Biography

Professor Dong Junhua is working in Institute of Metal Research (IMR), Chinese Academy of Sciences (CAS). He is the vice chairman of the Chinese Society for Corrosion and Protection, and the member of the standing committee of the corrosion branch (AHD#45) of Transport Research Board (TRB) of the United States, and also the editorial board member of the "Journal of Corrosion and Protection of China" and "Corrosion Science and Protection Technology". He has his expertise in electrochemical corrosion principle of metals in study and teaching. His primary research aim is to solve various industrial and natural environmental corrosion problems. His research interests has been focused on: the evaluation of atmospheric corrosion evolution of low alloy steels; the study of developing cost effective weathering steel and marine corrosion resistant steel; the design of waste containers for the underground geological disposal of high level nuclear wastes in China; the study of marine corrosion in tidal zone and deep sea; the evaluation of concrete corrosion; the study of magnesium corrosion and protection by alloying and coating technique; the evaluation of corrosion inhibitors; electrochemical corrosion monitoring for various corrosion environments. He has taught the course of electrochemical corrosion principle of metals to the graduate students for 15 years in his organization.

Email: jhdong@imr.ac.cn

Recent Publications

1. Xuehui Hao, Junhua Dong, Ini-Ibehe Nabuk Etim, Jie Wei, Wei Ke, (2016), Sustained effect of remaining cementite on the corrosion behavior of ferrite-pearlite steel under the simulated bottom plate environment of cargo oil tank. Corrosion Science, 110, 296-304

2. Xuehui Hao, Junhua Dong, Jie Wei, Ini-Ibehe Nabuk Etim, Wei Ke, Effect of Cu on corrosion behavior of low alloy steel under thesimulated bottom plate environment of cargo oil tank, Corrosion Science, 121 (2017) 84-97

3. Jie Wei, Junhua Dong, Wei Ke, and Xiaoyan He. Influence of Inclusions on Early Corrosion Development of Ultra-low Carbon Bainitic Steel in NaCl Solution. Corrosion, 71(12) (2015) 1467-1480.

4. Jie Wei, Junhua Dong , Yangtao Zhou, Xiaoyan He, Changgang Wang, Wei Ke. Influence of the secondary phase on micro galvanic corrosion of low carbon bainitic steel in NaCl solution. Materials Characterization, 139 (2018) 401-410.

5. Ma H, Chen X-Q, Li R H, Wang S L, Dong J H, Ke W, First-principles modeling of anisotropic anodic dissolution of metals and alloys in corrosive environments, Acta Materialia, 130 (2017) 137-146.