The Crossroads of Art & Science

Most people associate glassblowing with art, but it is also essential for scientific research. In order to conduct experiments, chemists need specially designed glassware that can only be made by hand. This equipment is made from a special type of glass called borosilicate that can withstand sudden and extreme temperature changes. It is also unaffected by most chemicals.

Careers in glassblowing

If you are interested in pursuing a career in scientific glassblowing, Salem Community College, located in Carney’s Point, New Jersey, offers a 2-year associates degree in Scientific Glass Technology. It is the only school in the USA that offers a degree in scientific glassblowing. Through hands-on learning and classroom instruction you will acquire the skills necessary to build glass apparatuses according to specifications. More information is available at www.salemcc.edu.

Would you like to be a glassblower?

Do you
• Enjoy working with your hands?
• Enjoy making things?
• Have good hand to eye coordination?
• Find it interesting to work with precision tools such as a ruler, calipers, and protractors?
• Enjoy 3-dimensional problem solving?

Are you
• Detail oriented?
• A good problem solver?
• Not bothered by heat?
• Undeterred by set-backs (sometimes glass breaks!)?

If you answered yes to these questions – scientific glassblowing could be a good career choice for you!!

The scientific glassblower works closely with scientists, engineers and researchers to create the glass instruments they need to do their research. Through blueprints, sketches and discussions with researchers, a plan is developed to create the required glassware.

The author

This exhibit was assembled by Tracy Drier who is the scientific glassblower for the chemistry department at the University of Wisconsin–Madison, Wisconsin. He enjoys interacting with scientists and learning how the glassware he makes is helping further their research goals.

Photo credit

Both photos are by Ilia A. Guzei.
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