

Curriculum Vitae

Dr. Ramadan Nagy Mohamed

Contact Information »

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Personal Information

Nationality: Egyptian
Resident of: Badrashin city - Giza
Birth date: 27 June 1983
Gender: Male
Marital Status: Married with two sons
Military Status: Exempted
Religion: Muslim
Passport: Valid till 2021



Qualifications

1- B.Sc., (2008) Faculty of Engineering, Benha University (Mechanical Engineering)

- **Sector:** Production Engineering
- **Grade:** Good (Third in the sector)
- **project:** Effect of Thermomechanical Treatment on the Hardness, Impact and Microstructure of different grades of low alloy steel
- **Project's grade:** Very Good
- **Graduation Year:** June 2008

2- M.Sc., (2012) Faculty of Engineering, Benha University (Mechanical Engineering)

3- Ph. D., (2017) Faculty of Engineering, Helwan University (Materials Engineering)

Publications

- [1] R. N. Elshaer, A. M. Elshazli, A. H. A. Hussein, and S. R. Al-Sayed, "Impact of laser process parameters in direct energy deposition on microstructure, layer characteristics, and microhardness of TC21 alloy," *Int. J. Adv. Manuf. Technol.*, vol. 121, no. 7, pp. 5139–5154, 2022.
- [2] R. N. Elshaer, "Effect of Initial α -Phase Morphology on Microstructure, Mechanical Properties, and Work-Hardening Instability During Heat Treatment of TC21 Ti-Alloy," *Metallogr. Microstruct. Anal.*, pp. 1–16, 2022.
- [3] R. N. Elshaer, M. S. S. El-Deeb, S. S. Mohamed, and K. M. Ibrahim, "Effect of Strain Hardening and Aging Processes on Microstructure Evolution, Tensile and Fatigue Properties of Cast Ti-6Al-2Sn-2Zr-2Mo-1.5 Cr-2Nb-0.1 Si Alloy," *Int. J. Met.*, vol. 16, no. 2, pp. 723–737, 2022.
- [4] R. N. Elshaer, M. K. El-Fawakhry, and A. I. Z. Farahat, "Microstructure Evolution, Mechanical Properties and Strain Hardening Instability of Low and Medium Carbon Quenching & Partitioning Steels," *Met. Mater. Int.*, vol. 28, no. 6, pp. 1433–1444, 2022.
- [5] R. N. Elshaer, M. Abdelhameed, K. M. Ibrahim, M. El-Shennawy, and A. Sobh, "Static and Fatigue Characteristics of Heat-Treated Ti-6Al-3Mo-2Zr-2Sn-2Nb-1.5 Cr-0.1 Si Alloy," *Metallogr. Microstruct. Anal.*, pp. 1–11, 2022.
- [6] R. N. Elshaer, M. K. El-Fawakhry, T. Mattar, and A. I. Z. Farahat, "Mathematical modeling of wear behavior and Abbott Firestone zones of 0.16 C steel using response surface methodology," *Sci. Rep.*, vol. 12, no. 1, pp. 1–25, 2022.
- [7] E. S. Ali *et al.*, "Novel ultrasonic dynamic vapor sorption apparatus for adsorption drying, cooling and desalination applications," *Energy Reports*, vol. 8, pp. 8798–8804, 2022.
- [8] A. M. Elshazli, R. N. Elshaer, A. H. A. Hussein, and S. R. Al-Sayed, "Laser Surface Modification of TC21 (α/β) Titanium Alloy Using a Direct Energy Deposition (DED) Process," *Micromachines*, vol. 12, no. 7, p. 739, 2021.
- [9] R. N. Elshaer, K. M. Ibrahim, M. M. Ibrahim, and A. S. Sobh, "Effect of Quenching Temperature on Microstructure and Mechanical Properties of Medium-Carbon Steel," *Metallogr. Microstruct. Anal.*, vol. 10, no. 4, pp. 485–495, 2021.
- [10] R. N. Elshaer, M. K. El-Fawakhry, and A. I. Z. Farahat, "Behavior of Carbon Steel Machine Elements in Acidic Environment," *Metallogr. Microstruct. Anal.*, vol. 10, no. 5, pp. 700–711, 2021.
- [11] R. N. Elshaer and K. M. Ibrahim, "Effect of cold deformation and heat treatment on microstructure and mechanical properties of TC21 Ti alloy," *Trans. Nonferrous Met. Soc. China*, vol. 30, no. 5, pp. 1290–1299, 2020.
- [12] R. N. Elshaer, K. M. Ibrahim, I. Lotfy, and M. Abdel-Latif, "Effect of cooling rate and aging process on wear behavior of deformed TC21 Ti-alloy," in *Key Engineering Materials*, 2020, vol. 835, pp. 265–273.
- [13] R. N. Elshaer, K. M. Ibrahim, A. F. Barakat, A. I. Farahat, and R. R. Abbas, "Determination of phase transformation for TC21 Ti-alloy by dilatometry method," *Open J. Met.*, vol. 9, no. 1, pp. 1–10, 2020.

1–10, 2019.

- [14] R. N. Elshaer, K. M. Ibrahim, A. F. Barakat, and R. R. Abbas, “Fatigue Performance of Heat Treated TC21 Ti-Alloy,” *Open J. Met.*, vol. 9, no. 2, pp. 11–18, 2019.
- [15] R. N. Elshaer, K. M. Ibrahim, A. F. Barakat, and R. R. Abbas, “Effect of heat treatment processes on microstructure and mechanical behavior of TC21 titanium alloy,” *Open J. Met.*, vol. 7, no. 03, p. 39, 2017.
- [16] A. I. Z. Farahat, A. M. Bahgat Gemeal, and R. N. Elshaer, “Influence of Skin Pass Design and Aging Phenomena on Steel Sheets Surface Characteristics,” *J. Fail. Anal. Prev.*, vol. 16, no. 1, pp. 86–94, 2016.
- [17] K. M. Ibrahim, A. M. M. El-Hakeem, and R. N. Elshaer, “Microstructure and mechanical properties of cast and heat treated Ti–6.55 Al–3.41 Mo–1.77 Zr alloy,” *Trans. nonferrous Met. Soc. China*, vol. 23, no. 12, pp. 3517–3524, 2013.

Languages

Language
Arabic
English

Level
Fluent
V. Good

Career Achievements

- **Dec.2018 – Current: Tabbin Institute for Metallurgical Studies (TIMS).**
 - **Title:** lecturer at mechanical engineering department.
- **Jan.2009 –Dec. 2018: Central Metallurgical Research &Development Institute (CMRDI).**
 - **Title:** Deputy of technical manager of mechanical testing & material evaluation lab.
 - Destructive testing for materials and alloys.
 - Data Analysis for the results of mechanical tests.
 - Estimating Uncertainty values
 - Quality control for testing products
 - Certified Internal auditor at CMRDI laboratories
 - Developing/Documenting Management System according to ISO standards.
 - Implementing and documenting international standards.
 - Preparing the test reports.

TECHNICAL SKILLS

- Experience in mechanical testing and material evaluation sector.
- Performing all types of mechanical tests according to international specifications (ASTM, ISO, DIN, EN,).
- Performing all types of mechanical tests for welded specimens according to international specifications (ASM, ...).
- Estimating the error & uncertainty values for test results.
- Preparing verification, validation, and control charts for test results.
- Data Analysis for the results of mechanical tests.
- The applications of Quality systems in accordance with ISO/IEC 17025.
- Quality control & Quality Assurance for testing products.

TRAINING & Development

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|---|----------------|
| ▪ Mechanical Testing training course at CMRDI, including.
(Tensile, Bending, Compression, Hardness, Impact, Fatigue) | 2009 (2 weeks) |
| ▪ Trained at CMRDI (Cairo), Requirements of ISO/IEC17025
for accreditation. | 2009 (2 days) |
| ▪ Trained at ESSP (Cairo), Requirements of ISO/IEC17025
for accreditation. | 2012 (1 day) |
| ▪ Trained at CMRDI (Cairo), Requirements of OHSAS 18001 | 2014 (2 days) |
| ▪ Trained at CMRDI (Cairo), Uncertainty of Measurements Results | 2014 (2 days) |
| ▪ Trained at ESQ (Cairo), Uncertainty of Measurements Results | 2016 (3 days) |
| ▪ Trained at CMRDI (Cairo), ISO 9001:2015 | 2018 (3 days) |
| ▪ Trained at CMRDI (Cairo), ISO/IEC 17025:2017 | 2018 (3 days) |
| ▪ Trained at CMRDI (Cairo), Control Chart / Statistical Tools | 2018 (2 days) |

Courses Studies

- 1- Fundamental of Materials.
- 2- Materials Classification.
- 3- Mechanical Testing.
- 4- Quality Assurance.
- 5- Estimation of uncertainty.
- 6- Statistical Quality Control.
- 7- Failure analysis.

► Computer Skills

Excellent knowledge of

MS Office and Perfect Internet Applications