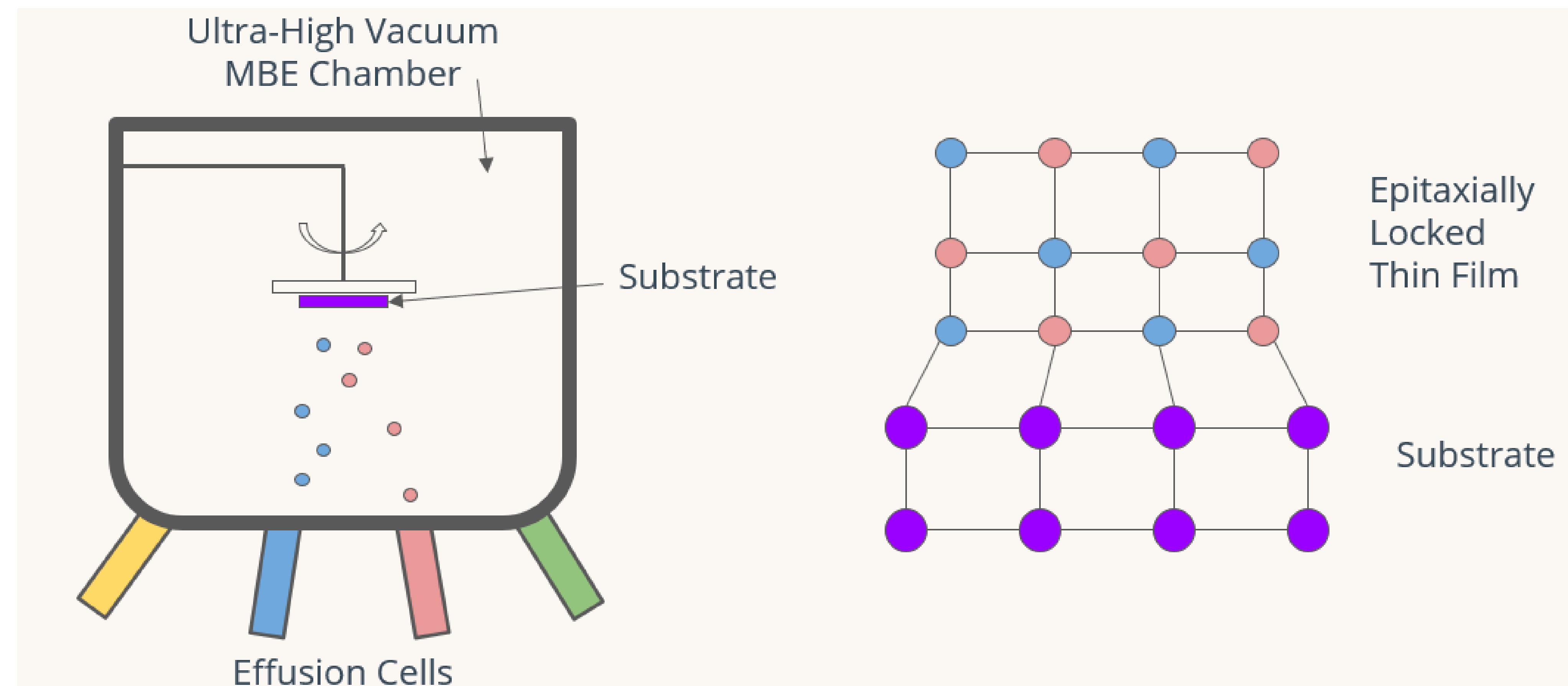


# Single crystal NaCl for modular substrate holders

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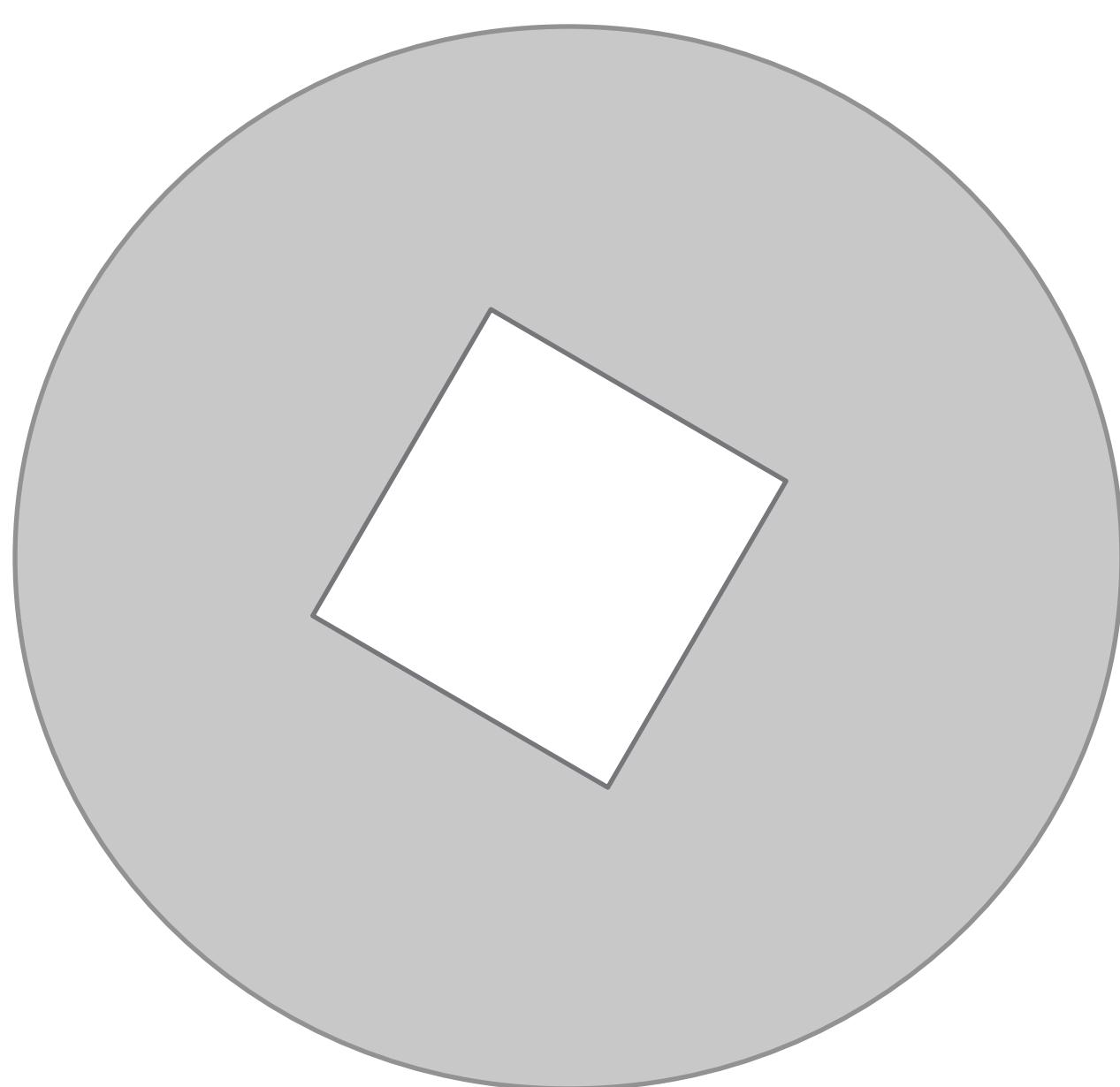
## Molecular Beam Epitaxy (MBE)



MBE image courtesy of Abigail Jiyang (Caltech)

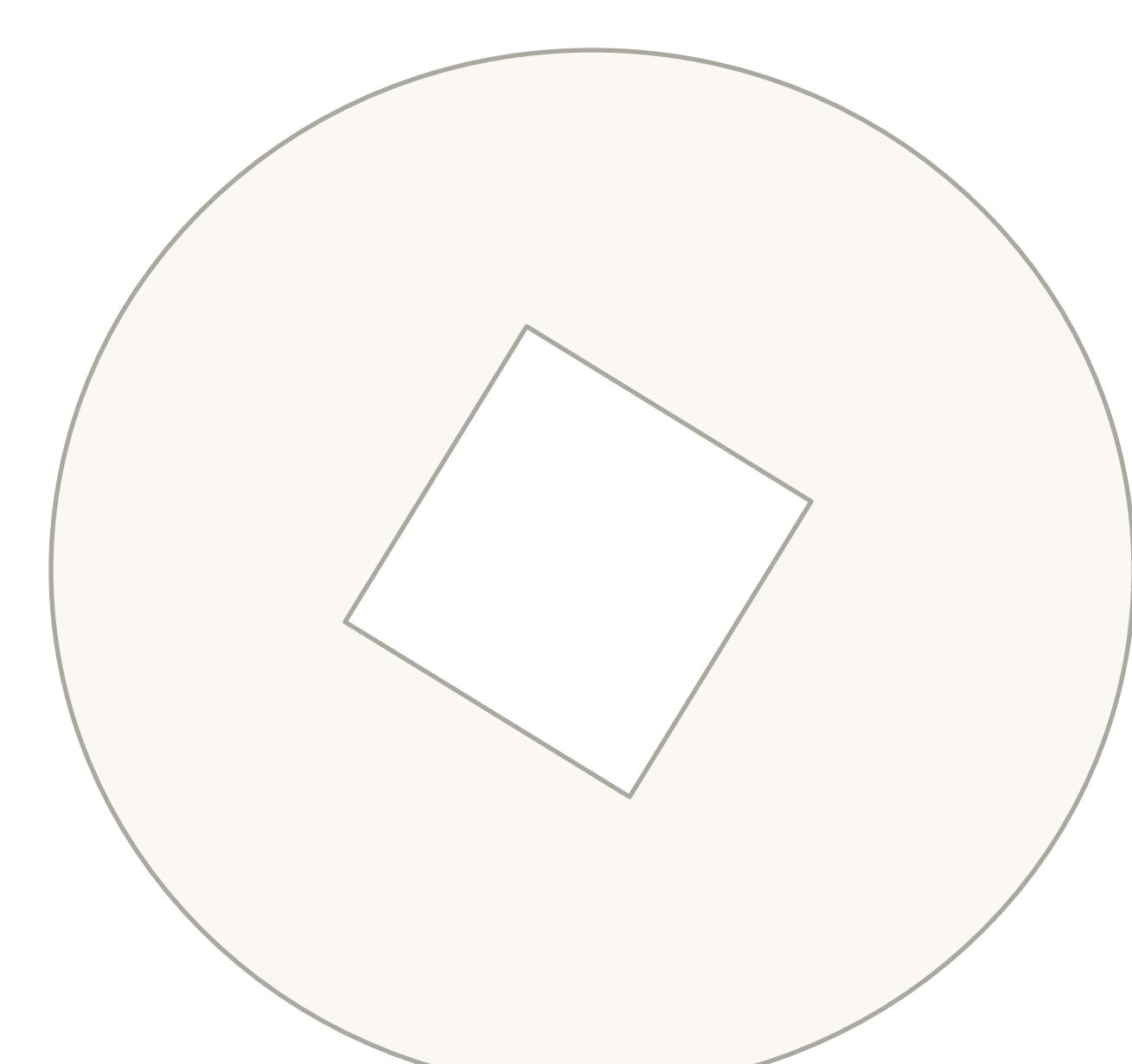
## Why NaCl Substrate Holders?

### Metal alloy



- ✗ Reacts with chamber environment
- ✗ \$\$\$

### NaCl



- ✓ Stable
- ✓ Inexpensive

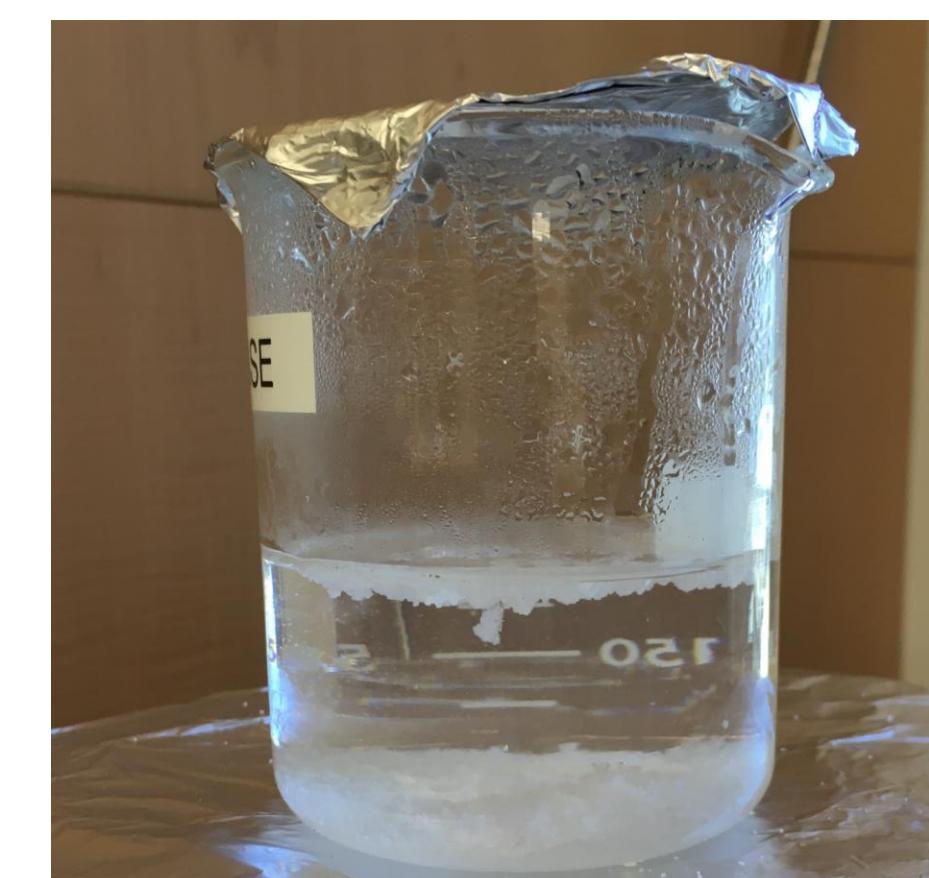
## Method

Mix saturated NaCl solution

Precipitate seed crystals

Grow seed crystals in mold

## Preliminary Results



## Crystallization on solution surface

## Outlook

### Improvements:

- Optimize solution saturation, temperature, mixing

### Future directions:

- Different salts (KCl,  $\text{CaCl}_2$ )

