

## End-of-the-Year Newsletter

Dear GIF colleagues,  
Dear readers,

As a newcomer in the GIF family, it is a real pleasure for me to introduce this 6<sup>th</sup> GIF newsletter. Except for my occasional participation in the organization team of the 2018 GIF Symposium, I started being involved in the GIF early in 2020 with the EG and PG support team. I do my best to serve the Technical Director, particularly for the EG meetings. Since then, it has been a great opportunity for me to participate in the GIF meetings and to contribute to the evolutions proposed by the Technical Director to the GIF board, with the precious contribution of the NEA Technical Secretariat team.

In this Newsletter you will learn about an emerging initiative on Preserving and Capitalizing Knowledge at GIF. Ms. Kathryn Obisesan who just joined the GIF team to support a number of groups as Technical Secretariat, gives her first feeling about this initiative.

You will also find an article from Shigenobu Kubo, who acted as Chair of the Safety Design Criteria Task Force, on the Development of Safety Design Criteria and Guidelines for the GIF systems. This includes the latest information

about the closing of the SDC taskforce and its merging into the Risk and Safety Working Group.

End of October was our EG44/PG50 meetings. Unfortunately, due to Covid restrictions, we were not able to hold this meeting in France/Amboise/Clos Lucé as we had expected in order to celebrate the 20<sup>th</sup> anniversary of the GIF.

Despite the fact these EG/PG meetings were held by videoconference, they were a real success: we gathered from 60 to 75 participants each day during the week. We also experimented an optimized agenda taking into account the lessons learned from the previous spring virtual EG/PG meetings, with more time to present the technical progress from the SSCs, WGs and TFs during the newly combined EG/PG days. The objective is to avoid redundancy during the week and to promote dynamic exchanges. We hope that the participants enjoyed this new formula!

One of the points discussed during these EG/PG meetings was the initiative proposed by the Technical Director to hold a brainstorming meeting on Non-Electrical Application of Nuclear Heat. This meeting was held on 16<sup>th</sup> November with more than 60 experts. "A first

promising step!" as Gilles Rodriguez concluded in his article.

As everybody knows, Sama Bilbao Y León crossed the Channel to be the new Director General of the World Nuclear Association. On behalf of all GIF members, "Thank you Sama for your precious job done for the GIF... Good things ahead Sama (we know you read the GIF newsletter!)". And, welcome to Philippe Guiberteau who replaced Sama since October as Head of the GIF Technical Secretariat.

Finally yet importantly, do not miss the next webinars announced here! We also invite you to follow us on gen-4.org where new GIF branding is being implemented.

Remember that it is your newsletter and that you can contact the [GIF Secretariat](#) to suggest an article for the next issues.

Bonnes fêtes de fin d'année ! Prenez bien soin de vous ! (\*)

\*Season's greetings!  
Stay Safe, Stay Healthy!



Pascal Terrasson

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## Upcoming Conferences

International Conference on Fast Reactors and Related Fuel Cycles (FR21) - 10-13 May 2021, Beijing, China.

<https://www.iaea.org/events/fr21>

HTR 2021 International Conference 2-4 June 2021, Yogyakarta, Indonesia

<https://htr2020.org/>

## Major events

December 2020 [Webinar Series 48](#): Development of Multiple-Particle Positron Emission Particle Tracking for Flow Measurement, Cody Wiggins, VCU (USA)

January 2021 [Webinar Series 49](#): MOX Fuel for advanced reactors, Nathalie Chauvin, CEA (France)

[www.gen-4.org](http://www.gen-4.org)

### A Newcomers Perspective on Preserving and Capitalizing Knowledge at GIF



On September 14<sup>th</sup>, 2020, I joined the GIF team as a Technical Secretariat support to several groups. Recently with the Education and Training Working Group (ETWG), I have had the opportunity to provide support to a budding activity encapsulating Knowledge Preservation and Capitalization.

**Knowledge preservation and knowledge capitalization acknowledge the need to dedicate time today to prevent the potential dangers erosion of knowledge can bring in the future.** Within our GIF community, Gilles Rodriguez (Technical Director), alongside ETWG members, are planning an initiative to implement knowledge preservation and capitalization

principles into GIF work. Through this initiative, they would like to facilitate the transmission of expertise between GIF generations.

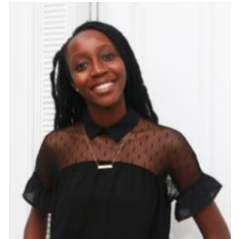
The specifics, which Gilles and ETWG are still finalizing, are as follows: Hosting a crosscutting webinar series that would focus on retired GIF experts sharing their relevant professional experiences. The selected expert would connect with GIF members to deliver a 20 minute virtual presentation followed by a 20 minute interview led by 4-5 mid-career GIF members who would ask specific questions related to their day-to-day work. The webinar would close with an opportunity for the audience to pose questions to the subject matter expert in a question and answer session that would last 20 minutes.

As an early career GIF participant myself, I am still learning the intricacies of the forum. How one progresses an idea to fruition or

engages in crosscutting support to move a new initiative forward is fresh. It is fascinating to observe an emerging project in real-time while concurrently providing support. Perhaps the Knowledge Management webinar series will only be the beginning of a longstanding commitment within GIF... Engaging our developed expertise to endow knowledge on those currently in the organization is a valuable commitment.

Until this project, I was unfamiliar with the concept of knowledge capitalization and preservation. But as an individual very early in my career, I am a part of this initiative's planning and synchronously represent the target audience. For this experience, I am excited and grateful.

**Kathryn OBISESAN, ETWG Technical Secretariat**



### Development of Safety Design Criteria and Guidelines for GIF systems

To establish an international safety design standard, GIF has promoted the development of Safety Design Criteria (SDC) and Safety Design Guidelines (SDGs) for each of the GIF systems, and the Policy Group (PG) established a task force for the SDC (SDC-TF) in 2011. The first mission of the TF was to develop the SDC for sodium-cooled fast reactors (SFRs). The TF, which consists of experts of advanced reactor safety and SFR technologies from GIF member countries and IAEA as an observer, developed the SFR SDC report and presented it in the PG meeting in San Diego in 2012. In 2013, according to the PG's recommendations, the TF launched its Phase 2 activities for quantifying and qualifying key aspects of the SFR SDC to

demonstrate the advantages of Gen-IV SFRs more clearly. Since then, the TF made extensive work: based on review by national regulators and international organizations such as the IAEA, the TF revised the SDC report; and the TF developed two Safety Design Guidelines (SDGs) that describe recommendations for practically applying the SDC to SFR design. After being reviewed by external bodies, the SDGs were disseminated internationally through annual GIF-IAEA safety workshops. **The latest version of the SDC report and the first SDG report "Safety Design Guideline on Safety Approach and Design Conditions" are available on the GIF website ([https://www.gen-4.org/gif/jcms/c\\_93020/safety-design-criteria](https://www.gen-4.org/gif/jcms/c_93020/safety-design-criteria)). The second SDG report "Safety Design Guideline on Structure, Systems and Components" will be released soon.**

Having completed the missions, the TF joined in the Risk and Safety Working Group (RSWG) in 2019. The well-experienced SDC-TF is contributing to drafting SDC and SDGs for the other GIF systems including very high temperature reactors and lead-cooled fast reactors. The RSWG will also contribute to the development of IAEA SMR safety standards and safety documents, because non-LWR small modular reactors (SMR) have many technical similarities to the GIF systems. In 2020, the RSWG has already made great contribution in joint activities with IAEA regarding SMR safety issues.

**Shigenobu KUBO, Chair of SDC-TF**



