

أ.د. سالم محمد موسى

Dr. Salem Mohamed Musa

**B.Sc. (Tripoli Univ.- Faculty of Engineering - Libya), Ph.D. (Newcastle-UK)
Professor**

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Area of interest:

- Research on corrosion field, stress corrosion cracking.
- Research on physical & mechanical metallurgy.

Education:

- 1996 PhD degree in Materials and Metallurgical Engineering. Title of the thesis 'Susceptibility of the diffusion bonded joint of low alloy steel and austenitic stainless steel to stress corrosion cracking'. University of Newcastle Upon Tyne, UK.
- 1991-1996 PhD researcher in the field of stress corrosion cracking at the department of Materials, Mechanical & Manufacturing Engineering. University of Newcastle Upon Tyne, UK.
- 1984 B.Sc. in Materials and Metallurgical Engineering, Faculty of Engineering, Tripoli University-Tripoli-Libya.
- 1979-1984 Undergraduate student, Department of Materials and Metallurgical Engineering, Faculty of Engineering, Tripoli University-Tripoli-Libya.

Experience:

- Chairman of Researchers Affairs Committee at Technical Research centres.
- Engineering consultations for different industrial companies in Libya, e.g.:
 1. Corrosion of surgical tools (Tripoli Medical centre), 1997.
 2. Feasibility study of using local manufactured materials instead of imported ones for electric networks for the general electric company carried out by the engineering research & consultation bureau 1999.
 3. Assessment of corrosion damage of power transmission cables Hawk 240/40 electrical conductor located at Asharara oil field for AKAKUS OIL OPERATION carried out on behalf of SGS Inspection Company, 2008
 4. Study of evaluation and fitness for service of the piping networks at Tripoli Medical Center with collaboration of the Canadian groups Oli system and

Metweld Corrosion carried out through the engineering research and consultation bureau, University of Tripoli, 2006.

- Supervision of several student projects at University of Tripoli in the field of corrosion, welding and physical and mechanical metallurgy.
- Lecturing at the Metallurgical & Materials Engineering department, faculty of Engineering at Tripoli University & some other higher institutions in the following subjects: Introduction to Materials Science, Strength of Materials, Physical Metallurgy, Mechanical Metallurgy and Welding Metallurgy.
- Contribution in issuing of Libyan Standards as a member of the metallic materials committee at the Libyan National Centre for Standardization and Metrology (LNCSM).
- Participation at the Fourth Arab Conference on Material Science, Tripoli-Libya, September 2005 as a Reviewer for some scientific papers.

Employment

- 2014 – to date: The general manager of the Advanced Occupational Center for Welding technologies, Libyan Authority for Research, Science & Technology, Ministry of Higher Education & Scientific Research.
- 2015 – to date Professor at the Department of Materials and Metallurgical Engineering, Faculty of Engineering, University of Tripoli -Tripoli-Libya.
- 2009 – to date: Associate professor at the Department of Materials and Metallurgical Engineering, Faculty of Engineering, University of Tripoli -Tripoli-Libya.
- 2006 – 2011: Head of Materials and Metallurgical Engineering Department, Faculty of Engineering, University of Tripoli -Tripoli-Libya.
- 2000 - 2005: Assistant professor at the Department of Materials and Metallurgical Engineering, Faculty of Engineering, University of Tripoli -Tripoli-Libya.
- 1996 - 2000: Lecturer at the Department of Materials and Metallurgical Engineering, Faculty of Engineering, University of Tripoli -Tripoli-Libya.
- 1984 - 1991: Teaching Assistant at the Department of Materials and Metallurgical Engineering, Faculty of Engineering, University of Tripoli -Tripoli-Libya.
- Supervision for M.Sc and B.Sc Dissertations, at the Faculty of Engineering University of Tripoli.
- Examiner for M.Sc and B.Sc Dissertations at the Advanced Technical Institute, Tripoli-Libya and at the Faculty of Engineering University of Tripoli.
- Instructor for M. Sc Postgraduate courses of Corrosion & Materials Selection for Desalination Plant at the Department of renewable energy & water desalination at the Academy of Graduate Studies, Tripoli – Libya.

Publications:

a) Papers,

- Mokhtar B. Abuzriha and Salem M. Musa, Substitution for Chromium and Nickel in Austenitic Stainless Steels, 2nd International Multidisciplinary Microscopy and Microanalysis Congress. Springer International publishing Switzerland 2015, pp 205- 214.
- Mokhtar B. Abuzriha and Salem M. Musa, Measuring the Degree of Sensitization (DOS) Using an Electrochemical Technique, 2nd International Multidisciplinary Microscopy and Microanalysis Congress. Springer International publishing Switzerland 2015, pp 197- 203.
- Salem M. musa, Erkan Kaçar, Mustafa Ürgen, Mohamed A. Alaalam, IRON ALUMINIDE COATINGS ON LOW CARBON STEEL DEPOSITED BY ARC – PVD TECHNIQUE , The 46th International October Conference in Mining & Metallurgy, Serbia 2014, pp. 517 – 520.
- Salem. M. Musa, Mohamed A. M. Alshwigi, Ali Basir , The Susceptibility of Low Carbon Steel Welded Joint To Sulfide Stress Cracking (SSC). 3rd International advances in Applied physics & Materials Science Congress , pp. 343 -347 Antalya, Turkey, April 2013.
- Role of Structural Orientation on the Susceptibility of 2205 Duplex Stainless Steel to Hydrogen Embrittlement, S. Musa, A. Sharefediin, APMAS2012 Conference, Antalya, Turkey, April 2012.
- A. Elbasir, E. Kalil, F. Aboudia and S. Musa, Investigation and Remedies of Corrosion Problems of Copper Piping Systems the Tripoli Medical Centre, (under publishing in Libyan Journal for Technical & Applied Science 2010.
- S. M. Musa, N. A. Zreiba and W. Ben Ziglam, B. Ben Rajab "Correlation of the degree of sensitization with impact toughness for 304 stainless steel, journal of basic & applied science, Vol. 16, pp. 24-37, 2006.
- S. M. Musa, Diffusion Bonding of 7017 Al – alloy". Industrial research centre journal, 2006.
- S.M Musa, E. A. "Charles and J.Congelton. EAC of diffusion bonded stainless steel to carbon steel joints in an aqueous chloride solution, corrosion science, April 1996".
- S. M. Musa. "Stress Corrosion Cracking of AISI 316 Sensitized Austenitic Stainless Steel in Chloride Solutions at 80°C". (to be published).

b) Books Scientific refereed,

- Materials Science book, published by the national center for education and training planning, 2003-2004.

c) Books Translation & Scientific refereed,

- Materials technology – Part 1, Technical Book Series, Yearly technical publications, Tripoli – Libya, 2003.
- Materials technology – Part 2, Technical Book Series, Yearly technical publications, Tripoli – Libya, 2003.
- Welding techniques, Technical Book Series, Tripoli – Libya, 2003.

Membership:

- Member of NACE (National Association of Corrosion Engineers)
- Ex-member of Libyan National Centre for Standardization and Metrology, Metallic Industry committee, 2006 to 2011.
- Member of quality Mark Award Committee at Libyan National Centre for Standardization and Metrology.
- Member of Libyan Corrosion Society.

Civil & Sport activities:

- President of Libyan Golf Federation up to date.
- Member of Libyan Olympic Committee 2013 - 2017.
- Member of Arab Golf Federation 2013 - 2017
- Observer in Libyan General Election, 2011.