



Mr. Roig is a Senior Technologist with 13 years of experience in investigations of various aerospace, biomedical and construction materials related to product liability, failure analysis and quality assurance. He has broad experience in destructive and non-destructive test methods using optical microscopy, Scanning Electron Microscopy (SEM), 3D Computed Tomography (CT)/Radiography, Metallography, Mechanical Testing, and FTIR/Micro-RAMAN spectroscopy.

Education

BS, Construction Engineering Technology. University of Southern Mississippi. 2017

BA, Business Administration – Finance. California State University, Fullerton. 2010

Licenses & Certifications

- NICET Associate Engineering Technologist
- Buehler SumMet Metallography
- JEOL SEM Operator
- IXRF Systems Training

Positions Held

Engineering Systems Inc., Anaheim, California

- Regional Operations Manager, 2025 – Present
- Technologist Director, 2023 – Present
- Senior Technologist, 2022 – 2023

Kars' Advanced Materials, Anaheim, California

- Senior Technologist, 2017 – 2022
- Lab Technician, 2012 – 2017

Contact Information

tcroig@engsys.com
(657) 254-3988

ESi Anaheim

2528 W Woodland Dr
Anaheim, CA 92801

Areas of Specialization

- Lab & Inspection Services
- Failure Analysis
- Material Characterization
- Metallography
- Fractography
- Computed Tomography (CT)

Publications

“The Complimentary Use of 3D X-ray Micro-Computed Tomography with Traditional Metallography,” N.K. Kar, A. Bovie, **T. Roig**, Advanced Materials and Processes, Vol. 180, No. 1, pp. 16–20, January/February 2022.

“Failure Analysis of a Ti6Al4V used in a RASL Procedure,” N.K. Kar, **T. Roig**, J. Kar, Y. Hu, Journal of Failure Analysis and Prevention, Vol. 16, No. 3, pp. 482–488, June 2016.