Abstract:
We aim to reach concrete structures (low to medium rise) resist external environmental factors (hot climates - humidity - coastal environment - earthquake - frost areas - noisy areas - industrial areas - weather fluctuation - stormy areas. etc), characterized by high fire resistance (externally and internally), achieves higher structural balance rates, higher sustainability rates & higher durability with longer life than counterparts. All of that achieved by using lightweight high performance structural concrete with totally environmentally friendly materials that donot involve any harmful substances, we called it (KanCrete) it is the concrete of the future because, with all these features we do not use any (unconventional) materials, as they are composed of (coarse & fine aggregates) and (ordinary or resistive cement) have the same composition proportions as any conventional concrete, but with the addition of some elements to get all of these advantages. Without a significant increase in cost. (KanCrete) density = (1600 to 1850 kg / m3), reducing 25 % to 35% of conventional concrete weight, Compressive strength = 423 to 523 kg/cm2, with 40% to 75% more than conventional concrete, Heat gain %age = 2.47% to 2.58%, with heat transfer resistance 25 times of insulated conventional concrete, Not permeable to liquids and harmful substances & Chemically balanced in the face of harmful environments. we obtain fully structural system integral components and members, with full distribution of loads in various loading states, high stable & tough structure system.

Biography:
Mr.Ibrahim Kandil is a Civil Engineer consultant, BSc. 1977, Alexandria university, Egypt. He has 30 years of extensive experience in structural engineering & Soil mechanics with all its applications, worked as an executive director and consultant for large and diverse projects in Egypt & Gulf region, has engineering studies in buildings restoration and maintenance. has +300 Courses “CEUs” From :AIA, ACI, PCA, ASTM, USGBC, AISC, McGraw Hill Constr., CED Inc., WP council, BD+C university, NFBA, Gr. Builder College, NIBS, Green CE Inc., RON BLANK & Associates Inc., BUILDER College, WBDG. And Civil Engineer Consultant ( Saudi council of engineers ).

References: