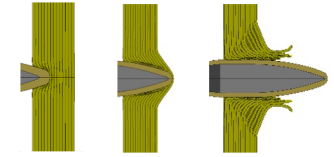


Structural integrity under extreme load

Topic: Structural batteries



•**TITLE:** Design and analysis of structural batteries at multiscale levels

•**RESEARCH BACKGROUND:**

•Structural batteries have been attracted more attention recently due to its high efficiency and light weight, especially applied with composite structures. Thus, development of related numerical methods can be helpful for both design and applications of structure batteries.

•**RESEARCH ACTIVITIES:**

1. Development numerical models at microscale considering the introduce of battery for composites.
2. Development numerical models at macroscale considering structural responses of composites with batteries.
3. Investigate the effect of batteries on mechanical behaviours of composite structures (optional)
4. Consider the multifunctional responses of structural batteries for design related structures (optional)

•**METHODOLOGY:** Numerical – Programming

•**DURATION:** 7 – 9 months

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•**POSSIBLE COLLABORATIONS:**

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