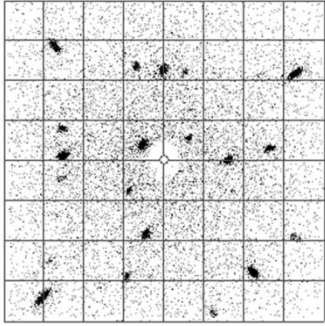
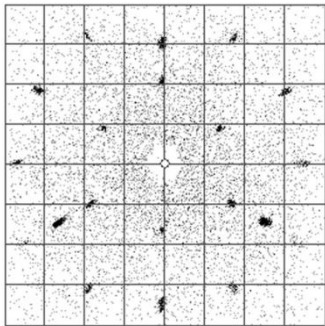


X-ray Orient by Symmetry the Real-Time way!



Gallium arsenide real-time image in arbitrary orientation



Germanium real-time image showing 3-fold or 111 orientation

For more information about Multiwire products and a DVD demonstration, complete the form below and mail it **or** complete the same form at www.multiwire.com or www.lauecamera.com (European sales) Updated 11/09.

cut here

Multiwire Laboratories, Ltd.
Donald Bilderback, PhD.
Cornell Business & Tech Park
95 Brown Rd., MS 1018
Ithaca, NY 14850, USA

Dr. Andreas Erb
Photovoltaik und Röntgen
Sonnenweg 4b
D-85386 Eching/Dietersheim
Germany

Please send a **Free** DVD demonstrating Multiwire products.

Please have a MWL sales representative call me

Interested in : MWL 110 system Orienting my crystals

Select your level of interest in our products:

Immediate Long Range

What kind of crystals are you x-ray orienting? (silicon, sapphire, etc.)

Name: _____

Company: _____

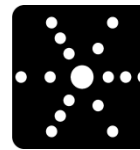
Address: _____

City: _____ State: _____

Country: _____ Zip/Postal Code: _____

Phone: _____ Fax: _____

Email: _____



MULTIWIRE LABORATORIES, Ltd.

Dr. Andreas Erb, (for European Sales).

Sonnenweg 4b

D85386 Eching/Dietersheim

Germany

Tel: (00) 49 89-32666906

Email: dr.andreas.erb@arcor.de,

Web: www.lauecamera.com or www.multiwire.com

Real-Time X-Ray Crystal Orientation by the Back-Reflection Laue Method



MULTIWIRE LABORATORIES, Ltd.

Cornell Business and Technology Park

95 Brown Road, MS 1018

266A Langmuir Bldg.

Ithaca, NY 14850 USA

Tel: (607) 257-3378 FAX: (607) 257-3201

Email: salesinfo@multiwire.com,

Web: www.multiwire.com

MWL 110 Real-Time Back-Reflection Laue Camera System

Announcing a major upgrade of NorthStar Laue back-reflection indexing software to v6.0 with Fault-Tolerant (FT) capability (patent pending).



The MWL 110 Real-time back-reflection Laue Camera System orients single crystals in seconds.

NorthStar software indexes cubic hexagonal, ...triclinic crystal systems, and creates stereographic projections. Provides accuracy of 0.25 degrees in standard mode and 0.05 degrees in

high-resolution mode. Custom computer and NorthStar v6.0 software included with system.

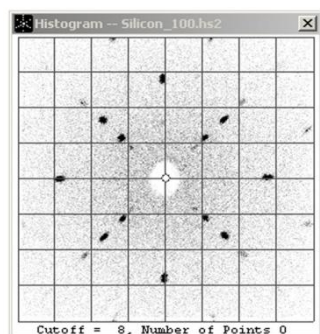
-Laue patterns are stored, displayed, and printed to paper completely avoiding the use of film.

-Greatly reduces the personnel time necessary to achieve any crystallographic orientation.

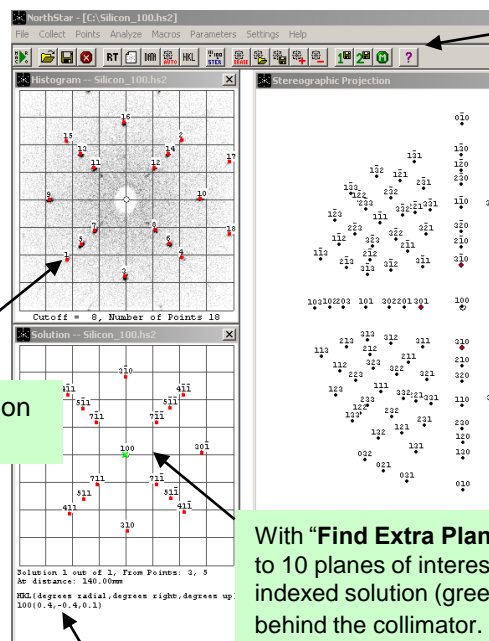
-Ideal for crystals of silicon, gallium arsenide, sapphire, quartz, SiC, nickel, tungsten, turbine blades, ...geological minerals such as olivine, etc.

-Ideal for industrial process control, research applications or academic laboratories.

1) Collect an image. (Silicon example)



2) Analyze the data & display the results



Speed Icons give one-click execution of the most often used functions

Stereographic projection made from the orientation matrix shows location of neighboring HKLs.

With "Find Extra Planes", you can specify up to 10 planes of interest to be highlighted in the indexed solution (green circle) even if it is behind the collimator.

Auto-detection of points

Statistics of the misorientation are given in degrees

3) Results are obtained immediately, a few seconds to integrate the Laue image and a couple of seconds to determine the correct orientation matrix (in most cases).

Fault-Tolerant Settings:

- Accommodates few millimeter variation in film-to-specimen distance.
- Controls percentage of Laue spots to be indexed.
- Tries multiple combinations of starting Laue points during indexing and automatically selects the best orientation matrix.
- With minimal training, novice users can achieve "expert results with very little effort."

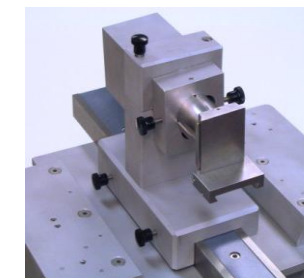
Once you have experienced the **NorthStar** software advantages, you will not want to go back to other slower, more primitive methods of analysis!

Motorized Accessories



The **MWL705 Three-axis Rotation Goniometer** provides remote alignment of crystal samples within a radiation enclosure. This goniometer is ideal for sample manipulation over large angular ranges (X: -60 to +85 degrees, Y: -30 to +60 degrees; phi: 360 degrees). The MWL705 is operated through the 6-axis MWL731 motor controller.

The **MWL703/704 Barrel Holder and Multiwire Automated Orientation Base** is designed to orient crystals. Crystals can be tipped up to ± 7 degrees by two DC motors located in the Orientation Base, then locked in place and the Barrel Holder removed for sawing. The unit is operated through the 6-axis MWL731 motor controller.



The **MWL731 6-Axis Motor Controller** has 6-axis drive capability with 12 and 28 vdc motors of up to 2 amperes per motor. A joystick controls the motors, two pairs at a time.

The **MWL701 Jack & Translation Stage** has been designed to travel 10 cm of distance horizontally, 6.7 cm vertically and lift up to 50 kg for positioning samples and orientation stages.

