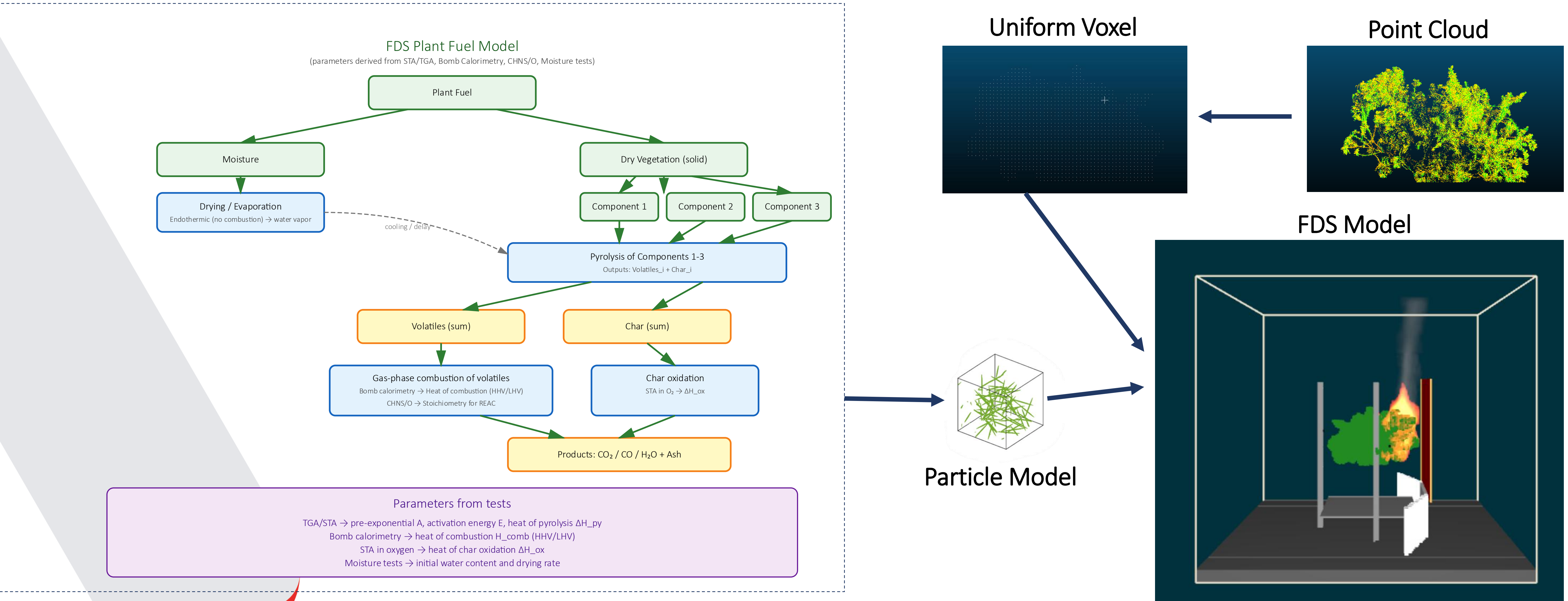
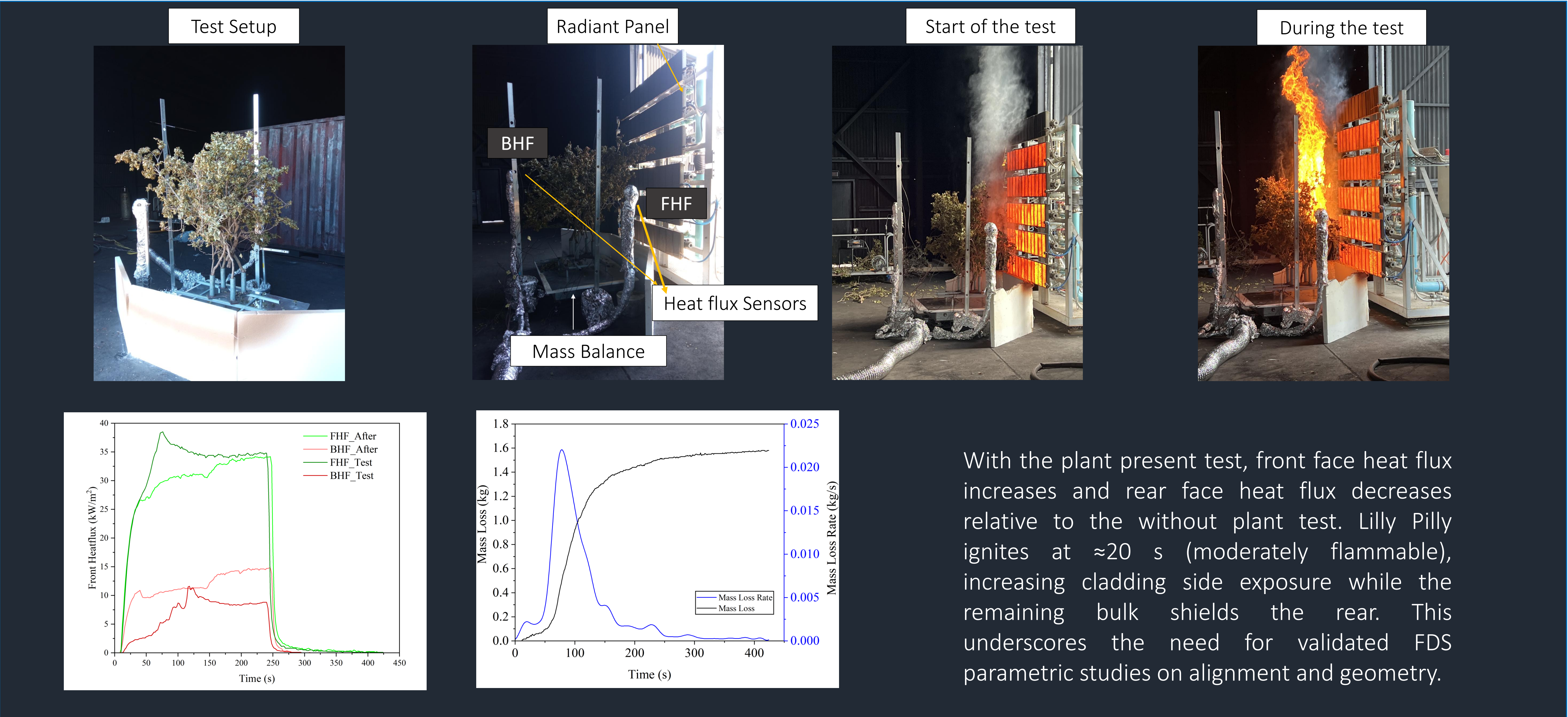


Ornamental plants elevate ignition risk; Experiments and FDS Modelling agree; Evidence informs landscaping setbacks.

Thanirosan Krishnakumar, A. Prof Anthony Ariyanayagam, Prof Mahen Mahendran
Wind and Fire Lab, Queensland University of Technology

Assessing Ornamental Plant Flammability for Building Safety.

Ornamental vegetation can intensify radiant and convective exposure to nearby buildings. We conducted controlled burning tests with front- and back-face heat-flux sensors, determined material properties (STA/TGA-DSC, bomb calorimetry, CHNS/O) and validated FDS models. A planned parametric study will extend this workflow by varying species, moisture content, hedge geometry, and wind/external heat flux, enabling generalised setback guidance for diverse landscaping scenarios.



Further information
For additional information scan the QR code or contact:
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