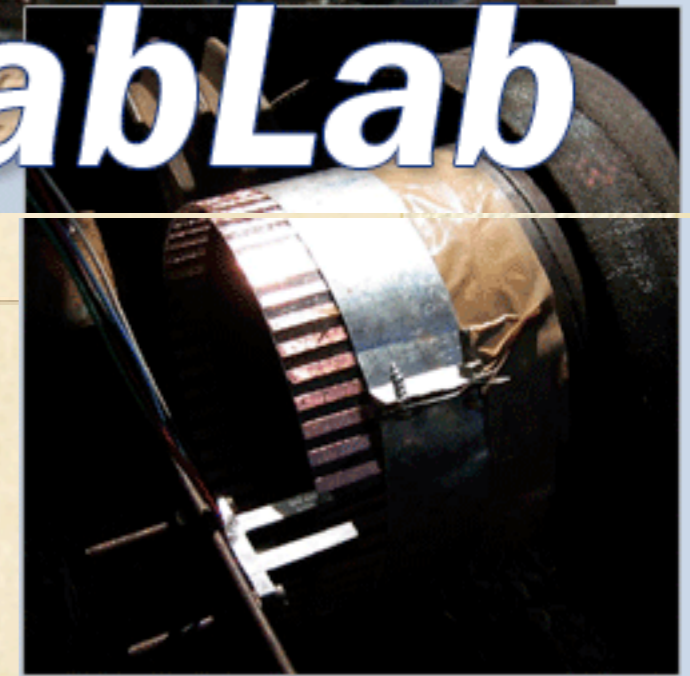




**FabLab**



# Low-cost High-end Instrumentation

*Fab-Lab user meeting  
18 Jan 2005*

# Functional Prototyping

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- ❑ Commercial scientific instruments pose a cost barrier and inflexibility.
- ❑ Using Fab labs as a setting for designing and developing instrumentation for specific communities

# Functional Prototyping

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Bio-analysis



Agricultural

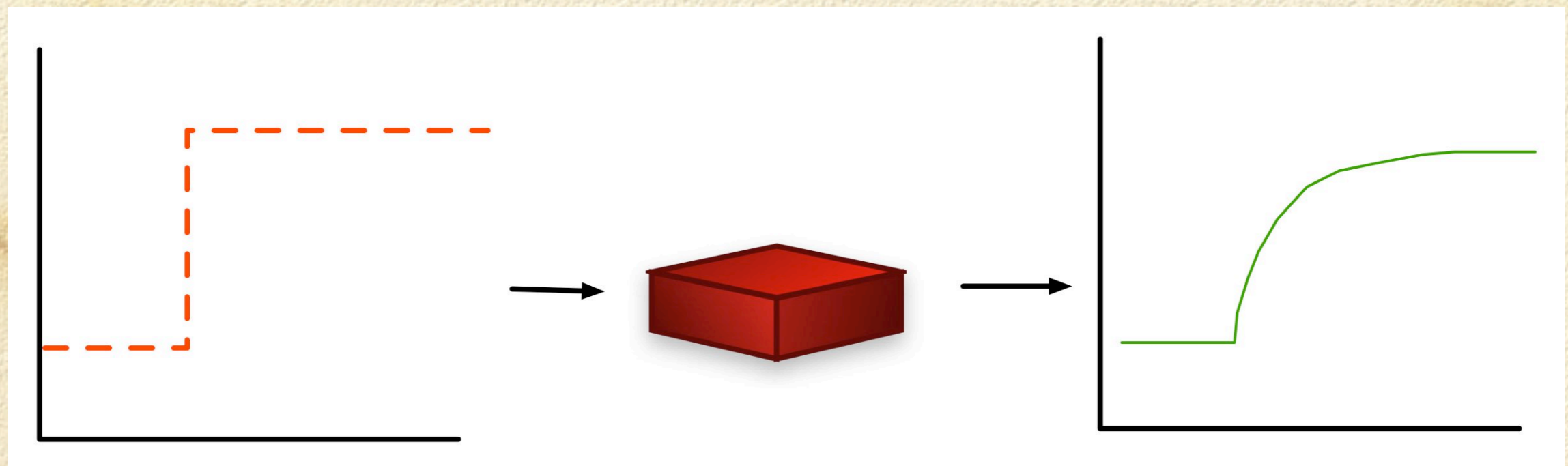
Water quality

- ❑ Commercial scientific instruments pose a cost barrier and inflexibility.
- ❑ Using Fab labs as a setting for designing and developing instrumentation for specific communities

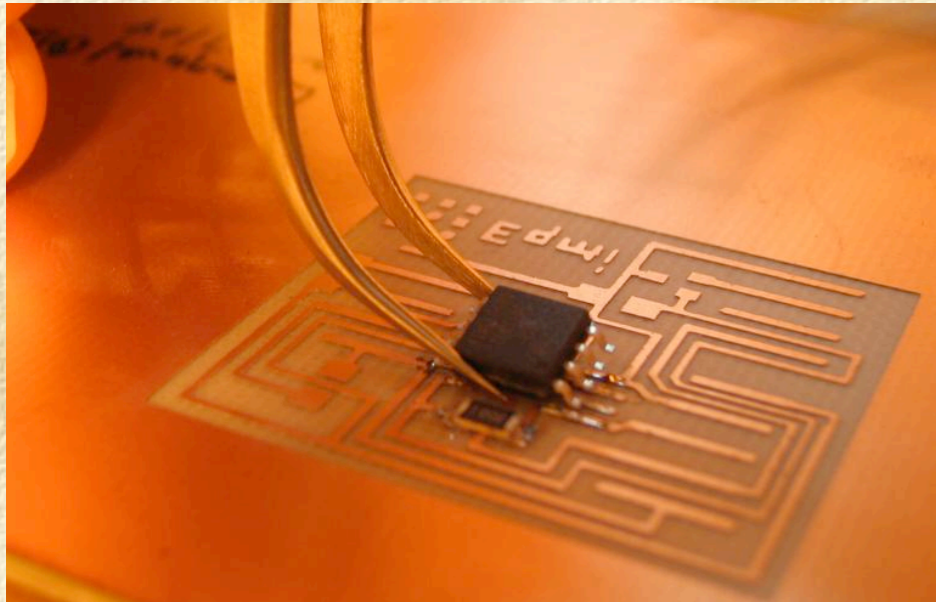
# Impulse response

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- Time domain response function to an impulse
- Non-destructive characterization of materials

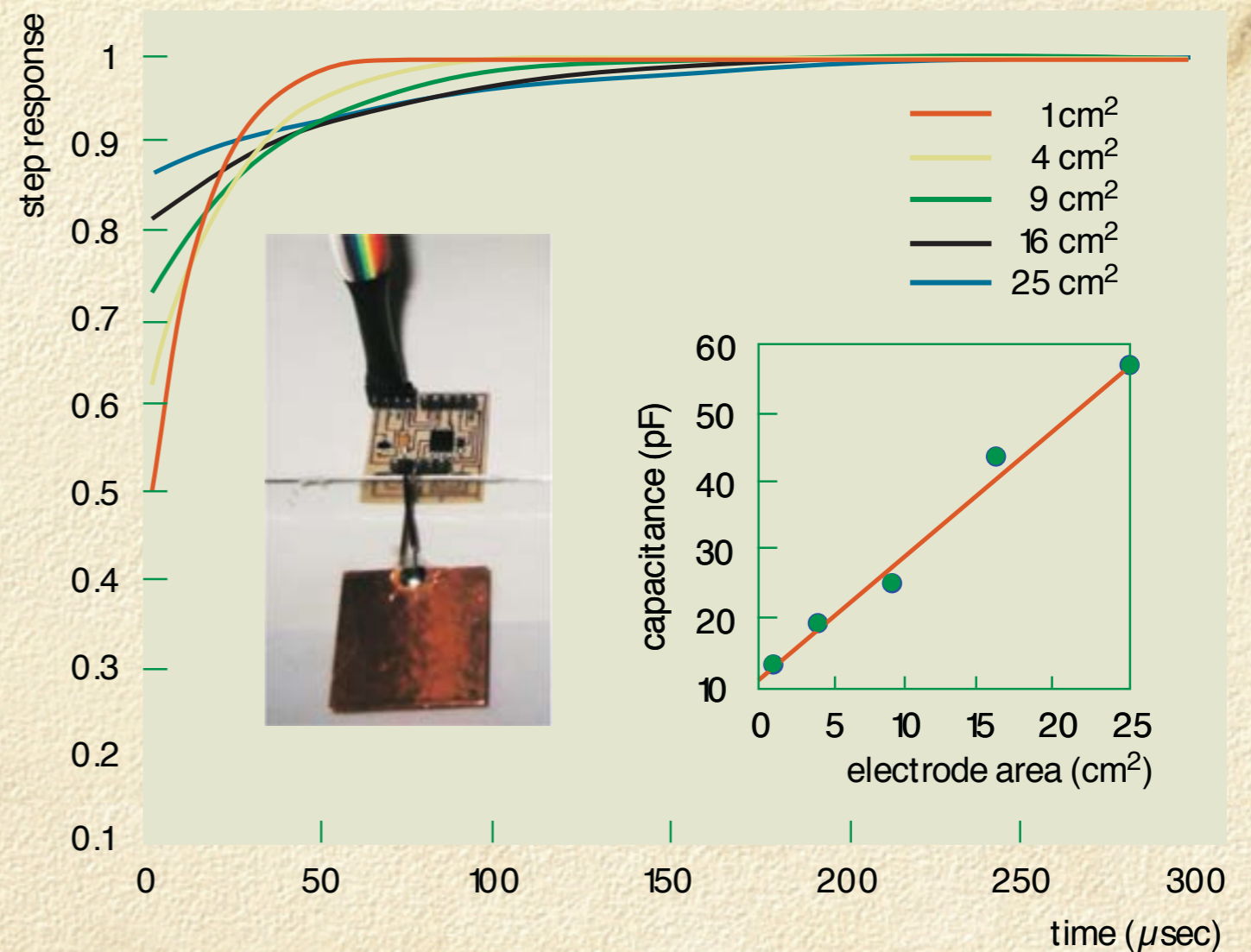


# Impulse Response

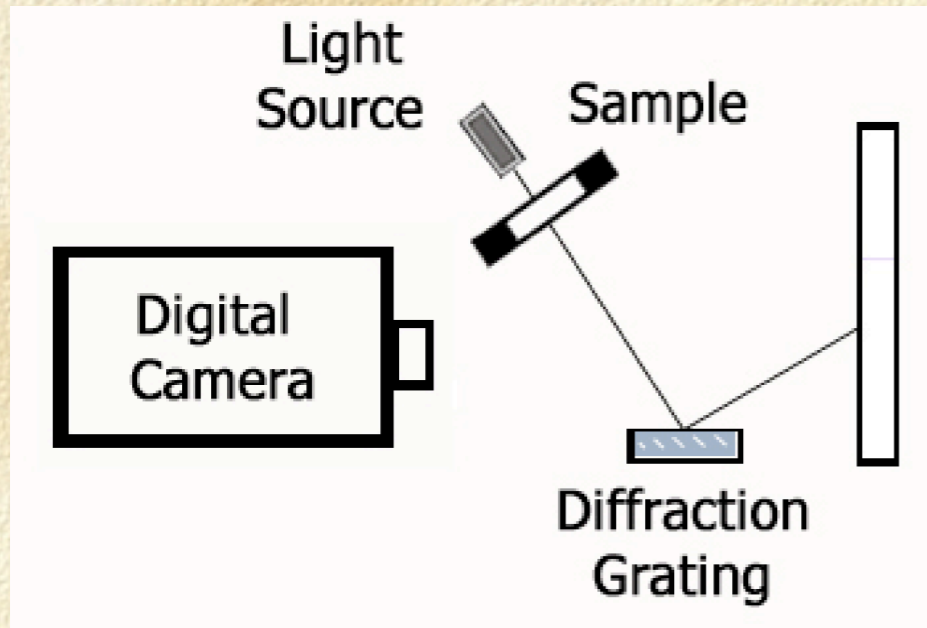


Complex impedance response

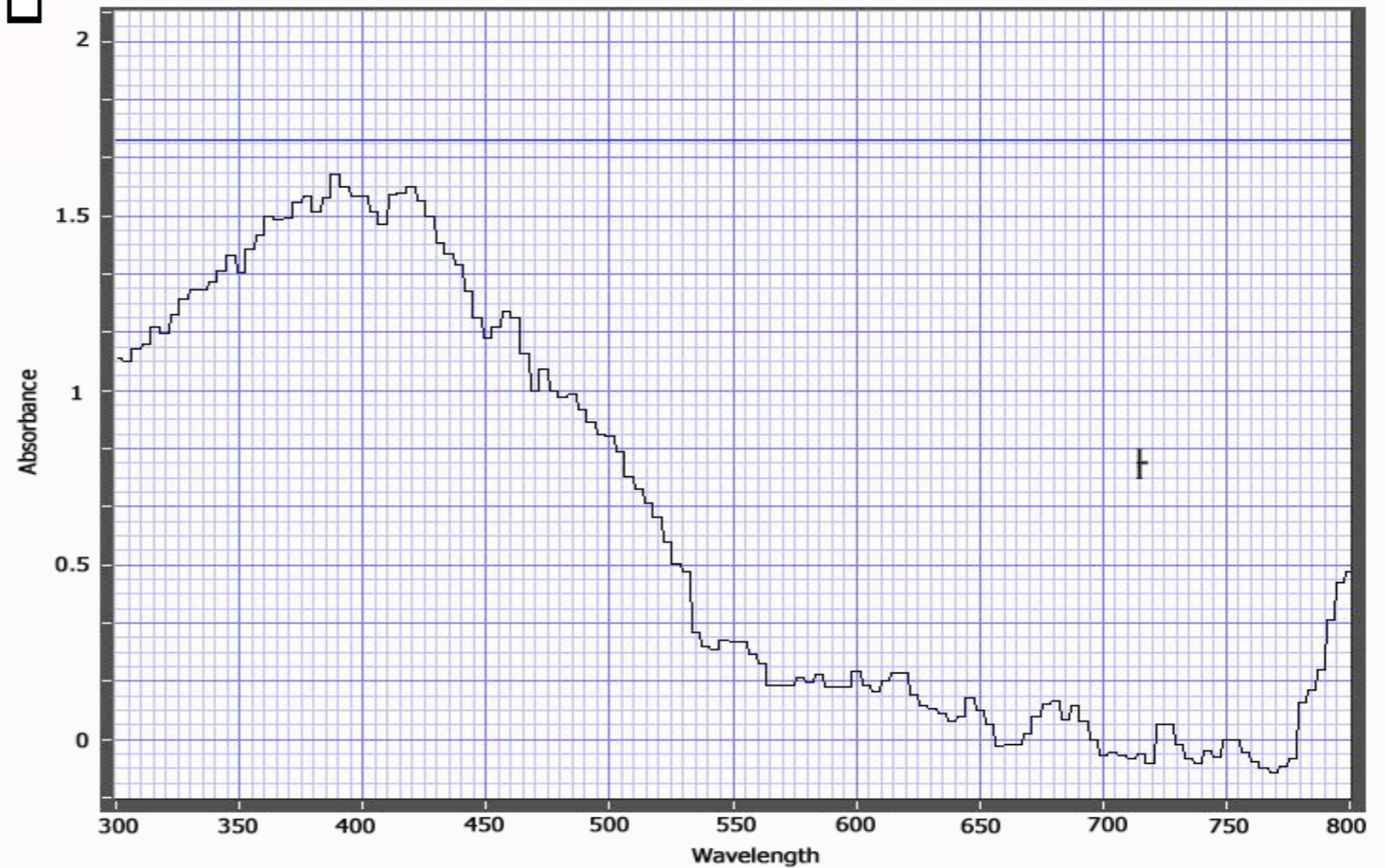
Dielectric characterization for antenna design



# UV-Vis Spectroscopy

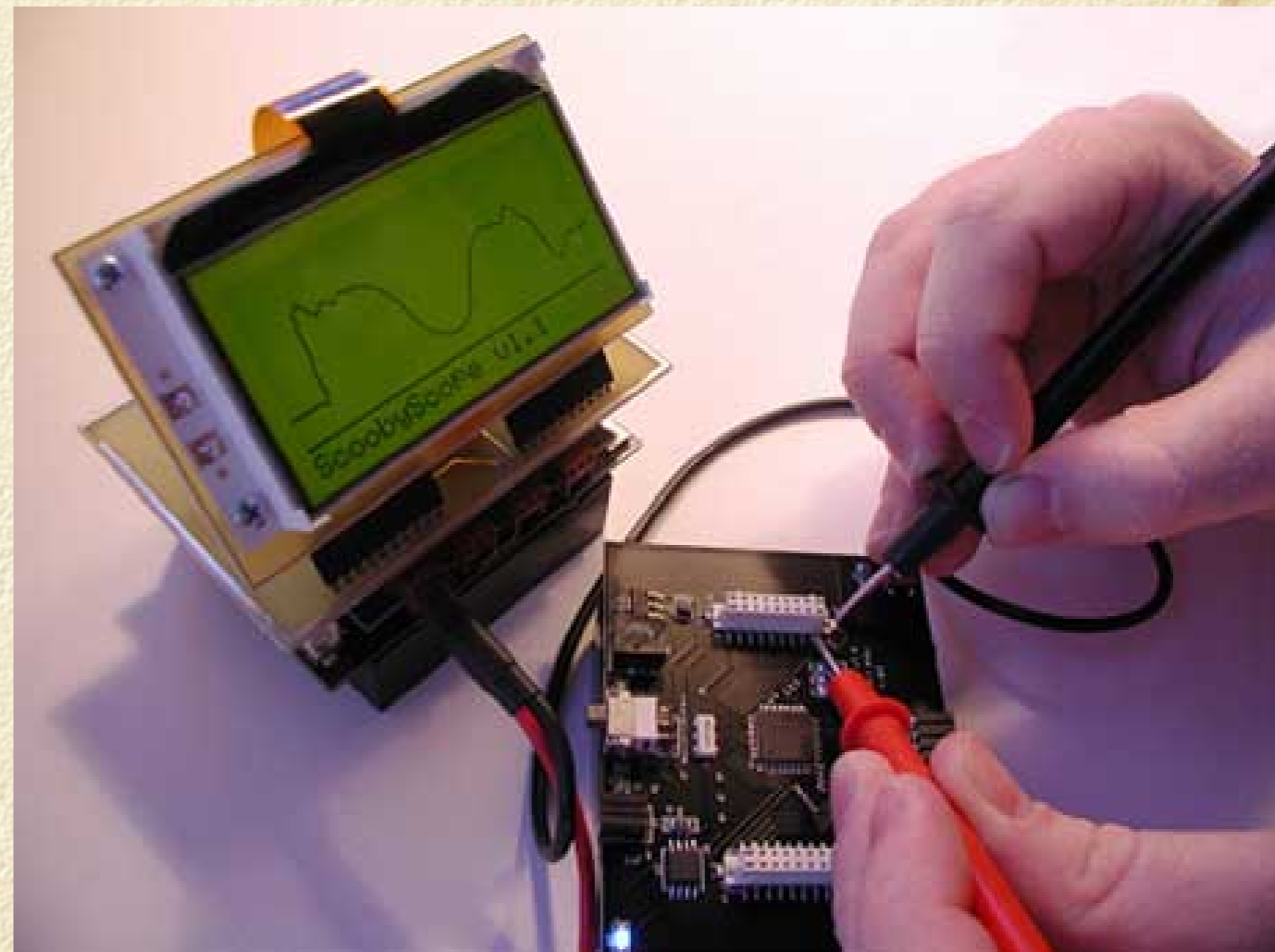


UV-Vis light source

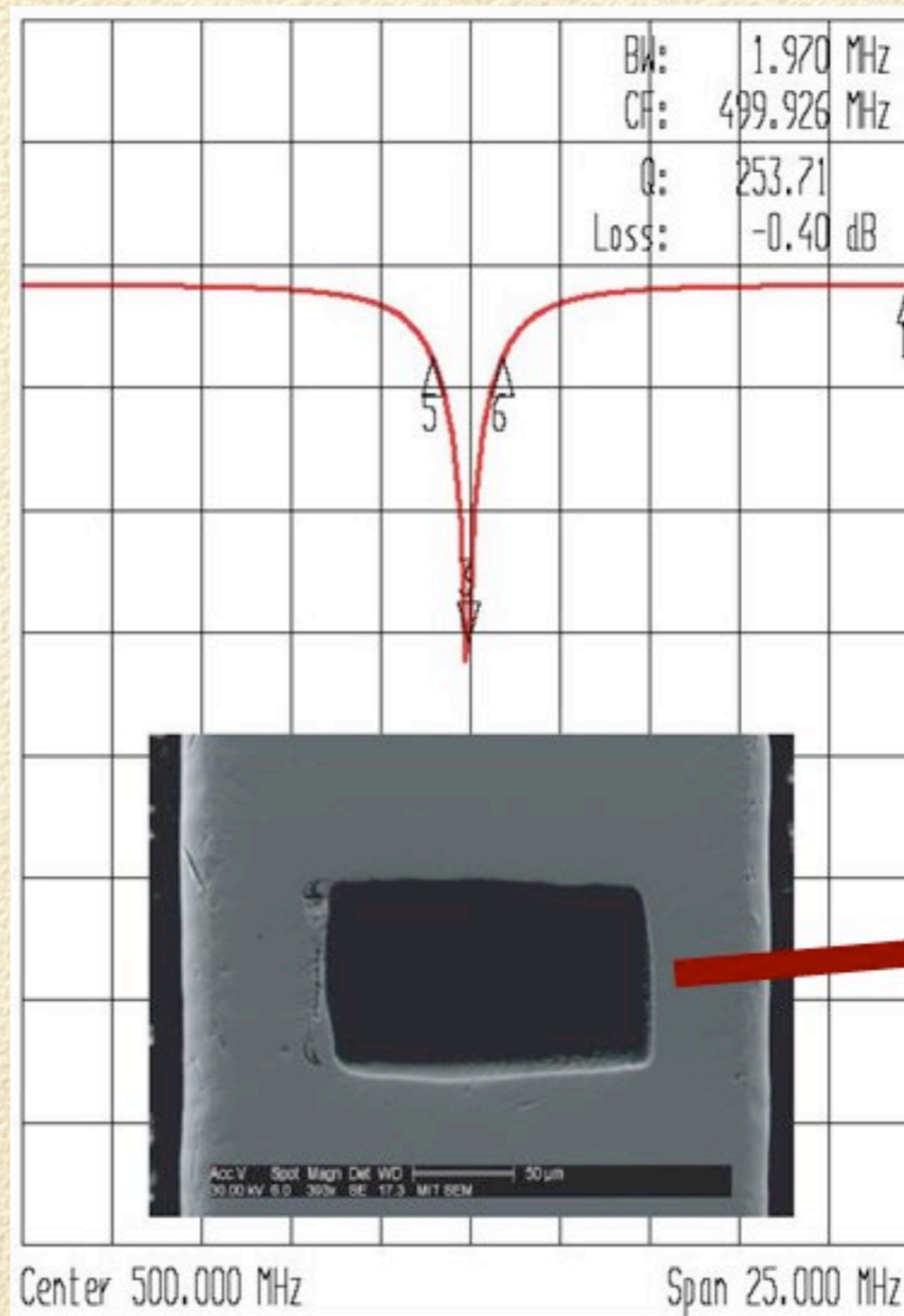
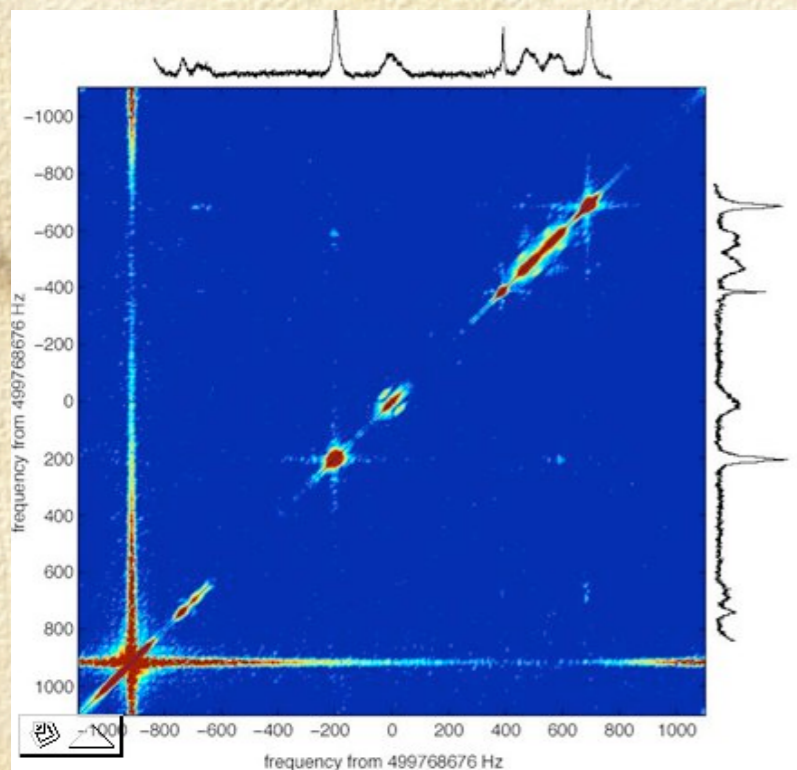
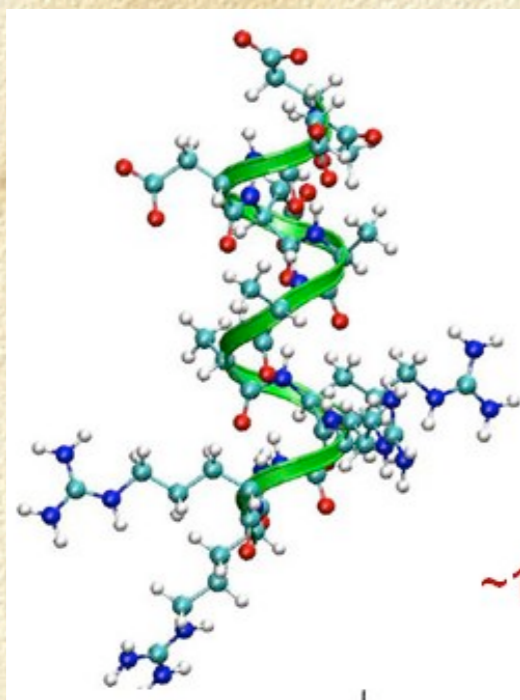


# Test equipment prototyping

- Sustainable instrumentation
- Fabricating bench-top fab and test equipment in a fablab



# Micro-slot probes : Visualizing bio-molecules





# Three dimensional scanning

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- touch probe sensing

