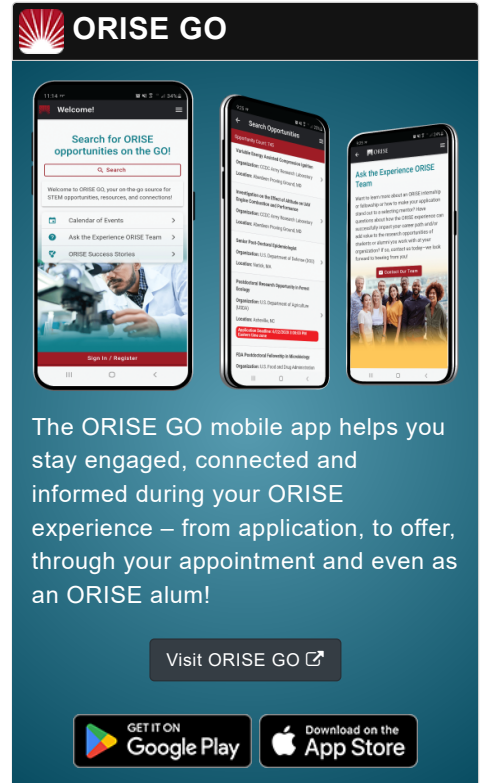


Opportunity Title: High reliability RF to flexible circuit interconnections resilient to classical wash cycles

Opportunity Reference Code: IC-17-27



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Organization Office of the Director of National Intelligence (ODNI)

Reference Code IC-17-27

How to Apply **Create and release your Profile on Zintellect** – Postdoctoral applicants must create an account and complete a profile in the on-line application system. **Please note: your resume/CV may not exceed 2 pages.**

Complete your application – Enter the rest of the information required for the IC Postdoc Program Research Opportunity. The application itself contains detailed instructions for each one of these components: availability, citizenship, transcripts, dissertation abstract, publication and presentation plan, and information about your Research Advisor co-applicant.

Application Deadline 3/31/2017 11:59:00 PM Eastern Time Zone

Description **Research Topic Description, including Problem Statement:**

Modern electronic systems including antennas, power sources, and displays require integration into garments/military load bearing equipment etc. As such, a key enabling technology will be robust and integrated electrical and RF interconnection systems able to survive harsh use environments, and also laundering/garment washing cycles. It is therefore proposed that research and development be undertaken to augment/supersede classical coaxial interconnects.

Example Approaches:

Successful research could look to develop a new generation of interconnects based around circuit board to transmission line direct and capacitive coupling techniques by exploring some of the following:

- Stitched Interconnect
- Ultrasonic Welding
- Conformal Coating
- Laser Cutting
- Conductive Threads

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree.
- **Discipline(s):**
 - **Business** (11)
 - **Chemistry and Materials Sciences** (12)
 - **Communications and Graphics Design** (6)
 - **Computer, Information, and Data Sciences** (16)
 - **Earth and Geosciences** (21)
 - **Engineering** (27)
 - **Environmental and Marine Sciences** (14)

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- **Life Health and Medical Sciences** (45 👁)
- **Mathematics and Statistics** (10 👁)
- **Other Non-Science & Engineering** (13 👁)
- **Physics** (16 👁)
- **Science & Engineering-related** (1 👁)
- **Social and Behavioral Sciences** (28 👁)