

Quarterly **NEWS**
LETTER

SPRING ISSUE 2022

BeST

Beryllium Science & Technology Association



Dear Readers,

**Welcome to the Spring edition 2022
of the BeST Quarterly Newsletter!**

In this edition, BeST will provide updates on NASA's James Webb Telescope project, and the role played by beryllium in the construction and operation of its important components.

In addition, we will give you a short report of the BeST Annual General Meeting, which took place on 30 March, and of BeST's meeting with BAuA, the German Federal Institute for Occupational Safety and Health.

We are also very delighted to present to you the next Be Responsible Webinar, which will be held in English on 6 April. All relevant information about the event is included in the article.

Finally, don't forget to keep an eye out for our newest Easy Guide Blast expected next month.

Kind Regards,

Prof Dr. Andreas Köster, Chairman of BeST

Table of Contents

- BeST hosts Annual General Meeting 2022	03
- NASA's Webb Reaches Alignment Milestone, Optics Working Successfully	04
- BeST shares Be Responsible update with BAuA	05
- Be Responsible Webinar in English on 6th April 2022	06
- The third edition of the Easy Guide Blast soon to be released	07
- BeST Online	07

BeST hosts Annual General Meeting 2022

On 30th March 2020, BeST Members and Associate Members gathered virtually to participate in the BeST 2022 Annual General Meeting. During the assembly, Members referenced BeST's achievements over the past few years in the field of Occupational Health and Safety as well as in the field of electronics and electrical equipment.

The meeting was also an occasion to address the upcoming challenges that the beryllium industry will face in the coming years and the importance of persisting in informing EU and National policymakers on the applications of beryllium and its role in maintaining the European industry at the cutting edge of innovation.

BeST's Director described key initiatives and deliverables for the EU 2022 program, highlighting the opportunities and challenges of the main initiatives of the EU co-legislators: the policy actions stemming from the EU Chemicals Strategy for Sustainability, including the the review for the Classification, Labelling and Packaging (CLP) Regulation and of the REACH Regulation, the 2023 update of the Critical Raw Materials List, the Update of the Industrial Strategy and development of transition pathways, the novelties in the aerospace and defence sectors, and the national implementation of the European Occupational Exposure Limits (OELs).

NASA's Webb Reaches Alignment Milestone, Optics Working Successfully

The James Webb Space Telescope (JWST), the successor to the famous Hubble telescope, has completed the stage of alignment known as "fine phasing" with a positive outcome.

JWST is a telescope unique in its kind. It is the first telescope in space to use a segmented primary mirrors design. This means that the primary mirror, large 6.5 meters, is not made by a unique block, rather by 18 hexagonal, beryllium mirror segments, which had to be folded up for launch, then unfolded in space and finally adjusted – to within nanometres – to form a single mirror surface.

As you may remember from the previous quarterly newsletter, the JWST was launched on 25th December 2021, reaching its final destination one month later, 1.5 million kilometers from Earth. Before becoming operative, JWST needs to undergo several preparative steps. Fine phasing is just one of the seven steps required to prepare and calibrate the telescope to do its job.

The process is fundamental, since to work together as a single mirror, the telescope's 18 primary mirror segments need to match each other of a fraction of a wavelength of light.

Fine phasing aims to produce one unified image of the same star using only the Near Infrared Camera (NIRCam) instrument. The process has been conducted with success: every optical parameter that has been checked and tested is performing at, or above, expectations.

The team also found no critical issues and no measurable contamination or blockages to Webb's optical path. As a result, the observatory can successfully gather light from distant objects and deliver it to its instruments without issues.

Over the next six weeks, the team will proceed through the remaining alignment steps before final science instrument preparation. After the Alignment process is completed, there will be science instruments preparations, which will take approximately two months. For this reason, Webb's first full-resolution imagery and science data will be released only in the summer.

Beryllium played a decisive role in the success of the alignment process. Beryllium was the perfect material for the JWST's construction and assembly due to its lightness, excellent optical reflectivity, and ability to retain its shape even at low and extreme temperatures. Indeed, the complex maneuvers required by fine phasing have been eased by the unmatched characteristics of beryllium, making it the material of choice for the mission.

Beryllium mirrors are also used in several civilian applications, such as laser scanners for PCB drilling (Printed Circuit Board), medical imaging, confocal microscope and many more where the use of beryllium mirrors enables high power, speed and precision processing.

BeST shares Be Responsible update with BAuA

On 23rd February 2022, BeST shared its Be Responsible update with BAuA, the German Federal Institute for Occupational Safety and Health.

BeST delegation was composed by Mr. Ted Knudson from Materion, Mrs. Angelique Renier from NGK Berylco France, Mr. Peter Mählmann from Tropag, and Ms. Rebecca Lentini from BeST.

As you may know, the Be Responsible Program is a project launched by the beryllium industry that aims to promote the science of beryllium health and safety while also ensuring that Beryllium workers and their close entourage are protected in the workplace.

During the meeting, BeST delegation had the opportunity to show the progress of the Voluntary Product Safety Program and to describe its main initiatives, such as the “Working Safely with Beryllium” webinars (three more webinars are planned for 2022), and the Easy Guide Blasts, the new communication tool launched in December 2021 – more information on this below.

The event has been the occasion to share with the institutional counterpart the efforts made by BeST to promote best practices in the industry’s workplace.



Be Responsible Webinar in English on 6th April 2022

Registration details and announcement of expert

On 6 April 2022 at 2.00 PM BeST will host the first 2022 Be Responsible Webinar – Working Safely with Beryllium - in English.

The expert guest of the session will be Mr. Ted Knudson, Senior Director – Regulatory Affairs & Product Stewardship of Materion Corporation. He will address occupational health and safety at the workplace and highlight good practices applied to beryllium.

Don't miss the event! Mark your calendar for 6 April 2022. Information on registration is available on our website [here](#).

Cannot follow the event? Don't worry, BeST will organise similar activities in 2022.

In the meantime, you can read more about our Be Responsible Programme on our website. The website is free of charge and available in all official EU languages. To have a look at it, [click here](#).

The third edition of the Easy Guide Blast soon to be released

Easy Guides are a new communication tool developed by BeST at the end of 2021 and dedicated to each of the 12 Guides developed in the frame of the Be Responsible VPSP.

The third edition will be published shortly and will focus on the Exposure Assessment. Exposure Assessment is the process of estimating or measuring the concentration, how long, and how often exposure occurs to an agent.

The Guide provides you with information on how to properly conduct an exposure assessment and what its main goals are.

The second edition of the Easy Guide Blast, published earlier this year, was dedicated to Personal Protective Equipment (PPE) & Hygiene. The guide provides infographics about PPE and how to use them properly.

Don't miss out on our next edition of the Easy Guide Blast dedicated to the Exposure Assessment. Check out our previous Easy Guide Blast editions [here](#). will also be available shortly on the Be Responsible website.



Stay in Touch

The BeST website keeps you informed with a 'Latest News' section, where readers can follow the latest news and features on beryllium.

The news section complements the wealth of information already on the site, on issues such as environment, health, and safety.

Get the latest news on BeST online.

BeST can also be found on Facebook. 'Like' the page and be notified when there is news from our association. Photos of events organized by BeST can also be found on our [Facebook page](#).