Abstract:
It is well-known that the durability of vegetable fibres, such as reed, in concrete media is very low because of high PH value of concrete. The improvement of the durability of reed in concrete media is investigated. Many coatings (namely epoxy paint, SBR, PVA, and liquid mastic) were used as well as many types of salts (sodium chloride, sodium sulfates and sodium nitrite). It is concluded that epoxy paint is the best coating in this respect. Sodium chloride is the best salt. It is also reported that no one of these measures is sufficiently effective in improvement of the durability of reed in concrete media. It seems that using reed with gypsum plaster is more practical.