


Science speaks for itself.
RJ Lee Group gives it a confident voice.



RJ Lee Group is an industrial forensics analytical laboratory and scientific consulting firm located in the Greater Pittsburgh area. We maintain a visible and respected reputation within the legal community, having offered scientific support in civil litigation matters for over 35 years. Our experienced consulting staff tracks conflicts of interest, maintains proper chains of custody, and organizes data productions as part of the discovery process. Immediate access to comprehensive laboratory facilities, coupled with materials and environmental experts, are leveraged to our clients' advantage.

At RJ Lee Group, we believe that science speaks for itself. We just give it a confident voice.

RESOLUTION

Credentialed Experts. Accredited Laboratory. Trusted Experience. Sound Science.

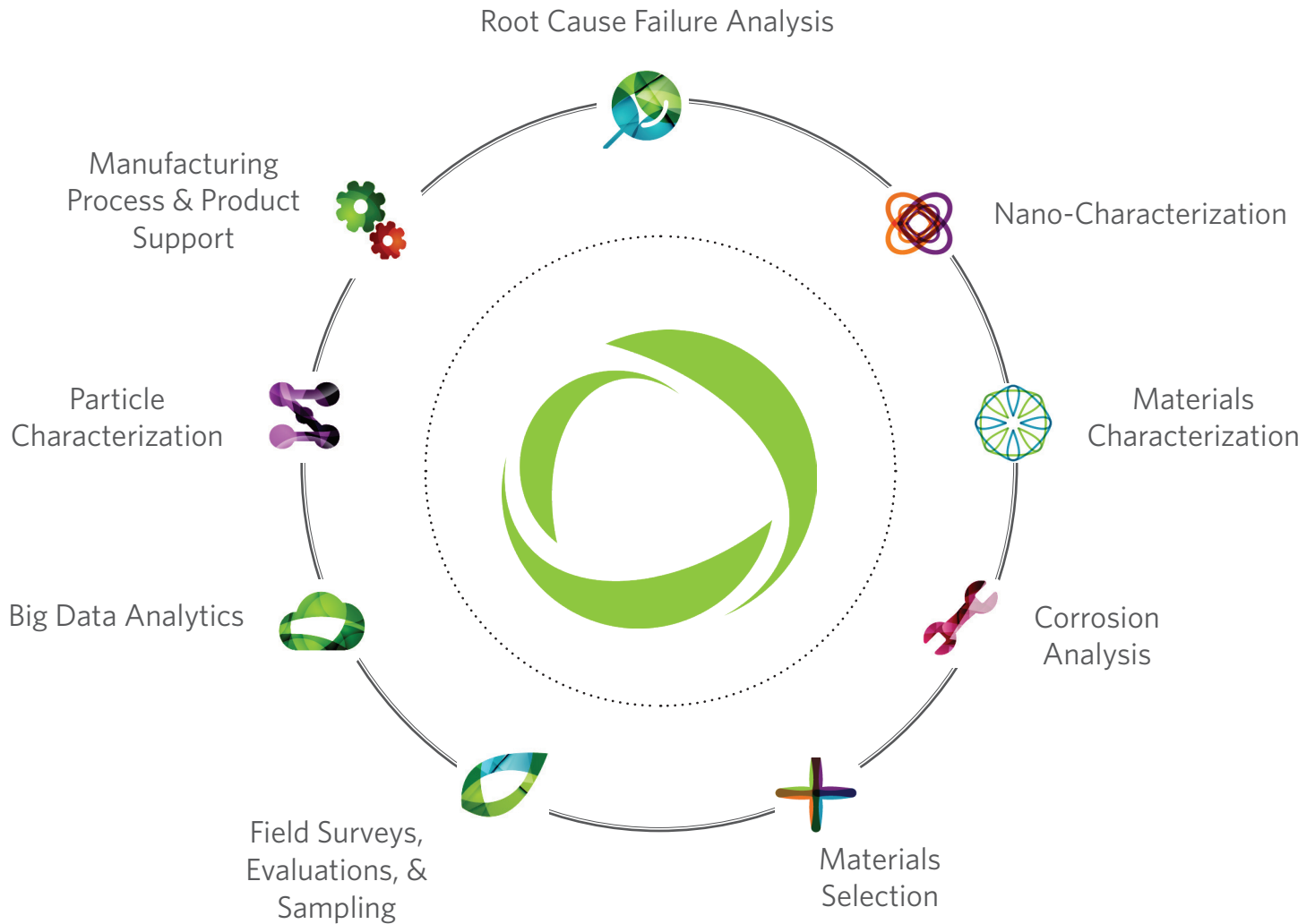


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We provide in-depth scientific analysis, interpreted and delivered by seasoned professionals.



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Our experts have contributed to cases ranging from those with little public awareness to large-scale litigation.



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RJ Lee Group's experts work with your team to answer your industry's most challenging questions.



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We are an industry leader in providing innovative solutions for materials characterization, forensic engineering, and information management.



RJ Lee Group Advantage

| We provide in-depth scientific analysis, interpreted and delivered by seasoned professionals.

Our experts and technology provide the scientific support needed to clearly communicate critical aspects of your case.

We Provide Experienced Litigation Support Inside & Outside the Courtroom



Litigation
Experience



Accredited
Testing
Laboratory



Expand Your
Team



Defensible
Data



Field Inspection
& Sampling

RJ Lee Group's strength lies in our scientific insight and decades of specialization in areas related to product liability, toxic tort, construction defect, nuisance dust, personal injury, and patent infringement.

Litigation Experience

Targeted inquiry addressing the fundamental scientific issues

Accredited Testing Laboratory

Defensible analytical data provided by seasoned professionals in our accredited laboratories

Expand Your Team

Internal experts & external network provides targeted subject matter expertise

Defensible Data

Laboratory simulations & test chamber studies provide real-world answers based on sound science

Field Inspection & Sampling

Laboratory capability extends to field and on-site sampling and monitoring

▶ RJ Lee Group maintains a visible and respected reputation within the legal community, offering

scientific support in civil litigation for more than 35 years for over 500 law firms, in over 3,000 matters involving product liability, toxic

tort, construction defect, nuisance dust, personal injury, and patent infringement cases.

Our relationship with our law firm clients is built upon mutual respect for each other's expertise.

Our credentials in civil litigation support enable us to work cohesively with our law firm clients to determine the best strategy for providing investigative studies that achieve maximum impact. RJ Lee Group's considerable experience in crafting a plan of action, organizing and identifying samples, and implementing in-depth studies ensures that there will be sound scientific data to support expert opinions and testimony. Our reputation for delivery of accurate laboratory results and respected expert testimony are some of the main reasons that our clients frequently recommend us to their peers.

RJ Lee Group's experts represent decades of specialist knowledge with strengths in many scientific disciplines. Together with our substantial analytical resources, this depth of experience allows us to develop analytical protocols which we can use to deliver results that address specific key issues. Though a methodology or investigative course developed during a particular study may be uniquely tailored to the situation at issue, the analytical methods used are based on established, scientifically accepted methods.



AREAS OF EXPERTISE

Our experts have given testimony in state and federal courts, interacted with state and federal regulators, and contributed to cases ranging up to high-profile, large-scale litigation.

Our multi-disciplinary staff lead and rely upon our in-house laboratory capabilities for support.

Our experts engage in all phases of the case, from field investigation to providing testimony.



Materials
Characterization



Corrosion



Nano-
Characterization



Root Cause
Failure Analysis



Particle
Characterization



Post-Disaster
Assessments



Patent
Infringement



Areas of
Expertise

Our experts understand that each case is dynamic with changing needs over the course of our engagement. We have a proven track record in meeting rigorous court deadlines, and our clients value our ability to adapt quickly to changing circumstances.



▶ According to Norton Rose Fulbright's 2016 Litigation Trends Annual Survey,

30% of Life Sciences & Healthcare industry lawsuits were for product liability, IP and patents;
22% of Energy sector lawsuits addressed environmental and toxic tort issues; and
19% of Infrastructure, Mining and Commodities lawsuits involved regulatory & investigation questions.



Materials Characterization

When dealing with matters involving the performance and reliability of raw materials or those used in product design or assembly, our experts conduct studies that identify material properties, validate and develop investigative procedures, test and affirm quality assurance, and explain anomalies.



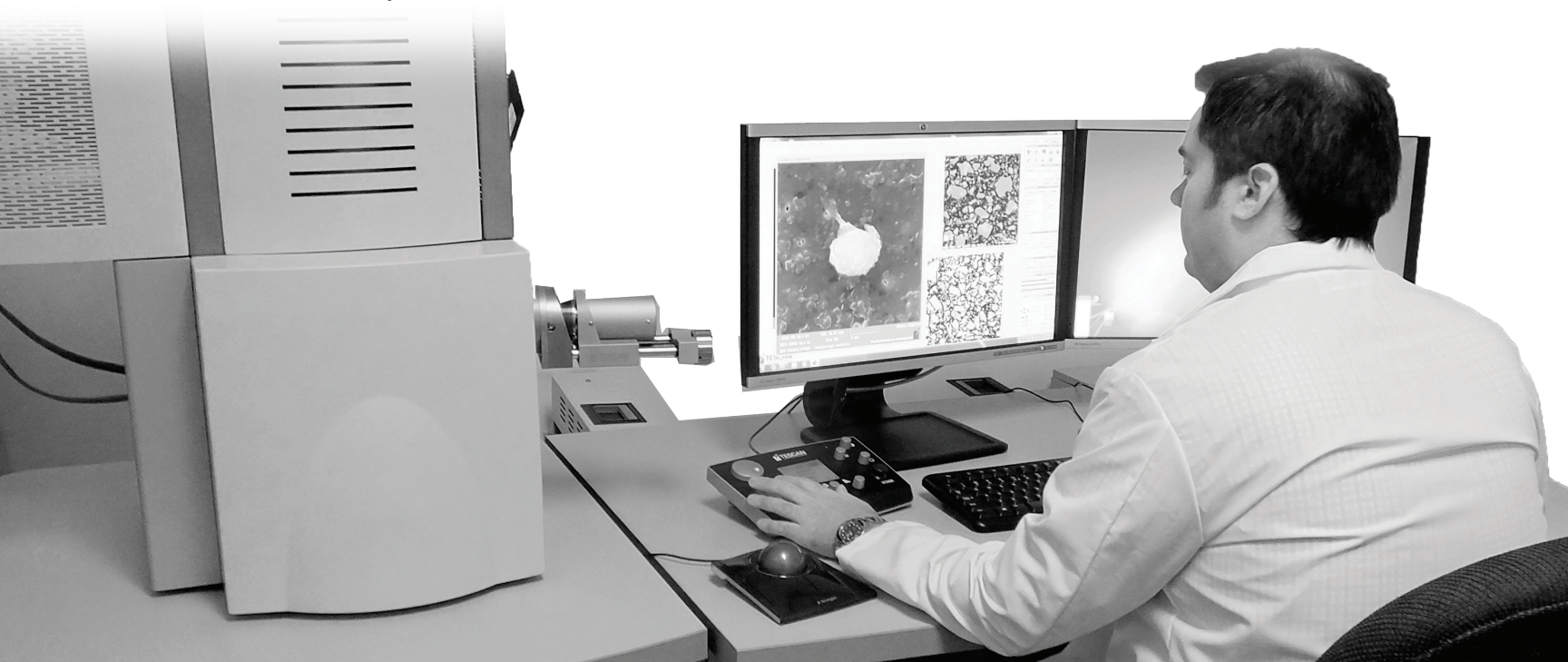
Corrosion

When product liability or property loss may be a result of the impact of corrosion, we are experts in assessing the nature and cause of the failures or materials impact. This includes using field investigations and laboratory controlled and simulated environments to determine if the damage is a result of a defective product, material, process, or operating environment.



Nano-Characterization

When evaluating risk, we address concerns related to product stewardship and the impact of nano-materials both to the environment and to human health. Our cutting edge instrumentation and nano-characterization capabilities, as well as our proven experience in conducting field assessments provide a sound scientific foundation in nano-product evaluation matters.





Areas of
Expertise



Root Cause Failure Analysis

Root cause failure analysis requires in-depth working knowledge across multiple industrial sectors and material applications. We are experts in using this industrial forensics approach to provide the scientific foundation to determine the root cause of failure.



Particle Characterization

We address particle morphology and chemistry, the potential for toxicity, and chemical reactivity in matters involving environmental exposure and source apportionment, nuisance dust, indoor air quality, pharmaceuticals, medical device wear debris, surface cleanliness and mineral dust identification.



Post-Disaster Assessments

Catastrophic events such as a structure collapse, train derailment or pipeline rupture may involve property damage and potential contamination and exposure concerns. Our experts lead large-scale, rapid response field assessments supported by our full-service laboratory to provide the data needed to respond to regulatory agencies, assess material damage, determine risk-based cleanup standards, and develop comprehensive remediation strategies for cases ranging in size up to high-profile.



Patent Infringement Analysis

Litigation involving patent infringement can be complicated, but our experts have extensive experience with the analysis of device design, electrical and material properties, and more to conclusively ascertain whether your clients' patent has been infringed upon.

A grayscale photograph of a scientist in a white lab coat and gloves, holding a test tube and looking upwards. The image is semi-transparent and serves as a background for the text.

RJ Lee Group Meets Needs Across a Wide Range of Industries:

- » Coatings & Specialty Chemicals
- » Construction Materials
- » Criminal Forensics
- » Energy & Utilities
- » Government
- » Hospitals
- » Polymers & Plastics
- » Medical Devices
- » Microelectronics
- » Mining & Industrial Minerals
- » Oil & Gas
- » Pharmaceuticals

A person wearing a white protective suit and a white hard hat is shown in profile, looking down at a wooden structure. They are holding a flashlight in their right hand, which is illuminating the wood. In their left hand, they hold a tool, possibly a chisel or a similar instrument, against the wood. The background is a wall of vertical wooden planks. The overall lighting is warm and orange-toned.

Case Studies & Testimonials

RJ Lee Group's experts work with your team to answer the most challenging scientific questions for your case.

Millions of problems solved.

Thousands of clients served.

One RJ Lee Group.

We work with our clients to understand the issues surrounding each unique situation



Investigating
Material Failures



Assessing
Collateral Damage



Improving Quality
Control



Developing
Simulations to
Assess Risk



Analyzing Product
Components



Testing
Environmental
Factors



Our challenge is to continually advance science, to be the leader in our field, and to steadily strive for excellence in our contributions to our clients and to our community.



▶ **“A judge is not a scientist, and a courtroom is not a scientific laboratory. **But the law must seek decisions that fall within the boundaries of scientifically sound knowledge.**”**

- Justice Steven Breyer
Associate Justice, US Supreme Court



Investigating Material Failures

PROBLEM: A mechanical failure may have contributed to a fatal airplane crash. The manufacturer of the 30-year old engine in question retained RJ Lee Group to examine the engine components.

Because some engine components were replaced with aftermarket items during an overhaul three years previously, we inspected the recovered engine components and noted their general condition. Using optical and electron microscopy, we compared the crash carburetor and engine components to an exemplar engine and fuel delivery system and observed that wear features and deposits were typical of in-service operation.

CONCLUSION: The metallurgical investigation of the engine components concluded that none of the evidence supported a mechanical cause for the accident.



Assessing Collateral Damage

PROBLEM: A train carrying chlorine gas derailed and one of the tank cars ruptured, releasing about 60 tons of gas. A nearby resident claimed corrosive damage to her property from the leak.

Determining the impact perimeter was critical. We inspected the claimant's property, conducted field evaluations, and collected and analyzed samples to evaluate impact.

CONCLUSION: We used scientifically sound data and observations to reliably discern between impacted and nonimpacted properties.



Improving Quality Control

PROBLEM: A medical device manufacturer faced major delays in product delivery because of problems with cured silicone components.

The lifecycle investigation revealed that the problem arose from of an unreported formula change in molds used to create the silicone parts. This formulation change, though previously considered insignificant, threatened a major product launch and, potentially, consumer safety.

CONCLUSION: We worked with the client to develop more robust raw material specifications and testing to ensure quality and reduce downtime in the future.



Developing Simulations to Assess Risk

PROBLEM: In response to regulatory health requirements, a manufacturer needed to know the amount of respirable dust that could be generated by workers using their products under various conditions.

We constructed a control chamber in which to test products during simulated work scenarios. We analyzed the samples for total respirable dust and chemicals of potential concern and related the data back to anticipated real-world use.

CONCLUSION: We provided the client with enough information to appropriately label its products and comply with safety standards.



Analyzing Product Components

PROBLEM: When the manufacturer of a medical device implant saw an increase in the device's failure rate after implant, they alleged that a component provided by their supplier was responsible.

The component supplier retained RJ Lee Group to characterize the physical, chemical, and microstructural properties of the component – both as they supplied it to the manufacturer and again after the manufacturer applied a surface coating to it – to determine if specifications were met. Our experts performed microscopic analyses and then visited the supplier's plant to review their processes. We reviewed documentation and data including specifications, inspection reports, and studies that were conducted before implanting the device.

CONCLUSION: We provided expert testimony that the increased failure rate of the device was not the result of the supplier's processes.



Testing Environmental Factors

PROBLEM: RJ Lee Group was retained to investigate the role of a failed municipal water pipe in a landslide that resulted in environmental concerns.

The investigation determined that the failure was caused by externally induced mechanical stresses that initiated a transverse crack in a graphitized area of the cast iron portion of the pipe wall. The sudden loss of many tons of cover material caused an upward heave in the surrounding soil allowing the crack to propagate through the wall and fracture the concrete liner, giving rise to the leak.

CONCLUSION: The pipe failure was a victim of the landslide and not the cause.

Testimonials

We build lasting relationships with our clients that result in solid scientific strategies.

RJ Lee Group “gets” high stakes litigation. They understand how to zero in on the precise scientific inquiry required to address the fundamental issues in a case. The scientists at RJ Lee Group know that any analysis they perform must be unassailable. Their science and their ability to communicate it effectively to any audience is second to none.

- Partner, Business and Tort Litigation Group
Top 10 Law Firm Worldwide

Finding litigation support that is professional and thorough, as well as easy to work with, is rare. The RJ Lee Group team meets these criteria, and more importantly, understands the science involved.

- Richard McMillan Jr., Esq.
Crowell & Moring

We have worked with RJ Lee Group on projects to determine risk assessment after catastrophic events, as well as in areas related to consumer products. Their thorough scientific analyses and objectivity are resources we have come to rely on.

- Dennis J. Paustenbach, Ph.D., C.I.H.
Toxicologist, ChemRisk, LLC





Connect with the Experts

RJ Lee Group is committed to being recognized as the industry leader in providing innovative solutions to challenges in materials characterization, forensic engineering, and information management.

We help our clients understand contributing factors and scientific nuances, conveying accurate and reliable insights in the context of your case.

Our experts deliver dependable scientific results clearly and professionally



Visit Our Website



Schedule a Facility Tour



Email for More Info



Speak to an Expert



Contact

Connect with an Expert



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