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# **RSC/ERDF Lecture**

**1<sup>st</sup> October 2013**

## **The Mary Rose: Preserving An Old Wreck With Nanoscience**

**Professor Alan Chadwick  
University of Kent**

The Mary Rose was built in 1509 and, after an illustrious career she sank in Portsmouth Harbour in 1545 following a confrontation with the French fleet. She remained on the seabed until she was re-discovered in 1967 and raised in 1982. A large fraction of the wreck's hull was recovered, conserved and is currently on exhibition to the public in a new purpose-built museum. The ship, along with the associated 20,000 artifacts, represent a unique insight into Tudor life and are a national treasure. The conservators at the Mary Rose Trust were faced with a wide range of problems when embarking on the conservation project. The trust has collaborated with a team of scientists at the University of Kent, including Professor Chadwick. The team focused on a specific problem, termed the 'sulfur problem'. The team's work involves a wide range of techniques, particularly synchrotron radiation at the Diamond Light Source, and has determined a possible nanomaterial solution to the sulfur problem.



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