

Materials Scientists

19-2032.00



Description: Research and study the structures and chemical properties of various natural and synthetic or composite materials, including metals, alloys, rubber, ceramics, semiconductors, polymers, and glass.

Other Resources:

[ONET Link](#)
[MyNextMove Link](#)

Sample of Reported Job Titles: Materials Scientist

Job Zone

Title: 5 - Extensive Preparation Needed

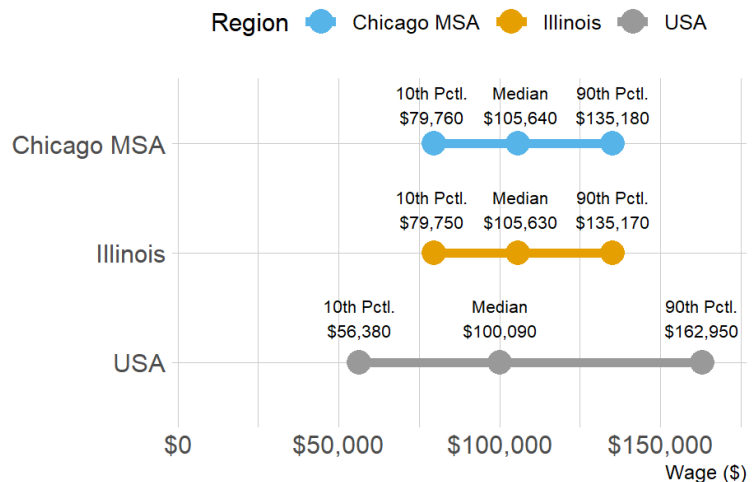
Education: Require graduate school.

Experience: Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience.

Training: May need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Hot Technologies: IBM SPSS Statistics, Microsoft Office Suite, National Instruments LabVIEW, R, The MathWorks MATLAB

Region	Employment	Location Quotient	Median Wage
Chicago MSA	470	2.33	\$105,640
Illinois	530	1.97	\$105,630
USA	6,690	—	\$100,090



Top 5 Core Tasks According to Current Job Holders

Importance
Frequency (out of 100)

Conduct research on the structures and properties of materials, such as metals, alloys, polymers, and ceramics, to obtain information that could be used to develop new products or enhance existing ones.

Daily

90

Determine ways to strengthen or combine materials or develop new materials with new or specific properties for use in a variety of products and applications.

Daily

88

Plan laboratory experiments to confirm feasibility of processes and techniques used in the production of materials with special characteristics.

More than weekly

85

Devise testing methods to evaluate the effects of various conditions on particular materials.

More than yearly

84

Prepare reports, manuscripts, proposals, and technical manuals for use by other scientists and requestors, such as sponsors and customers.

More than yearly

84