What is claimed is:

1. A method of manufacturing a communication device including a partial power source, the method comprising the steps of:

depositing a layer of adhesion material onto a first ~~location~~ surface of a support structure, wherein the layer of adhesion material defines a plurality of holes;

depositing a first material onto the layer of adhesion material, wherein the first material adheres to the layer of adhesion material;

depositing a layer of transition ~~material~~ metal on a second ~~location~~ surface opposite the first surface of the support structure; and

depositing a second material onto the layer of transition ~~material~~metal, wherein the first material and the second material represent a voltage potential difference when the first material and the second material come into contact with a conducting fluid.

2. The method of claim 1, wherein the layer of adhesion material is gold.

3. The method of claim ~~1~~2, further comprising the step of roughing the surface of the gold to enhance adhesion property.

4. The method of any of the preceding claim~~s 1~~, wherein the support structure is a silicon based material.

5. The method of any of the preceding claim~~s 1~~, wherein the step of depositing the first material includes evaporating deposition using electron beams.

6. The method of claim 2, wherein the layer of adhesion material is less than 100 microns thick.

7. The method of any of the preceding claim~~s 1~~, wherein the step of depositing a layer of transition ~~material~~ metal on a second surface opposite the first surface of the support structure includes the steps of:

depositing the layer of transition ~~material~~ metal onto the support structure;

heating the support structure with the layer of transition ~~material~~ metal deposit; and

cleaning an exposed surface of the layer of transition ~~material~~ metal such that the resulting structure is ready to receive the second material.

8. The method of claim 7, wherein the step of cleaning the exposed surface further comprises cleaning with an ion gun.

9. The method of any of the preceding claims ~~1~~, further comprising the step of spinning a polymer onto the device to provide a protective coating.

10. The method of claim 7, further comprising the step of spinning the device to evenly distribute a polymer on the surface of the device.

11. The method of any of the preceding claims ~~1~~, further comprising the step of inserting the device into a non-conducting membrane.

12. A method of manufacturing a plurality of communication devices, wherein each device includes a non-conducting membrane and a partial power source device, the method comprising the steps of:

cutting a plurality of openings into a sheet of non-conducting material to produce an assembly membrane sheet, wherein the shape of each opening corresponds to the shape of a framework of the device; and

inserting one partial power source device selected from the plurality of partial power source devices into each opening of the assembly membrane to produce a loaded membrane sheet, wherein each partial power source device is prepared according to a process that includes the step of depositing a layer of transition metal on an opposite surface of a support structure from a surface having an adhesion material.

13. The method of claim 12 further comprising the steps of:

depositing a layer of non-reactive material onto the loaded membrane sheet on a side opposite the transition metal to produce an adhesion membrane sheet, wherein the layer of non-reactive material defines a plurality of holes;

depositing a first material onto the adhesion membrane sheet on the side with the adhesive material, wherein the first material adheres to the non-reactive material;

depositing a second material onto the layer of transition metal to produce a partial power device sheet, wherein the first material and the second material represent a voltage potential difference.

14. The method claim 13 further comprising the step of defining a plurality of boundaries on the support structure, wherein each boundary corresponds to circuitry of each device.

15. The method of claim 14, wherein the step of depositing a layer of non-reactive material further comprises the step of defining a group of holes, wherein each group of holes is contained within one boundary selected from the plurality of boundaries, such that the position of each hole within the group of holes is within the corresponding boundary.

16. A device comprising a partial power source for communication, wherein the partial power source of the device is prepared by a process comprising the steps of:

depositing a layer of adhesion material onto a first ~~location~~ surface of a support structure, wherein the layer of adhesion material defines a plurality of holes;

depositing a first material onto the layer of adhesion material, wherein the first material adheres to the layer of adhesion material;

depositing a layer of transition ~~material~~ metal onto a second ~~location~~ surface opposite the first surface of the support structure;

depositing a second material onto the layer of transition ~~material~~metal, wherein the first material and the second material represent a voltage potential difference when the first material and the second material come into contact with a conducting fluid.

17. The method of any of the preceding claims ~~1~~, wherein the transition~~al material~~ metal is titanium.

~~18. A device including a partial power source for communication, wherein the device comprises:~~
~~a support structure made from a silicon material; and~~
~~a CuCl layer deposited on a first location of the support structure using physical vapor deposition.~~

~~19. The device of claim 18, wherein the physical vapor deposition is achieved through sputter deposition.~~

~~20. The device of claim 18, wherein the physical vapor deposition is achieved through arc deposition.~~