Probus Neutral Bay Guest Speaker – Tues. 10th JUNE 2025

DR. STEPHEN YEOMANS – Metallurgist & Academic Extraordinaire

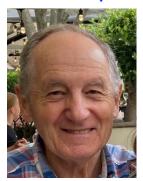
..... And Fellow Member



"Metallurgy 101 - A Stroll Through the Wonderful World of Metals".

Introduction — What is Metallurgy? Metallurgy is defined as a process that is used for the extraction of metals in their pure form from minerals e.g. soil, limestone, sand and rocks. And what is Metallurgy 101? The basics of the manufacturing, identification and usage of metals. How important are these studies in our lives? You Could Never Estimate!

Our Guest Speaker - Stepen Yeomans - Valued Member.



Stephen holds the degrees of BSc (Hon I) and PhD in Metallurgy from the UNSW. He was a member of the academic staff from 1974 to 2019, primarily at the UNSW Canberra campus at the Australian Defence Force Academy. He taught materials science and materials engineering in both undergraduate and postgraduate degree programs. He has had visiting appointments at highly respected academic and metallurgical institutes in Canada, England and the USA.

Further to his academic activities, he has been a consultant, both locally and internationally, in component testing and evaluation, welded fabrication and construction, corrosion prevention and accident and failure investigations. He has provided expert evidence in legal proceedings including expert witness conclaves and court appearances in both civil litigation and criminal proceedings and coronial inquests.

His Presentation — Stephen will start with a little basic metallurgy exploring the nature and characteristics of the common metals steel, aluminium and stainless steels. In essence, what is it about these metals that makes them so important to everyday life? He will briefly talk about their properties, failure modes and corrosion behaviour.

Stephen will then mention some consultancies and investigations he has undertaken. A couple to note – the Victorian Arts Centre Spire, Excalibur Racing yacht accident, Springwood and Mt Victoria-Winmalee bush fires, and the Drayton's Winery explosion.



Excalibur Racing yacht accident



Springwood and Mt Victoria-Winmalee bush fires