

## Newcomen International Society for the History of Engineering and Technology & IGS UK Chapter

### Engineering of roads and airfields for military victory with bituminous geomembranes

**Speakers:** Eugene Gallagher, Coffey Geotechnics and  
Dr Bill Craig, Manchester University

<b>Date:</b>	Tuesday, 22 October 2024
<b>Location:</b>	The International Anthony Burgess Foundation, Engine House, Chorlton Mill, 3 Cambridge Street, Manchester, M1 5BY
<b>Time:</b>	6.30pm to 8:00pm

#### **Synopsis:**

The presentation will explore the history of bituminous geomembranes from their origins in the 1930s and subsequent development during World War II for the rapid construction of military roads and runways right up to the current day. These materials were manufactured in large quantities in support of the Allied air and land forces and were to play a significant role in battles of the Burma campaign and in the immediate aftermath of the Normandy landings. In Asia they were used to create airfields and all-weather roads, keeping supply lines open and enabling fast movement of troops, particularly during the monsoon season. In northern France and Belgium in 1944/45 they allowed rapid surfacing of temporary or expedient airfields by sealing the ground and maintaining the existing soil's bearing capacity, thereby enabling close tactical air support to be maintained with rapidly advancing ground forces. They are currently under consideration for rapid repairs of military airfield crater damage.



#### **About the Speakers:**

Eugene is an associate geotechnical engineer with Coffey Geotechnics where he acts a focus for geosynthetics and containment engineering and consults internationally. Bill is now a visiting academic, formerly Reader in geotechnical engineering at Manchester University and past chair of the British Geotechnical Society; he and Eugene will discuss the historical aspects of bituminous geomembranes based on their research into its wartime use.