Editorial - A GIF Newsletter ! Why ? When ? For who ?

Gilles RODRIGUEZ (GIF Technical Director)

Dear colleagues, dear readers,

You are reading the first GIF Newsletter. This short 2 pages of exchange will help us to communicate, to enhance the dissemination of GIF’s great progress but also of tiny achievements. Indeed, I am definitely convinced that during our all daily life we are too focused on the major milestones. But neglecting all small achievements is a mistake because they help people to boost their self-confidence and for the long term they accumulate to amount to significant progress. The newsletter is also created to meet people, deeply involved in their work, devoting a significant time to the GIF progress and making of this forum the major organization working on GENIV systems.

Therefore this newsletter is a link between all GIF members, a link with other persons and organizations, a link with all persons who want to know more about GENERATION IV Systems. This newsletter belongs to all persons who want to disseminate smart information, because this newsletter will be what we all will want it to become. We will try to keep a monthly publication. But here again: no rules, we will favour agility over constraints.

I guess we are all facing complicated situations due to the COVID-19 crisis. I really hope that of all you are in good health, and I wish the day when we will able to meet in person again is not so far. Digital tools are efficient and they are greatly simplifying our work at home, but for sure, nothing is better than face to face contact!!

Towards HTTR restart

Taiju SHIBATA, EG member of JAEA

On March 25th, 2020, JAEA received the basic agreement from the Japanese Nuclear Regulation Authority (NRA) towards the restart of HTTR. About one month will be needed to receive the official approval, after public comments. Hopefully, the HTTR restart is foreseen for 2021.

The Very High Temperature Reactor (VHTR), one of the six Generation IV nuclear reactor systems, is expected to extend the use of nuclear heat to a wider spectrum of industrial applications such as hydrogen production, high efficiency power generation, etc., due largely to its capability to supply high temperature heat, as well as its inherent safety characteristics.

JAEA has been conducting research and development in the HTTR (High-Temperature Engineering Test Reactor) project since 1999, aiming to establish both HTGR technology and technology for nuclear heat applications.

The HTTR, the first VHTR system constructed at the Oarai R&D Institute of JAEA, is used to demonstrate reactor performance and safety. The HTTR achieved continuous reactor operation with reactor outlet temperature of 950°C for 50 days in 2010. During the operation, the SiC-TRISO (tri-structural isotropic) coated fuel particle (CFP) for HTTR showed excellent performance to retain fission gas. The effects of neutron irradiation on SiC coated with oxidation-resistant graphite have also been evaluated. JAEA has been pursuing an activity to establish the international safety standard for the licensing of commercial cogeneration systems considering the inherent safety characteristics of HTGRs. R&D on hydrogen production system by Iodine-Sulfur process is carried out. 150-hour with 30 L/h continuous hydrogen production by electric heating was achieved in January 2019.
Recent Achievements in GIF Organisation

Sama BILBAO Y LEON

We would like to take the opportunity of this inaugural GIF Newsletter to bring everyone up to speed with the most recent accomplishments of the GIF Organization.

As you know, the GIF Technical Secretariat has undergone a few changes in recent months. In June 2019, Sylvia Anglade-Constantin became the new GIF assistant taking over for Gisela Grosch, who moved to the Nuclear Safety Division within the OECD Nuclear Energy Agency (NEA). Later in 2019, we said goodbye to Marc Deffrennes, who retired from NEA to found a pro-nuclear NGO in Brussels. Antonio Vaya-Soler took the torch from Marc, serving as the SIAP secretariat and Michel Berthelemy replaced Antonio as the secretariat for the EMWG. 2020 started with more changes, as we lost Henri Paillere as the Head of the GIF Technical Secretariat and Malisol Ohirko as the secretariat for the PRPPWG. Henri is now the Head of Planning and Economics Studies Section (PESS) at the International Atomic Energy Agency (IAEA), and we are doing what we can to fill his huge shoes at the NEA and at the GIF Technical Secretariat. Danielle Zayani has taken over the PRPPWG from Malisol, who has gone back to beautiful Argentina, and Sama Bilbao y Leon now serves as the Head of the GIF Secretariat. We want to thank all the colleagues that have left the GIF Secretariat for their contributions and their dedication, and we want to reassure all the members of the GIF family that OECD NEA remains committed to the GIF organisation.

2020 has been a very eventful year so far! We started the year with the organisation of two back-to-back GIF international workshops with nuclear industry including SMR vendors and supply chain SMEs. The first one, the Workshop on Advanced Manufacturing led by Lyndon Edwards (ANSTO) took place on February 18-19. Roger Garbil (Euratom) led the second one, the Workshop on Research and Development Infrastructures Needs and Opportunities on February 19-20. Although the COVID-19 pandemic had only reached China at the time, the GIF leadership decided to use live streaming to allow everyone in the GIF family to join the workshops. On the GIF public website you will find the video streaming of all the presentations and discussions (these have been timed for your convenience), as well as the speakers’ bios, the list of participants and the conclusions of the two workshops.

As the year progressed, the GIF leadership and the GIF Technical Secretariat continued monitoring world events regarding the global COVID-19 pandemic. We express our solidarity with those affected by this global emergency and we hope that everyone in the GIF family remains healthy. At the same time, we are doing our best to continue with the work of GIF in the midst of this crisis. GIF has cancelled or postponed several meetings and events, but many meetings are being conducted via video-conference. GIF has examined several video-conferencing tools to facilitate our work while ensuring privacy and security. These tools are working well, materials are being shared securely and effectively, and meeting participants are satisfied. The GIF Secretariat continues doing their best to serve GIF members and to move forward with the goals of GIF for 2020.

Even with all this excitement, we did manage to refresh a little bit the look of the GIF public website. The GIF leadership wants to enhance the GIF public website to become a useful tool to disseminate the great work everyone at GIF is doing and much work remains to be done, but we please take a look and let us know what you think. The website also includes the recently published Proceedings of the 2018 GIF Symposium. Check them out!

We look forward to seeing most of you in person soon, but in the meanwhile, stay safe!!

Major events — Please save the dates!

♦ GIF Webinar: April 29th, see the picture on the right
♦ 43rd Expert Group / 49th Policy Group meeting: May 26-27, 2020 in viiococonf Mode
♦ 44th Expert Group / 50th Policy Group meeting: Oct. 19-23, 2020 in Amboise, France