

Iran

ICerS: Iranian Ceramic Society and Refractory Issues



ICerS (Iranian Ceramic Society) is a national organization for ceramics and glasses, licensed by the Iranian Ministry of Science, Research, and Technology in 1995, and has currently 500 industrial as well as 100 corporate members. It has been active in organizing conferences, workshops, and collaborative research in the fields of refractory, tiles, glass, sanitaryware, heavy bricks, and electroceramics. However, the refractory field has always been the main interest, where ICerS is jointly working with the Iranian Refractory Producers Society nationally, and with refractory WORLDFORUM internationally. Development of steel, cement, non-ferrous, ceramic, and petrochemical industries in Iran has encouraged refractory suppliers to produce about 300 000 t different basic and other refractories, both in the form of shaped and unshaped products, annually. However, there are challenges in the refractory production such as shortages of some raw materials, export, and import problems influenced by sanctions as well as the absence of advanced technologies, mainly in monolithics. Of course, the skilled manpower in Iran, and domestic dolomite raw materials availability as well as growing market needs are important potentials for the development of refractory industry. On behalf of ICerS, Prof. Dr Farhad Golestani-Fard (FG), ICerS Past President, gave a statement.

rwf: *What was the situation of the Iranian refractories community in the last decade?*

FG: Last decade saw a decrease in specific consumption in the steel plants to values of 9–13 kg/t which was due to intensive research at universities and refractory R&D centres. In cement, the specific consumption was also reduced to 0,2–0,5 kg/t which again was due to joint collaboration of users/producers and research centres. Also during the last decade, the interest for monolithics increased among the refractory users and therefore production of monolithics increased to a level of 35–40 %. However, most of the monolithics were employed in petrochemical and cement industries, but steel producers are not using monolithics to an acceptable level and efforts to reach a satisfactory amount is under way. Of course, the foundation of new steel and non-ferrous plants was a temptation for extra refractory production in general. The big challenge however was the increase in Chinese raw materials price, such as magnesia and graphite, which slowed down some development pace.

rwf: *Did the expectations of the Iranian user industries change?*

FG: All user industries, including steel, non-ferrous, cement and others, have expectations

which include higher performance, lower cost, and product consistency in refractory materials they are buying. Steel industry in Iran is expecting a production increase to a level of 45 Mt until 2025, and is depending to higher quality refractories more than ever. Almost all of them expect to reduce the specific consumption below 10 kg/t in the next few years. Reducing pollution and therefore recycling the used refractory is also of becoming interest in most of the high-temperature plants.

Some users are also showing interest in refractory total management and are prepared to discuss it with domestic, and international producers. There is a nice coverage of refractory users expectations by S. Roshanfekr, presented during the last biennial Iranian Refractory Conference in Tehran in October 2017 (see page 26–28).

rwf: *Which role can a publication like refractories WORLDFORUM play in the refractories community of ICerS?*

FG: The refractories WORLDFORUM has become popular in the Iranian refractory community, and can play a major role to introduce Iranian refractory producers and users to international communities. Also, it has the role of a window for the Iranian community to look at the external world, which is crucial after



Fig. Prof. Dr Farhad Golestani-Fard

the long period of isolation of Iran. We are happy to have a fruitful cooperation with refractories WORLDFORUM, and wish to further cementing this cooperation through constant exchange of reports and papers. We are proud that the Iranian Ceramic Society has become a corporate partner of refractories WORLDFORUM, and hope to have a strong collaboration in future.

rwf: *Thank you for your statement.* KS