



# AERSF JR/SR CATEGORIES

## Animal Sciences (ANIM)

- Animal Behavior
- Cellular Studies
- Development
- Ecology
- Genetics
- Nutrition & Growth
- Physiology
- Systematics & Evolution
- Agricultural Animal Science

## Behavioral and Social Sciences (BEHA)

- Clinical & Development
- Psychology
- Cognitive Psychology
- Physiological Psychology
- Social & Social Psychology
- Human Behavior Studies

## Biochemistry (BCHM)

- Analytical Biochemistry
- General Biochemistry
- Structural Biochemistry

## Biomedical/Bio-Informatics & Health Sciences (BMED)

- Disease study
- Drug Development
- Epidemiology
- Nutrition
- Biomedical Engineering
- Computational Pharmacology
- Computational Bio-modeling
- Computational Biology
- Computer Neuroscience
- Genomics & Genetics

## Cellular and Molecular Biology (CELL)

- Cell Physiology
- Genetics
- Immunology
- Molecular Biology
- Neurobiology

## Chemistry (CHEM)

- Analytical Chemistry
- Computational Chemistry
- Organic/Inorganic chemistry
- Chemical Engineering

## Computer Science: Hardware/Embedded Systems (CSHW)

- System Hardware
- Circuits
- Internet of Things
- Microcontrollers
- Networking/Communications
- Optics/Sensors/Signal Processing

## Computer Science: Systems Software (CSSW)

- Algorithms
- Cybersecurity
- Databases
- Operating System
- Programming Languages
- Software performance
- Neural Networks
- Gaming

## Earth and Environmental Sciences (EAEV)

- Atmospheric Science
- Climate Science
- Environmental Science
- Environmental Management
- Environmental Engineering
- Geosciences
- Water Science
- Soil Science

## Energy: Traditional/Alternative/Energy Efficiency (ETAE)

- Energy Efficiency
- Alternative Energy
- Renewable Energy
- Traditional Energy
- Alternative Fuels
- Solar Energy
- Thermal
- Wind
- Fuel Cells & Batteries etc.

## Engineering Mechanics(ENGM)

- Physical Engineering
- Mechanical Engineering
- Aerospace Engineering
- Civil Engineering
- Transportation Engineering
- Electrical Engineering
- Structural Engineering

## Materials Science (MATS)

- Materials
- Biomaterials
- Ceramic & Glasses
- Composite Materials
- Materials Computation & Theory
- Nanomaterials
- Polymers

## Mathematics (MATH)

- Mathematical Sciences
- Analysis
- Graph Theory
- Geometry
- Number Theory
- Probability & Statistics

## Microbiology (MCRO)

- Antimicrobials & Antibiotics
- Applied Microbiology
- Bacteriology
- Virology
- Microbial Genetics
- Environmental Microbiology
- Other

## Physics and Astronomy (PHYS)

- Astronomy & Cosmology
- Astro Physics
- Mechanics
- Nuclear, Plasma & Particle Physics
- Electromagnetics
- Optical
- Quantum Physics
- Theoretical Physics

## Plant Sciences (PLNT)

- Agronomy
- Ecology
- Genetics/Breeding
- Growth & Development
- Pathology
- Physiology
- Systematics & Evolution

## Robotics and Intelligent Machines (ROBO)

- Biomechanics
- Cognitive Systems
- Control Theory
- Machine Learning
- Robot Kinematics
- Integrated Sensors
- Navigation