

Hazelab Newsletter –Imperial College London

May 2024 – October 2024

Hello friends of Hazelab! Welcome to another update of our recent activities on research and engineering. For more news follow us on twitter @ImperialHazelab, visit our [website](#), [publications](#), or watch our [video](#).

Graduating and arriving students

We are very excited to welcome **Hanna Berry** as a new PhD student in our team. She starts her work on battery fires between Hazelab and the battery research group of Imperial College London under the supervision of both Guillermo and Dr Huizhi Wang. Welcome to Hazelab!

Dimitra Tarasi from the Technical University of Crete has joined Hazelab again for an extended visit to work with us on our smouldering peat experiments – we are very happy to host you again, Dimitra!

We also welcomed three undergraduate students and one postgraduate for the summer to work on research projects. **Yingfan Deng** used AI to study firebrands from timber compartments. **Frixos Papachristodoulou** reviewed firebrands (aka ejecta) from Li-ion batteries. **Siheng Xin** developed wildfire smoke models. Two students recently finished their masters' projects with Hazelab – **Jeff Gwee** developed models of firebrand transport from timber buildings, and **Kristen Chan** developed statistical models of firebrand generation from timber buildings.

Two MSc students from the master in Sustainable Energy Futures joined us for their thesis. **Panagiotis (Takis) Adamopoulos** worked on power-line network design optimisation, while **Auriane Javaloyes** modelled wildfire ignition from powerlines.

We are also thrilled that two of our members have graduated – congratulations, **Dr. Edmund Ang** and **Dr. Harry Mitchell**! Ed's PhD developed CFD models of tunnel fires, whereas Harry conducted large mass timber compartment fire experiments. Ed is continuing his amazing career as a Director at AECOM in Australia. Harry is continuing with Hazelab as a postdoctoral researcher but moving to a completely new topic – smouldering of Arctic peatlands!

Carlos Walker-Ravena is taking up a new postdoctoral position at the Universidad Católica de Chile on battery fires. Congratulations Carlos and best of luck!



Visitors

It has been an extremely busy summer for Hazelab for visitors! We feel very fortunate that so many have been able to visit our labs and chat with us about all things fire. We had visits from:

- Carlos Fernandez-Pello from University of California, Berkley
- Charles Betts and fire engineers from Hydrock, now Stantec
- Craig Weinschenk from UL
- Fernando Perez from ETH Zurich
- Augustin Guibaud's research group from University College London
- James Quintere from University of Maryland
- Sara McAllister from Missoula Fire Sciences Laboratory, USDA
- Carmen Gorska and fire engineers from OFR Consultants
- John Gale's research group at York University, Canada
- Richard Yuen from City University of Hong Kong and Anthony Yuen from Hong Kong Polytechnic
- Lukas Arnold's research group from Forschungszentrum Jülich
- Iza Vermesi from Bureau Veritas
- Candice Charlton from University of the West Indies



Conferences and Outreach

Alexander and **Nikolaos Kalogeropoulos** attended the 4th summer school on fire dynamics modelling at the Forschungszentrum Jülich in Germany. There, Alexander and Nick had the opportunity to learn about the physics and chemistry models embedded in FDS, and to meet and exchange ideas with the FDS developers.

Guillermo Rein went to China to visit the University of Science and Technology of China (USTC) and Hong Kong, where he presented at the Fire Asia conference. While he was in China, he also attended the First Hazelab Reunion (China Edition) to meet with some of Hazelab's alumni.

Harry and **Alexander** attended the 4th European Symposium on Fire Safety Science, hosted by the Universitat Politècnica de Catalunya in Barcelona, Spain. Hazelab had a fantastic time with a lot of collaborators and friends from across the world!

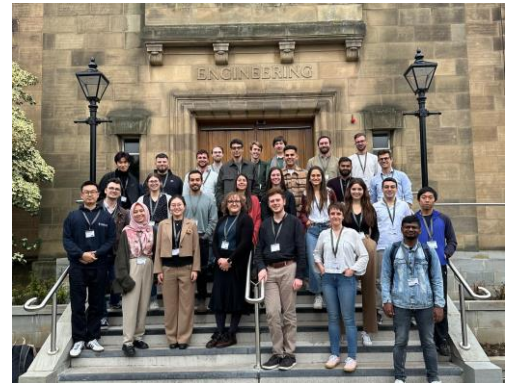
Harry, **Carlos**, **Afi Mulyasih**, **Nick**, and **Alexander** went to Edinburgh to attend Fired-Up. It was a great opportunity to meet with colleagues and friends from the fire science community from the UK and abroad!

Nick, **Harry**, and **Guillermo** had a great time on the Fire Science Show podcast, hosted by the famed Wojciech Wegrzynski. Nick and Harry presented their research on wildfire evacuation trigger modelling, and Guillermo presented on wind turbine fires.

The BBC published an article on the study conducted by **Jamie John** and **Guillermo** on the 'firewaves' that hit London in 2022. Carlos and Guillermo were also part of the BBC podcast on the Grenfell enquiry, discussing why combustible cladding was allowed on the market.

Nick, supported by student travel grants, attended and presented at the Annual SFPE conference and Expo in Kentucky and the 18th Plinius Conference on Mediterranean Risks in Greece.

Alexander Castagna and **Harry Mitchell** recently attended the European Fire Safety Symposium in Barcelona, Spain. Here, Harry presented his PhD research on firebrands from mass timber compartments. In addition to great tapas and sangria, the conference was a brilliant opportunity to meet our field's best and brightest and see some excellent research. Thank you to the lead organisers and hosts, Elsa Pastor, Eulàlia Planas, and the rest of the Universitat Politècnica de Catalunya team for a wonderful conference!



Written by Alexander Castagna, Harry Mitchell, and Guillermo Rein