Corrosion control defends longevity, safeness and beauty of our constructions

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In many instances, corrosion damages were shown, explained in detail as for causes, mechanisms, possible ways to avoid or minimizing them. In many instances it was found that at the origin of failures was either a human mistake or the total lack of awareness of the most elementary rules of anticorrosion procedures. Corrosion exists everywhere and there is no industry or house where it does not penetrate and it demands a state of readiness and awareness for engineers and scientists to combat this problem.

Nevertheless, it is much easier to raise funds to create new products, new technologies than to combat a phenomenon such as corrosion, which in everyone’s perception has only negative connotations: economic losses, danger, ugliness. In order to overcome such a negative approach, this paper has a positive title: "Corrosion control defends longevity, safeness and beauty of our constructions". In other words, corrosion control has to be seen as an investment on durability instead of an expenditure to fight degradation.

In this lecture I will want to show why corrosion protection is necessary and how the development of corrosion awareness is useful. Mainly I will want to display examples of the cooperation of scientists from corrosion control specialized laboratories with managers of urban, road, industrial infrastructures as an efficient tool for wide spreading the knowledge of the causes of the very many cases of degradation due to corrosion: this is the best way to avoid or at least minimizing them. Case histories will be taken from the railways, energy, bridges, road network, urban structures, water transmission networks and many more.