

Newsletter



Sri Kamal Dasgupta, Acting Director, CSIR- CGCRI presiding over the inaugural session

Refractory Training Programme for MSME members of Bangabhumi Cluster of Refractories Association at CSIR-CGCRI

A training programme was held on 25 August 2014 at CSIR-Central Glass and Ceramic Research Institute (CSIR-CGCRI), Kolkata, to meet the needs of the Bangabhumi Cluster of Refractories Association, Asansol, West Bengal. In addition to Acting Director Shri Kamal Dasgupta, who presided over the event, Senior Scientists Dr. S.K. Bhadra, Dr. Arup Ghosh, Dr. S.K. Das, Dr. H.S. Tripathi, Dr. K. Dana, Shri. S. Sinhamahapatra and Dr. Atul Maldure participated in the programme.

Refractory materials are inherently resistant to creep deformation, high temperature slag corrosion etc. Typically refractory products include Fire clay bricks, High alumina bricks, Mg-C bricks and Insulation bricks in addition to Refractory castables, Mortar bed materials and Ladle sleeves. Many of these products are in great demand by the steel, cement, glass and ceramics industry, where operating conditions are hostile. The refractory cluster at Asansol, Purulia and Barakar in West Bengal are well known. This cluster not only manufactures refractory items of value but also, in the process of doing so; provides significant employment opportunities for the local populace.

However, it cannot be denied that all clusters, irrespective of their standard of operation need technology interventions from time to time. Focus must also be directed to aspects such as access to better raw materials, improved infrastructure, skill up-gradation, better design techniques, reduced wastage, enhanced energy efficiency, better adherence to emission norms, improved products in line with global demands, diversification of products in sync with customer expectations etc., for overall improvement of the cluster.

**Workshop – cum-
Training
Programme on
Refractory Bricks
25 August 2014**

**Organized by
Refractory Division
CSIR-CGCRI**

In Association with

**Technology
Facilitation Center
(A Joint Initiative of
Government of West
Bengal and CSIR)**

It is pertinent to note here that in September 2013, CSIR had signed a MoU with the Government of West Bengal with the novel and noble vision of creating a sustainable ecosystem of micro, small and medium enterprises to drive economic prosperity of the State. CSIR-CGCRI was charged with the responsibility of carrying forward the activities as the Nodal Laboratory. Subsequently a Technology Facilitation Centre (TFC) was set up in the institute to facilitate technology interventions by serving as a bridge between the entrepreneurs (existing and aspirants) and research institutions (all CSIR sister laboratories and knowledge partners outside the CSIR network). The Refractory Division of CSIR-CGCRI has designed a training module with the specific objective of catering to the needs of the Bangabhumi Cluster of Refractory Association. It is in this context that the Training Programme for MSME members of Bangabhumi Cluster of Refractories Association at CSIR-CGCRI assumes great importance.

Acting Director Shri. Kamal Dasgupta warmly welcomed the guests and succinctly summed up the activities of CSIR-CGCRI. He said that while CSIR-CGCRI did high science at par with the best anywhere in the world, it was also capable of helping small scale industries to address their problems. He then gave a brief idea about the reasons behind the setting up of the TFC and invited the guests to visit some of the modern research facilities of CSIR-CGCRI.

Shri. Indranil Biswas made a detailed presentation on the MSME activities of CSIR-CGCRI. The guests were visibly impressed to learn that CSIR has a pan India footprint with 37 laboratories across the length and breadth of the country; each with its impressive arsenal of diverse technologies available for the MSME sector, at their request. Shri. Biswas walked the guests through the different links of the dedicated website (<http://msmetfc.in>) and emphasized that the entrepreneurs could post comments and/or queries directly under the appropriate links and be assured of a prompt response from the TFC-team.

He stressed the fact that the TFC was empowered to access the technology portfolios of knowledge partners outside the CSIR family too, effectively enormously enlarging the potential of technology access for the benefit of entrepreneurs of West Bengal. This would no doubt help in meeting the mission of achieving technological enablement of West Bengal's small scale sector leveraging through the prowess of our knowledge institutions. He admitted that technology adoption is a slow process but was optimistic that TFC activities would lead to large scale technology diffusion and accelerated technology adoption and the impact would be realized as reinvigoration of the small-scale sector and inclusive economic development.

Shri. Biswas's presentation was followed by a spontaneous outburst of questions from the participants who wanted to know the nitty-gritty of the way to approach TFC and the financial implications of doing so, since they were from the MSME sector.



They were delighted to learn that this was a Not-for Profit initiative and so, charges, if any were unlikely to be prohibitively expensive for entrepreneurs of the MSME sector. The lively interactive session highlighted the importance in which the participants held this event.

Dr. (Mrs) Mou Sen, General Manager, District Information Centre (DIC), Durgapur, West Bengal articulately presented the issues before the participants. She highlighted the events behind its conceptualization and reiterated the expectations of the entrepreneurs from TFC. She said that the TFC is a bridge between the entrepreneurs and the technology providers. She expressed satisfaction that the response of TFC to a query received was not only swift, but also affordable, because the entrepreneurs in this sector have are economically constrained and cannot invest huge amounts. She said the DIC would encourage entrepreneurs to take advantage of the technologies available with government organizations such as CSIR. She was confident that when a premier organization such as the CSIR, comes forward with a technology solution, it is definitely good. Thus, if the technology is good, so will be the product. Better technology will lead to better products which will be able to capture the market easily, she said.

The training programme started with a general introductory to refractory raw materials and products followed by refractory properties evaluation and monolithic refractory. The participants of the training programme were exposed to the state-of-the-art characterization facility of the Institute.

In the Valedictory Session Shri. Beni Prasad Biyani, President, Bangabhumi Cluster of Refractories Association profusely thanked CSIR-CGCRI for the excellent training programme which benefitted all the participants. He made a list of different issues on which he sought the assistance of CSIR-CGCRI. He requested CSIR-CGCRI to continue extending its good offices and extension of assistance to address vexing issues as also the development of new products, as and when prompted by market demands. He hoped that CSIR-CGCRI would help in treating cheap and locally available raw materials available in West Bengal so that these could be used to make better products. There was also a request for CSIR-CGCRI to train groups of entrepreneurs in refractory testing. His wish list of specific areas where CSIR-CGCRI intervention could be profitable included development of calcined raw materials through rotary kilns; development of low cement and self flow castable; value addition such as silimanite aggregates (not fines which are traditionally used) to make products that could be of economic benefit to the cluster; Improvement of indigenous Bauxite to make it high value; Magnesia –Carbon bricks and any other technology development suitable for the cluster and which had a robust local market.

In his summing up Acting Director thanked all participants and encouraged them in their efforts. He said that there was the need to use scientific knowledgebase. In today's economic scenario it was imperative that the initial emphasis should be on innovation that would create a firm platform for advance. Whatever the scenario, R&D has to continue or even the innovation chain will dry up. He suggested that entrepreneurs should use the available knowledgebase to generate income. He recounted the success stories of CSIR-CGCRI's Naroda centre which has contributed significantly to the thriving ceramics industry of Gujarat and expressed the hope that history would repeat itself in West Bengal with the sustained intervention by the institute. His final message was that the services of CSIR-CGCRI would always be available for the inclusive development of society and for the assistance of entrepreneurs who approached the institute.

The Technical presentation programme, visit to the facilities of CSIR-CGCRI and demonstration of Testing as well as Refractory practices were all much appreciated by the participants.

