

Occupational Profile: Biochemists & Biophysicists

GENERAL OCCUPATION DESCRIPTION

Study the chemical composition and physical principles of living cells and organisms, their electrical and mechanical energy, and related phenomena. May conduct research to further understanding of the complex chemical combinations and reactions involved in metabolism, reproduction, growth, and heredity. May determine the effects of foods, drugs, serums, hormones, and other substances on tissues and vital processes of living organisms.

Source: O*NET online. <http://online.onetcenter.org>

REQUIRED EDUCATION

As shown in the table to right, over 96% of interviewed employers reportedly require a four-year degree or more.

Required Education	
Percent of Employers Requiring HS Diploma or Less	0.7%
Percent of Employers Requiring 2-Year Degree or Equiv	3.2%
Percent of Employers Requiring BS Diploma or More	96.1%

Source: Bureau of Labor Statistics

WAGES

Biochemist & Biophysicist is considered a high-wage occupation, with very good possibility for wage advancement with experience. Wage information not available for Greater Phoenix or the State of Arizona.

Location	Pay Period	2005				
		10%	25%	Median	75%	90%
United States	Hourly	\$19.20	\$24.93	\$34.14	\$43.46	\$55.76
	Yearly	\$39,900	\$51,900	\$71,000	\$90,400	\$116,000

Source: Bureau of Labor Statistics

The table to right provides median wages for the top five highest paying States. As shown, Indiana tops the list with a median hourly wage of \$50.82/hour.

RANK	Location	Median Wage 2005	
		Hourly	Annual
1	Indiana	\$50.82	\$105,700
2	Georgia	\$47.83	\$99,500
3	Massachusetts	\$41.30	\$85,900
4	North Dakota	\$41.23	\$85,800
5	Connecticut	\$40.34	\$83,900
n/a	ARIZONA	n/a	n/a

Source: Bureau of Labor Statistics

EMPLOYMENT

As shown in the table below, this occupation has a projected 38% growth rate over 10 years (between 2003 and 2013) for the Greater Phoenix region. There are an average projected 2 job openings each year, comprised of 1 new job and 1 positions vacated by individuals leaving the field (due to retirement, death, career changes, or other reasons).

	10-YEAR CHANGE			AVERAGE ANNUAL		
	Employment		Percent Change	Job Openings	Growth	Separations
	2004	2014				
United States						
Biochemists and biophysicists	16,100	19,500	21%	840	n/a	n/a
Arizona						
Biochemists and biophysicists	N/A	N/A	N/A	N/A	n/a	n/a
Greater Phoenix						
Biochemists and biophysicists	32	44	38%	2	1	1

Source: Bureau of Labor Statistics

*Job Openings refers to the average annual job openings due to growth and net replacement.

Source: Bureau of Labor Statistics

**N/A is displayed in cases where data is not available or cannot be published because of federal data privacy standards.

Comparison of employment projections for top five regions for Biochemist & Biophysicist

The table to right provides employment projections for the top five States with regard to projected growth rate. As shown, Alabama tops the list with a projected 10-year growth of 48%.

RANK	Location	Employment		Percent Change
		2004	2014	
1	Alabama	90	140	48%
2	Utah	140	200	46%
3	Colorado	140	190	40%
4	Minnesota	220	290	34%
5	Massachusetts	1,170	1,550	32%
n/a	ARIZONA	n/a	n/a	n/a

Source: Bureau of Labor Statistics

Employment by Industry

The table below shows the industries that most commonly employ Biochemist & Biophysicist, and the proportion of employment accounted for at the national level. As shown, "Research and development in the physical, engineering, and life sciences" is the largest employer for this occupation (40.3%).

Percent of Employment Nationally by Industry	
Percent	Industry
40.3%	Research and development in the physical, engineering, and life sciences
22.4%	Pharmaceutical and medicine manufacturing
6.7%	State government educational services
3.5%	General medical and surgical hospitals, private
3.2%	Testing laboratories
2.7%	Federal Government, excluding Postal Service
2.2%	Pesticide, fertilizer, and other agricultural chemical manufacturing

Source: Bureau of Labor Statistics

Geo-Location Overlay of Employers with 5 or More Employees that Potentially Employ Occupation (n = 84)

