

Neil Mendoza

Metallurgical Engineer

Personal Information

Address

6 Ella Street
St. Catharines, On
L2R 0A8

Telephone

+49 163 2011671

E-Mail

neil201990@icloud.com

Skills

Communication

Manufacturing

Leadership

Teamwork

Problem Solving

Listening

Adaptability

Desire to Learn

Software

MS Office

Word, Excel, PowerPoint

Advanced

AutoCAD

Intermediate

Abaqus

Intermediate

Language

English

Native

Spanish

Native

Experienced Metallurgical Engineer with a demonstrated history of working in the metals industry. Skilled in Microsoft Office, Communication, Engineering, and Leadership. 3+ years of experience.

Experience

Metallurgist, Applied Technical Services - Marietta GA, December 2017 - October 2018

- Work with clients of various industries providing technical engineering services.
- Perform a variety of tests on metallic, plastic, and ceramic material; e.g. coating thickness, plating verification, chemical analysis, tensile strength, micro and macro hardness, case depth, microstructure evaluation.
- Evaluate products according to drawings, customer's requests, and ASTM standards.
- Perform failure and root cause analysis, following internal and ASTM standards.
- Properly operate instrumentation used in testing such as microscopes, mounting and polishing equipment, SEM, stereoscopes, acids and bases used in metallic preparation.
- Creating technical reports with test data and any remarks and explanations of support data such as micrographs, spectra data, SEM images.
- Coordinated with other groups to ensure completion of projects.
- Updated internal specifications, procedures, and operating manuals.

Metallurgist, Aremac Heat Treating-City of Industry CA, March - December 2017

- Providing technical advice about the suitability of metals for different purposes.
- Investigate corrosion and metal failure/fatigue ensuring adherence to manufacturing quality standards.
- Overseeing operational quality control processes.
- Participated in monthly safety meeting, created safety regulations and ensured other members followed safety regulations.
- Develop new tests and repair processes.
- Investigate production problems.
- Created documents, manuals, metallurgical investigations and reports in support of customer relations.

Materials Engineer Intern, Walt Disney World - Orlando FL, July 2016 - March 2017

- Helped identify potential cost savings projects based on engineering and emerging technology application.
- Communicated with other departments, vendors, and other third parties to advance projects and testing.
- Aid in materials selection, research and testing on a global scale for Walt Disney Parks & Resorts.
- Material consultations in microstructures of ferrous and non-ferrous alloys, corrosion in firework applications, material selection, failure analysis.
- Develop testing programs to collect, document and analyze the results to make recommendations based on findings.
- Experience in application of statistics and data analysis.
- Experience in material characterization using various techniques (FTIR, SEM, Fatigue testing, tensile testing, Chemical testing, metallography).
- Worked with emerging materials to improve life cycle, performance, functionality of various components.

Metallurgist Intern, Woodward - Fort Collins CO, May - August 2015

- Involved in the processing of materials; heat treatments, chemical treatments, and quality engineering
- Metallographic preparation (sectioning, mounting, polishing, etching) and microstructure evaluation.
- Worked in production and quality assurance.

Neil Mendoza

Metallurgical Engineer

Personal Information

Address

Plitscharder Str. 149
Herzogenrath, 52134
Germany

Telephone

1-626-250-5059

E-Mail

neil201990@icloud.com

- Investigate material behavior in product and processes in development and apply findings to improve the overall quality and functionality of the product and process design.

Research Experience for Undergraduates Funded by National Science Foundation, South Dakota School of Mines & Technology, June 2014-August 2014

- Worked in a laboratory setting conducting cutting-edge research and development in coatings with the following research topic: "Material characterization of coldsprayed titanium hydroxyapatite on titanium substrate". The focus of this research was to evaluate the microstructure and mechanical performance of cold spray deposited biocomposite coatings. Biocomposite coatings consisting of various compositions of titanium and hydroxyapatite were deposited using cold spray technology.
- Planned and performed scientific research and development experiments using a rigorous scientific approach and advanced statistical methods to address and resolve critical engineering, quality and production problems.
- Used testing standards to evaluate physical properties of coating.
- Wrote technical report on results and conclusions drawn from experiments conducted.

Education

RWTH Aachen University - Aachen, Germany

Master of Science - Metallurgical Engineering

2018 - Present

South Dakota School of Mines & Technology - Rapid City, South Dakota

Bachelor of Science - Metallurgical Engineering and a Minor in Chemistry

2012 - 2016

Citrus College - Glendora, California

Associate in Biology - Physics and Mathematics

2010 - 2012