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### **European Spallation Source and Neutron Science**

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International collaborations in large-scale scientific projects can link Sciences and Society. Following this goal, the European Spallation Source (ESS) is a multi-disciplinary research centre under design and construction in Lund, Sweden. This new facility is funded by a collaboration of 17 European countries. Scandinavia is providing 50 percent of the construction cost whilst the other member states are providing financial support mainly via in-kind contribution from institutes, laboratories or industries of the given countries. Scientists and engineers from 35 different countries are members of the workforce in Lund who participate in its design and construction. The ESS will enable new opportunities for researchers in fields of life sciences, energy, environmental technology, cultural heritage and fundamental physics by producing very high flux neutrons to study condensed matter physics, chemistry, biology, nuclear physics and materials science. The ESS will be up to 30 times brighter than today's leading facilities and neutron sources. A tungsten target and a 5 MW long pulse proton accelerator, composed mainly of superconducting Radio-Frequency components, are used to achieve these goals.