCE ELEMENTS FUNDED BY RESEARCH COUNCIL OF LITHUANIA



- CITIZEN SCIENCE AS AN INNOVATIVE FORM OF CITIZEN PARTICIPATION FOR WELFARE SOCIETY DEVELOPMENT (CS4WELFARE)
- IMPLEMENTED BY KAUNAS UNIVERSITY OF TECHNOLOGY
- NR. P-GEV-20-28



- ADVANCED MODELS, CITIZEN SCIENCE AND BIG DATA FOR SUSTAINABLE INLAND FOOD PRODUCTION AND ECOSYSTEM **SERVICES**
- IMPLEMENTED BY NATURE RESEARCH CENTRE
- NR. 01.2.2-LMT-K-718

EXAMPLES OF LARGE SCALE EUROPEAN PROJECTS WITH LITHUANIAN BENEFICIARIES FROM LITHUANIAN RESEARCH INSTITUTIONS



CITIZEN SCIENCE IN LITHUANIAN SCHOOLS



LIETUVOS MOKINIŲ NEFORMALIOJO

ŠVIETIMO CENTRAS



PROJECTS INITIATED BY INDIVIDUAL RESEARCHERS, COMMUNITIES, CITIZENS





BRONĖS PAJIEDAITĖS TAKAIS (@Vytautas Magnus University)

RŪŠIŲ RALIS (annual event)





Birdlife.lt

RESOURCES IN LITHUANIAN ON CITIZEN SCIENCE

Eglé Butkevičienė Monika Mačiulienė Evelina Mickevičiūtė Eglė Vaidelytė Jonė Vitkauskaitė-Ramanauskienė Bálint Balázs

PILIEČIŲ MOKSLAS KAIP INOVATYVI PILIEČIŲ DALYVAVIMO FORMA KURIANT GEROVĖS VISUOMENE



methodological guidelines

monograph

**all available on www.pilieciumokslas.lt



VIEŠOSIOS POLITIKOS PASIŪLYMAI

Kaip skatinti piliečių įsitraukimą į mokslinių tyrimų procesus siekiant spręsti socialinės gerovės problemas ir kuriant viešąją vertę

public policy recommendations

Results of large-scale survey conducted in the context of INCENTIVE project in 2021 in Greece, Lithuania, Netherlands and Spain.

Total sample: 1936; Lithuanian sample: 342

Respondents: quadruple-helix groups (industry, public administration, academia and civil society)



Level of familiarity with the term "Citizen Science"

Source: INCENTIVE project report "Requirements and motivations of quadruple helix stakeholders for active engagement in the Citizen Science"



- Extremely Familiar
- Moderately familiar
- Somewhat familiar
- Not at all familiar



Willingness to join Citizen Science activities in Lithuania (per stakeholder group) Source: INCENTIVE project report "Requirements and motivations of quadruple helix stakeholders for active engagement in the Citizen Science"





ADDED VALUE OF CITIZEN SCIENCE

Findings from CS4Welfare project

Methodology used: 30 interviews with stakeholders (scientists, policy-makers, teachers, librarians, etc.)



The opportunity to formulate problems together with scientists (responding to individual or community needs); Self-realisation; Opportunity to work with like-minded people; A sense of power as a citizen; Curiosity-raising; Powersharing, reduction of information asymmetries; Strengthens family relationships (if involved together)



Scientists & their research

Framing of topical problems;

- More data can be collected:
- Highlighting problems that would otherwise be
 - overlooked;

Saves time:

- Ensures continuity of research;
- Building personal relationships with researchers

ADDED VALUE OF CITIZEN SCIENCE

Findings from CS4Welfare project

Methodology used: 30 interviews with stakeholders (scientists, policy-makers, teachers, librarians, etc.)

Students in all levels of education

Opportunities for growth; Opportunities to apply skills in formal education System of research of innovation

Getting young people interested in careers in science; A new way to tell science stories in an engaging way; Increasing public confidence in science (and its system); Enhancing the reputation of science institutions





Creating new attitudes of citizens towards the environment, society, science; Changing the behaviour of members of society; Additional resource for solving social problems

BARRIERS AND DRIVERS OF CITIZEN SCIENCE IMPLEMENTATION IN LITHUANIA

Findings from CS4Welfare project

Methodology used: 30 interviews with stakeholders (scientists, policy-makers, teachers, librarians, etc.)



- science;
- motivation by scientists;

- groups.





• Fragmented understanding of the concept of citizen

• Limited institutional support;

• Evaluation focused on articles in high-impact journals and not the Open Science related activities > Lack of

• Limited understanding among stakeholders on the

principles of the design, implementation and

management of citizen science projects;

• Limited skills in communication and science outreach; • Lack of cooperation between different stakeholder



THAN Q&A CONT MONIKA

THANK YOU!

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