

## **THE ADSTOCK SCIENCE CLUB**



The Adstock Science Club has had two very interesting and entertaining talks over the last couple of months. The first was in August and was given by Dr Matthew Balme from the department of Physical Sciences at the Open University and was all about “Water on Mars”. This was mainly from a geological perspective. Dr Balme talked about how our understanding of water on Mars has evolved over the past few decades, and about our current understanding of how Mars’ geological history has been shaped by water over the last 3-4 billion years.

He finished by talking about one of the key reasons we are interested in water on Mars – i.e. the question of life – and a little about the European Space Agency ExoMars Rover. The ExoMars Rover will launch in 2020 and has the specific mission goal of searching for evidence of past life on Mars.

Our second talk, in September, was presented by Dr Liz Parvin, also from the Open University, who spoke to us about “Radiating Health”: an alpha, Beta & Gamma of radionuclide imaging”. She began the talk by giving us a lesson on some basic atomic physics, introducing the atom, its structure and explaining what the atomic number and weight are. She went on to tell us about radioactive isotopes and the different types of radiation which are emitted by them and how their “half-lives” are useful in making decisions on which of them to use for medical diagnoses and imaging purposes. During her talk she covered some of the equipment and technologies such as the PET, MRI and CT scanners used in this process.

Dr Parvin discussed how physicists, doctors, radiographers and technologists work together in the nuclear medicine team and how radioactive tracers are carefully chosen to minimise the patient’s exposure to radioactivity and to target the body part under investigation.

Before I sign off I would just like to mention that for the past seven or eight months The Adstock Science Club has had its very own web site which I should have mentioned in past write ups. However for some reason this has slipped my mind. I blame it on age. Anyway you know now, so don’t delay, go to [www.theadstockscienceclub.co.uk](http://www.theadstockscienceclub.co.uk) link to see what’s going on.

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