

[TDX2]

Future WSN Sensor Technology

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Outline

- Overview – How Can We Build Better Sensors?
- Embedded Sensors
- A New WSN Concept
- Summary

How Can We Build Better Sensors?

- What is “better”?

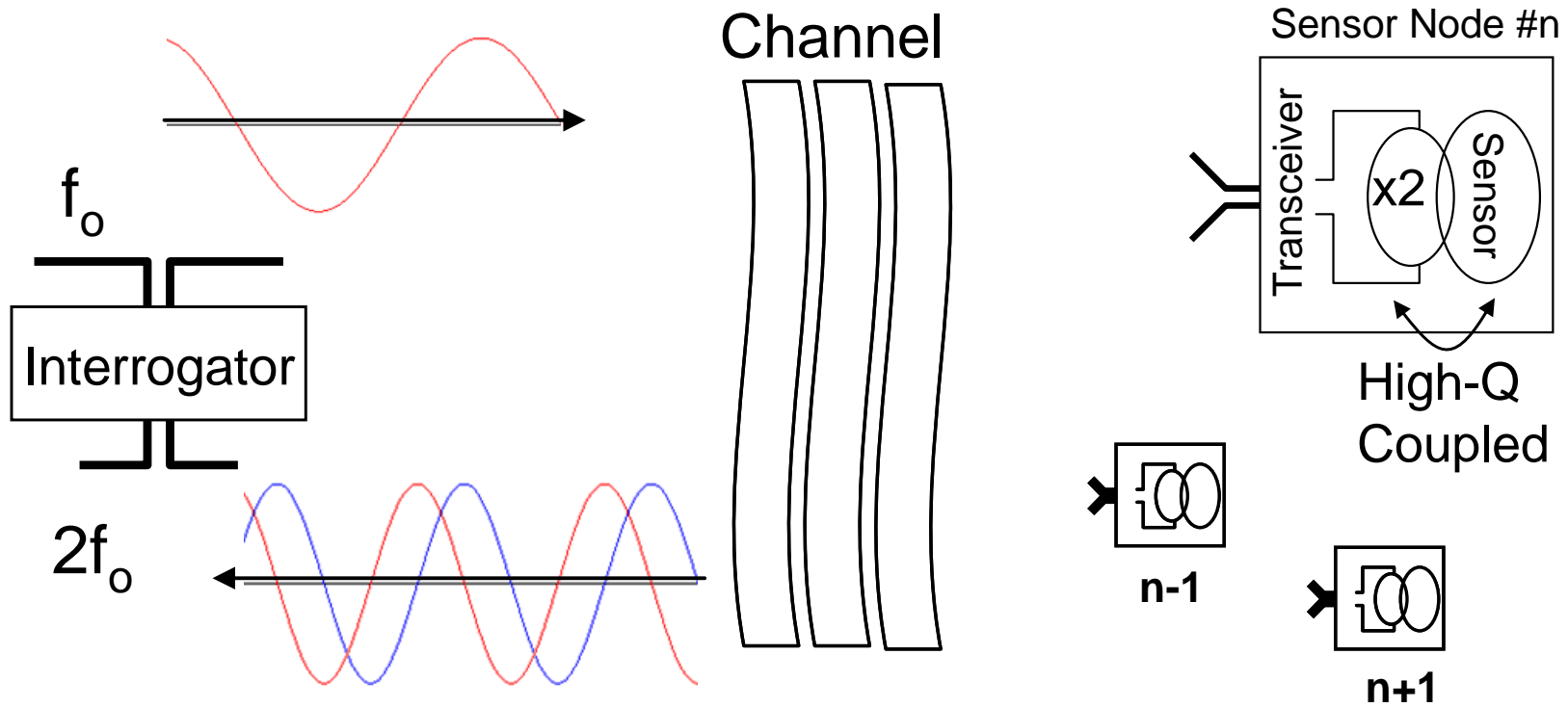
How Can We Build Better Sensors?

- Let's focus on cost and energy:

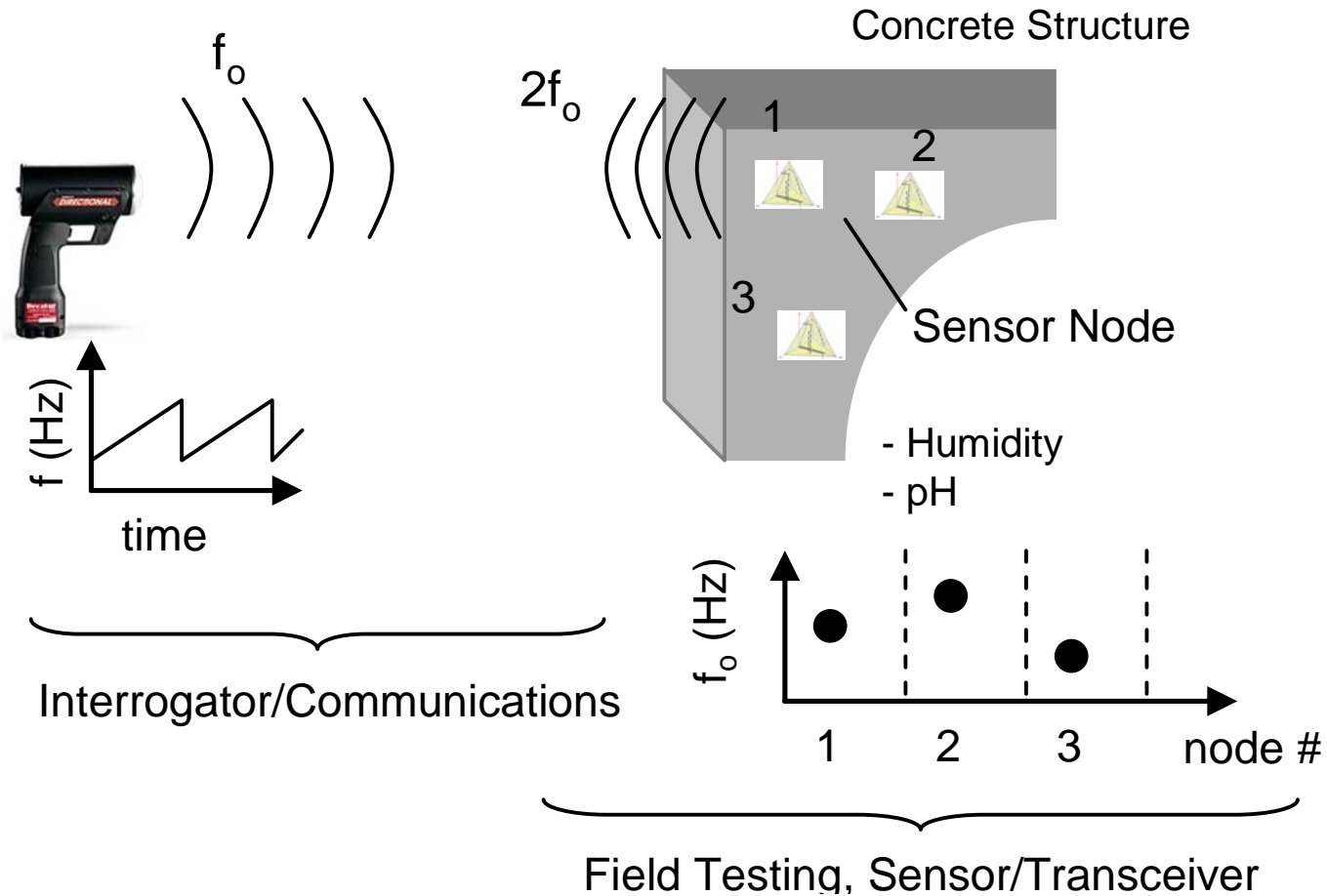
Embedded Sensors

- Applications
- Missions
- Challenges

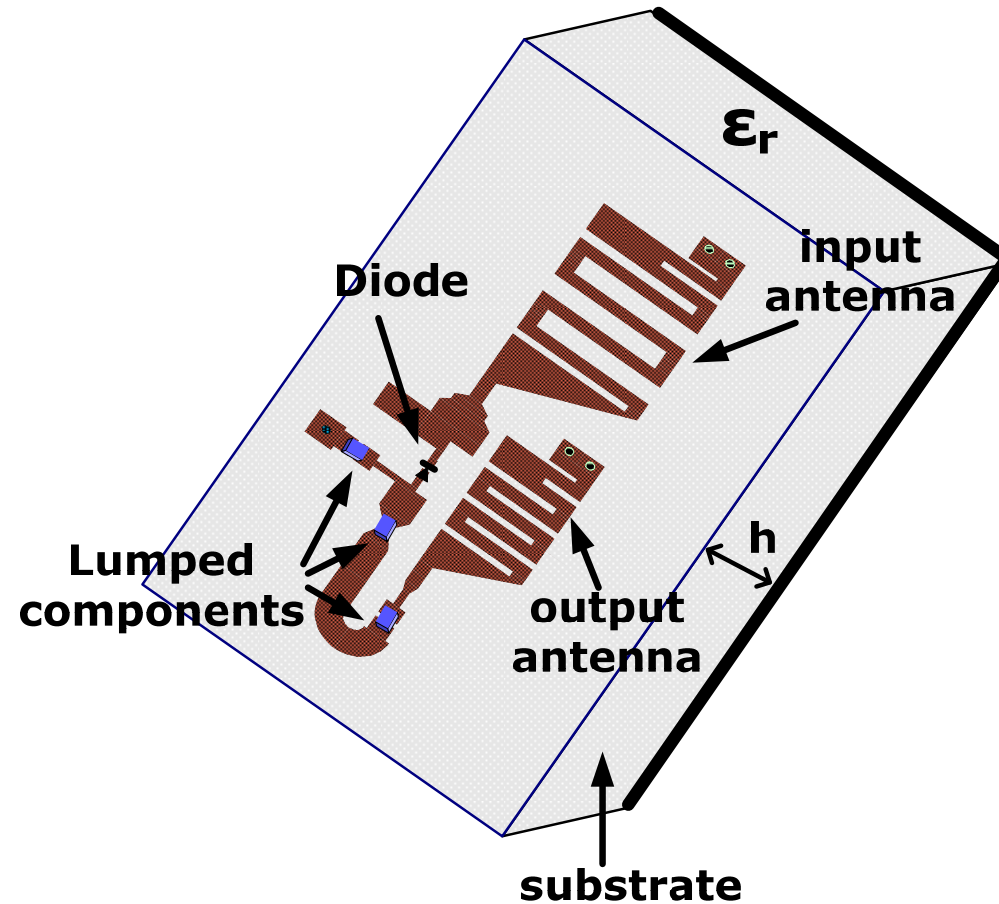
A New WSN Concept



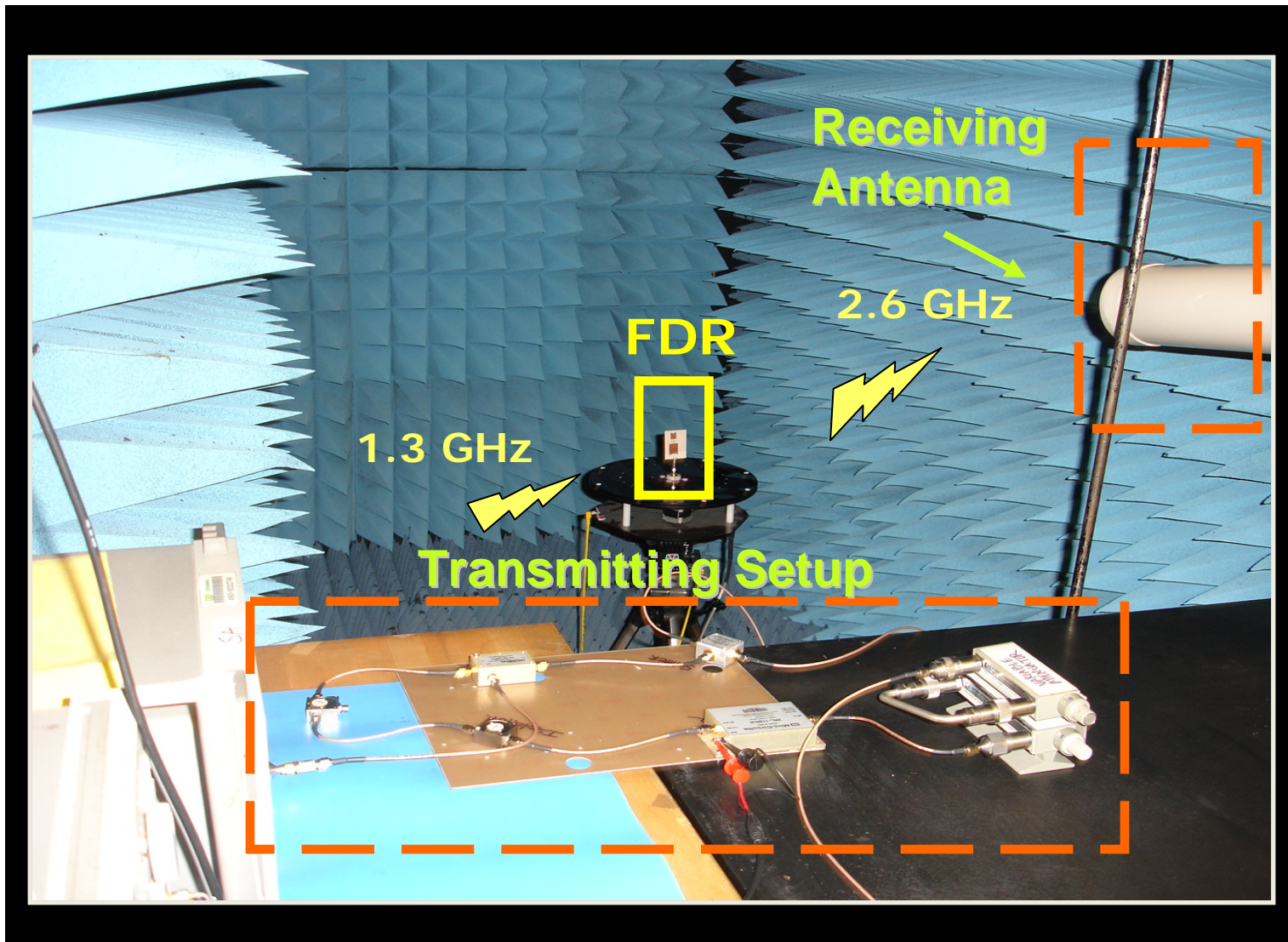
A New WSN Concept



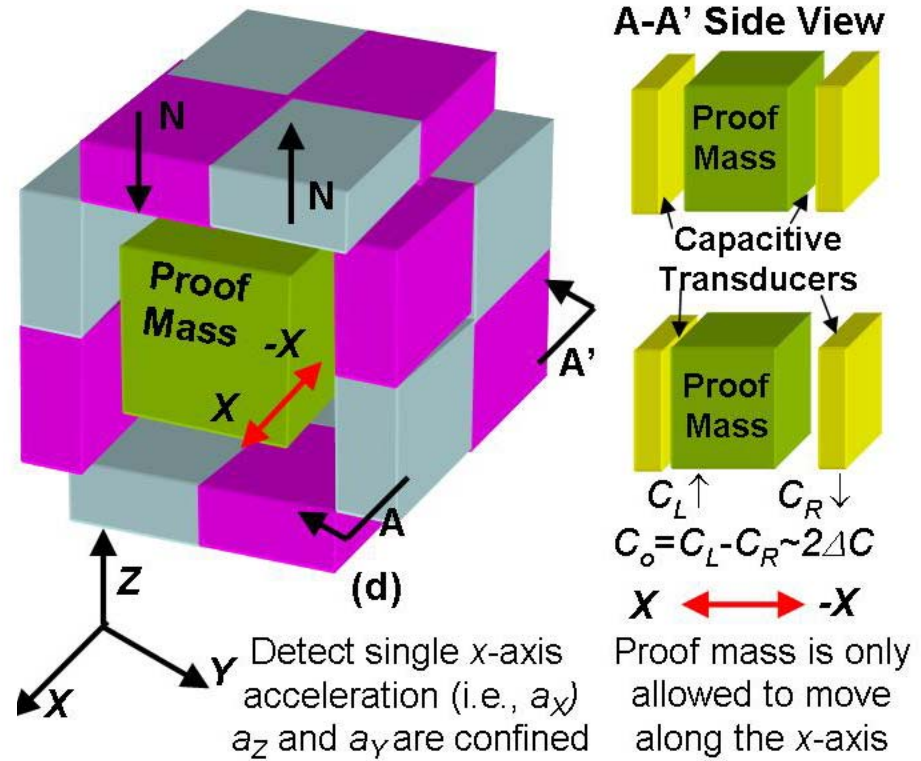
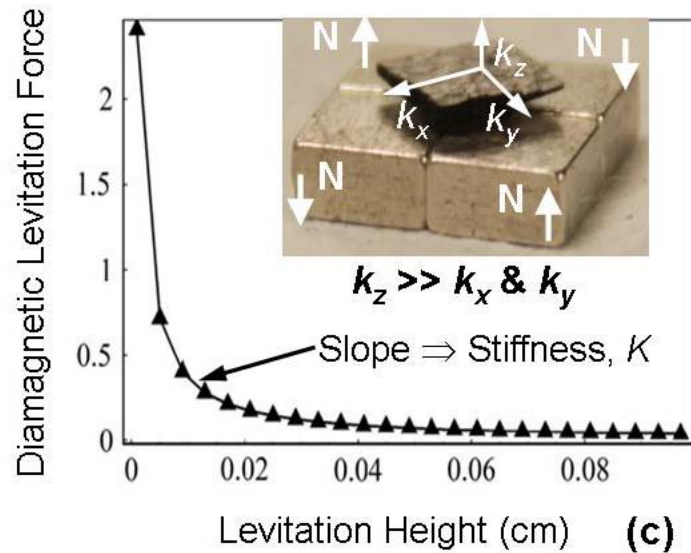
A New WSN Concept



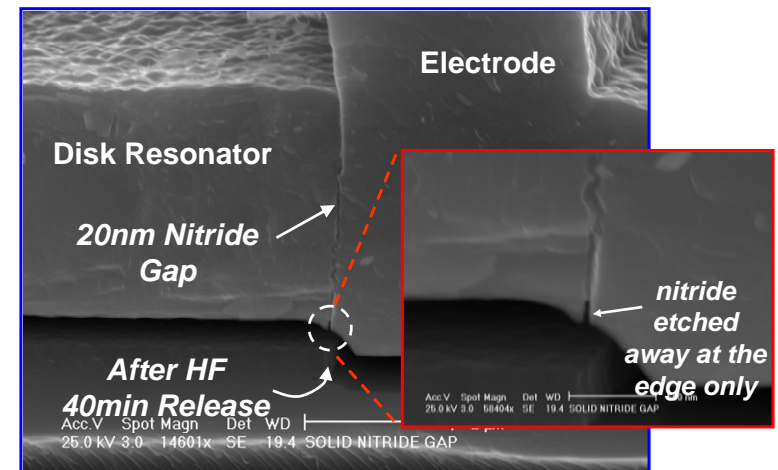
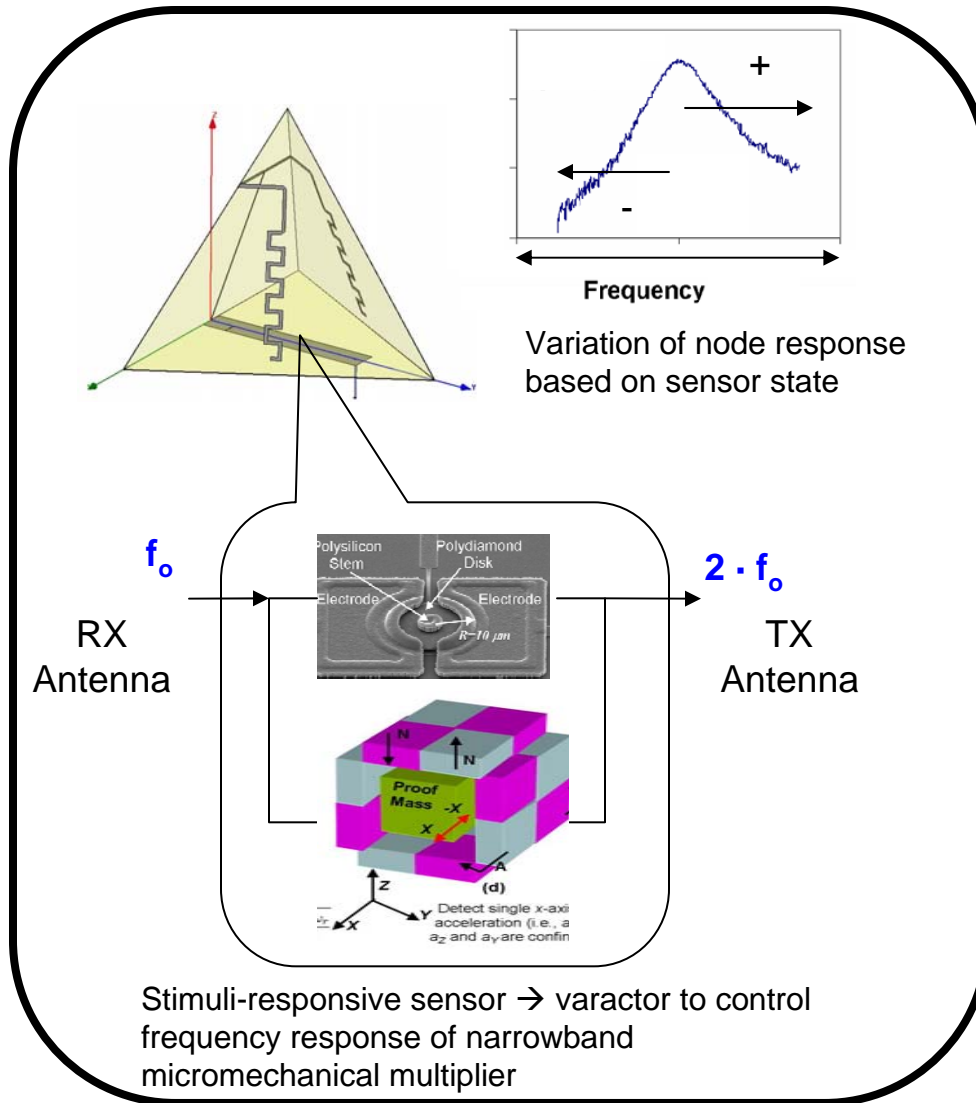
A New WSN Concept



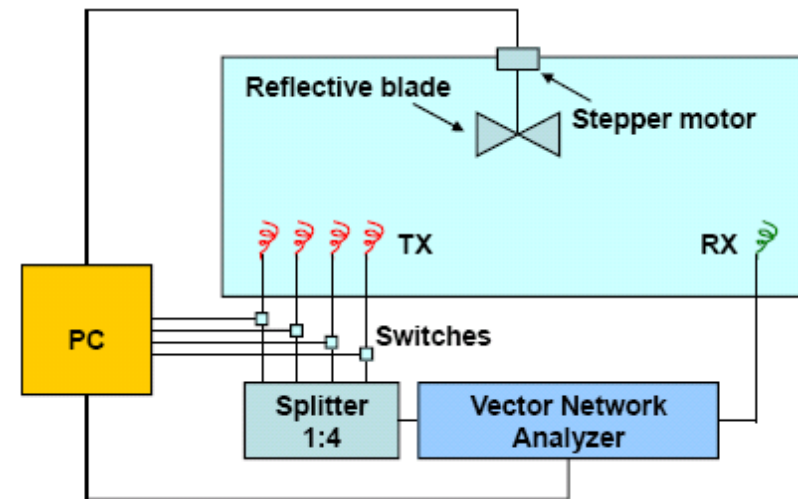
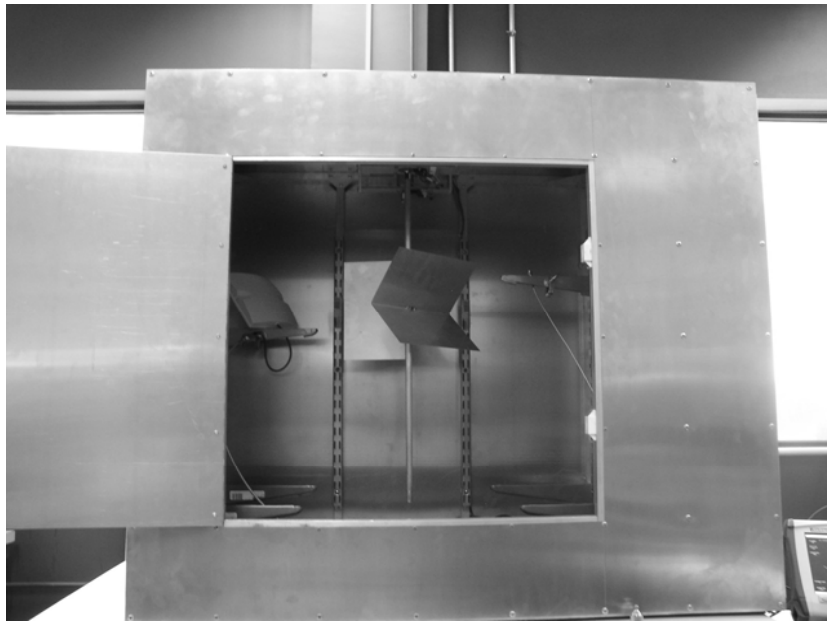
A New WSN Concept



A New WSN Concept



A New WSN Concept



Summary

- All WSN applications present challenges, and some may not be feasible with current-day technology
- Gain from optimizing individual pieces of a system eventually goes to zero → systems-centric thinking can reveal unique solutions
- In the advanced WSN concept discussed here, where will the most energy be used?