



## My Expertise Is Your Advantage

In my decades of working extensively with diverse Niobium applications, I have learned that this metal offers significant benefits as a material of construction for a wide array of technologies.

Schedule a Free Consult

## Hello, I'm Steven Sparkowich

Steven Sparkowich, PE is a Licensed Professional Metallurgical Engineer with a Bachelor of Science in Metallurgical Engineering from the Colorado School of Mines and a Graduate Certificate in Welding Engineering from the Ohio State University, and is considered a leading global expert on topics related to niobium and niobium alloys.

Steven has 25+ years of experience working with the refractory metals niobium, tantalum, molybdenum, tungsten and rhenium, as well as with the reactive metals titanium, zirconium, and hafnium.

Learn More



## Top Focus Areas

Offering customized technical and market research services related to Niobium and Niobium-based alloys, chemicals, oxides and coatings.



### Supply Chain

Global Supply Chain Advisory  
Insourcing Assistance  
Strategic Stocking



### Material Selection

Corrosion & Failure Analysis  
Vendor Identification & Vetting  
Alternatives to Glass Lined or  
Tantalum Lined Equipment



### Coatings

Technical & Market Advisory  
Vendor Identification & Vetting  
CVD, PVD, ALD, Cold Spray,  
Cladding, Electroplating

## How I Help



- Would you like to explore the potential and benefits of Niobium for your application, but are having difficulty with reliable sourcing?
- Would you like to use Niobium for your application, but don't have the full-spectrum, in-house resources to explore?
- Are you actively using and benefiting from the performance of Niobium for your application, but would like to improve your process and/or troubleshooting?
- Have you ever considered Niobium as a solution/alternative for your application, but are curious about its benefits?

## Services



### Customized Services

Including Failure Analysis & Metals Testing, Materials Selection Advice, Market Research, and more...

Learn More



### Outside Services

Including Representation in Key Technical Committees, Seminars, Short Courses, and more...

Learn More

## Niobium Facts

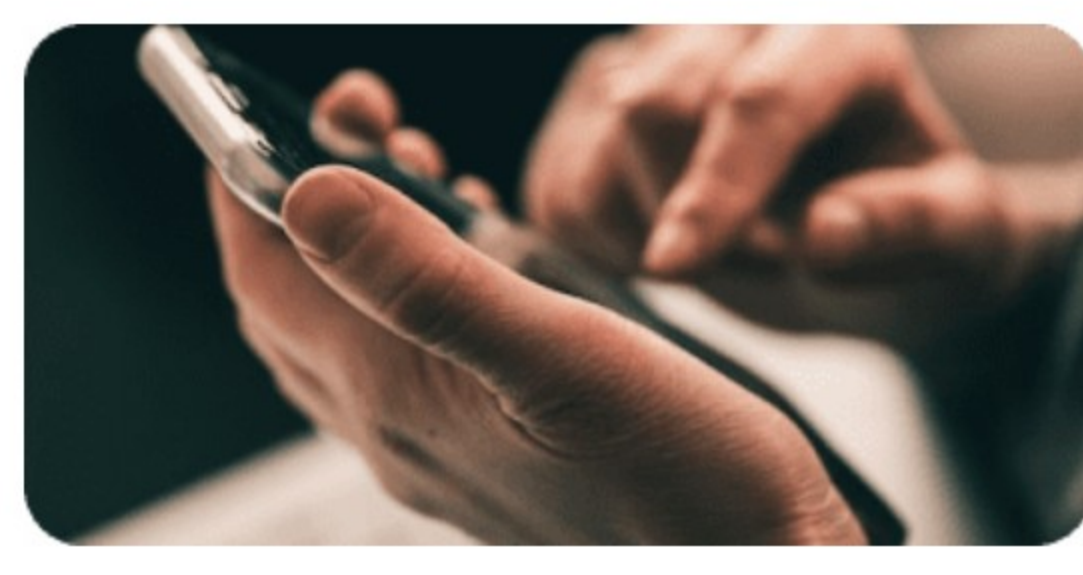


Niobium (Nb), formerly known as Columbium (Cb), is a metal in group VB of the periodic table with atomic number 41, an atomic weight of 92.91, and a density of 8.4 g/m3. Niobium is similar to Tantalum (Ta), however, it is half the density with a significantly lower unit cost.

Niobium is not particularly rare or exotic in that it is the 34th most abundant element in the Earth's crust at an average concentration of 20 ppm. Niobium is mined primarily from the minerals pyrochlore and columbite, in Brazil and to a lesser extent in Canada and central Africa.

Continue Reading

## How it Works



### 1. Contact Us

The best way to get started is by contacting us through our online contact form. Let us know what problems you are trying to solve, or how you think we could help.



### 2. Request a Free 30-minute Consult

When completing the contact form, answer the question "What shapes, sizes and forms of Niobium or alloys containing Niobium would you like available in stock domestically for your project(s)?" to qualify for a free 30-minute consultation.



### 3. Provide Statement of Work

We can help you define a statement of work that fits your project requirements.

Schedule a Free Consult

## You have a friend in the Niobium business.

Niobium Research LLC and our network of technical and market experts provide real time results and educational resources for your project needs.

Schedule a Free Consult