CRAFTING MATERIAL INTERFACES

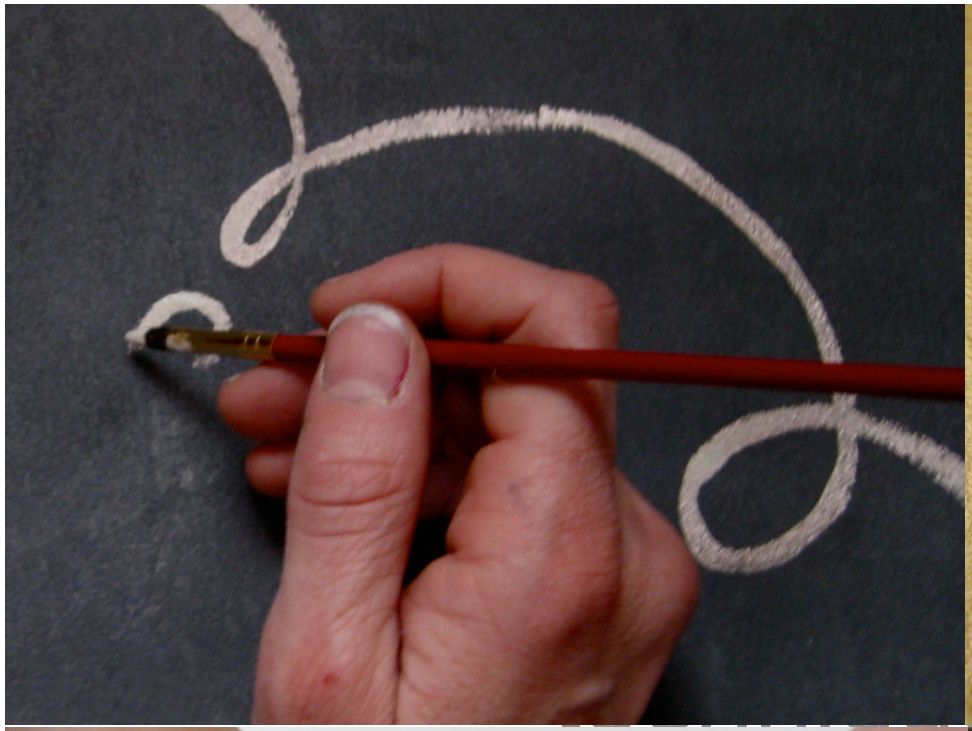
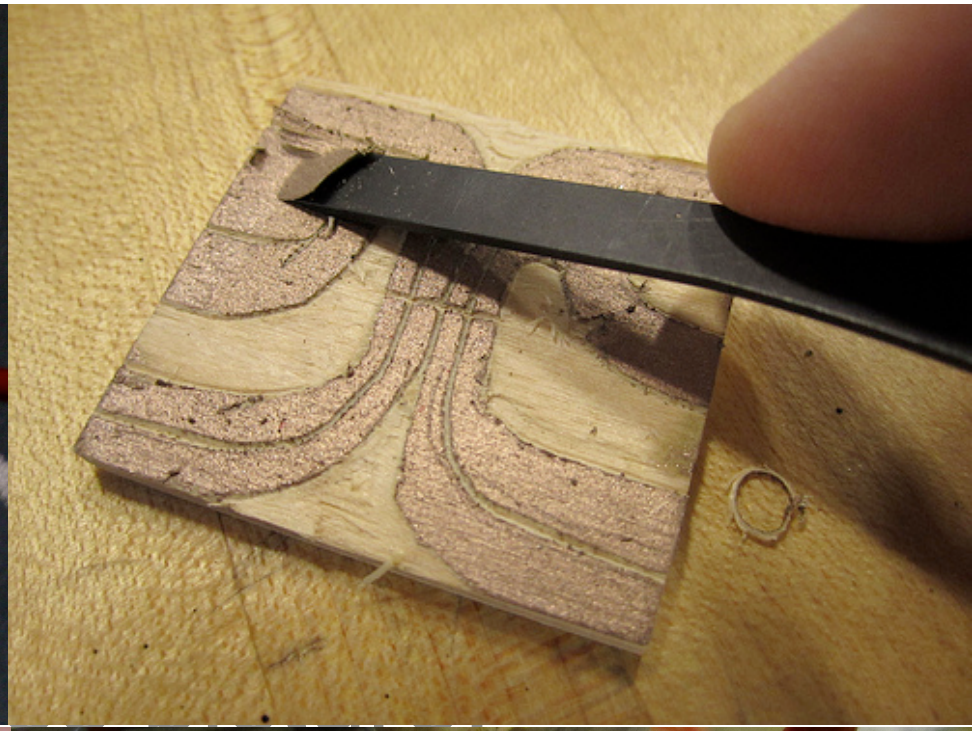
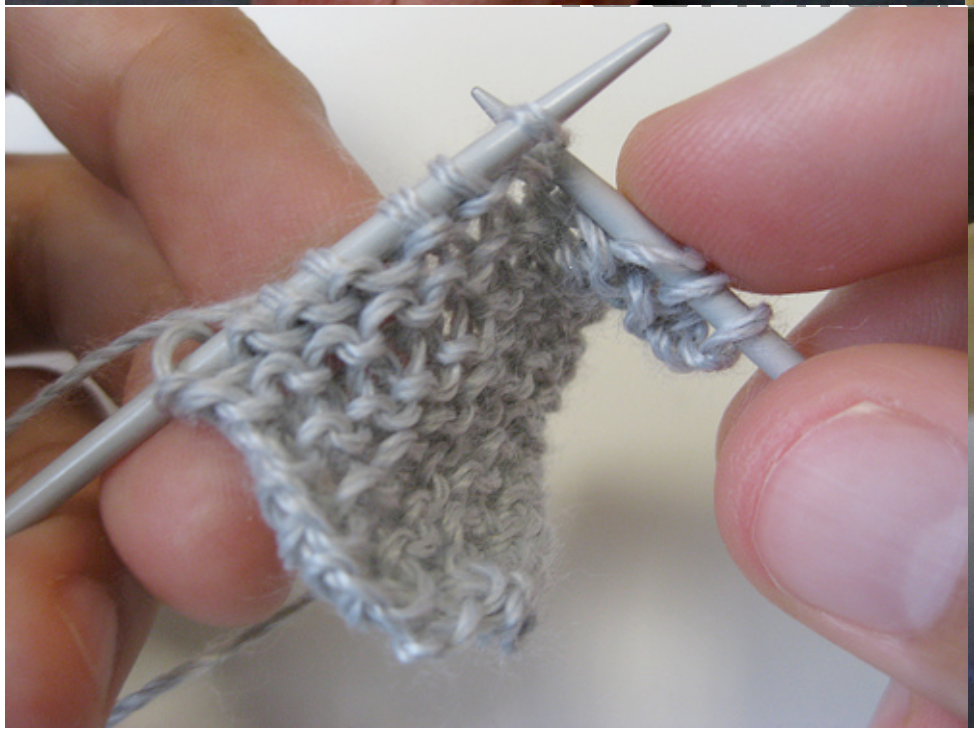
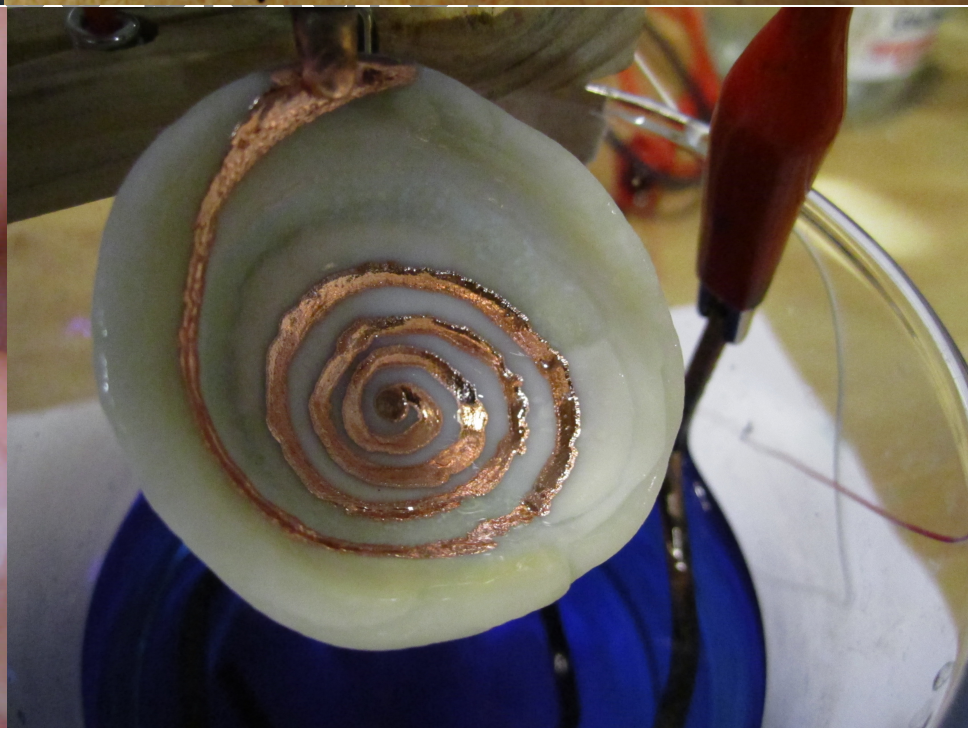
MAS S62, E14-493
Instructor: Leah Buechley
Tuesdays 3-6pm
http://material.media.mit.edu/

This course will explore…

MATERIALS

http://www.flickr.com/photos/martinlabar/159898112/

TECHNIQUES

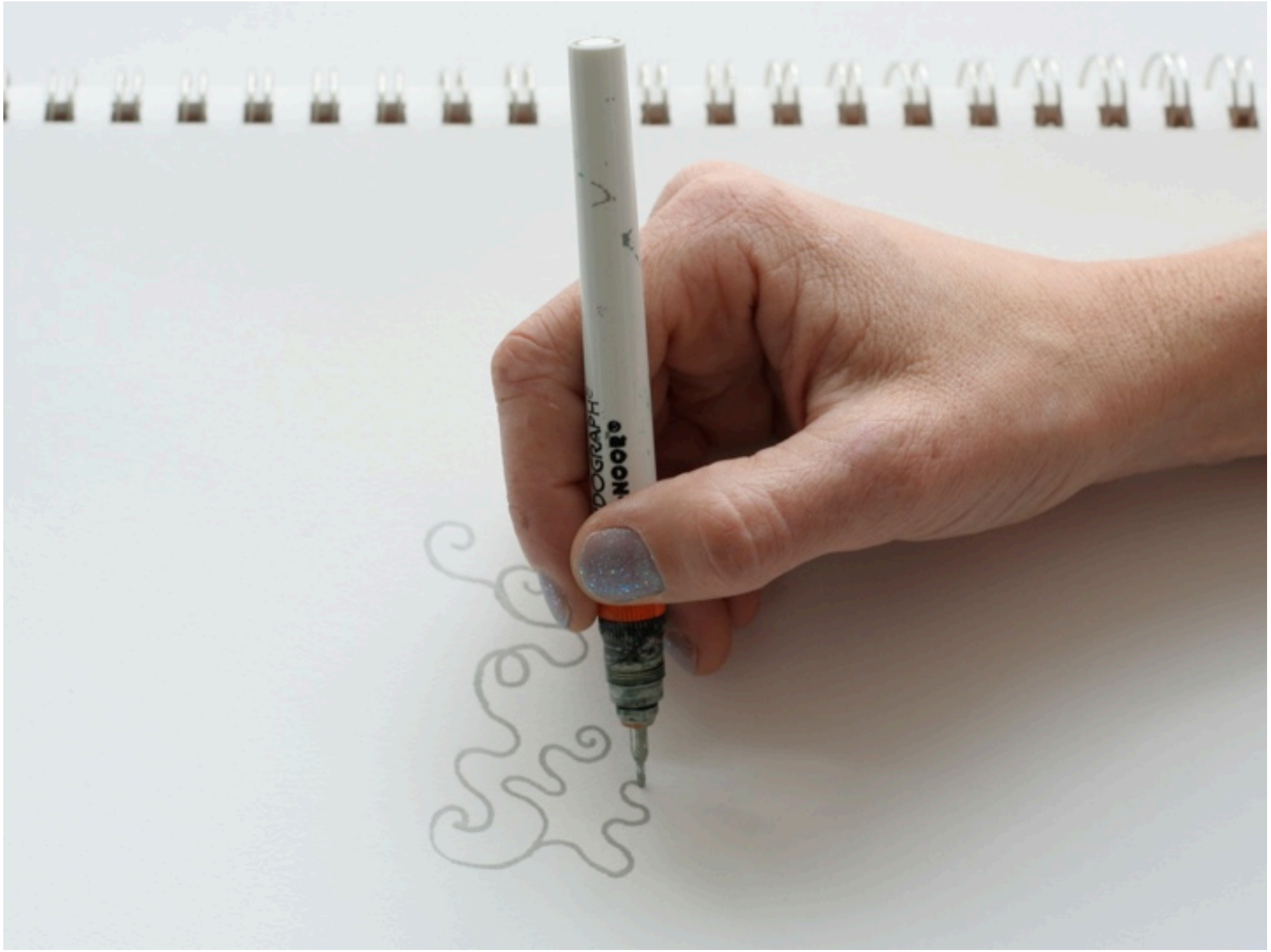
The course is organized around 3 topics

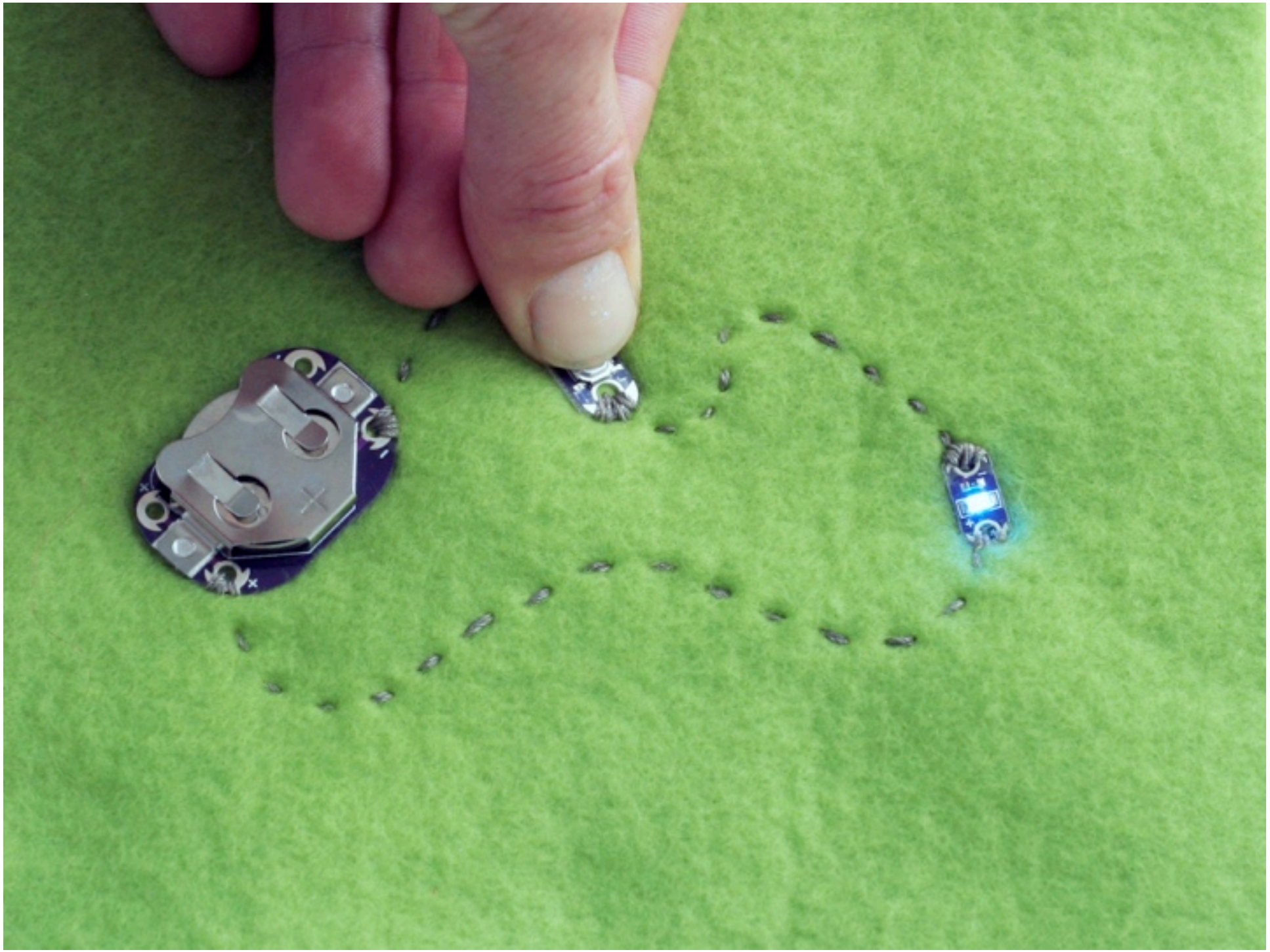
CONDUCTIVE MATERIALS
INPUTS
OUTPUTS

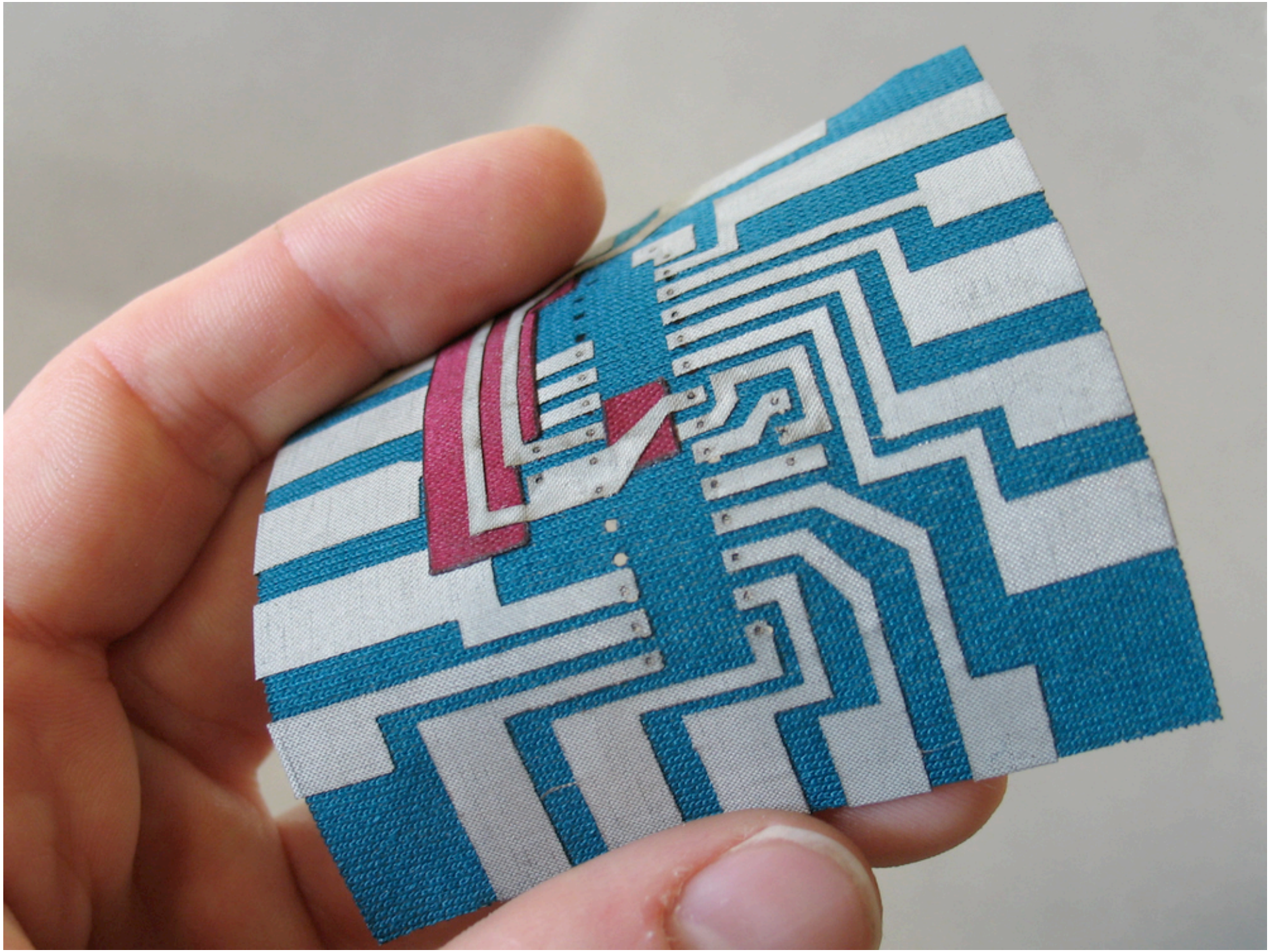

input
electricity
output

CONNECTORS (CONDUCTORS)
INPUTS
OUTPUTS

CONDUCTIVE MATERIALS


GRAPH
NOOR

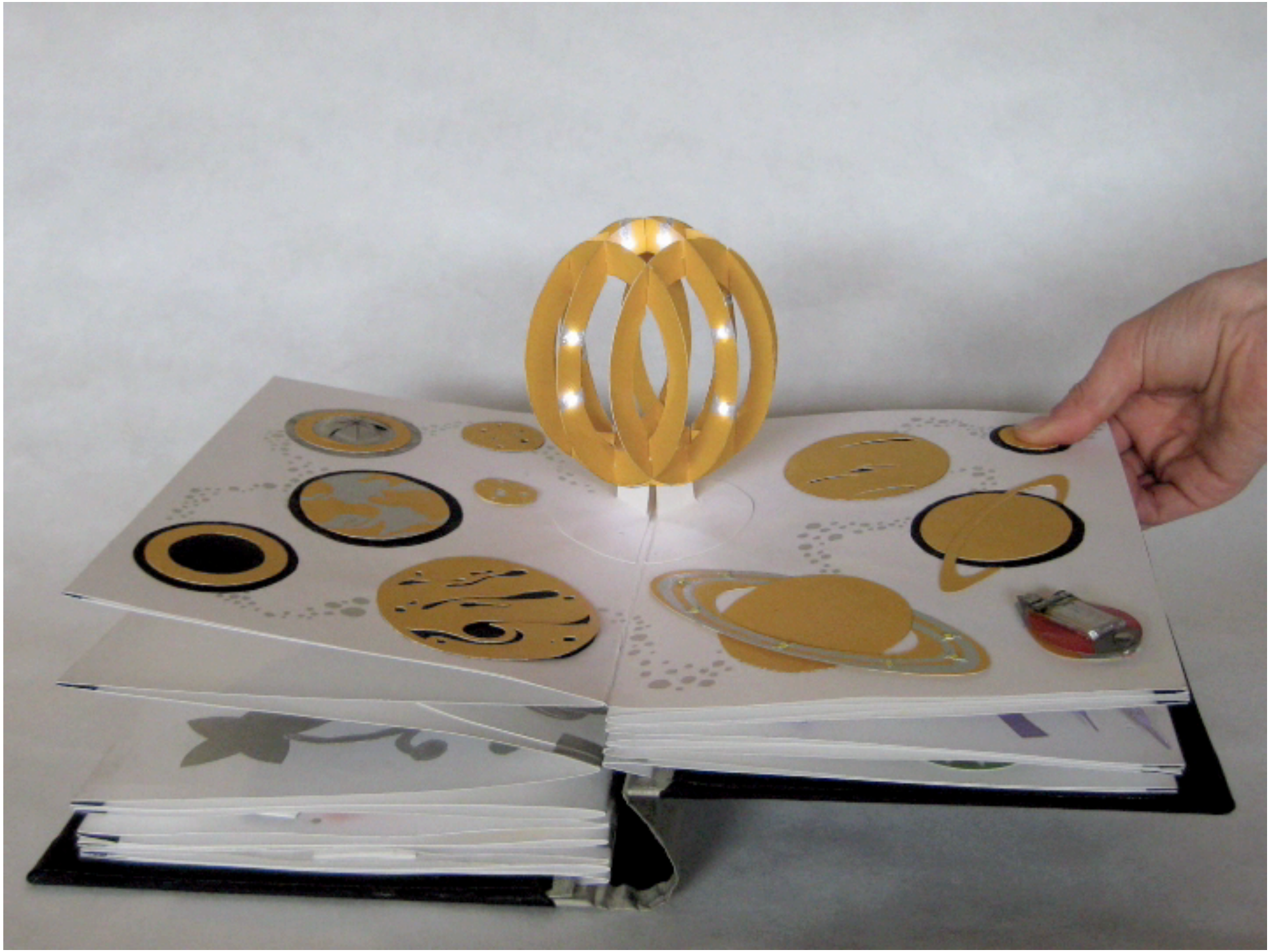




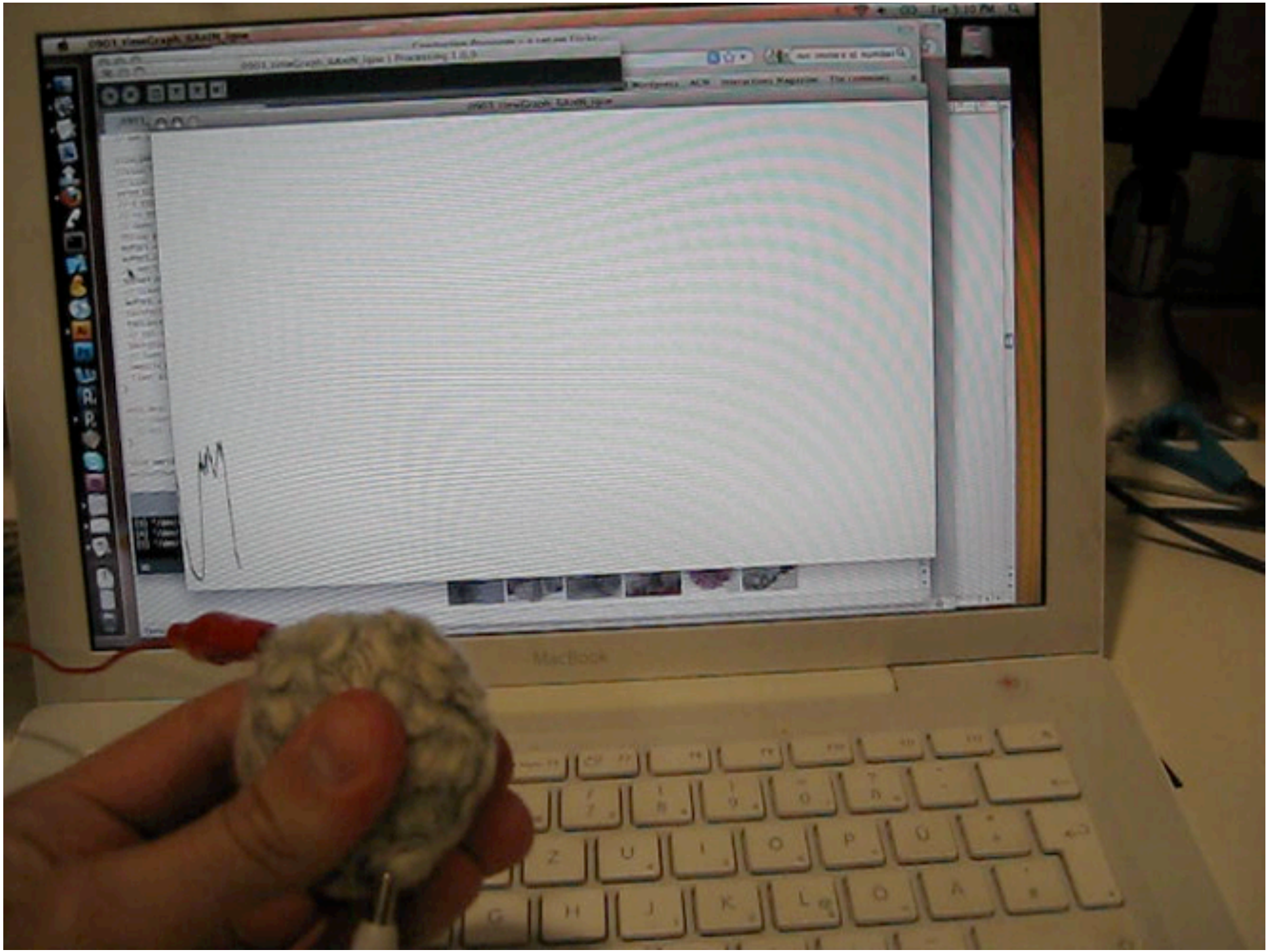

http://www.flickr.com/photos/zebble/9621065/

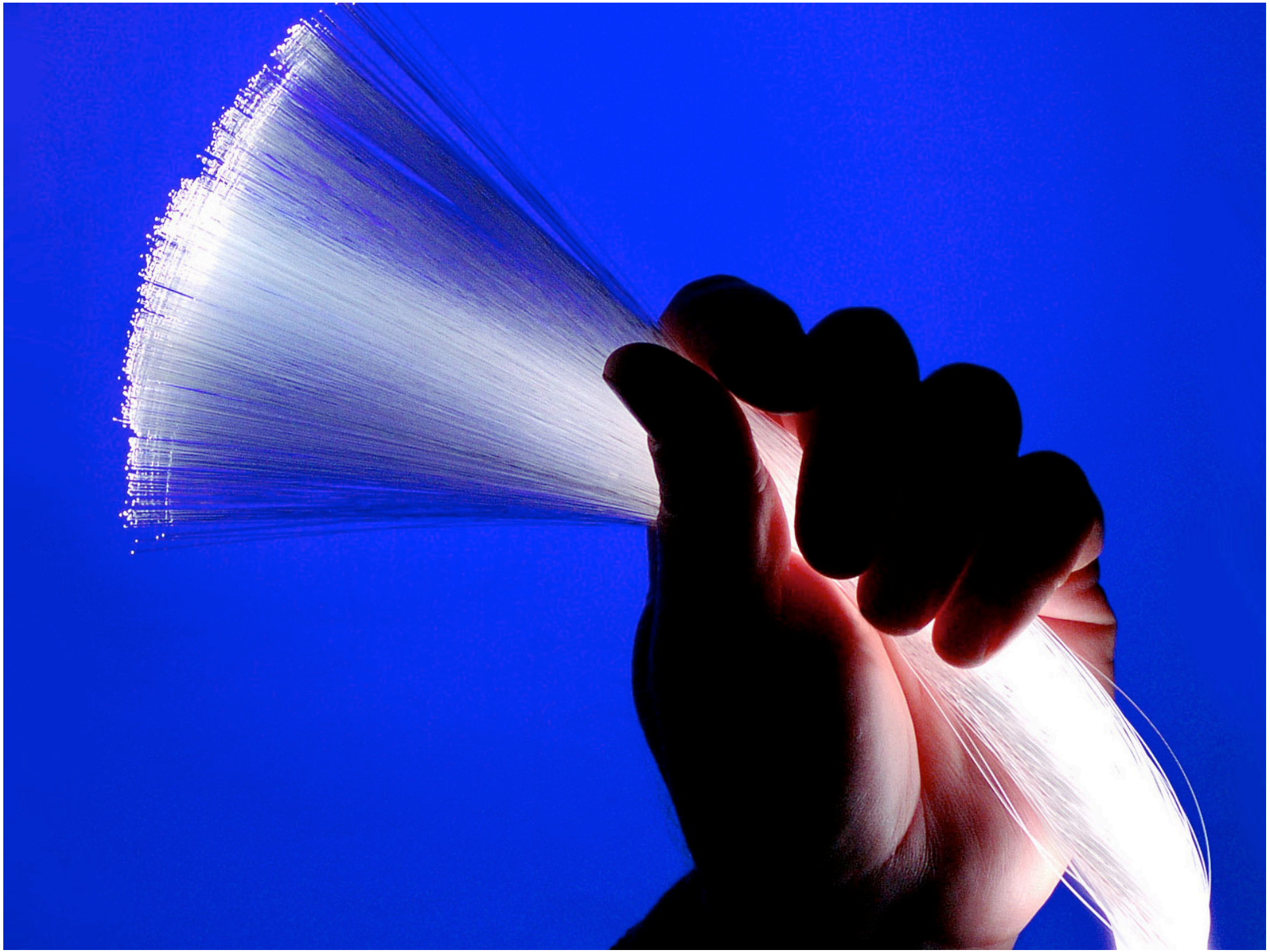

PACE TECHNOLOGIES
1802 W. Grant Rd. Suite 102
Tucson, Arizona 85745 USA
520-882-4586 FAX 520-882-4589
www.metallographic.com
Conductive Copper
Mounting Compound
(Cat. No. CONDUCTO-CU-5) - 5 lbs
Directions:
-Temperature 265 F (185 Celcius).
-Pressure 3000-4000 psi.
-Cure time 5-10 minutes at temperature.
-Shelf life approximately 1-year at room temperature.
Warning:
-Avoid breathing dust and fumes, use only in a well ventilated area, avoid contact with skin and eyes, wash thoroughly with soap and water after handling, -in case of eye contact immediately flush eyes with copious amounts of water for at least 15 minutes; call a physician.
Conductive Copper Mounting Compound
(Cat. No. CONDUCTO-CU-1) - 1 lb
Conductive Graphite Mounting Compound
(Cat. No. CONDUCTO-1) - 1 lb

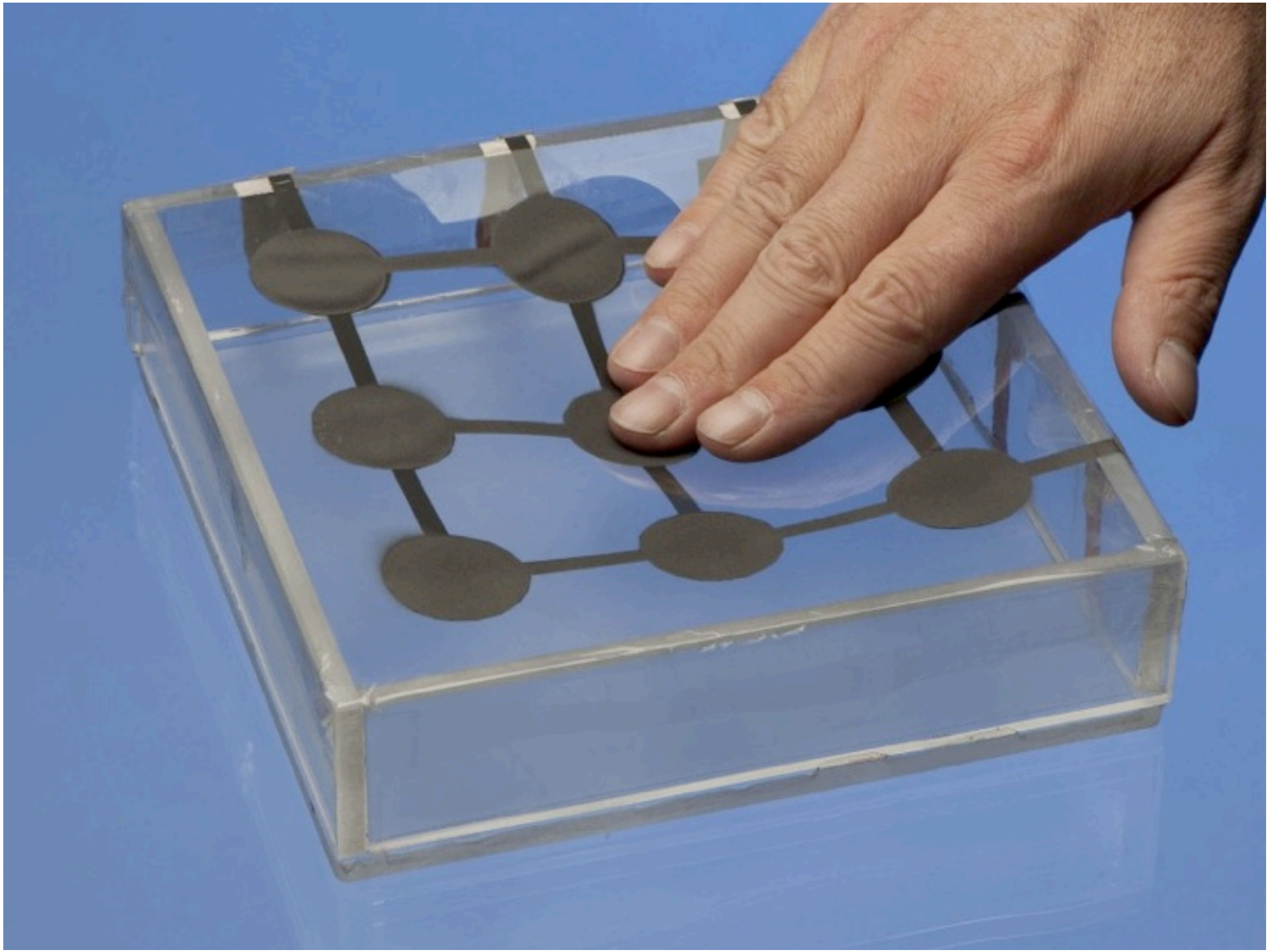
INPUTS

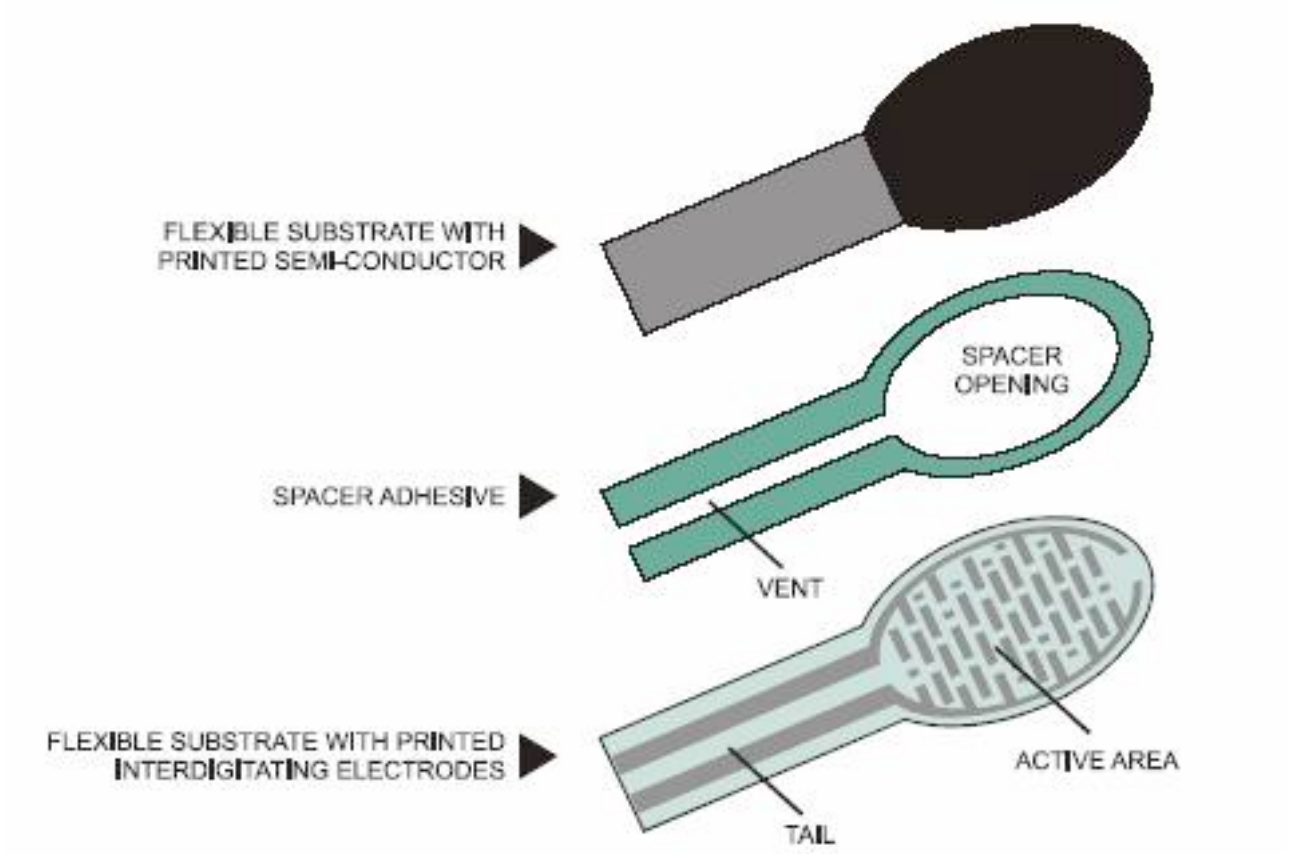


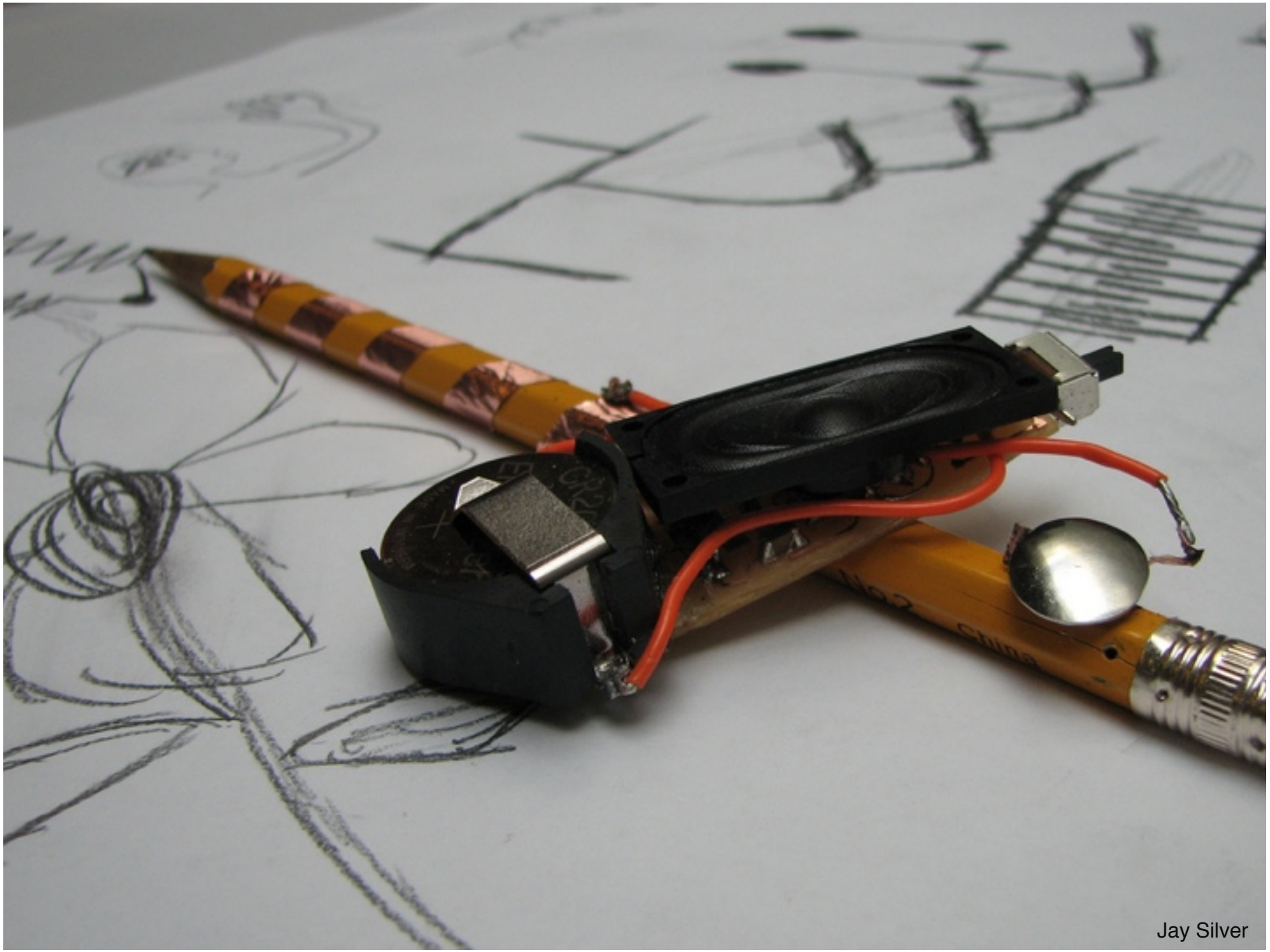

Hannah Perner-Wilson

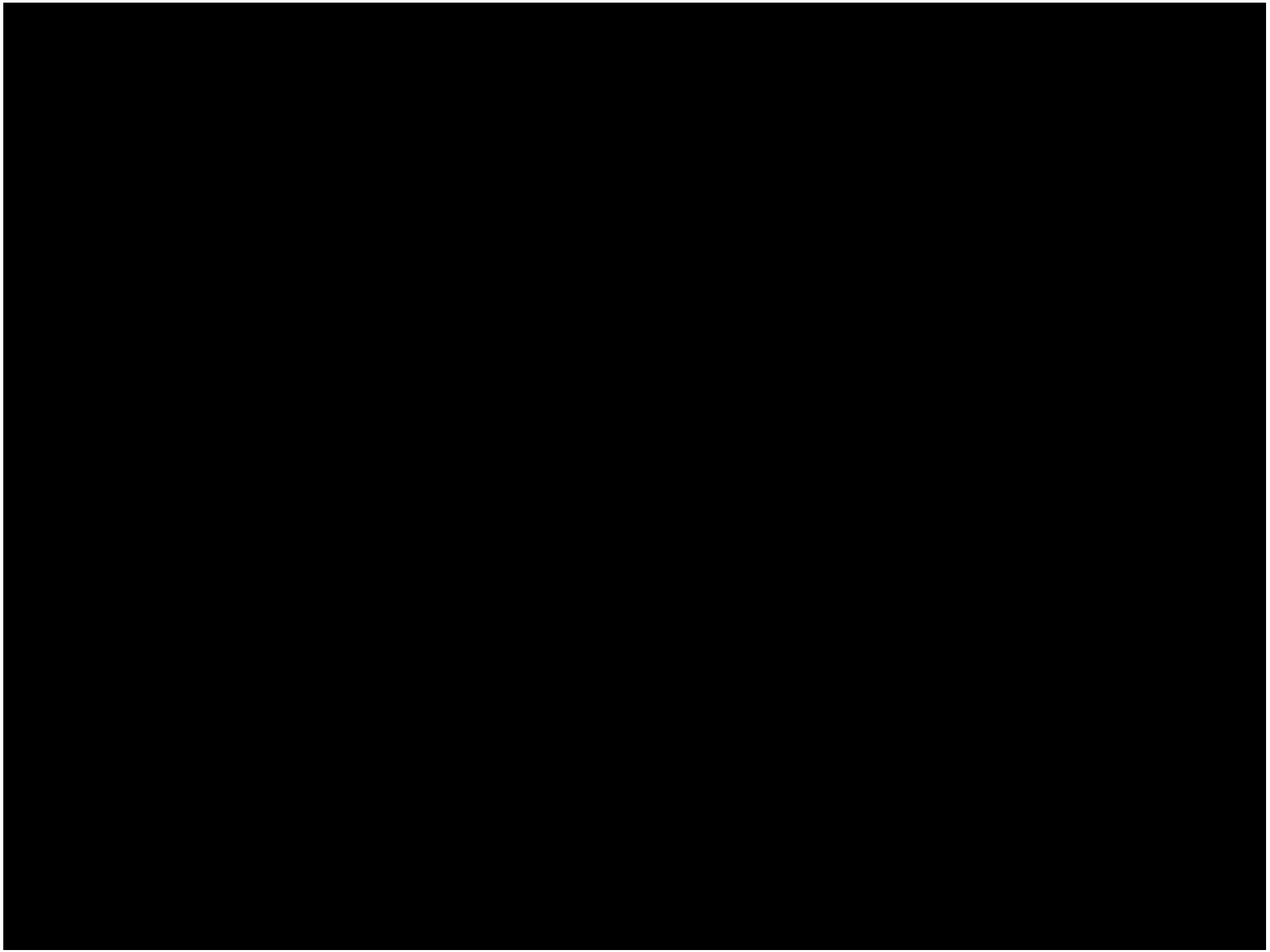




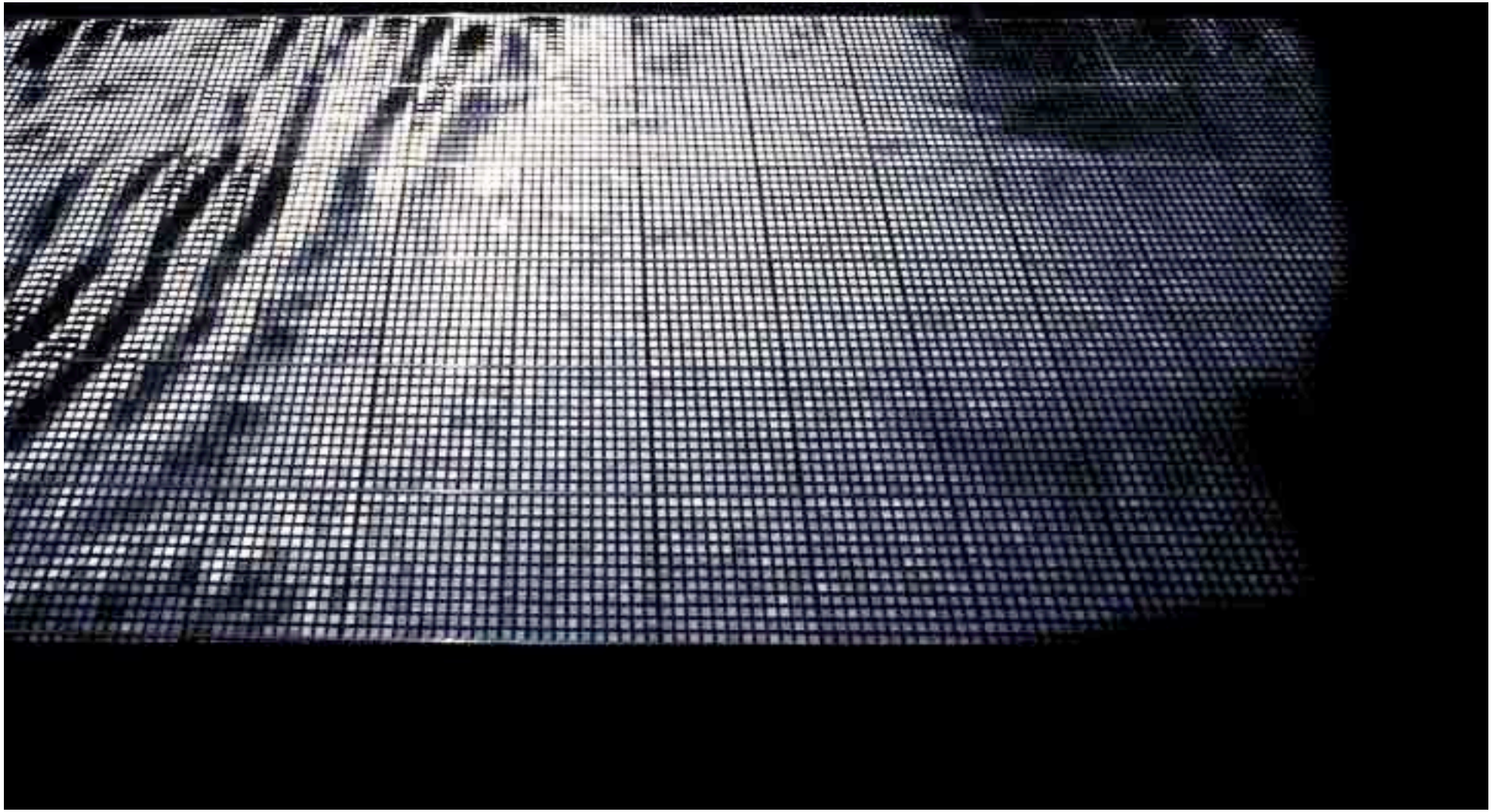



FLEXIBLE SUBSTRATE WITH PRINTED SEMI-CONDUCTOR
SPACER OPENING
SPACER ADHESIVE
VENT
FLEXIBLE SUBSTRATE WITH PRINTED INTERDIGITATING ELECTRODES
ACTIVE AREA
TAIL

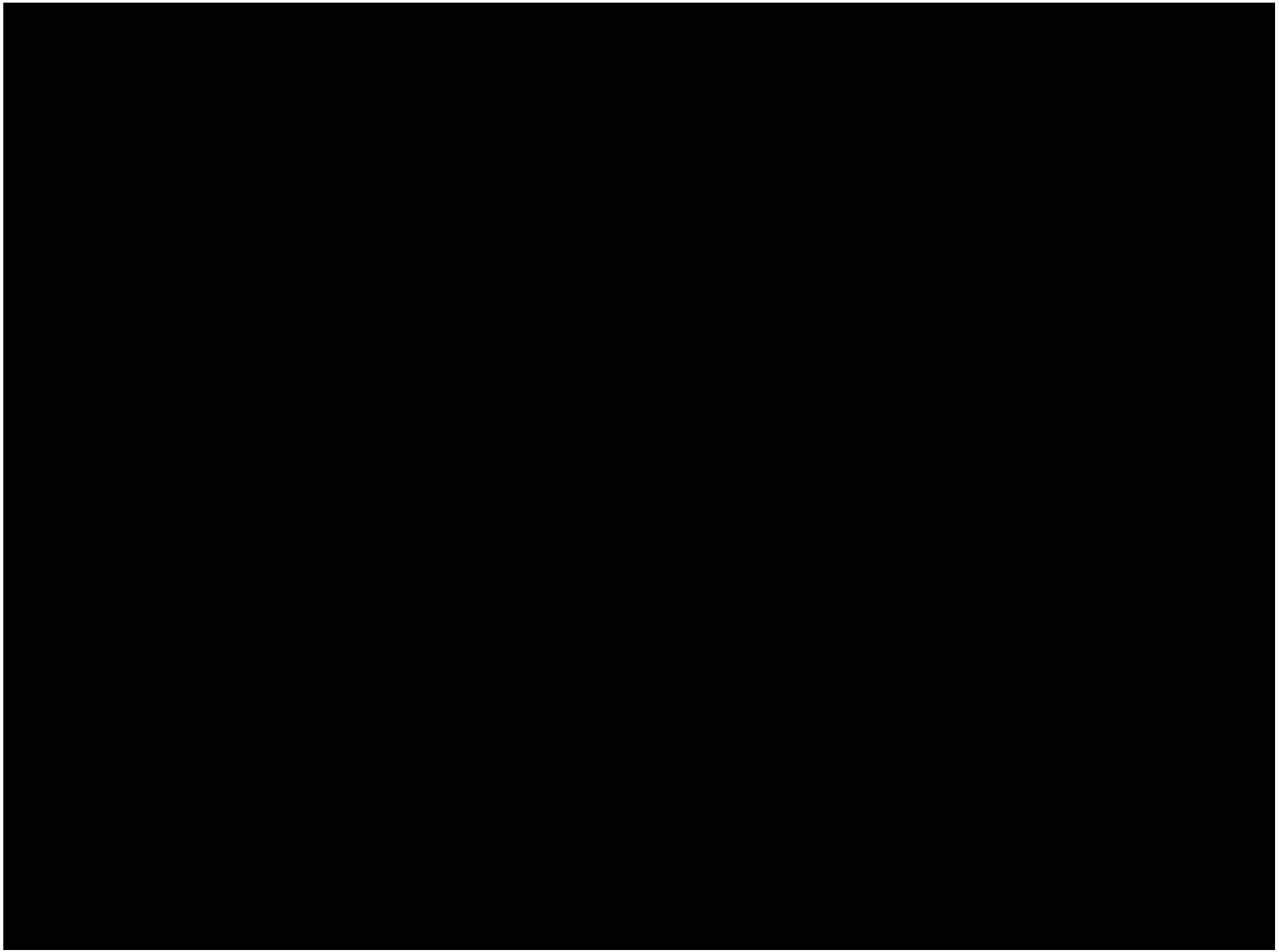

Jay Silver



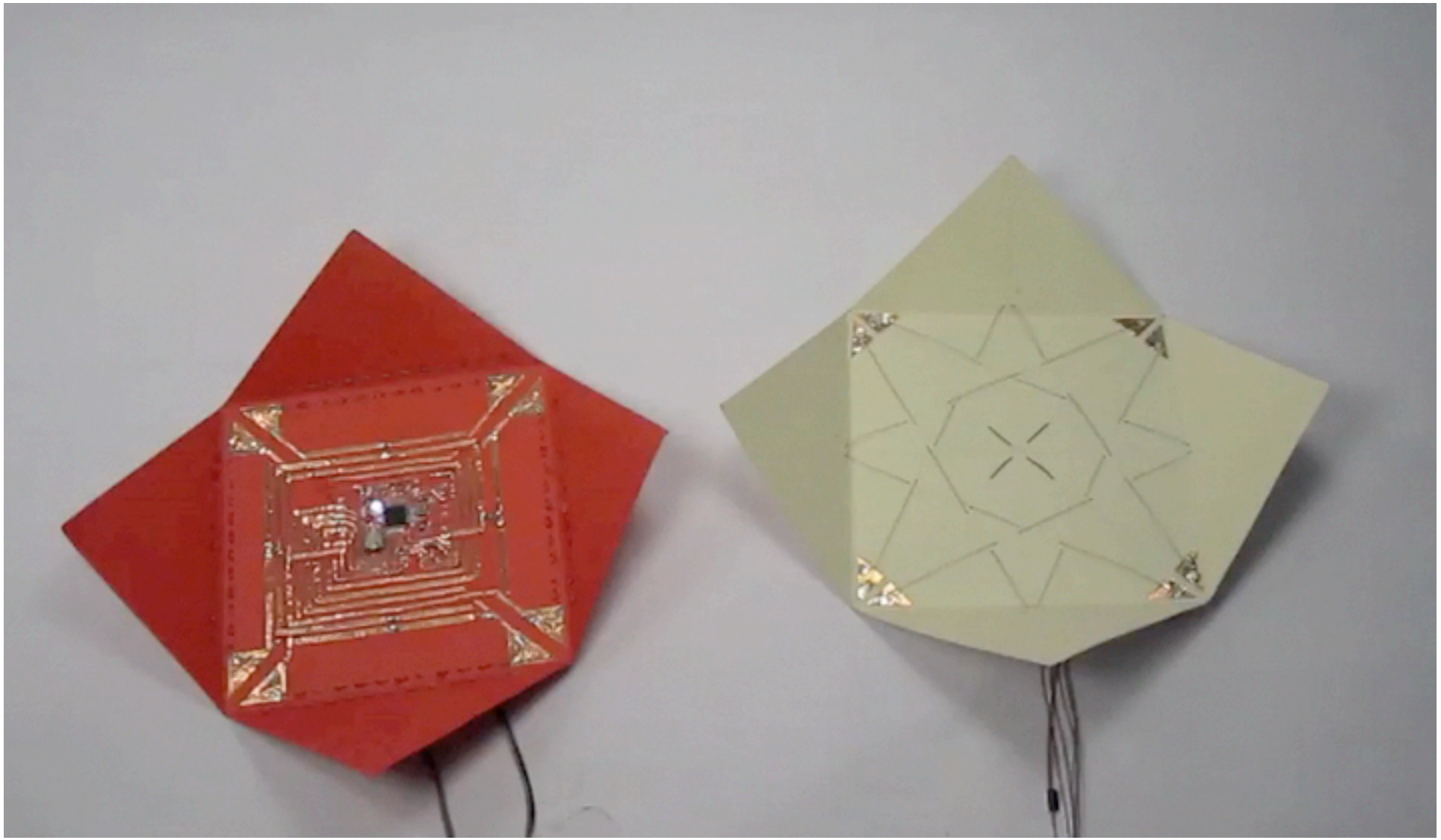
OUTPUTS



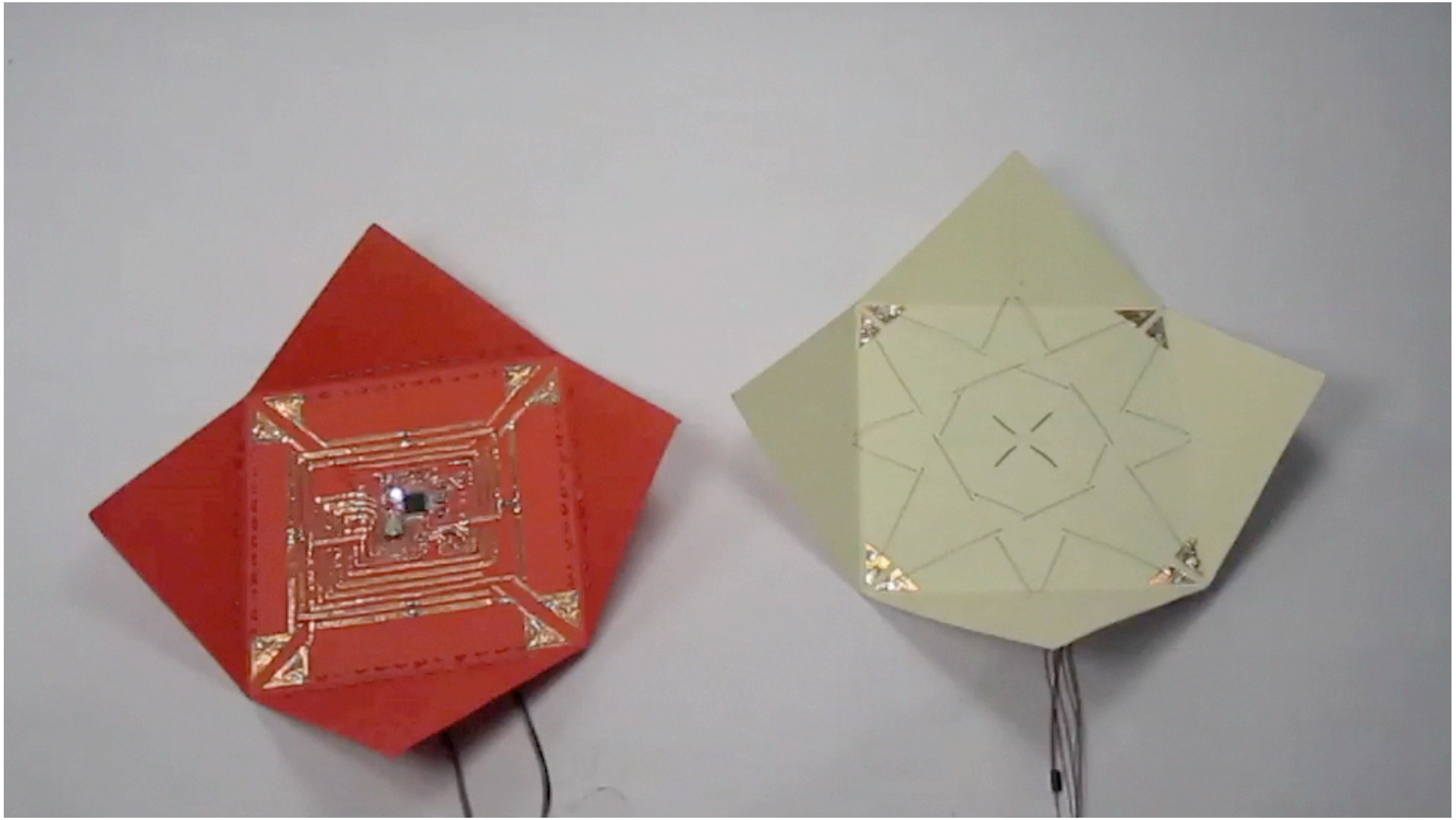
Ned Kahn



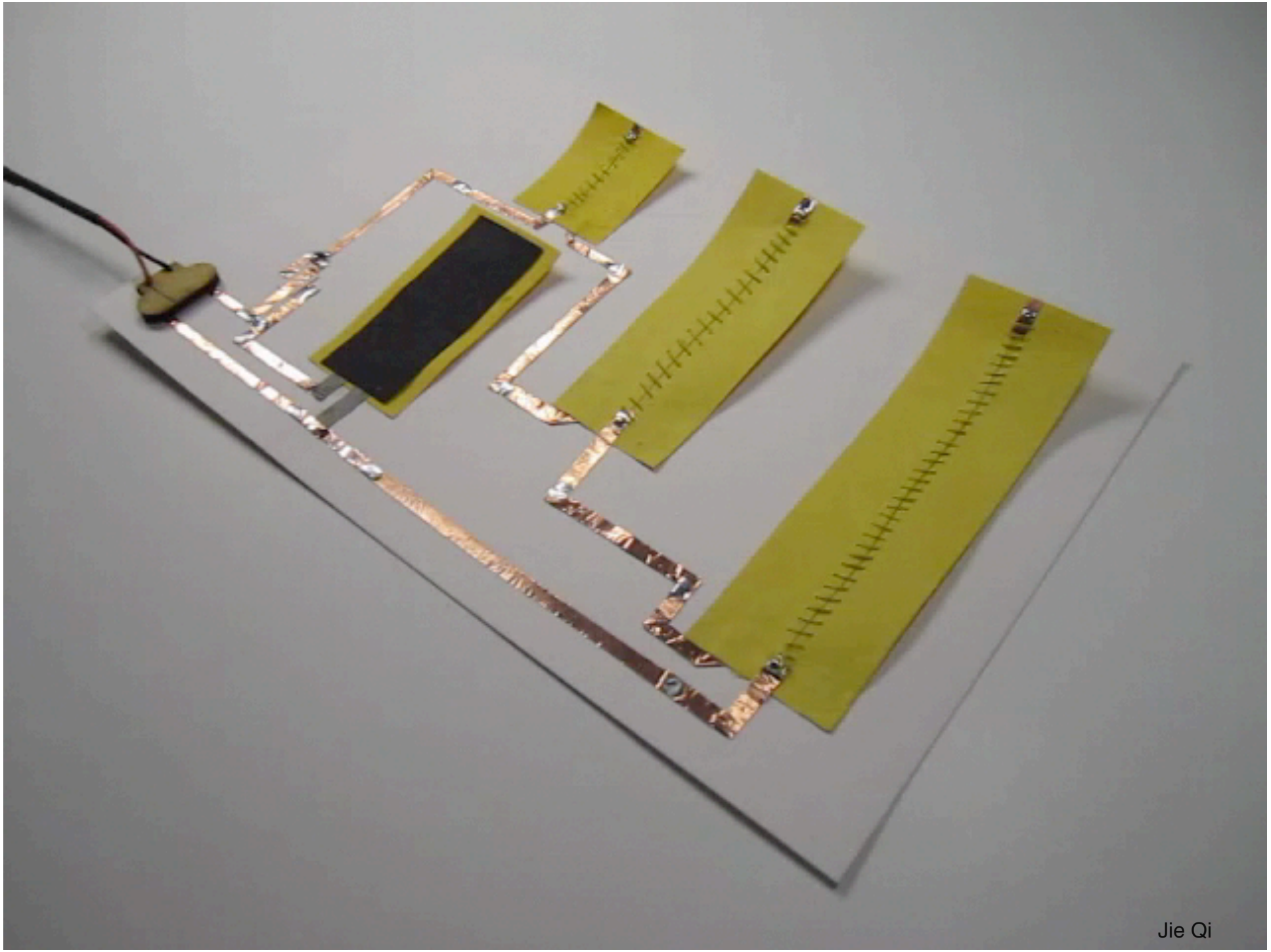
Ned Kahn

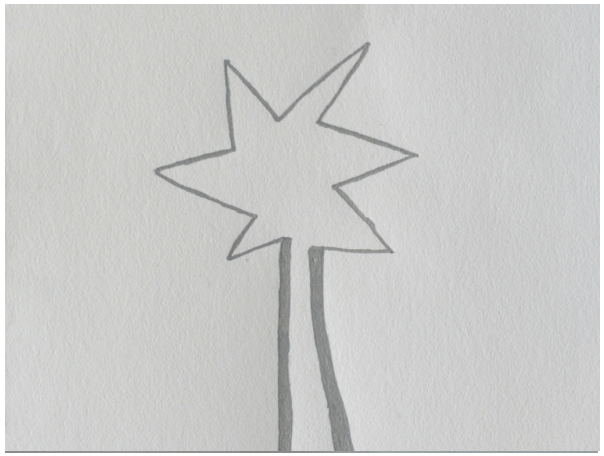


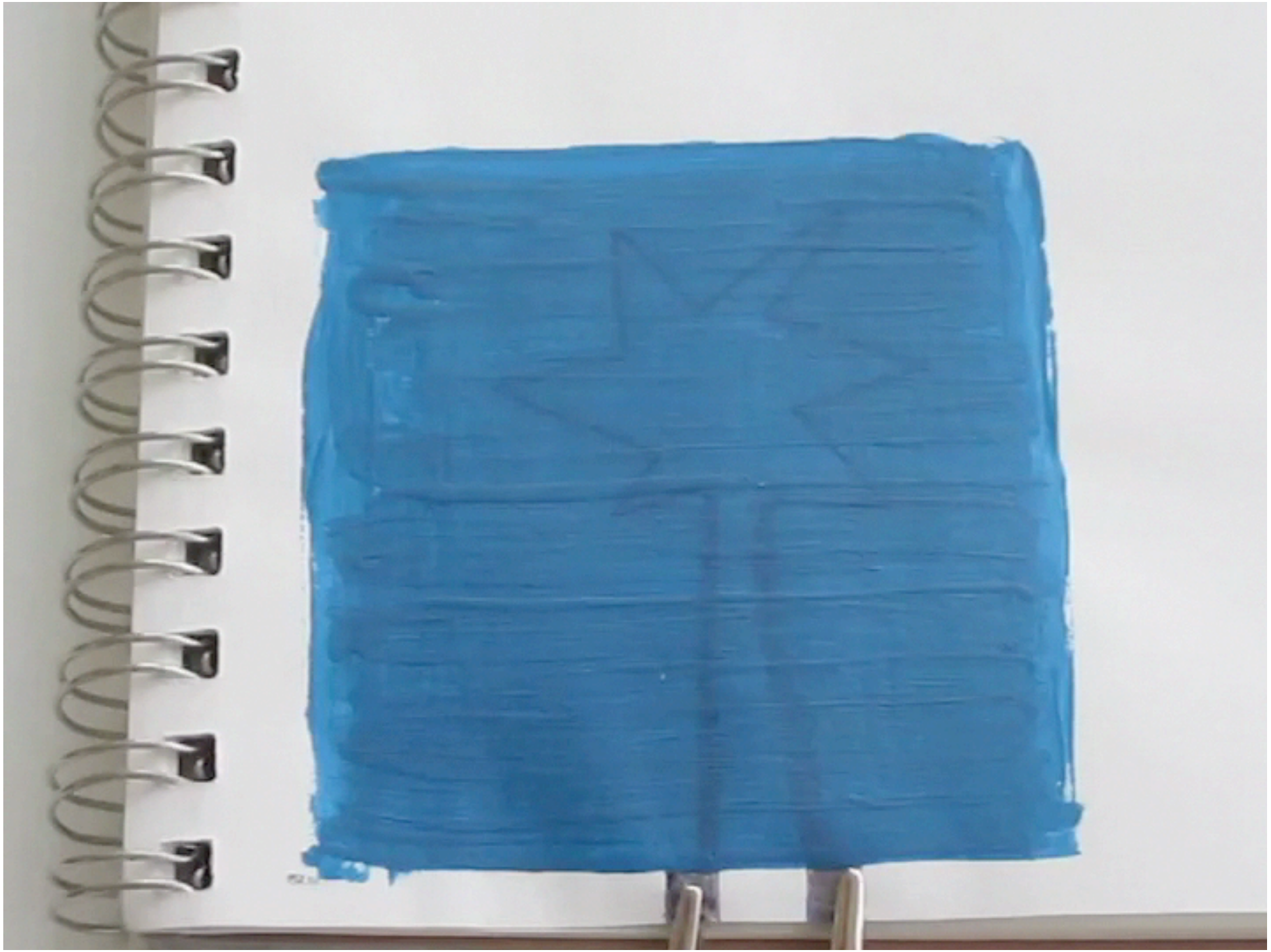
Jie Qi



Jie Qi


Jie Qi





http://vimeo.com/3599345

Class nuts & bolts…

Grading

30% research projects
30% hands-on projects
30% final project
10% class participation

Schedule

Section1: Connectors/Conductive Materials (3 weeks)
week 1: lecture and lab
week 2: research presentations
week 3: project presentations

Section 2: Inputs (3 weeks)
week 1: lecture and lab
week 2: research presentations
week 3: student project presentations

Final Project Proposals

Section 3: Outputs (3 weeks)
week 1: lecture and lab
week 2: research presentations
week 3: project presentations

Final Project Presentations

Research projects will focus on

- Understanding the electrical and mechanical properties of materials
- Finding suppliers of materials
- Exploring previous design, art and engineering projects

First Assignment

create an account on the class website:
http://material.media.mit.edu/wp-admin

fill out the course survey

http://material.media.mit.edu/