Foreword from the Technical Director

It is a pleasure and a big responsibility to serve the Generation IV International Forum (GIF) as Technical Director. In 2019 a big change in all the GIF Organization occurred. I am taking this opportunity to thank and to send my regards to the previous team.

This new Governance Structure is facing new challenges and has to define new horizons. Indeed, Generation IV International Forum will be 20 years old soon (in 2020). For the GIF organization, it is the right time to review its objectives in the new context of a deregulated energy market and a decarbonized future society.

GIF has become an unavoidable organization for people concerned by Gen-IV reactors systems and their related safety, economics and Proliferation Resistance & Physical Protection (PR&PP) items. The key position of systems must be pursued and reassessed, under the prism of the new economy market, the future energy mix, and the transition towards a low-carbon society. The six Gen-IV systems have significant assets to be part of this new energy paradigm. And it is important to highlight the GIF systems coherence in the energy mix through their flexibility and load following; their ability to ensure energy cogeneration (e.g. heat, desalination) and/or a coupling with large-scale energy storage (hydrogen); their deployment flexibility (large – small or micro-scale reactors, small modular reactor type), their siting adaptability.

Thus, it is important to pursue the involvement in these reactor systems, and also to confirm the key role of cross-cutting working groups in main domains: Safety and PR&PP, Economy and Market, Market Opportunities, vision from Industrials, compatibility with renewables, and also future innovative techniques deployable to nuclear systems.

At the same time, GIF has to promote its works on Gen-IV systems, and its views on future energy challenges to the large audience that it can reach due to its reputation. It has started thanks to symposium and webinar initiatives; and we will make efforts to pursue this dynamism and give direction towards a targeted and efficient GIF communication plan.

2019 was a transition year between the great success of the 4th GIF Symposium in October 2018, the large change in GIF Governance, and the new direction where we want to pave the way for the years to come. It was also an interesting year for the various technical progresses that all GIF members achieved. I am convinced that this Annual Report will give you a proper overview of the excellence of these results, and some keys towards our future challenges. The last GIF Annual Report was in 2017. In 2018 – due to the GIF Symposium Event and large involvement of all GIF members – it was decided skip the report. This report will therefore synthetize in some extents the two last years activity report.

Gilles Rodriguez
GIF Technical Director