



Photonics industry survey for research centers and universities in Finland

Survey results

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Boost Brothers Oy

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Summary

The survey was commissioned by the Flagship for Photonics Research and Innovation (PREIN), aiming to map the activities in the Finnish research community

- The survey was aimed at the photonics research personnel of the Finnish research centers and universities
 - The survey received 109 responses and the response rate was approximately 25%
 - 40 % of the participants were members of PREIN, while 60 % were non-members.
- The survey was carried out during Spring 2023



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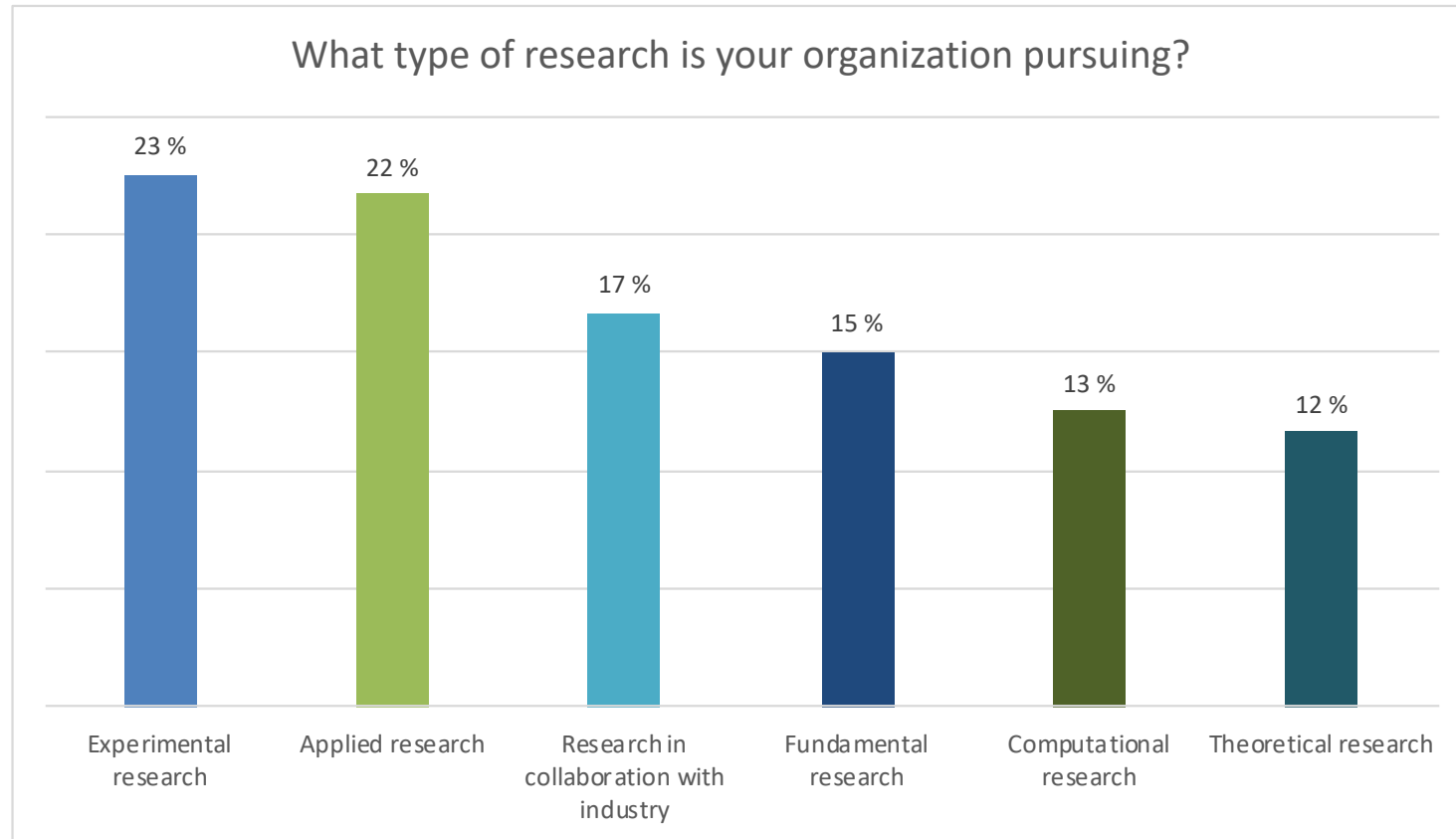
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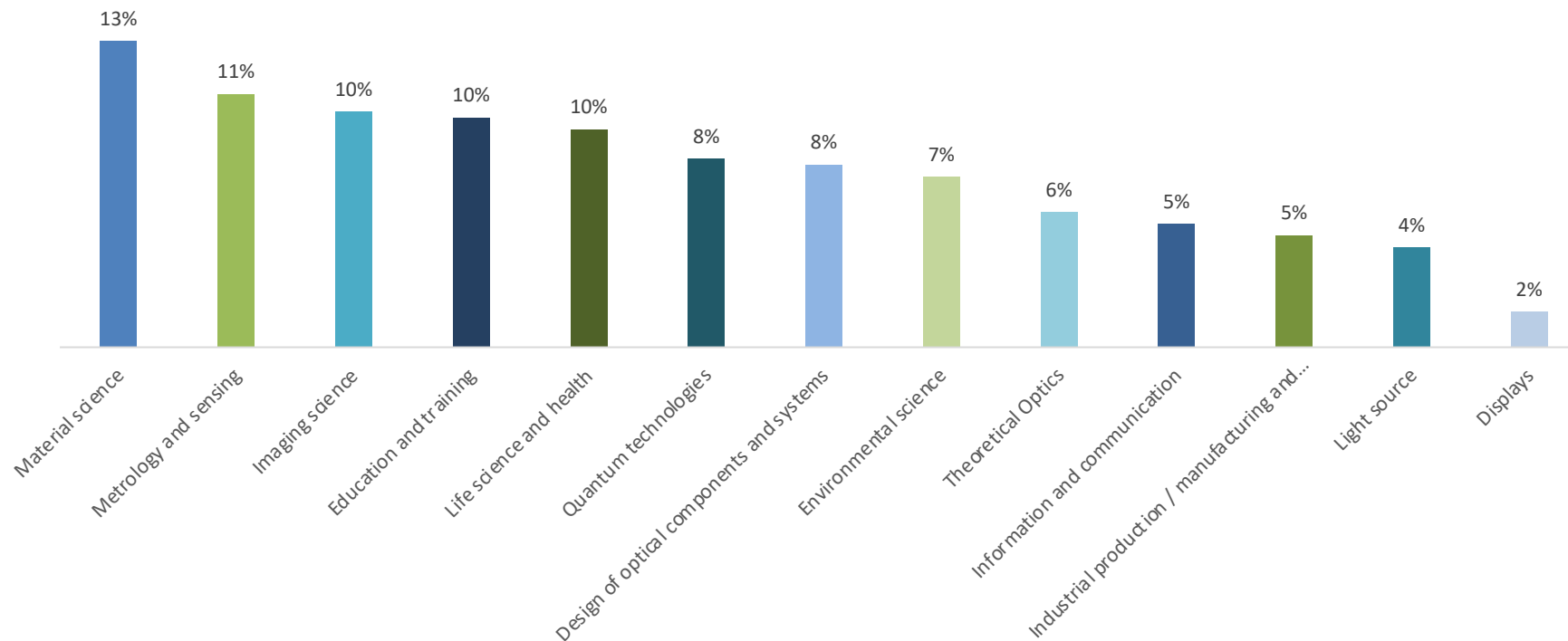
Finnish research centers and universities are pursuing photonics research in various ways, with *Experimental research* and *Applied research* being the most prominent



- Research activities distribution remained roughly the same compared to 2020

Material science is the most prevalent photonics-related research field in Finland. Additionally, respondents reported research activity concerning other research fields, such as *Photovoltaics* and *Bioimaging*

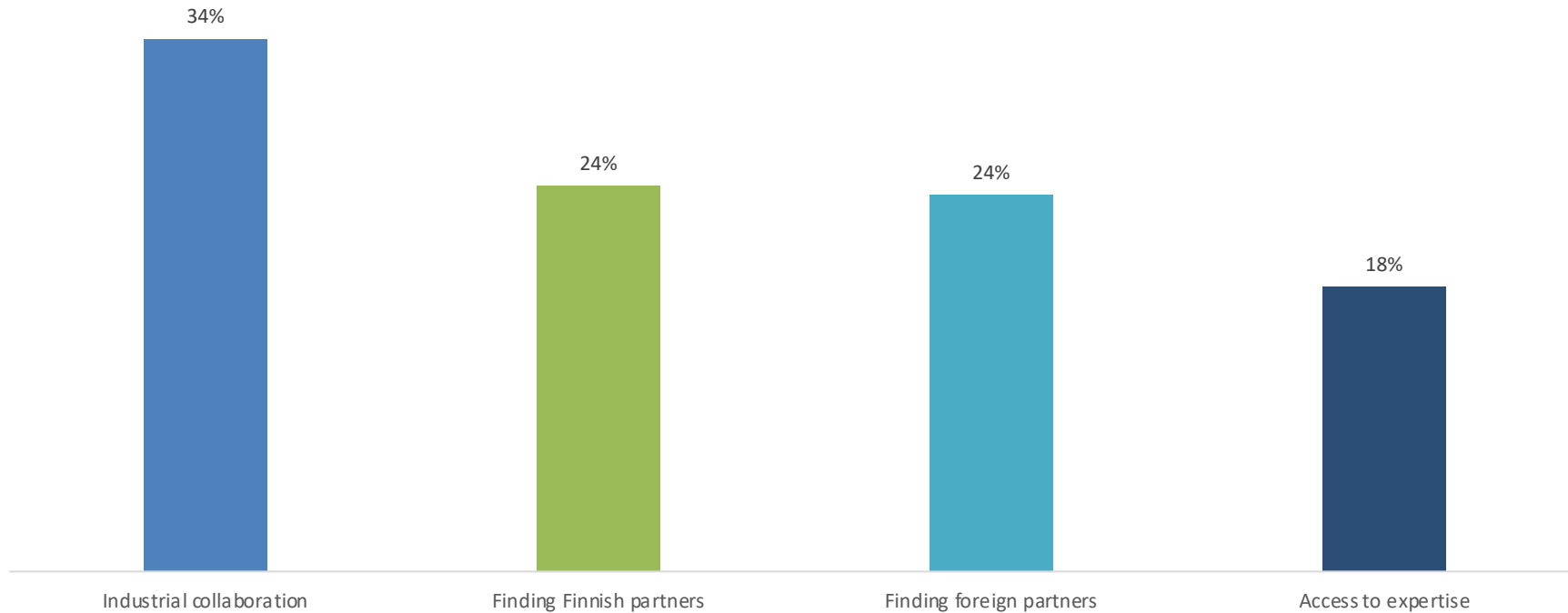
Which are the key photonics-related fields in your organization?



- In key photonics-related research fields light source has dropped down to 4 %.
- In contrast, in 2020 light source was among the biggest photonics-related fields with 10 % share.

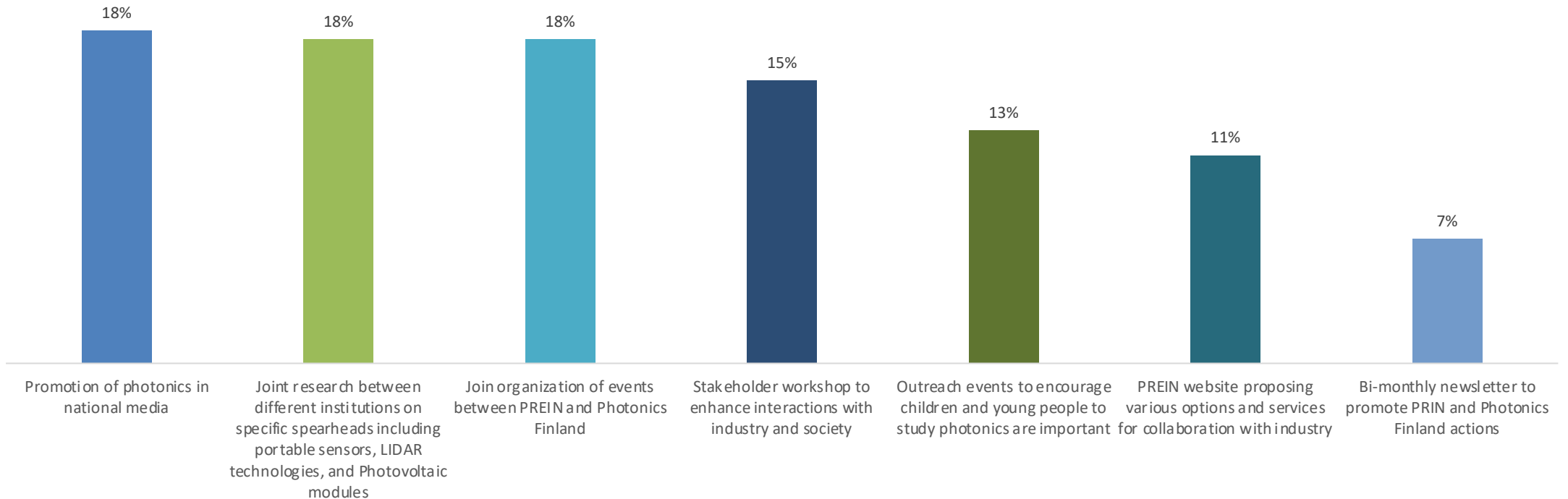
Similar to 2020, respondents see assistance in *Industrial collaboration* as the most important facilitator of further photonics research.

What type of assistance would facilitate the research in your organization?



Promotion of photonics in national media, joint research on specific spearheads, as well as joint industry events, were generally seen as the most beneficial actions of PREIN.

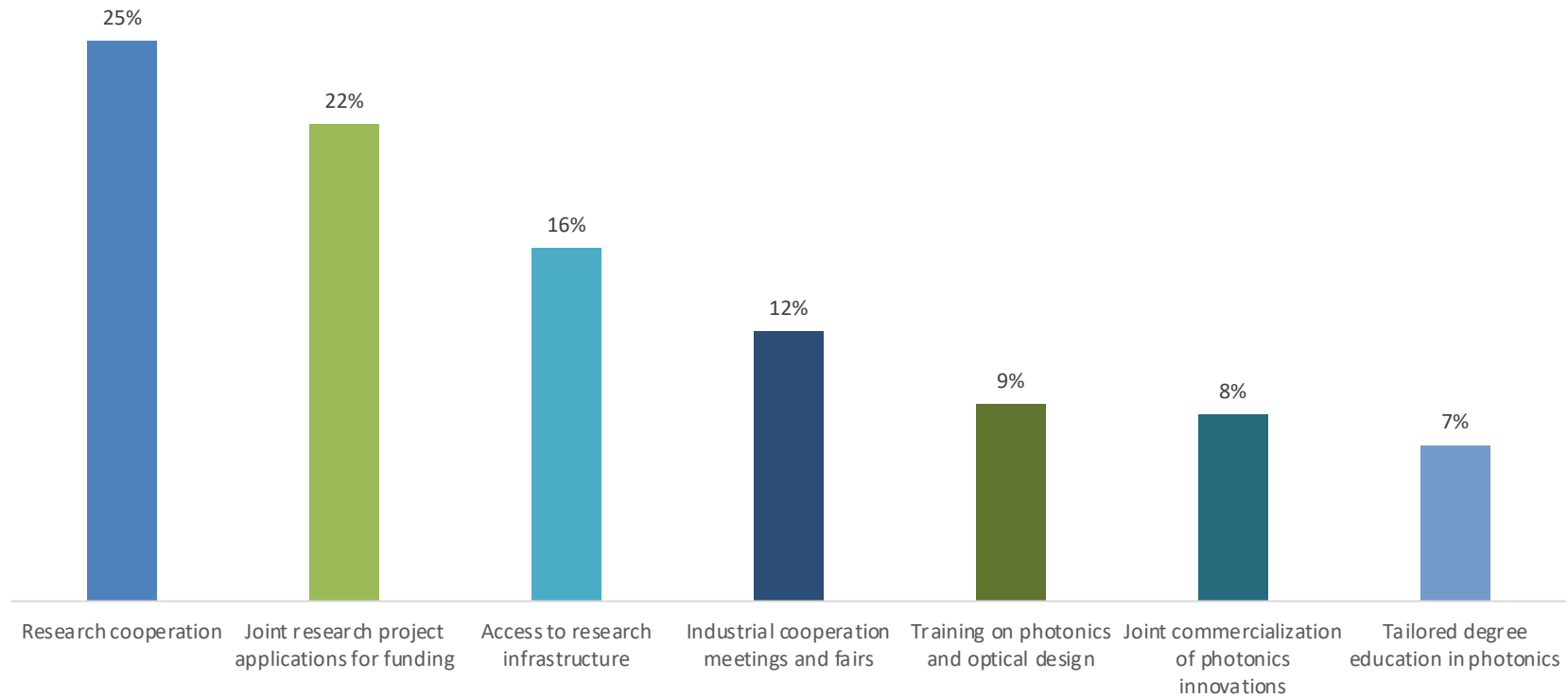
The Flagship of Photonics Research and Innovation (PREIN) has been established in 2019 to support the Finnish Photonics Ecosystem. Do you think the following actions implemented by PREIN are useful for this purpose?



- More people would like to see promotion of photonics in national media compared to 2020 survey.
- The top three were seen as the most important actions in industry survey as well

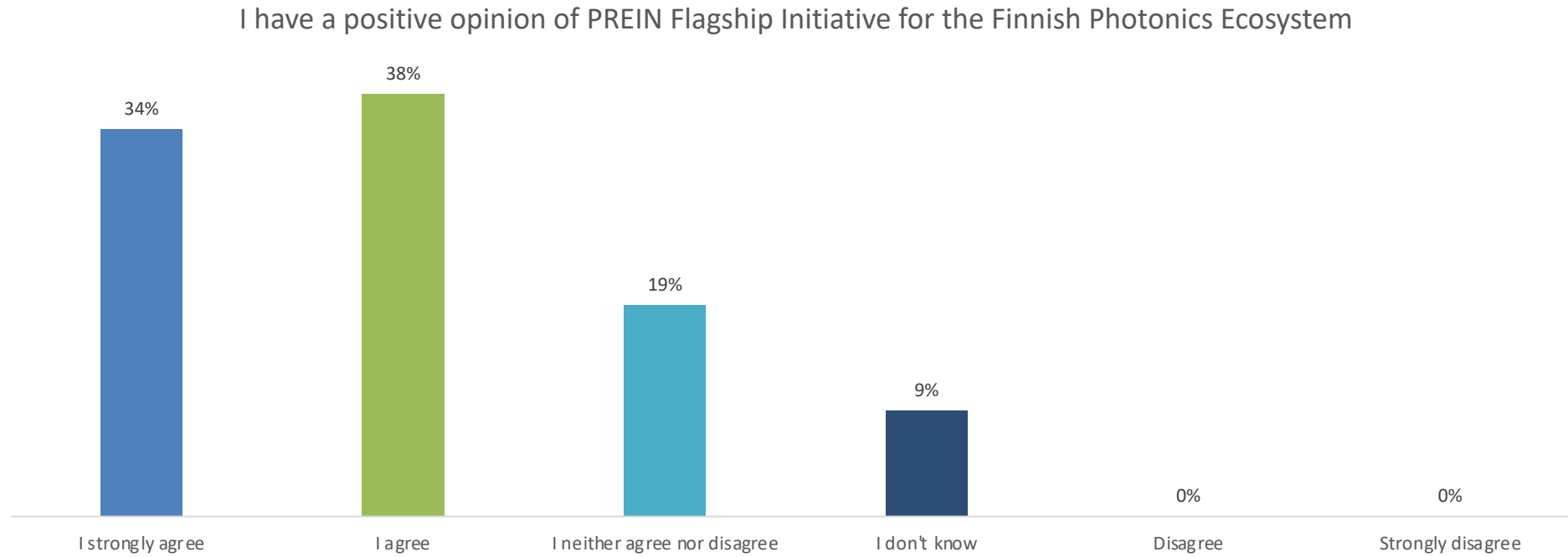
PREIN is expected to provide researchers with means for cooperation and collaboration, along with an improved access to necessary infrastructure

What are your expectations from PREIN



- In addition, researchers mentioned promoting photonics and its career opportunities as one of the expectations in open-ended responses.

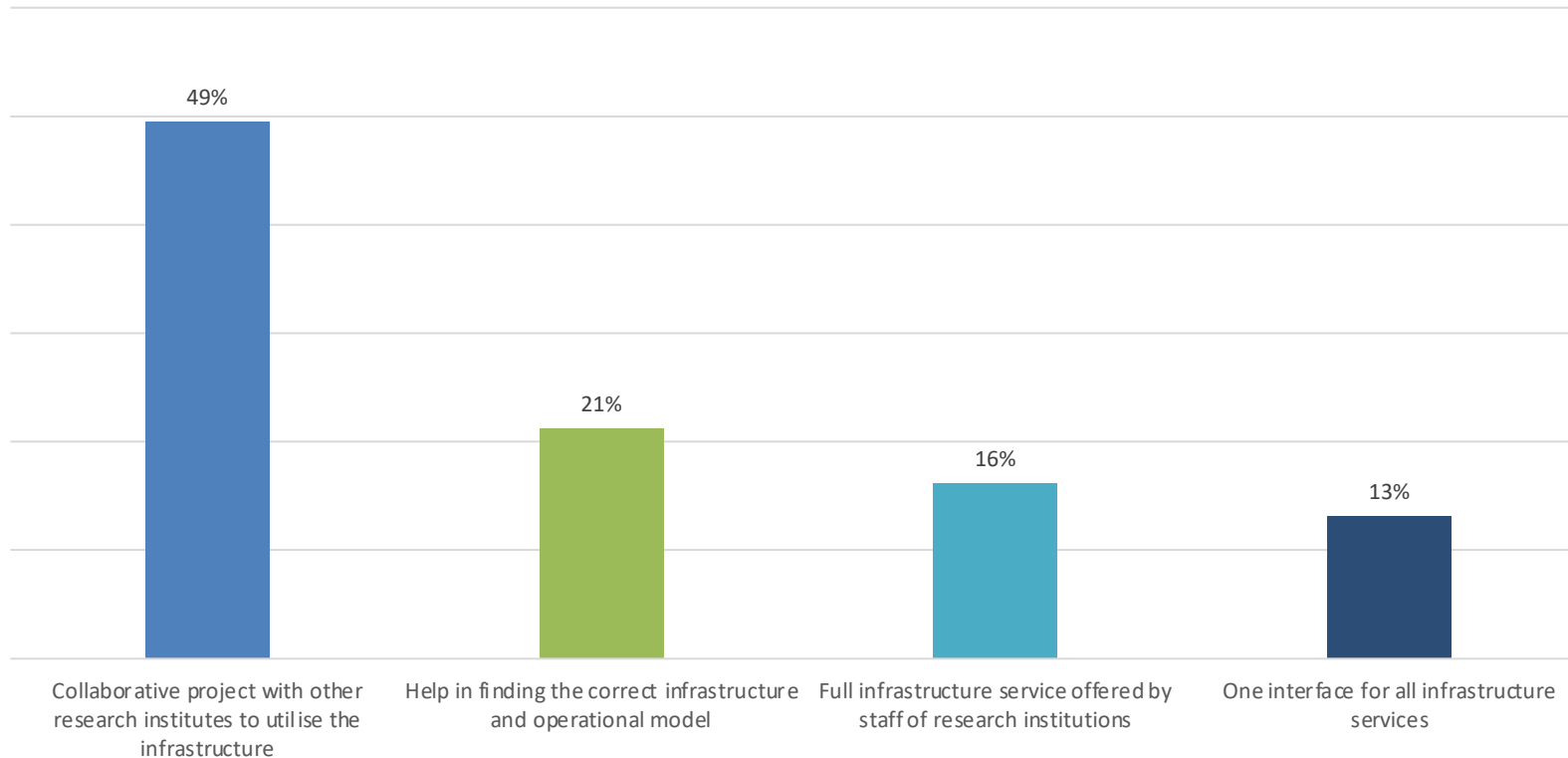
PREIN Flagship Initiative is held in high regard, especially among its members. Some of the respondents hoped that PREIN could increase its prevalence through improved communications and higher media visibility



In comparison to 2020 study, “I neither agree nor disagree” grew notably. Fewer respondents were part of PREIN in this study.

Respondents were mainly hoping for further collaborative projects with other research institutes to utilize the full potential of Finnish photonics research infrastructure

What level of service would be the most desirable in your potential utilization of the research infrastructure of universities and research institutes?



- Increasing number of the researchers were hoping for further collaborative project with other research institutes
- Interestingly full infrastructure service offered by staff of research institutions were seen less important.

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- **PREIN Flagship Initiative is appreciated among researchers**
 - A total of 72% of the respondents either strongly agreed or agreed on having a positive opinion of PREIN.
- **First and foremost, researchers expect PREIN to facilitate research cooperation and joint research project applications for funding**
 - Especially further international collaboration, and further collaboration with the industry were highlighted by the respondents
- **Joint research on specific spearheads, as well as joint industry events, were generally seen as the most beneficial actions of PREIN**
 - In addition, promotion in national media were seen increasingly important by researchers

