

# **Advanced manufacturing and technology to realise a fusion power plant**

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The fusion environment creates unique challenges to materials, manufacture, testing and many other technologies that need to be overcome to realise a fusion power plant. These include aspects such as neutron and ion irradiation, high temperatures, hydrogen gas and cyclic loading. Some of these issues are unique to the fusion, however, there is overlap with other sectors. This talk will go through the challenges and ways in which we are trying to overcome them but also discuss transferring fusion know-how and requirements to industry and academia and partnering with other industry sectors, such as aerospace or automotive. We will look at how we pursue collaborative projects that bring together diverse expertise so that we can develop creative solutions quickly.