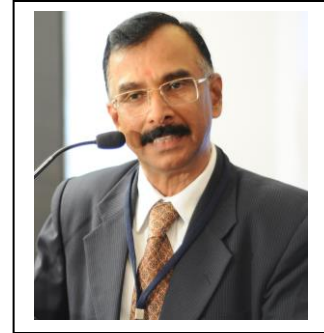


## Brief profile of N Kalidas

Mr. Kalidas is a technocrat-scientist, having specialized in cement chemistry and concrete technology. He has been pursuing the subject for the last thirty nine years. He worked for Salzgitter Industriebau and Casag AG, the German-Building material companies to promote their technologies in India (1984-1990), before starting own enterprise in 1990 for development and promotion of building material technologies.



He is the founder Director of Institute for Solid Waste Research & Ecological Balance (INSWAREB), an NGO promoted in 1992 in association with his spouse, Dr N Bhanumathidas. They jointly authored and presented several papers at various national and international fora. They also authored a comprehensive text, Fly ash for Sustainable Development, which is a compendium of various data right from fly ash generation upto its role in concrete durability and Sustainable Development.

FaL-G technology is the outcome of their joint research. He is the crusader in the research and promotion of advanced concrete technology through utilisation of complementary cement materials, and set up INSWAREB laboratories to pursue the subject.

He served various government bodies in his individual capacity and also as the nominee of INSWAREB. National Waste Management Council of Ministry of Environment & Forests; National Fly ash Mission of Ministry of Science & Technology, Task force on fly ash of AP Government are some of the prominent bodies among them.

He represents INSWAREB since 1999 as the observer organization for Conference of Parties (COP), accredited by UNFCCC, Bonn, Germany.

He served Madras Cements Ltd., as the Consultant for over seven years (1999-2006) and contributed greatly in transforming the market philosophy of the company from OPC to blended cements.

At the exclusive invitation of AP Government, he has catalysed many entrepreneurs and got the VAMBAY-Housing program executed through them at Vijayawada (2003-04), deploying the FaL-G technology not only for bricks, but also for RCC applications right from pile foundations.

He is the recipient of CANMET/ACI International award in 2002, along with his spouse, 'for Sustained and outstanding contributions in the area of fly ash in bricks and concrete in India'. Their contribution to the field of blended cement concrete, with particular thrust on fly ash utilisation, is widely acknowledged not only in the country but also internationally.

For promoting business in carbon credits, he promoted the Corporate, Eco Carbon Pvt. Ltd. (2003) in association with his spouse and, as the first task, signed with the World Bank for transferring 8.00 lakh tons of carbon credits worth of US \$ 6.00 millions, generated out of FaL-G brick industry. A couple of more agreements are in the offing with some more overseas buyers.

Developed and patented the breakthrough technology of the century, 'No-Aggregate Concrete or Nano Concrete (NAC)' (2010) which possesses the service life of not less than 1000-years, giving opportunity to retrieve the structural steel for reuse even after a couple of centuries. In this development fly ash, in addition to its role as pozzolan to the extent of reactive portion, acts as the micro-aggregate proving the role of coarse and fine aggregate as redundant.

He is the recipient of 1<sup>st</sup> Prize award of Rs. 5.00 lacs, along with his spouse, for their technology of Nano Concrete Aggregate (NACA) at the National Grand Challenge on Fly ash Utilisation conducted by NTPC in 2019.

He is now focusing on propagation of Khadanza pavements with high strength (30 MPa) FaL-G blocks as National program. FaL-G Khadanza pavements do have at least 100-years of service life because it is free from crack propagation, and resists pot-hole formation.

He represents INSWAREB for transferring FaL-G technology to Bangladesh through the good offices of IIP, USA. The technology-transfer monitored by Ministry of Environment, Bangladesh, includes not only FaL-G bricks for walling, but also high strength (30 MPa) Khadanza pavements and high strength (60 MPa) aggregate out of Nano Concrete, in order to address fly ash generation in Bangladesh totally.