# 2023 Central Alabama Regional Science & Engineering Fair (CARSEF) <u>Individual Entry Form</u>

Incomplete entry forms will not be processed
PLEASE PRINT CLEARLY OR TYPE

Deadline February 1, 2023

Name of Student:		Age	Gender
Mailing Address (street, city, zip)			
Telephone (home or cell)	E-Mail		
School Name			Grade
Sponsoring Teacher	Email		
Project Title			
Which major category letter best describes your project Category descriptions are on the back of this entry for This is the category you will A. Biology (including microbiology)  B. Chemistry (including biochemistry)  C. Engineering  D. Environmental and Earth Sciences	rm. ` <mark>compete in at CAR</mark> F. Medicine	<mark>SEF</mark> and Health So Sciences (inc al and Social	luding space science) Sciences
<ul> <li>E. Mathematics and Computer Sciences</li> <li>All applicants to the Regional Fair must complete</li> <li>1. Form 1 - Checklist for Adult Sponsor</li> <li>2. Form 1A - Student Checklist</li> <li>3. Research Plan/Project Summary</li> <li>4. Form 1B - Approval Form</li> <li>5. Abstract and Certification Form</li> </ul>	this entry form alo	ong with the f	ollowing five forms:
My project meets all requirements for entry into the Reto compete for a position at the State or International Fair.	egeneron International	Science and E	ngineering Fair, and I wish
I am a middle school student and I understand that as so State (but not International) Fair.	uch I will be competing	for local prizes	and for entry into the
We certify that we will abide by the regulations of the Cent Please call if your school fair will be held between January			
Signature of Student:	Signature of F	Parent:	
Signature of Sponsoring Teacher:			

\*Note: You will be contacted via email with important CARSEF information.

Please provide an accurate email address as requested above.

EMAIL COMPLETED APPLICATIONS TO KEVIN JARRETT AT KJARRETT@UAB.EDU..

For additional information, Call (205)934-5125 (CARSEF office) or (205)934-5171 (Cord main office)

# **CARSEF Category Descriptions**

## A. Biology (including microbiology)

Cell Biology

Cell and Molecular Genetics

Immunology

Molecular Biology

Antibiotics, Antimicrobials

Bacteriology

Microbial Genetics

Virology

**Animal Development** 

**Animal Ecology** 

**Animal Husbandry** 

Animal Pathology

Animal Physiology

**Animal Population Genetics** 

**Animal Systematics** 

# B. Chemistry (including biochemistry)

General Biochemistry

Metabolism

Structural Biochemistry

**Analytical Chemistry** 

Inorganic Chemistry

Organic Chemistry

**Physical Chemistry** 

General Chemistry

# C. Engineering

Bioenaineerina

Civil, Construction, Chemical, Industrial,

Electrical, Computer, and

Mechanical Engineering

Processing

Material Science

Thermodynamics, Solar

Robotics

#### D. Environmental and Earth Science

Climatology, Weather

Geochemistry, Mineralogy

Paleontology

Geophysics

Planetary Science

**Tectonics** 

Air Pollution and Air Quality

Soil Contamination and Soil Quality

Water Pollution and Water Quality

Bioremediation

**Ecosystems Management** 

**Environmental Engineering** 

Land Resource Management, Forestry

Recycling, Waste Management

Plant Development

Plant Ecology

Plant Physiology

Plant Systematics

Plant Agriculture/Agronomy

Plant Genetics

Photosynthesis

Plant Evolution

## E. Mathematics and Computer Sciences

Algebra

Analysis

**Applied Mathematics** 

Geometry

Probability and Statistics

Algorithms, Databases

Artificial Intelligence

**Networking and Communications** 

Computational Science, Computer Graphics

Software Engineering, Programming Languages

Computer System, Operating System

## F. Medicine and Health Sciences

Disease Diagnosis and Treatment

**Epidemiology** 

Genetics

Molecular Biology of Diseases

Physiology and Pathophysiology

## G. Physical Sciences (including space science)

Astronomy

Atoms, Molecules, Solids

**Biological Physics** 

Instrumentation and Electronics

Magnetics and Electromagnetics

**Nuclear and Particle Physics** 

Optics, Lasers, Masers

Theoretical Physics

Theoretical or Computational Astronomy

### H. Behavioral and Social Sciences

Clinical and Developmental Psychology

Cognitive Psychology

Physiological Psychology

Sociology

### I. Energy and Transportation

Aerospace and Aeronautical Engineering

Aerodvnamics

Alternative Fuels

Fossil Fuel Energy

Vehicle Development Renewable Energies

UAB CORD
empowering rising stars

Center for Community OutReach Development The University of Alabama at Birmingham