



Horticulture 4.0 Conference



Professor Seamus Higson
University of Chichester

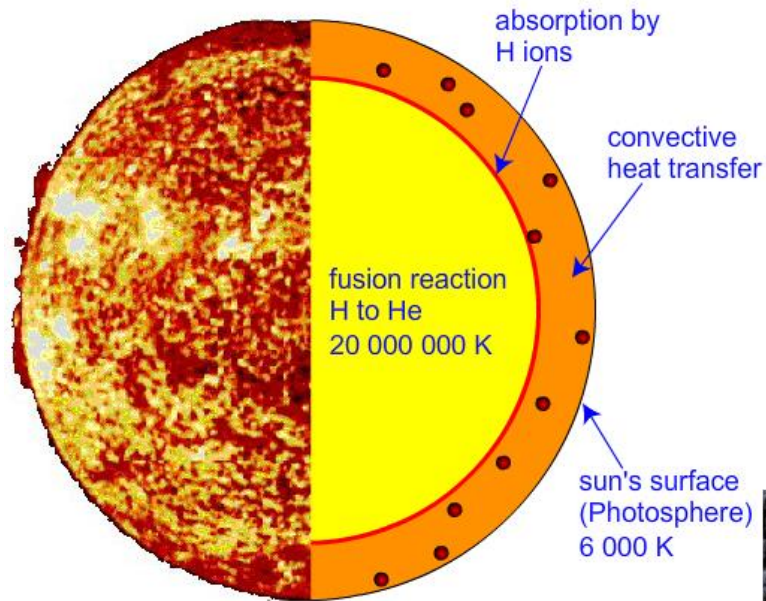
**Solar Energy – The power underpinning
Food security – and the key to
Sustainability ?**



Tech Park Opening on 3rd October



The Sun and Solar Radiation



**In 10mins – there
sufficient solar energy hits
the earth to supply all of
mans' needs for 1 year**



University of Chichester Academy Trust and Widening Participation

- **‘Rocket Science Project’ - 2016 at Kingsham Primary School...**
- **Kingsham: One of the twelve schools within the University of Chichester University Academy Trust**



The Serpentine – or – ‘Crinkle – Crankle Wall’



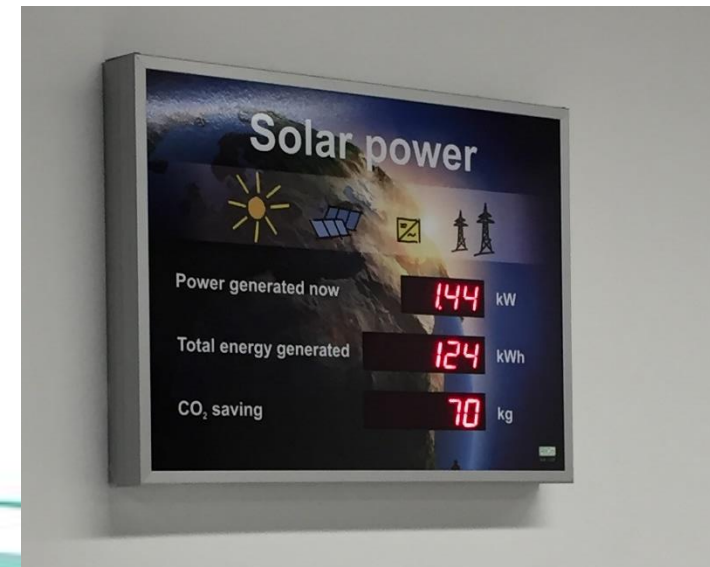
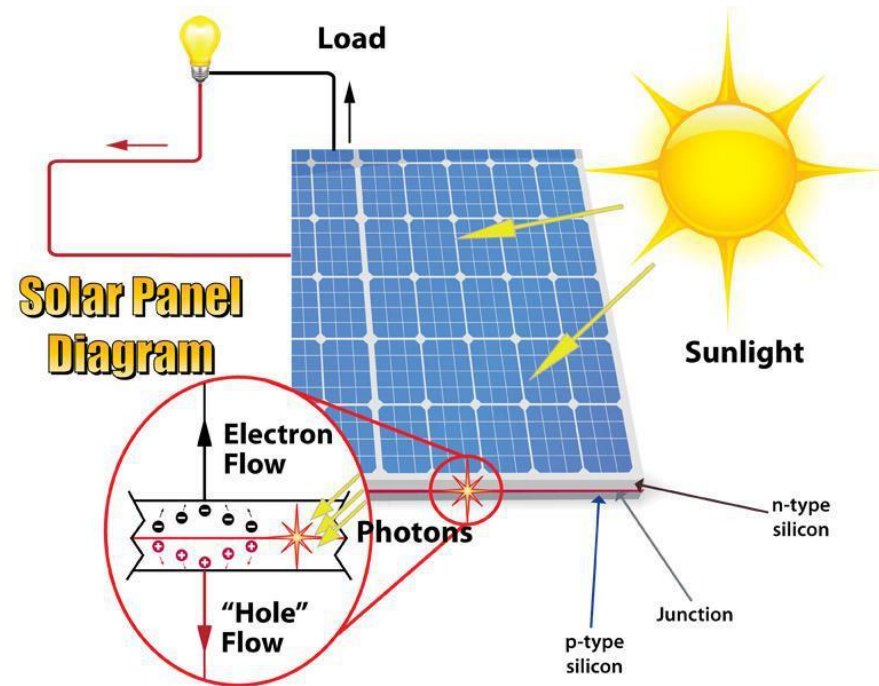
West Sussex and Horticulture



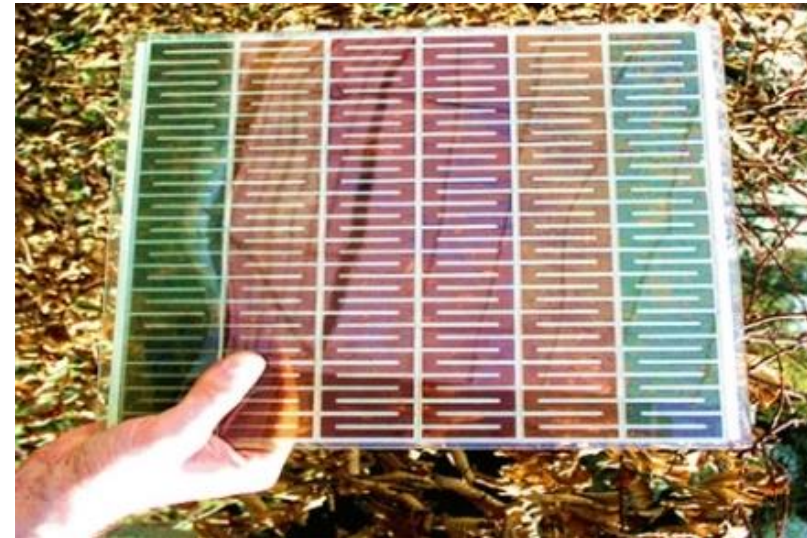
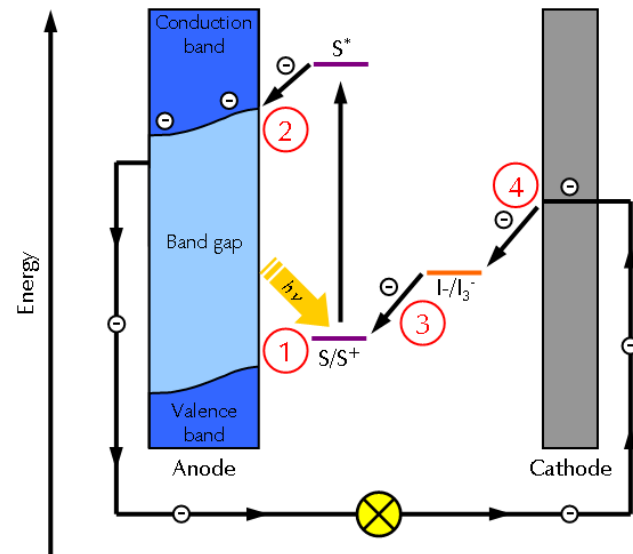
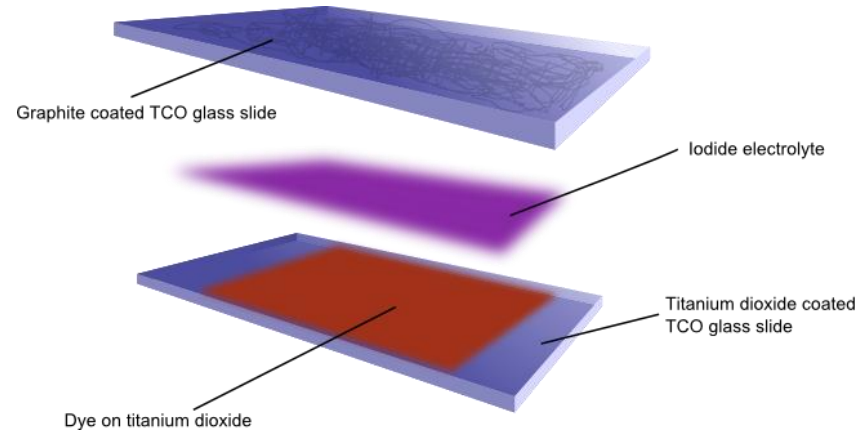
£ 1Bn to the local economy



Semiconductor Based Photovoltaics:

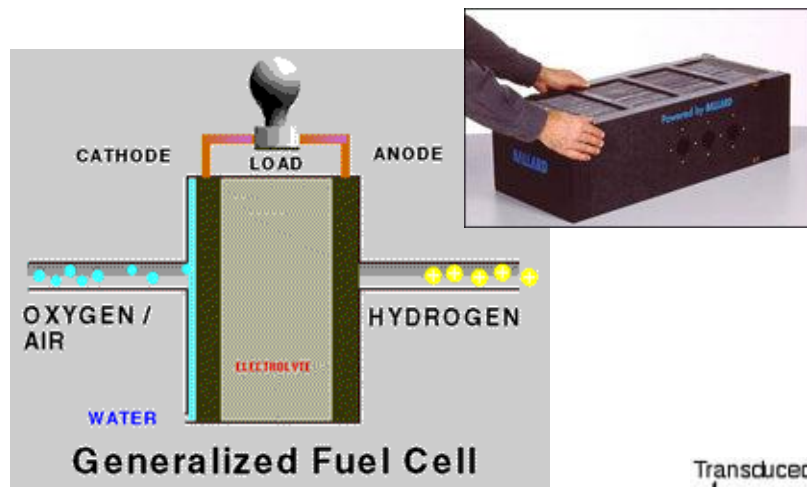


Dye Sensitised (Gratzel) cells:

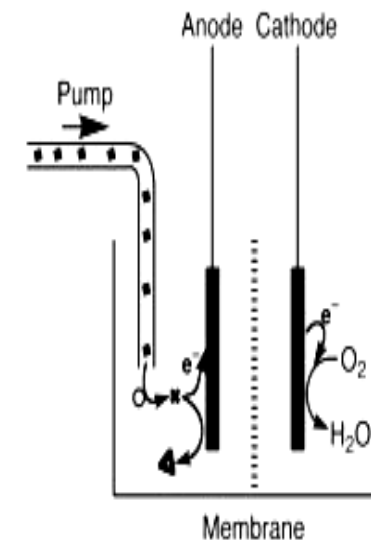
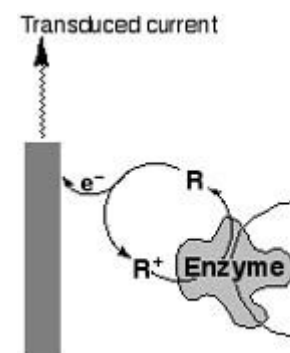


Fuel Cells...One of the solutions to the World Energy Crisis...?

Hydrogen fuel cells utilising H_2 and O_2



And Biofuel cells utilising sugar...



○ Microbial cell	✱ Fuel product
● Primary substrate	◼ Oxidised fuel

H₂ Refuelling / Renewable Energy Tech Park Centre for Sustainability:

Partners:

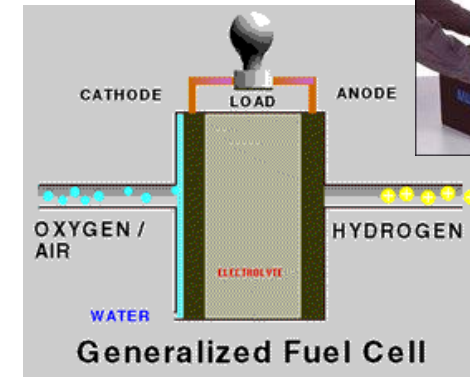


- **Centre for Research in Application of Hydrogen Power**
- **Two Refuellers:** Chichester and Bognor Regis campuses as replicable and saleable demonstrators
- **Business Modelling and Renewable Power Utilisation Software** for businesses and individuals to calculate investment, payback and CO₂ reduction along with smart usage of excess green power production
- **Partnering local authorities to facilitate hydrogen refueller installation** - throughout Coast to Capital LEP

Cobham Services



One Input to a Circular Economy and Supply Chain for Sustainability for the Future ?



Some of our Supporters





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Thank you

