Air Force Office of Scientific Research
FA9550-18-S-0003

The FAU Office of Research Development is available to provide proposal development support. Contact them for additional information.
Susan Day: sday5@fau.edu or Jo Smith: josmith@fau.edu

This announcement remains open until superseded. The Air Force Office of Scientific Research reviews and evaluates proposals as they are received. You may submit proposals at any time; however, some specific topic instructions may recommend submission by specific dates that align with funding expectations. Review the broad agency announcement for details.

Research Topics of Interest:

1. **ENGINEERING AND COMPLEX SYSTEMS (RTA1)**
    a. Dynamic Materials and Interactions
    b. GHz-THz Electronics and Materials
    c. Energy, Combustion and Non-Equilibrium Thermodynamics
    d. Unsteady Aerodynamics and Turbulent Flows
    e. High-Speed Aerodynamics
    f. Low Density Materials
    g. Multi-Scale Structural Mechanics and Prognosis
    h. Space Propulsion and Power
    i. Test Science for Test and Evaluation (T&E)
2. **INFORMATION AND NETWORKS (RTA2)**
    a. Computational Cognition and Machine Intelligence
    b. Computational Mathematics
    c. Dynamics and Control
    d. Dynamic Data Driven Applications Systems (DDDAS)
    e. Information Assurance and Cybersecurity
    f. Optimization and Discrete Mathematics
    g. Science of Information, Computation, Learning, and Fusion
    h. Trust and Influence
    i. Complex Network
    j. Computational Social Science
3. **PHYSICAL SCIENCES (RTB1)**
    a. Aerospace Materials for Extreme Environments
    b. Atomic and Molecular Physics
    c. Electromagnetics
    d. Laser and Optical Physics
    e. Optoelectronics and Photonics

f. Plasma and Electro-Energetic Physics
g. Quantum Electronic Solids
h. Quantum Information Sciences
i. Remote Sensing
j. Space Science
k. Ultrashort Pulse Laser-Matter Interactions

4. **CHEMISTRY AND BIOLOGICAL SCIENCES (RTB2)**

a. Biophysics
b. Human Performance and Biosystems
c. Mechanics of Multifunctional Materials and Microsystems
d. Molecular Dynamics and Theoretical Chemistry
e. Natural Materials, Systems, and Extremophiles
f. Organic Materials Chemistry

5. **INTERNATIONAL STUDENT EXCHANGE PROGRAM**

6. **OTHER INNOVATIVE RESEARCH CONCEPTS**

We are always looking for new basic research ideas and are open to considering unique and revolutionary concepts, as well as novel multi-disciplinary research projects which do not fall into the portfolios described above. Within that framework, there is limited opportunity for a few, specific research thrusts as described below. If you have an exciting idea that belongs to either one of them, you may submit a proposal under this section of the announcement. Pre-coordination with the points of contact listed below is, however, very strongly encouraged before submitting a proposal.

Sub-area 1: Fundamental Dynamics of Scientific Discovery.

Sub-area 2: Artificial Intelligence (AI), Games, and Optimal Design

Sub-area 3: Constructive Mathematics

Sub-area 4: Novel Approaches to Theoretical Quantum Information Science

To read the announcement, click here.