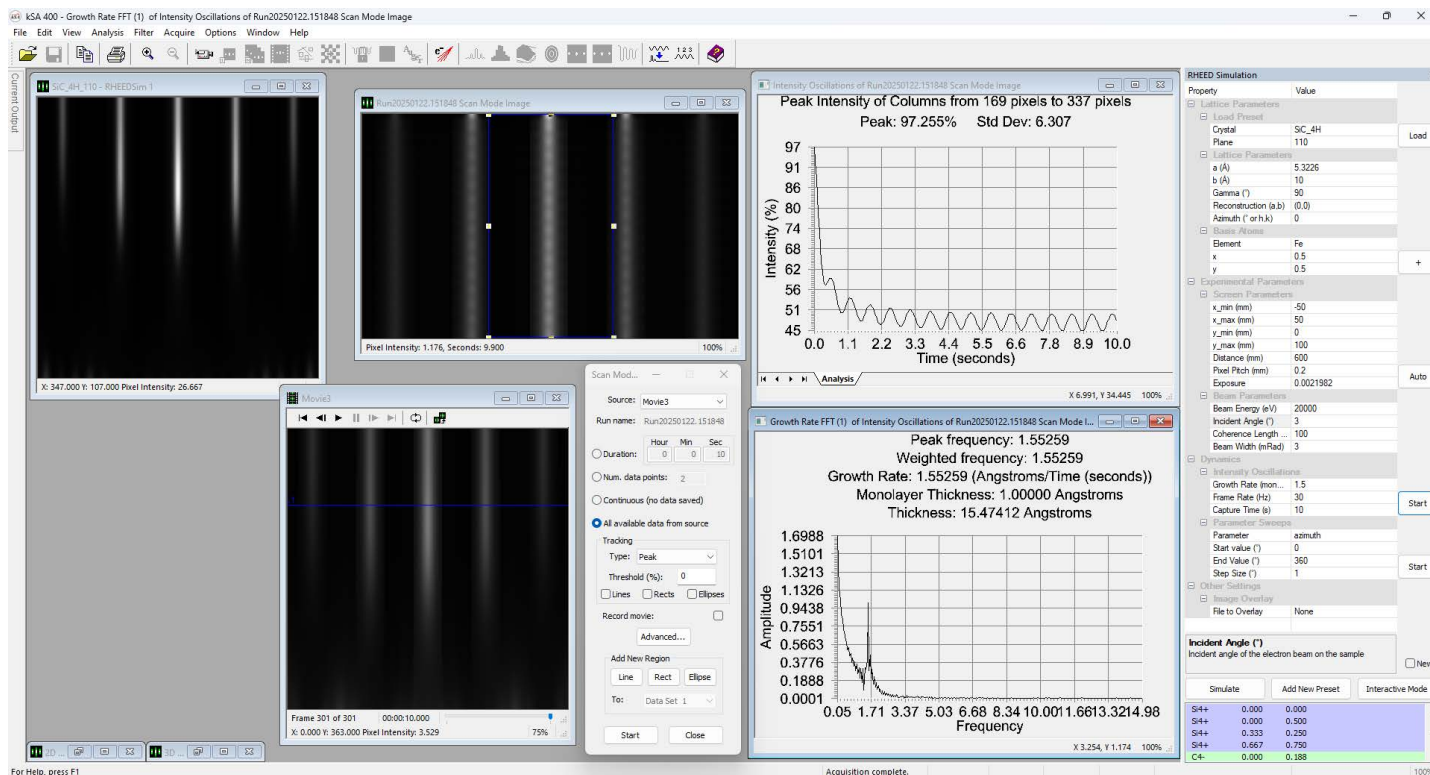




# RHEED Simulation Software



kSA RHEEDSim, the new RHEED simulation software from k-Space, gives you full control over the key parameters that dictate changes in your RHEED pattern. Simulate RHEED patterns for a broad range of crystal surfaces with complete control over the parameters that affect the pattern. Easily and rapidly produce RHEED patterns and different visualizations to explore and understand the behavior of RHEED under different conditions. It's a powerful visual tool you can start using immediately.

Software Solution	The Power of RHEED at Your Fingertips
<b>Simulation capabilities</b>	Simulate RHEED patterns for a broad range of crystal surfaces with complete control over the parameters that affect the pattern.
<b>Simulate any crystal surface</b>	kSA RHEEDSim is capable of simulating any crystal surface that can be defined by a periodic 2D surface lattice.
<b>Simulate any RHEED pattern</b>	Simulation possibilities range from basic simulated RHEED patterns of common structures, to complex patterns produced by reconstructions or complex surfaces, to dynamic simulations of changing phenomena.
<b>Analytical RHEED</b>	Available as a standalone application or integrated with kSA 400, the world's leading Analytical RHEED System.

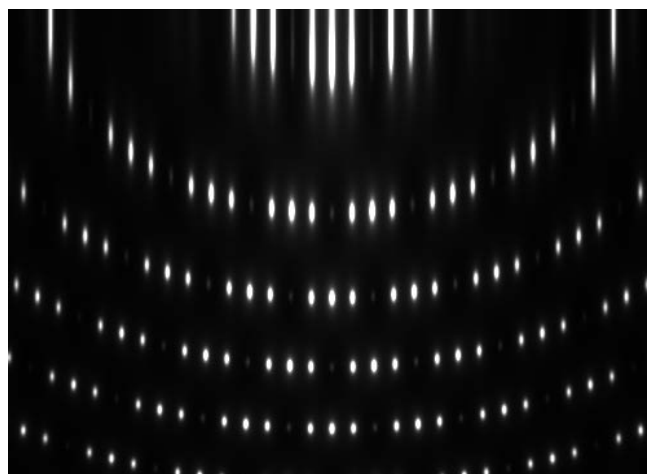
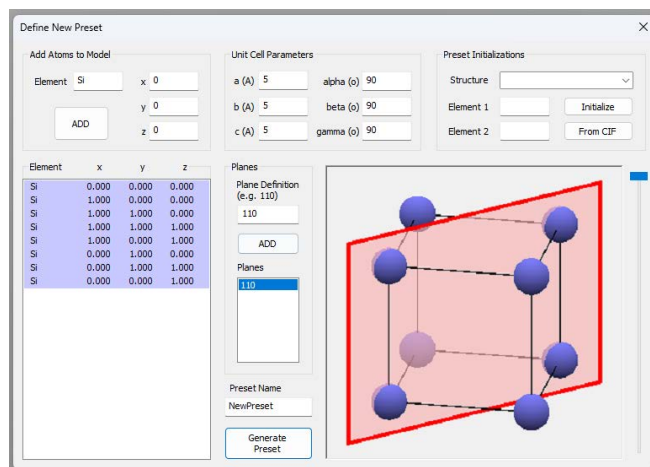


# RHEED Simulation Software

## Designed for Researchers and Students

Feature highlights of kSA RHEEDSim include:

- Visualize the 3D crystal structure for predefined or generated presets.
- Visualize the 2D surface structure relative to the incident electron beam. See it update live as parameters are changed.
- Define new surfaces to simulate from bulk crystal data loaded from CIF files or generated manually.
- Overlay your simulation output with other RHEED image data.
- Approximate the effect of surface reconstruction.



### Example RHEED simulations

- Simulate from preset data
- Simulate from CIF crystal data
- Compare simulated and experimental RHEED images
- Fit lattice parameters
- Simulate intensity oscillations
- Simulate parameter sweeps

*These are just some of the RHEED simulations you can generate with kSA RHEEDSim.*

