



Impact.

Strengthening the vision since 1969.

LUNAR SCIENCE

USRA has maintained a strong, **continuous connection** to lunar science since its formation during the **Apollo era**.

LUNAR GEOLOGY

The Moon, being the planetary body nearest the Earth, is a natural target for scientific exploration. USRA lunar scientists maintain a diverse expertise in **lunar geology**, including specific expertise in lunar history, **impact cratering**, remote sensing and volatiles, and resources.

TOPOGRAPHY VISUALIZATIONS

The topography (or landscape) of planetary surfaces is crucial for understanding their origins and evolutions, along with the benefits and challenges they would raise in exploration. USRA lunar and planetary scientists maintain strong expertise in producing **topographic data** (digital elevation models) and constructing visualizations of that data (static and dynamic 'fly-overs') focused on specific needs for research and exploration.

FLIGHT HARDWARE & INSTRUMENTATION

USRA scientists have **end-to-end** expertise in the design, development, and deployment of flight hardware, sensors, and **instrumentation**. USRA scientists play key roles in the development of instruments for orbital and sub-orbital missions, deep-space systems, and aircraft and high-altitude platforms.

EXPERIMENTAL PETROLOGY

USRA lunar scientists and their colleagues at NASA Johnson Space Center maintain and use a world-class facility for experimental studies of **rock materials** - subjecting them to pressures, temperatures, and chemical conditions appropriate to the surfaces and deep interiors of planets, satellites, and asteroids.

WHO ARE WE?

USRA is an independent, nonprofit research corporation where the combined efforts of in-house talent and university-based expertise merge to advance space science and technology. USRA works across disciplines including **biomedicine**, **astrophysics**, and **engineering** and integrates those competencies into applications ranging from **fundamental research** to **facility management** and **operations**. USRA engages the creativity and authoritative expertise of the research community to develop and deliver sophisticated, **forward-looking solutions** to Federal agencies and other customers - on schedule and within budget.

