PHOTOMACHINING
PROBLEM STATEMENT SCRIPT

Carol: Our company wants to become a player in the diabetes market. We want to have test strips done, drug inhalation devices, implantable devices; basically we want to get involved in all facets of the market.

Ron: As you guys know, we've done this with a lot of different customers- we can use our lasers for many different applications on many different materials.

Carol The first thing we'd like you to look at is stripping the dielectric off copper wire. These are for electrochemical probes for direct glucose detection in the body. This would be very fine copper wire- 50 micron diameter.

Dave: Do you know what the insulation is made of?

Carol: It's polyimide- polyimide coated copper. The coating's 12.5 microns thick, so it's 75 microns diameter overall.

Gabor: Do you have to strip all the way around the wires?

Carol: Yes, all the way around- and only one end of the wire. What will be important is the accuracy of the strip length, the termination zone, and the cleanliness of the strip. We'll be plating the wire after it's stripped.

Gabor: The wires have to be cut?

Carol: Yes, we'll need them cut to length. I'll fax the details when I get back to the office.

Ron: So, we'll develop the optics and tooling to strip the wire and cut it to the length you need. We'll work up a testing protocol for quality control too.

Carol: When can you have something to show me?

Ron. Why don't you guys get to work on some ideas tomorrow? We'll have something ready to show you early next week.