1. Record Nr. UNINA9910317730003321 Autore M. Aliofkhazraei Titolo Developments in Corrosion Protection / / edited by Mahmood Aliofkhazraei Pubbl/distr/stampa IntechOpen, 2014 Croatia:,:IntechOpen,,2014 **ISBN** 953-51-6359-0 Edizione [1st ed.] Descrizione fisica 1 online resource (710 pages) Disciplina 620.11223 Soggetti Corrosion and anti-corrosives Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto One of the first thing that comes to your mind after hearing the term "corrosion" is corrosion of a metal. Corrosion is a basically harmful phenomenon, but it can be useful in some cases. For instance, environment's pollution with corrosion products and damage to the performance of a system are among its harmful effects, whereas electric energy generation in a battery and cathodic protection of many structures are among its advantages. However, these advantages are almost nothing as compared to the costs and effects imposed by its detrimental influences. The enormous costs of this phenomenon can be better understand through studying the published statistics on direct and indirect corrosion damages on economy of governments. The direct cost of corrosion is near 3 % of the gross domestic product (GDP)

of USA. Considering this huge cost, it is necessary to develop and expand the corrosion science and its protection technologies.