

What should we do next? What can we do? -- Impact of NCREE Tainan Lab





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What Should We Do Next?

The answer is.....





What Should We Do Next?

The answer is.....

A LOT!





Re-Examine the issues we have taken into account for the last several decades in NCREE Taipei by the more advanced facilities.

- Scale effect (Young Prof. Moehle's 1/10 scale experiment)
- Various load capacities (Young Prof. Hwang's live load)
- Structural responses
- > Lifelines
- Nonstructural components

Conduct research in multi-disciplinary domain (ex. geotechnical engineering in NCREE Shake Table vs. NCU Centrifuge)





Structural vs. Centrifugal Shake Tables



NCREE Shake Table



NCU Centrifugal Shake Table





Lessons learned from disasters

Multi-hazard vs. Multi-Dimensional Load Rotational effect in ground motion Contribution from Earth Science Torsional effect on structures Irregular Structures Critical localized effect Multi-directional loads • Structures (Steel, RC, Composites) Bridges $\bullet P+M \rightarrow P+M+T$







Torsional Effect on Bridges



Torsional Effect on Buildings







Torsional Effect on Steel Members







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Torsional Effect on Composite Members













Torsional Effect on Composite Members



T/T.









