

Karim Abd-Elaziz Mohamed Younis

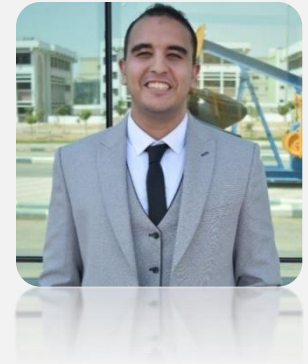
Metallurgical and Material Engineer

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📍 Sedoud | Menouf | Al-Monufia



LinkedIn: [linkedin.com/in/karim-abdelaziz1199](https://www.linkedin.com/in/karim-abdelaziz1199)

Date of Birth: 1/11/1999

Professional Skills

- Microsoft Office Programs
- Data Analysis
- Writing Reports

Soft Skills

- Time management
- Teamwork
- Effective communication
- Creativity
- Strategic planning
- Attention to detail
- Problem-solving
- Ambition

Languages

- **Arabic:** Native
- **English:** Intermediate / B2

Professional Summary

Metallurgical and Material Engineer with academic expertise in material analysis, complemented by practical experience in steel production gained through internships. Specialized in testing methods, process oversight, quality control, safety protocols, data analysis, and effective communication with production teams. Known for analytical thinking, problem-solving, and enhancing production efficiency through research and technical skills.

Education

Bachelor of Metallurgical and Materials Engineering

Faculty of Petroleum and Mining Engineering

Suez University

Graduation Date: July 2023

Graduation Grade: Excellent with honors

Ranked in the Top 5 of the Metallurgical Engineering Department.

Graduation Project: Production and Evolution of Al/TiO₂


Composites Using Additive Manufacturing (Friction Stir Deposition)

Project Grade: Excellent with honors

Professional Experience

Production and Operation Intern | [Elmarakby Steel](#)

 September 2022

 6th of October – Cairo – Egypt

Experience:

- Assisted in quality testing and inspection of raw materials and finished steel products.
 - Learned and adhered to workplace policies and safety procedures.
 - Reviewed production data and contributed to analyses for optimizing processes.
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Production and Operation Intern | [Beshay Steel](#)


 July 2022

 El Sadat City – Al Minufiyah – Egypt

Experience:

- Gained hands-on training in the operations of Direct Reduced Iron and steel output processes.
 - Collaborated with experienced engineers and technicians to troubleshoot Material issues.
 - Contributed to sustainability reports, identifying opportunities for process improvements.
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Production and Operation Intern | [Kandil Steel](#)

 February 2022

 El Obour - Al Qalyubiyah - Egypt

Experience:

- **Gained hands-on experience** in various stages of steel production, including pickling, cold rolling, annealing, and galvanizing.
 - **Assisted in monitoring and optimizing** the color coating process and the manufacturing of high-quality steel sheets.
 - **Developed a strong understanding** of industry-specific practices such as quality control and operational efficiency within large-scale production lines.
 - **Participated in projects** related to the development of exclusive KTOC products and gained insight into advanced steel manufacturing techniques.
 - **Collaborated with senior engineers** and technical teams to analyze production data and suggest improvements.
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Online Internship | Egyptian Steel

 March 2021

Experience:

- Completed virtual training on steelmaking fundamentals, heat treatment, and metal forming.
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Academic Head | ESME Chapter

 September 2021

 Suez University – Egypt

Experience:

- Led academic initiatives to support students in metallurgical engineering.
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IT Head | AICHE Chapter

 September 2020

 Suez University – Egypt

Experience:

- Managed IT infrastructure and supported digital initiatives for student engagement.

Courses

Courses in Metallurgical and Material Engineering

Material Science and Engineering 1

Focused on crystallography, electron theory, and equilibrium diagrams, providing a solid foundation in understanding the atomic structure and phase behavior of materials for engineering applications.

Material Science and Engineering 2

Explores crystal defects, microscopic analysis, and metallography, emphasizing the impact of microstructures on material properties and the use of advanced techniques for material characterization.

Heat Transfer and Its Allocation

Covers fundamental thermodynamics and heat transfer concepts, including conduction, convection, and radiation, essential for analyzing and optimizing thermal processes in engineering systems.

Material Science and Engineering 3

Delves into phase transformations and atomic diffusion in crystals, providing insights into the changes in microstructure during thermal treatments and their effects on material properties.

Mechanical Behavior of Materials

Studies stress-strain relationships, exploring how materials respond to external forces, including elasticity, plasticity, and fracture, crucial for predicting and improving mechanical performance.

Corrosion of Metals and Their Protection

Examines the electrochemical principles of metal corrosion and effective control methods, such as coatings and cathodic protection, to enhance the durability and lifespan of materials.

Heat Treatment

Covers processes like annealing, quenching, and tempering, focusing on altering the microstructure to achieve desired material properties for various engineering applications.

New Materials

Explores single crystal production and nanomaterial compaction techniques, highlighting advanced fabrication methods for creating materials with superior mechanical and functional properties.

Other Courses

Microsoft Office Courses

Gain advanced skills in **Excel** (data analysis and financial modeling), **Access** (database management), **Word** (document creation), and **PowerPoint** (presentations). This course enhances your proficiency in using Microsoft tools for professional and business needs.

Entrepreneurship and Business Courses

Learn the essentials of launching and managing a startup, including business planning, risk assessment, and growth strategies. This course equips you with the mindset and tools to turn innovative ideas into successful ventures.

Marketing Course

Explore the fundamentals of marketing, including market research, branding, and strategic marketing planning. This course prepares you to create effective marketing campaigns and understand consumer behavior.
