

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

Opportunity Reference Code: IC-17-27

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](#))
 - **Life Health and Medical Sciences** ([45](#))
 - **Mathematics and Statistics** ([10](#))
 - **Other Non-Science & Engineering** ([13](#))
 - **Physics** ([16](#))



ORISE GO

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!



Visit ORISE GO

GET IT ON Google Play

Download on the App Store

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

Opportunity Reference Code: IC-17-27

- **Science & Engineering-related** ([1](#) )
- **Social and Behavioral Sciences** ([28](#) )