The Challenge of Materials Gallery at the Science Museum was WilkinsonEyre’s first museum project. The Gallery demonstrates the diversity of materials and the limits to which they can be pushed. Both the actual exhibits and the form and construction of the architecture of the gallery were therefore dictated by this theme.

A series of varied architectural interventions create a thematic framework for the visitor, with natural light reintroduced into the refurbished space. The focus of the gallery is the unique and dramatic Challenge of Materials Bridge, which spans the main atrium. Designed to the limits of technical feasibility, the responsive glass and steel bridge is suspended from a series of fine wires linked to four crescent-shaped steel plates fixed to the building structure. Sensors trigger a computer which relays a special composition by sound artist Ron Geesin in response to the loads imposed by visitors crossing the bridge.

Details
Location: London, UK
Client: Science Museum
Architect: WilkinsonEyre
Exhibition Design & Lead Consultant: Jasper Jacob Associates
Sound and Light Artist: Ron Geesin
Structural Engineer: Whitbybird & Partners
Value: £1.2m
Completed: May 1997

Awards
RIBA Award for Architecture 1998
Design Week Award for Exhibition Design 1998
Glassex Industry Awards Finalist 1998 (Footbridge)
Design Council Millennium ‘Product’ Award 1998 (Footbridge)
Challenge of Materials Bridge, Science Museum
by WilkinsonEyre

This innovative glass and steel bridge provides a focus for WilkinsonEyre’s Challenge of Materials Gallery at the world-famous Science Museum in London. The bridge has a series of functions, providing a link at mezzanine level, a visual focus for the gallery and an installation demonstrating the limits to which materials can be manipulated.

The bridge is a minimal form, comprising few elements and delicate materials. The deck is formed by 828 abutted glass planks suspended from an array of ultra-fine stainless steel wires. These are linked to crescent-shaped stainless steel plates, which are fixed to the building structure by a larger, angled steel plate. By channelling the wires through stress gauges and incorporating acoustic and lighting devices designed by the artist Ron Geesin, the bridge becomes an interactive exhibit, challenging visitors to cross and responding to the variations in movement caused by their footsteps.

Details
Location: London, UK
Client: Science Museum
Architect: WilkinsonEyre
Exhibition Design & Lead Consultant: Jasper Jacob Associates
Sound and Light Artist: Ron Geesin
Structural Engineer: Whitbybird & Partners
Span: 16m
Completed: May 1997

Awards
RIBA Award 1998
Design Week Award for Exhibition Design 1998
Glassex Industry Awards Finalist 1998 (Footbridge)
Design Council Millennium ‘Product’ Award 1998 (Footbridge)