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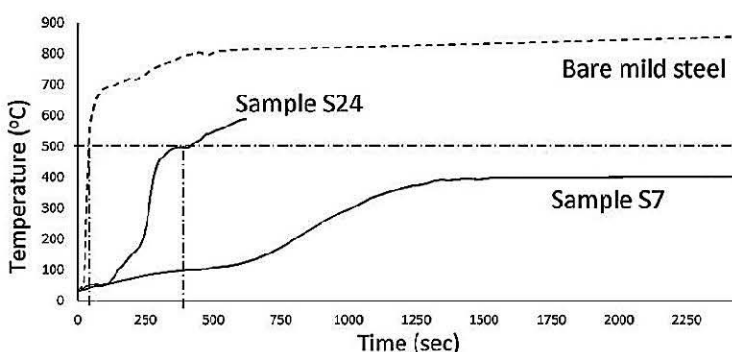
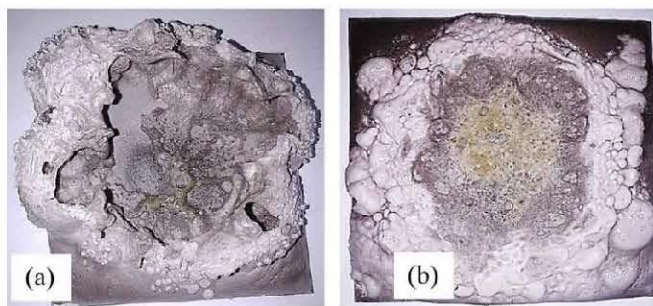
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## RESEARCH HIGHLIGHTS

### Development of Geopolymer Nanocomposite for Agriculture and Aerospace Applications:

- i) The interior part of the aircraft should be made of lightweight and fire retardant materials. When in flight-fire occurs, there is a limit time for passenger and crews to evacuate from aircraft. Thus the aircraft interior should be made not only lightweight but also fire retardant materials. Geopolymer nanocomposite based on rice husk ash has been developed as a potential fire retardant composite material. Inclusion of flame retardant nanofillers is expected to improve further the flame retardant properties and increase the time for evacuation when fire takes place.



- ii) *Ganoderma Boninense* (g. boninense) is the pathogen culprit of Basal Stem Rot (BSR) in a palm oil tree. Once infected, young palm would usually die within 1 or 2 years while mature trees would survive for around 3 years. Thus, providing precise watering with sufficient amount of fungicide will promote downward root growth and reduce the rot problem. Therefore, research on the sub irrigation nanoporous geopolymer pipe was currently being conducted to overcome this problem.