



Briony Horgan
Planetary Scientist

Professor Briony Horgan is a **planetary** scientist who uses data from NASA **satellites** and **rovers**, along with lab and field work back on Earth, to understand the **surface processes** that have shaped **Mars** and the **Moon**.

E X T R A T E R R E S T R I A L O
 S Y C T D E P T C R E C A P S E S
 J U K Y G Z X S T M H F O E R R L
 S Y R U M O Z M R E P O L M E D X
 K S V F W I U W U L Y I S T E S M
 B N P G A M S I A A D M A C Q T Y
 H I P E O C P N Y I G R T H J A S
 D A Q O C A E H M B C C E N S T K
 I Z N W Z T S P M P V Q L D E M E
 Z I P S A D R T R T B W L H P O V
 S U R R R L P O E O Z Y I R O S M
 O A Y Q O M F L M R C S T J C P L
 M B B J V G L R A E O E E K S H O
 T E K O E B H H K N T I S C E E L
 E G Y Q R N O P R P E E D S L R I
 S Z B Y S L K X M P V T R S E E Y
 F E Y E B Q K E B N F J S S T S N

Find more careers:

<https://www.purdue.edu/science/K12/stemcareers.html>



- Planetary scientists study **planets**, moons, **asteroids**, **comets**, and other celestial bodies, focusing on their composition and formation. Day-to-day responsibilities include:
- ❑ Analyzing data from **telescopes**, satellites, or planetary missions to study planetary surfaces, **atmospheres**, or interiors.
 - ❑ Using **spectrometers**, electron microscopes, and other tools to study planetary materials.
 - ❑ Experimenting with Earth analogs to simulate **extraterrestrial** conditions.
 - ❑ Conducting geological studies in Earth locations that resemble extraterrestrial environments, like deserts, volcanic regions, or polar areas.
 - ❑ Collecting samples from impact **craters** or volcanic sites to draw parallels with planetary geology.
 - ❑ Collaborating on **space** missions, such as designing experiments, selecting landing sites, or interpreting mission data.
 - ❑ Monitoring spacecraft performance and receiving real-time data from planetary missions.
 - ❑ Working with international teams to design and execute new missions.