Dear scientist,

We reach out to you to help define the future needs of the European neutron user community.

Our first goal to investigate the research that is done by neutron scattering scientists, by performing Artificial Intelligence text-analysis of published work. We have access to meta-data, but need your full-text publications to train the AI algorithm.

With the help of such analysis of publications, we will send out a survey, with relevant questions for each scientist. We will ask for your time and effort to express what you need in the future to perform your neutron science.

## Step 1: text-analysis on PDFs

PDFs of your published work will help to train the AI algorithm to analyze European neutron science in terms of *social relevance, scientific topics, neutron methods and complementary methods.* We will only use the PDFs we receive from you for the purpose of the current investigation and will not share the PDFs. The investigation is done on the whole community, not on a single scientist.

## Step 2: a survey personalized with relevant questions

The analysis in step 1 will enable us to automatically generate a survey with questions that will be relevant to a scientist by relating to the scientific field of a scientist.

At the **current stage**, we ask for your help in step 1, by sending us PDFs of all your neutron- and non-neutron publications that you are willing to share with us, so that we can 'feed' our AI algorithm. Any supplementary information of publications are welcome, but not required. We intend to report the outcome of this Brightness<sup>2</sup> work package back to you through your national delegates at ENSA.

Your time and efforts are much appreciated.

With kind regards,

The ENSA board and its delegates

## **ENSA – the European Neutron Scattering Association**

ENSA is a non-profit association of scientists that are delegates of their national neutron communities. ENSA is consortium member of Brightness<sup>2</sup> and the investigations described above are funded by the Brightness<sup>2</sup> EU-funded project. ENSA is executing this particular Brightness<sup>2</sup> work package at the TU Delft, Netherlands, the affiliation of its vice-chair, because ENSA holds no (single) office in Europe. The work will serve Brightness<sup>2</sup>, the ESS and the neutron community of scientists and neutron facilities in Europe.

## **Brightness**<sup>2</sup>

The European Spallation Source (ESS) is running the European Union-funded <u>Brightness<sup>2</sup> project</u> (823867), in support of the long-term sustainability of ESS, its community, and the network of neutron sources in Europe. Within this Brightness<sup>2</sup> programme, we, the European Neutron Scattering Association (<u>ENSA</u>), are executing work package 2.2: "Defining and reporting the needs of the user communities in terms of new neutron-based methods in alignment with the ESS facility capabilities."

