



Autumn Newsletter

September 2023

Annual General Meeting: 26th September @ 6pm

The 2023 Annual General Meeting will be held on-line on Tuesday 26th September at 6pm. To attend, please register at <https://tinyurl.com/fzu6ffvz>. There will be elections for President, Vice-President, Secretary and Treasurer as well as two ordinary members of Council.

Council is seeking approval for the following nominations:

President: Dr Tiziana Marrocco (Uni of Strathclyde)

Vice-President: Prof Brad Wynne (Uni of Strathclyde)

Hon Secretary: Dr John Wilcox

Treasurer: Mr John Darling

Nominations are requested for two vacancies on Council. **Nominees must be resident in Scotland but need not be members of the Institute of Materials, Minerals and Mining.** We would particularly welcome nominations from those working in industry. Council members serve for a term of 3 years and may be re-elected for a further 3 year term.

Nominations should be emailed to scottishmetals@gmail.com by midnight Friday 22nd September.

Presidential Address: “Form and Function in Materials Engineering”

Bob Reuben, Professor Emeritus in the School of Engineering and Physical Sciences at Heriot-Watt University will give his Presidential Address immediately following the business of the Annual General Meeting on 26th September.

Bob graduated from the University of Strathclyde with a First Class Honours Degree in Metallurgy and has spent 50 years working in the field of materials engineering on a wide range of materials and applications. A detailed CV and an outline of his talk can be found [here](#).

The lecture will be delivered on-line. All are welcome. Please register [here](#).

Awards Night: 24th October @ 6pm

Once again, we will be holding an Awards Night when our student prize-winners will describe their award-winning projects. The presentations will be held on-line and all are welcome to attend. Please put the date in your diary.

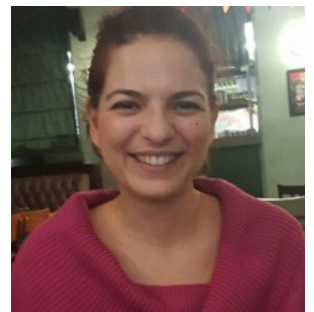
A Circular Steel Economy for Scotland: 28th November @ 6pm

On the 7th March 2023, Zero Waste Scotland (ZWS) facilitated a workshop of invited stakeholders to discuss the opportunity for re-melting Scotland’s steel scrap in Scotland using “green” energy as part of a low carbon circular economy. Dr Russ Hall of the Warwick Manufacturing Group will discuss the issues on 28th November.

Meet your Council - Dr Tiziana Marrocco

What 3 words would describe your materials expertise?

Investigation: this is the word that encapsulates everything I do and love. Whether it’s simply to identify the microstructural features of a component, the compositional phases of a material, the level of crystallinity of a polymer, the



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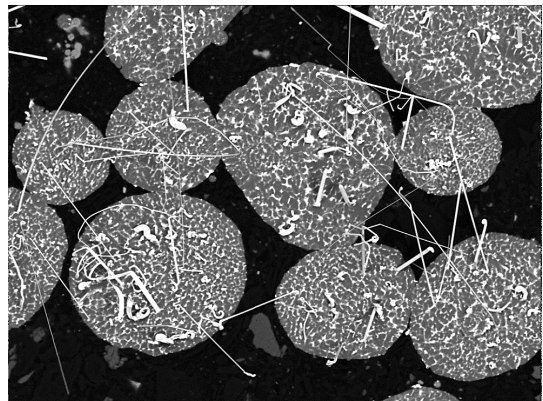
mechanical performance of an alloy pre- and post-treatment, the thermal response of an insulation panel or the granulometry of powder particles.

Cold Spraying: I dedicated my PhD and first 10+ years of my career to the development of this coating technology, seeing the installation of the 1st commercial system in the UK. I found the challenge of developing coatings for the most diverse applications one of the most interesting aspects of my job.

Client interaction: This is another aspect of my job I love. Through the years I have had the fantastic opportunity of working together with clients from everywhere in the world, from Japan to the USA, and embracing their beautiful cultures.

Describe your favourite materials moment:

My Al-Sn quaternary alloyed powder grew whiskers. It was alive! I used these powders within a project on thermally sprayed coatings for enhanced tribological properties of the journal bearings employed in high output automotive engines.



(Tizi is Knowledge Exchange Manager at the University of Strathclyde's Advanced Materials Research Laboratory.)