# <u>Hazelab Newsletter –Imperial College London</u>

January 2020 – July 2020

Hello! Welcome to another news update from Hazelab at Imperial College London. For more follow us on twitter @ImperialHazelab, visit our website or watch our video.

## New arrivals

In PhD student arrivals, we would like to welcome Simona Dossi, who has started researching how to protect rural houses in rural communities from wildfire! Simona is part of PyroLife, an international program targeted at training wildfire PhD students over a wide range of disciplines.

Also joining us soon is Tatenda Nyazika, who will be coming on as a Postdoctoral student researching façade fires!

Over the summer, Hazelab is also excited to be taking on three undergraduate UROP students: Yaxin, Kseniia, and Christos. Yaxin will be developing a database of timber behavior in fire for application in machine learning and AI; Kseniia will be modelling the fire behavior of curtain walls in buildings, and Christos will be continuing the work to develop an updateable database on façade fire incidents.

Welcome to Hazelab, Simona, Tatenda, Yaxin, Kseniia, and Christos!

# **Graduating Students**

Shu Min, Poppy and Alexandra graduated from their master's degree in mechanical engineering and completed their final year thesis with us. Poppy worked on modelling the combustion of timber facades, Alexandra on ACP panels and Shui Min studied the flammability of strong composites for aerospace applications. The research was well received and was presented to the department also as posters and webinars. We wish them all luck with all their future endeavours!

### Departures

We would like to say goodbye to Erika (bottom left of photo!), an undergraduate student from Toyohashi University of Technology in Japan, who was with Hazelab on academic placement studying façade fire safety with Francesca. Safe travels, Erika!



### Conferences

Guillermo, Matt and Franz presented their work at the Imperial Forum for policy makers. The Forum is part of Imperial's policy engagement programme, aiming to connect Imperial researchers with policy-makers to discover new thinking on global challenges.



In February, Harry presented his master thesis on wildland fire evacuation trigger modelling at the London Office of Movement Strategies. Simona helped organize and host a seminar of the Pyro-life symposium streaming every Wednesday during the summer months.

#### Awards

Matt won the SFPE Student Scholar Award, which recognizes excellent students across the world who are conducting research to advance the science and practice of fire protection engineering. Well deserved, Matt!

Guillermo received The Research Excellence Award from The Combustion Institute for publishing research papers that have had a major impact on the field of combustion science. We are very proud! He has also been nominated for the student choice award at Imperial College.

# Life during the pandemic

During these unprecedented times, Hazelab has had to adapt to working outside the office, with most of us working remotely in London and beyond! We have weekly virtual group meetings to keep everyone updated on work and current events in the field, and we run frequent drop-in virtual coffee meetings where we chat about the wonders of now being able to wear pyjamas to the office.

Wuquan and Agung are part of the few students that were granted access to Imperial College campus to continue to carry out their experiments on smouldering peat. The rest of the group has been working from remote.

# **SFPE Greater London Student Chapter**

The SFPE Greater London student chapter has launched <u>Flash Points</u>, a competition to encourage communication for young researchers in the discipline of fire safety across the UK. The competition is open to undergraduate, postgraduate students and who are yet to or have recently graduated. To apply for the competition, students are required to submit a brief 3-minute original video describing research related to fire safety science that they have done, explaining its importance and impact in society. The prize for the best video decided by our panel of judges from industry and academia will consist of a £350 cash prize! Watch out for the winning video announced towards the end of summer. The chapter has also established monthly publicly available fire science webinars. Carmen Gorska from University of Queensland was our first speaker on this new platform her talk on timber compartment fires is available on our YouTube channel. More amazing speakers are comping in August, September and October, so sign up to our mailing list on our website for further updates.

The chapter has also been awarded a silver award for chapter excellence, which recognises chapters that demonstrate significant contributions to the needs of chapter members and the society. We would like to thank members and friends of the chapter for making this possible, and SFPE for recognising the strides the chapter has made!

#### Outreach

We were interviewed for an <u>article</u> which featured in the national geographic on wildland fires.

Matt participated in a communication competition challenge open to all phd students at Imperial College and made this amazing <u>video</u> for the competition.

The Combustion Institute has featured a range of photos taken by multiple Hazelab members on their Instagram account. Phenomena including Fire tornadoes (left, by Francesco), Peat micro-haze (top, by Eirik), and smouldering Biomass (bottom, by



#### Francesco)

Finally, we would like to send a huge thanks all of the academics and engineers who were kind enough to visit us – when this was still possible - and share their expertise and diverse experiences with the group. Thank you to Dr Nieves Fernandez-Anez (Western Norway University of Applied Sciences), Dr Eleni Asimakopoulou (UCLan), Carmen Gorska (University Queensland) & Dr Wojciech Węgrzyński.

Written by Francesca Lugaresi & Harry Mitchell