

## **RESEARCH STATEMENT**

In present scenario, rapid industrialization in developing countries continue to attract growth in urbanized areas. New construction to support urbanization, such as buildings for housing and industries, mass transit for moving people and facilities for handling drinking water and sewage for all, require huge construction activities. India has witnessed unprecedented urbanization, with a high rate of population growth. Most of the Indian cities are growing due to economic, social, environmental as well as technological change. The Government of India's plan for 'Housing for All by 2022' - 20 million houses in 4041 statutory towns and urban transformation in 100 Smart Cities, which ensures that there will be a huge investment of resources in construction. To full-fill the demand of mass construction, developing countries are facing a shortage of conventional building materials. Hence such developing countries must utilize abundantly available industrial by-products like fly ash, pond ash, red mud, blast furnace slag etc. as new building materials. Presently most of these industrial by-products are occupying huge land fill area. Many researchers are aiming to find alternative ways for dumping waste and instead of finding ways to successfully use materials and reduce the environmental impacts. Instead of land filling, the industrial by-products can be reused in construction.

My future aim is to find alternative ways for preparation of sustainable building material from Industrial By-Products (i.e. dumping waste) and saving the natural resources and reduce the environmental impacts.