

Good morning everybody,

My name is Marco Fiorentini and I am an Associate Professor in Mineral Systems and Early Earth processes at the Centre for Exploration Targeting. This is an applied research centre based at the University of Western Australia.

It is my great pleasure to stand in front of you today to present the award for the 2019 SGA Young Scientist of the Year. As you will know this award is offered biennially to a young scientist who contributed significantly to the understanding of mineral deposits.

Many excellent candidates were nominated and considered for the award this year. It is actually great to remark the outstanding scientific calibre that characterises the research pursuit of young scientists and early career researchers in our discipline. The presence of so many students among us today is a testament to the vibrant community we are part of.

However, ultimately a decision had to be made. And the winner of this year's SGA Young Scientist Award is Dr Crystal Laflamme.

Crystal received her PhD in Canada in 2014 and arrived to UWA in early 2015 with a strong background in field mapping, tectonics and radiogenic isotope systems. During her post-doctoral appointment with us, she grew tremendously and became one of the world leaders in the application of stable isotope techniques to monitor the evolution of fluids and magmas in a wide range of mineral systems.

In Australia, she also developed a strong relationship with industry and successfully integrated isotope techniques towards a better understanding of the global volatile and metal cycle during supercontinent amalgamation and breakup. With the philosophy that applied science and fundamental research are ultimately two sides of the same coin, Dr LaFlamme was able to translate findings from her industry-funded research into a number of high-impact publications, pushing the boundaries of science and pioneering some of the analytical techniques that are used to measure multiple sulfur isotopes.

This successful field of research has enabled Dr LaFlamme to attract top quality students during her appointment at UWA. Her excellence in supervision of students is reflected in their remarkable accomplishments and the award of very competitive scholarships to carry out postgraduate studies. Furthermore, in her relatively short career to date Dr LaFlamme has also developed collaborative work with many institutions worldwide, completing fieldwork and analytical work in numerous globally.

Dr LaFlamme has all the characteristics of an emergent research leader. She was able to proactively take the opportunity of the post-doctoral appointment at UWA and transform it into a trampoline to become one of the most renowned thought leaders in the field of isotope geochemistry applied to mineral system science. Dr LaFlamme developed some of the new key working hypotheses that allow us to utilise subtle (but measurable) isotopic anomalies as tracers to track ore forming processes with unprecedented confidence. The work of Dr LaFlamme's in the field of multiple sulfur isotopes represents a new benchmark in the visualisation of processes that up until a few months ago could not even be thought possible.

In mid 2018, Crystal was awarded a very prestigious Canada Research Chair Tier 2 at Laval University in Canada, as well as significant funding from the Canadian Foundation for Innovation to boost her research program into the future.

Without further ado, it is my pleasure to present to you the 2019 SGA Young Scientist winner: Dr Crystal Laflamme.