

About our research group:

Research experiences

We have an existing Corrosion Research Laboratory that is well equipped. This was established under the Department of Mechanical Engineering in the Faculty of Engineering. We have garnered a strong background in some research fields and have built a strong research foundation that will enable us to be more successful in future. Some of our research projects and experiences revolve around a focused research area associated with corrosion control using some environmentally friendly inhibitors. Currently, we have full time students who work in this research laboratory (eight Masters and four PhD degree students). On a yearly basis we publish over 10 scientific papers in high impact factor journals. Currently, we have about six (6) ongoing projects. Over the years (2016 to date) we have been able to achieve up to eight (8) new discoveries of which two patents (achieved in 2016) have been approved by the Turkish patent Institute, others are yet to be approved.

Experience of Responsible group/researchers

We are committed to solving the puzzle of cheap, benign yet effective corrosion inhibitors from renewable sources; this has the flair to impact various diverse technological fields. More than sixteen (16) projects have been successfully finished by Corrosion Research Laboratory staffs. All electrochemical measurement techniques for corrosion measurements are well known and properly applied by all researchers in our group. Surface morphological changes on metal surface can be examined by optical microscope, Scanning Electron Microscopy (SEM) and Energy Dispersive X-Ray Spectroscopy (EDS), in our laboratory without any problem. We have the ability to solve problems without needing any support from outside.

Experience in international cooperation

The Coordinator of Corrosion Research Laboratory is Assoc.Prof.Dr. Husnu Gerengi and he is the representative of Turkey International Corrosion Council (ICC), this can be confirmed at: http://icc-net.org/team_member/turkey/.

On a yearly basis, we accept at least one PhD student via the **ERASMUS+** student exchange programme.

http://www.kmyocorrosionlab.duzce.edu.tr/Dokumanlar/b4e68d04-84a6-492f-97c5-72c5bb306b6a_%C4%B0%C5%9EB%C4%B0RL%C4%B0KLER%C4%B0M%C4%B0Z2.pdf

We are cooperating with different universities from all over the world.

Please See:

<http://www.milliyet.com.tr/manchester-universitesinden-duzce-universitesi-duzce-yerelhaber-2544021/>

<http://www.kmyocorrosionlab.duzce.edu.tr/11775-duyurus-carthage-universitesi'nden-6-ay-sure-ile-doktora-ogrencisi-gelecek>

We are also proud of close cooperation with Gdansk University of Technology (Department of Electrochemistry Corrosion and Materials Engineering) –Poland.

Also, we have Dr. Moses M. Solomon, who was accepted for a one year fellowship, under the financial support of The Scientific and Technological Research Council of Turkey (TUBITAK-2216-Postdoctoral Research Fellowship (TUBITAK 21514107-115.02-56312).

Research infrastructures and facilities and their suitability

We have all the equipment used for corrosion studies in our laboratory, plus ICT-based e-Infrastructures to extract the needed literature review in each area of study. With the aid of these scientific equipment's, all electrochemical measurement techniques such as Electrochemical Impedance Spectroscopy (EIS), Dynamic Electrochemical Impedance Spectroscopy (DEIS), Tafel Polarization and Linear Polarization can be applied in the Corrosion Research Laboratory. We're a self-contained Laboratory. We are also solidly involved in industry-academia collaboration. Scanning Electron Microscopy (SEM) and Energy Dispersive X-Ray Spectroscopy (EDS) are readily available in Duzce university general research laboratory. The university's laboratory and Corrosion Research Laboratory collaborate well with each other. We have access to any equipment without waiting in the queue. Virtually, all analytical methods are carried out in this center.

Corrosion Research Laboratory web address:

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