

The Future of the BeYOND Industrial Forum

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The BeYOND Industrial Forum was first held in 2009, co-founded by Aniceto Goraieb of the Karlsruhe Beryllium Handling Facility (KBHF) and Chris Dorn, then working for Brush Wellman Inc. in the U.S. The name BeYOND is an acronym, which stands for “Beryllium Opportunities for New Developments.”

The reason for holding another beryllium-in-fusion-type event in addition to the IEA International Workshop on Beryllium Technology (BeWS) was that it would have a different focus. BeYOND was created with the idea of more emphasis on strengthening the connection between the beryllium research community and the beryllium industry, an aspect not always satisfied by the BeWS. Since BeYOND-V in 2013, the workshop has generally also placed more emphasis on beryllium health and safety than typically found in the BeWS.

After trying various timing relative to other conferences, it evolved that the BeYOND workshops would take place on alternate years from the BeWS and normally held in conjunction with the SOFT Conference (Symposium on Fusion Technology), which is always held in Europe. Meetings to date:

- BeYOND-I: Karlsruhe, Germany, 2009
- BeYOND-II: Porto, Portugal, 2010
- BeYOND-III: Karlsruhe, Germany, 2011
- BeYOND-IV: Karlsruhe, Germany, 2012
- BeYOND-V: Barcelona, Spain, 2013
- BeYOND-VI: San Sebastian, Spain, 2014
- BeYOND-VII: Berlin, Germany, 2016
- BeYOND-VIII: Karlsruhe, Germany, 2018
- BeYOND-IX: Karlsruhe, Germany, 2022

Nowadays, as the driving force in the fusion industry moves from government research institutes to commercial enterprises, it is the commercial companies that will determine the timeframe for achieving a successful, scalable fusion machine. If the realization of that first machine is to succeed, it is clear that collaboration between the traditional institutes and the commercial companies must happen, and that need for working together goes well beyond just what is happening with beryllium. Everyone needs to start thinking bigger.

In June 2023, BeYOND co-founder Aniceto Goraieb participated as a panelist in a satellite session at the Symposium on Fusion Energy (SOFE), which was his original brainchild. That session, which was titled “Next Steps to Global Fusion Partnerships,” discussed the opportunities in private-public partnership (PPP) in the fusion energy industry, and it was ultimately supported by Kyoto Fusioneering in the UK, and the Fusion Industry Association (FIA) in the U.S. The presentations and

discussion during that session emphasized not only the importance of partnerships to accelerate the development of fusion, but they also showed how many different pathways exist and are already being used for collaboration and partnership.

Based on this recent experience at SOFE, coupled with the large-scale changes in the fusion industry, it seems that now is the time to change the purpose of the BeYOND Industrial Forum. Up to now, BeYOND has been focused on fostering partnerships between government labs and industry for beryllium-related research, but the vision for the future is to significantly broaden the scope of those partnerships. Now, the critical path for accelerating the success of fusion lies in the promise of the afore mentioned public-private partnerships, and those PPPs need to cover all areas of fusion where technology transfers are needed and not just those that involve beryllium.

The presentation will conclude with an announcement of a plan for BeYOND-X, with a new agenda focused on global fusion partnerships, hopefully to be held in conjunction with the SOFT Conference in September 2024.

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