**COMPpounds Behind ParMesan's Signature Taste Uncovered**

Chemists determined almost 50 different chemicals are responsible for the characteristic taste of parmesan cheese. The cheese's saltiness comes from sodium, potassium, and chloride ions, whilst a number of amines are responsible for the ‘burning’ element.

**Squid Beaks Inspire A Rigid & Bendy Polymer Material**

Scientists used chitosan, from the chitin found in crustacean shells and squid beaks, to create a polymer that can be rigid at one end and bendy at the other. This is done by varying the amount of an oxidising agent, changing the level of cross-linking between polymer chains.

**Tomato Waste Can Be Used To Generate Electricity**

Damaged tomatoes can help generate electricity. Scientists produced a microbial electrochemical cell that uses bacteria to break down organic compounds in tomatoes, releasing electrons. The compound lycopene, which gives tomatoes their colour, encourages the process.

**Understanding Sea Shell Calcite Mineral Formation**

New work reveals the mechanism behind the formation the calcite biomineral found in seashells. Proteins selectively bind to the edges of calcite crystals. The proteins become trapped as the calcite builds up, creating a compressive force that gives the shells their strength.

**Insights Into Pluto's Atmosphere & Surface Composition**

Data from NASA's New Horizons shows Pluto's surface is composed of volatile nitrogen and water ices, and red patches caused by tholins, organic polymers. Its atmosphere is mainly nitrogen, with other organic compounds such as methane and acetylene causing a haze.