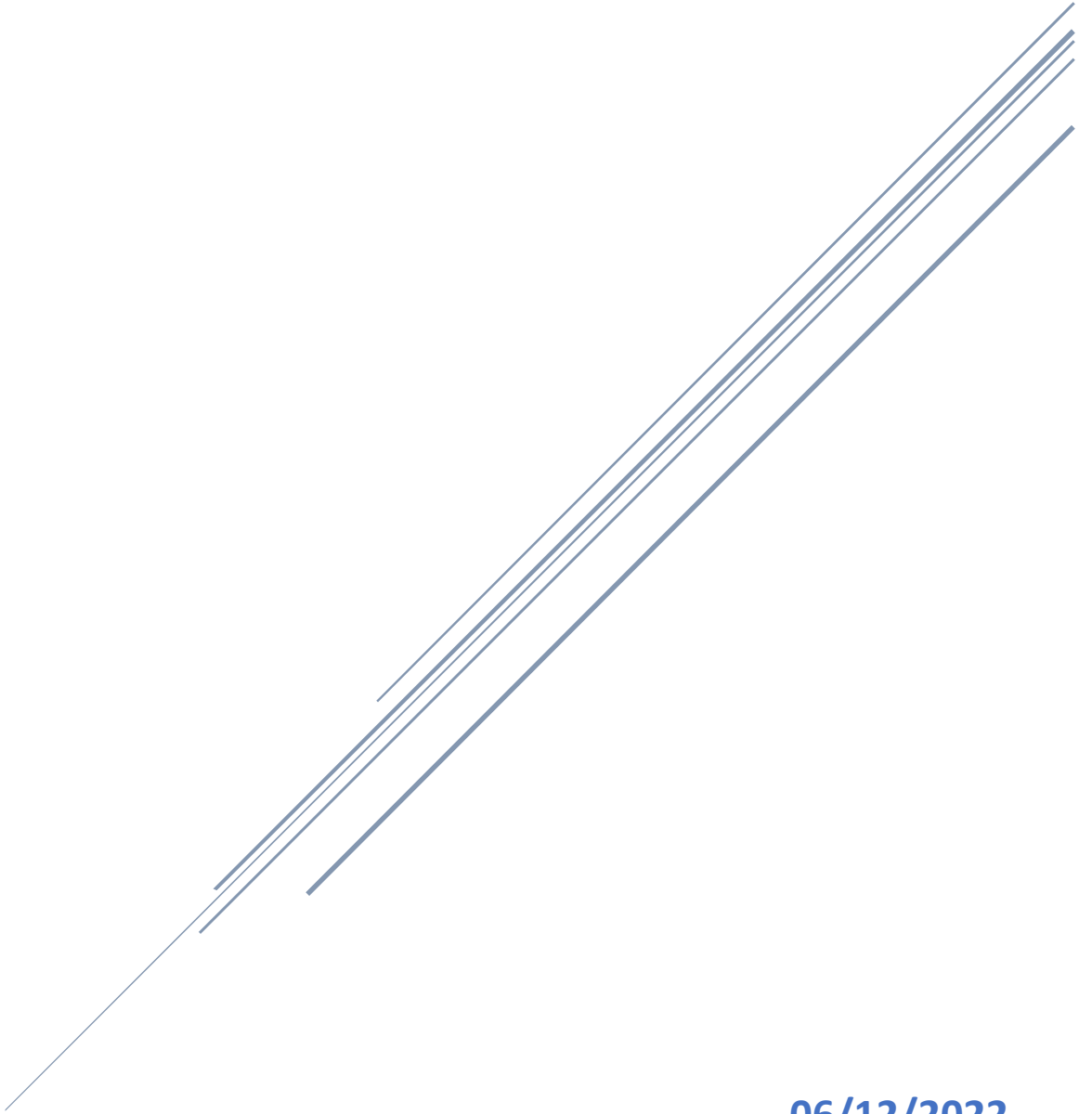


EuroCC Activities Evaluation Survey RESULTS



06/12/2022
@NCC Turkey

The Purpose of Survey

The purpose of this survey was applied to evaluate the effectiveness of the activities provided by NCC Turkey between 01.01.2021 and 29.12.2022 within the scope of EuroCC project. The evaluation findings will be used in order to devise NCC Türkiye's future program and to extrapolate lessons and best practices for SMEs' improvement and scaling up.

Survey Implementation and Participants

The survey was sent to participants registered on the NCC@Turkey list and 150 people, including academia, public institutions, the private sector and students, answered to the survey. TÜBİTAK Survey Management system was used for the survey and the answers were analyzed on the system. A total of 21 questions were directed to the participants, including multiple & single choice, long free text type and questions based on a 5-point Likert scale.

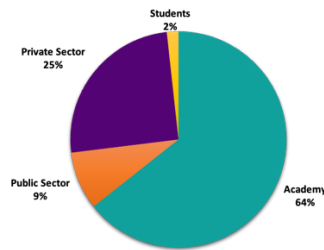


Figure-1: Distribution of participants according to sector.

Majority of the participants work in the field of Information Technologies sector. When a more specific analysis is made, most of the academic participants carry out their research in the fields of informatics/software, energy and Information Processing Technologies, while the private sector participants mostly operate in the field of information technology. In the sample, small percentages working in the fields of agriculture-food, construction, space, statistics and cyber security, were gathered under the title of "Other" in the graph in Figure-2.

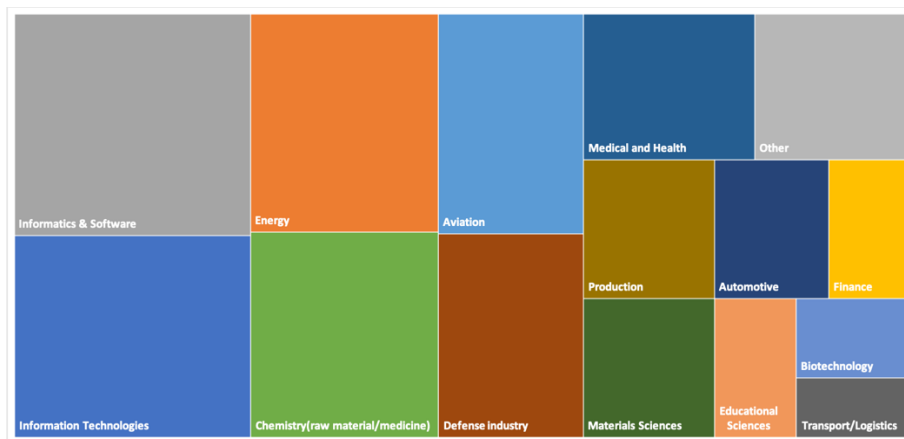


Figure-2: Distribution of the participants according to fields.

Usage of High Performance Computing Resources

The questions in this section were created to learn whether the participants use any of the High Performance Computing related technologies in their workflows, and which centers they use for HPC services. According to the distribution given in Figure-3a, a large percentage of the survey participants stated that they benefited from those technologies. While a large percentage of academics state that they use these technologies in their workflows, only half of private sector benefit from these technologies.

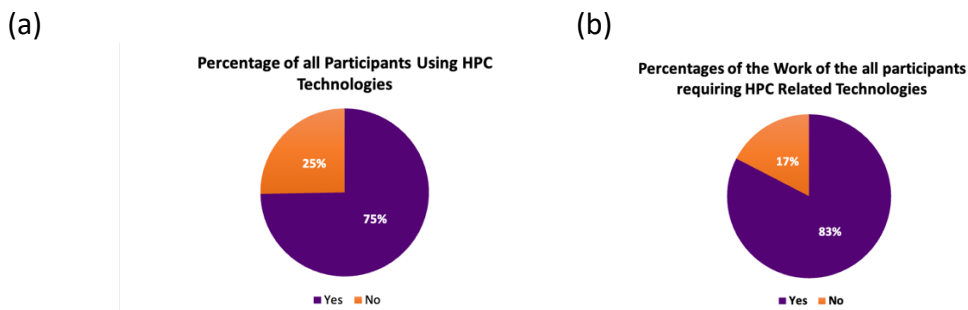


Figure-3: Graphics of the percentage of use of HPC technologies by all participants and the percentage of participants working that requires the use of these technologies.

The needs of the use YBH technologies are given in the graph in Figure-3b. According to this graph, the number of both academic and private sector users who require the use of these technologies is quite high.

Users are also asked that which sources they receive YBH services. Academic participants stated that they mostly prefer TRUBA and UHeM infrastructures. There are also researchers benefiting from foreign sources such as Cineca, Explor, Co-Lab. While very few of the private sector users provide their resource services from these centers, they stated that they prefer local resources.

Evaluation of Organized Trainings

The participants were asked which of the training they attended within the scope of the EuroCC project, the content of this training and whether they met their expectations. The participation rates are given in Figure-4. The applications/programs in different fields in the organized winter school, together with the applications of these codes in the YBH environment and the presentations of scientists in these fields, ensure a high level of participation in this school. In addition, being the first online event organized increased participation.

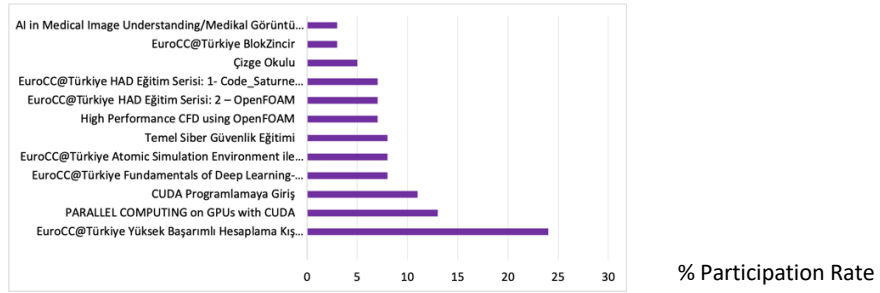


Figure-4: Participation of organized trainings

The participants of the survey were asked to evaluate these training activities in line with their personal goals, their content, and how much they benefit from these training activities for their workflows, on the 1-2-3-4-5 score scale. The results are given in the graphs in Figure-5.

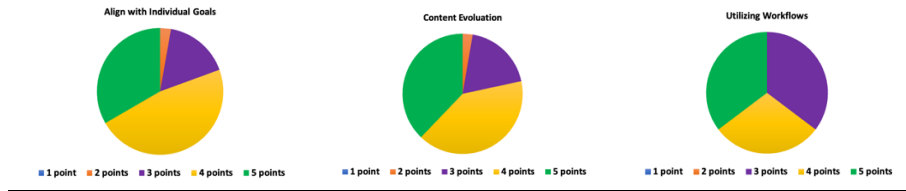


Figure-5: General Evaluation: Aligning with Individual Goals, Evaluation of the Content, Utilizing Workouts

For the future training that NCC@Turkey will organize, the participants are also asked about the training they would like us to organize. Requested training requests are listed below:

- Machine learning integrated LAMMPS and DFT applications.
- Molecular dynamics applications, a training on protein-ligand interactions.
- A special training on DFT.
- Applications of Sparse linear systems on YBH
- Transferring decision tree applications to YBH environment with Python
- Introductory training on C, Python, Parallel Programming (MPI, OpenMP, CUDA), TensorFlow, PETSci and their periodic editing.
- Applications developed using artificial intelligence used in the medical sector.
- Artificial intelligence applications in economy and economics

Evaluation of Other Organized Awareness Activities

In this section, questions are directed to the participants regarding Seminars, Workshops, Performance Conferences, Information Days, and Computhons organized within the scope of the EuroCC project. The participation rates are given in Figure-6a.

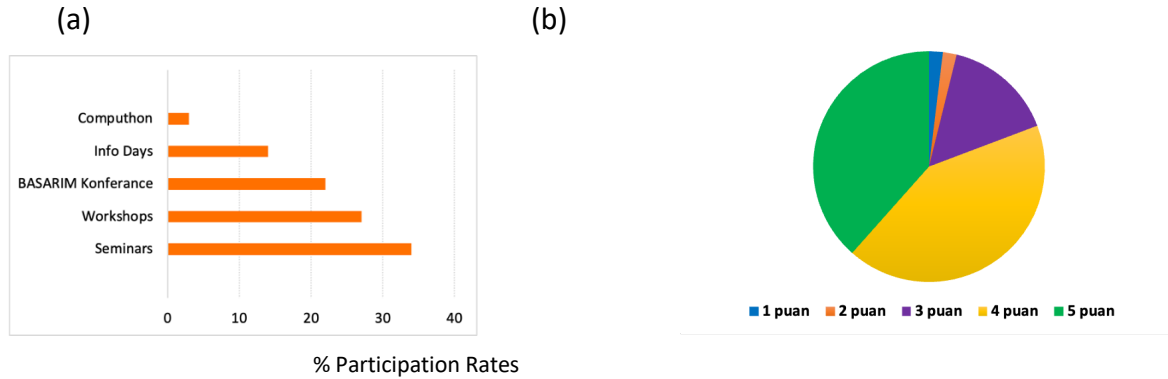


Figure-6: Distribution of participation in organized awareness activities and evaluation of the awareness they gained.

In the Information Days, calls for the EuroHPC ecosystem, the opportunities offered by this ecosystem, and information about YBH resources were presented. Participants are asked to evaluate how much awareness they gained about the opportunities offered during these information days, on a 1-2-3-4-5 score scale. The results are given in Figure-6b. While they state that they know about the EuroHPC ecosystem, there are also participants who do not know about the ecosystem. Therefore, as NCC@Turkey, these information days will be organized periodically.

Participants are also directed to which of the calls they apply by the EuroHPC ecosystem. Only a minority of academic participants stated that they applied to PRACE, EuroHPC Regular Access, HPC-Europa3 calls, while private sector participants did not apply to any of such calls. However, a high majority stated that they wanted to apply to these calls and could not apply due to the reasons listed below.

- We need support in applying for calls
- We do not have experts to use the resources to be provided.
- We lack information on accessing computational resources.