

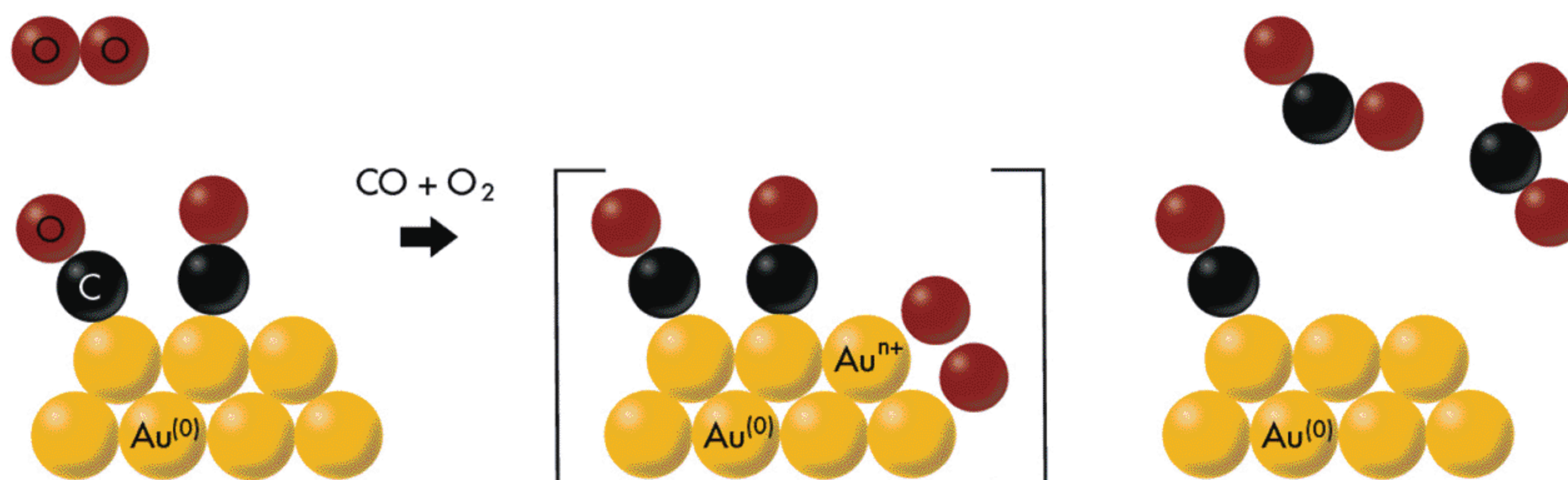
Events September

Theoretical Concepts on Magnetism in Solids
Symposium in Memoriam of Paolo Carra

November

Synchrotron Applications of High Magnetic Fields

The European Light Source



Mechanism for the catalytic reaction $2\text{CO} + \text{O}_2 \rightarrow 2\text{CO}_2$

When gold becomes a catalyst

Gold is a noble material which doesn't react as a bulk, but it also has unexpected properties: when it is presented in nanoparticles, it can act as a catalyst and transform carbon monoxide (CO) to carbon dioxide (CO₂). Gold suddenly enhances desired chemical reactions as a catalyst for example in the removal of odours and toxins or to clean automotive exhaust gases. Researchers from Switzerland, UK, the USA and the ESRF have monitored the catalytic process and proposed an explanation for the high catalytic activity of gold.

Van Bokhoven J.A. et al, Activation of Oxygen on Gold-Alumina Catalysts: In-situ High Energy-Resolution Fluorescence and Time-resolved X-ray Spectroscopy, Angewandte Chemie, Volume 45, Issue 28, 4651 - 4654.

The ESRF hosts the Three-way meeting



Every 18 months, the ESRF, the APS or Spring 8, hosts a meeting to discuss scientific and technical issues of common interest. This year, the ESRF

welcomed 31 participants in the Three-way meeting on 19 and 21 June. The meeting started with the 4th X-ray Optics workshop on the first day. The agenda included talks on aging of accelerator components, micro and nano focusing, high energy insertion devices, extreme conditions, accelerator complex; recent highlights and future developments, X-ray imaging and synchrotron radiation instrumentation.