The analysis of state of the art electronics technologies, the so-called road maps indicate a growing significance of graphene and graphene layers in microelectronics and photovoltaics. Graphene coatings in electronics have several applications: corrosion protection of copper tracks, prevention of the electromigration phenomenon, and in soldering processes they can act as a barrier to the growth of harmful intermetallic layer. Graphene is a material whose properties have been extensively studied. It is characterized by excellent electrical conductivity and mechanical properties. Graphene coating can find a variety of applications as new transistors, processors polar, touch screens and foils to protect them against mechanical damages, organic diodes, capacitors, batteries with high capacities. Can arise, based on the technology of graphene are rolled transparent laptops, televisions and mobile phones. One of the tasks is to develop a technology to connect (join) graphene coating to other materials. In the microelectronics industry soldering techniques are mainly used for joining purposes . Design of solder joints requires knowledge of the wetting process. The research proposed within this project are totally innovative and the obtained results will contribute to the processes of devising of new soldering connections. The explanation of the process of reactive wetting and the description of the mechanism of wetting of copper, silicon covered with graphene may lead to uncovering of new ways of metals joining not only in microelectronics.