Seismolator Project

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Background

- Increased earthquake occurrence
- Lately Mexico Magnitude 8.1 quake of September 8, 2017.
- Consequences:
- Loss of life
- Destruction to infrastructure
- Displacement of people and settlements

The Seismolator project

- The Seismolator project is conceptualized to provide a solution to this problem.

Action Required

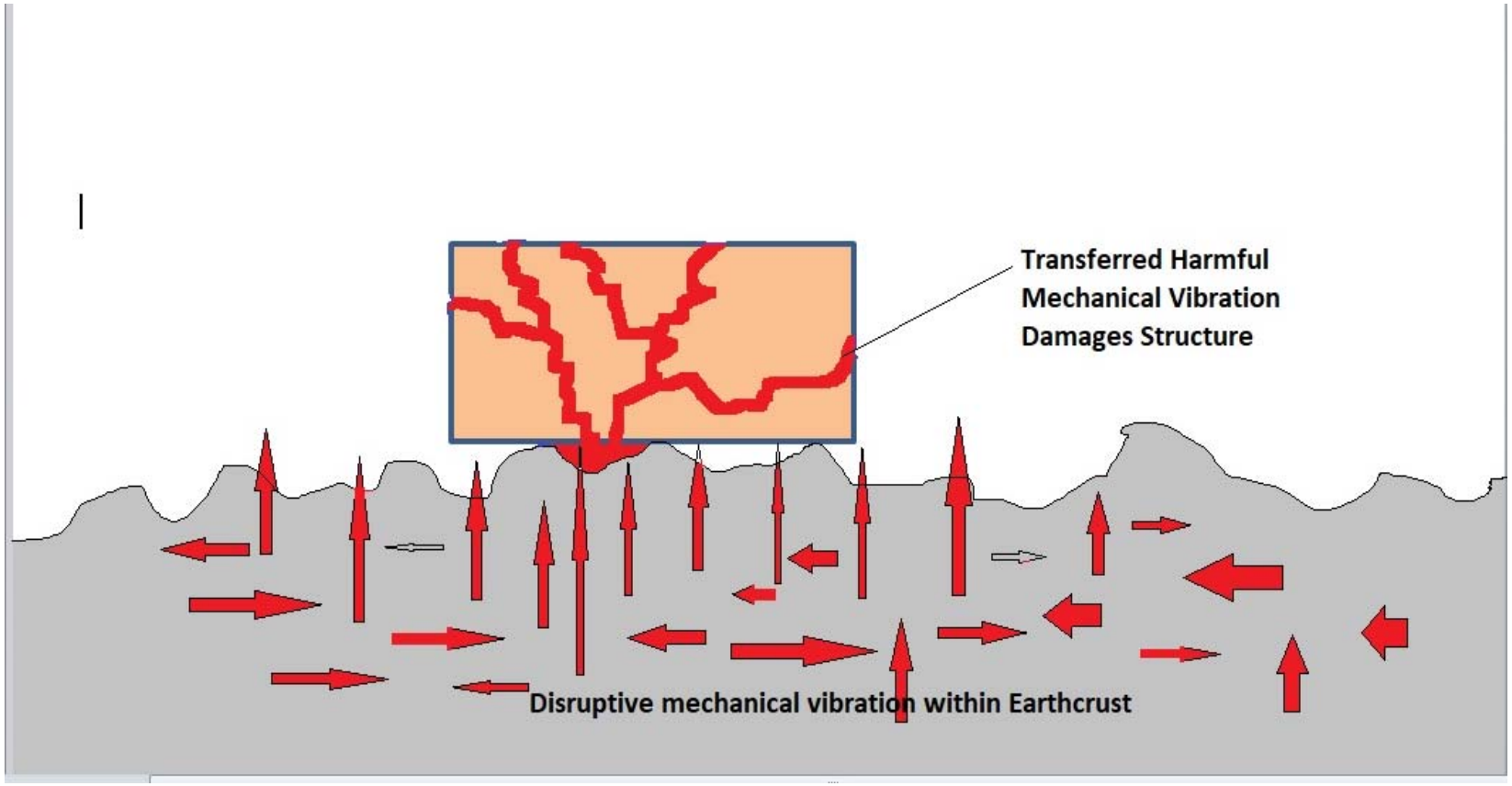
- Earthquakes are natural disasters
- Engineering approach to mitigating effect required
- This Involves studying the problem and use of applicable engineering principles to solve it.

Approaches in Research

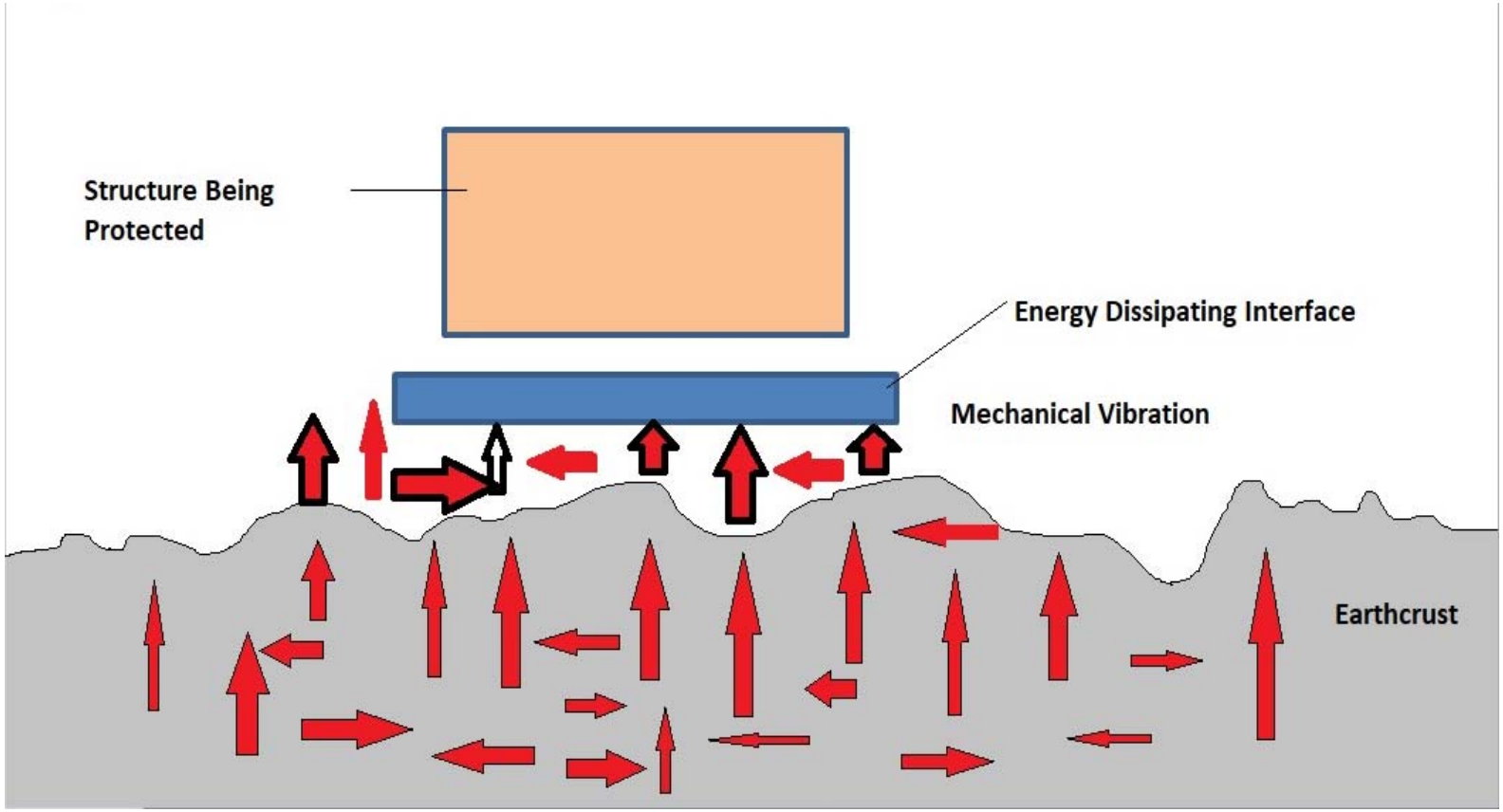
- 1. Base or foundation Isolation
- 2. Fast dissipation of harmful mechanical vibration
- Second approach which may be tackled using an energy conversion method based on the law of conservation of energy
- The law of conservation of energy states that:
- **“the total energy of an isolated system in a given frame of reference remains constant”**

The Task

- The task, therefore, condenses to **Designing** and **constructing** a **PROTOTYPE** applicable **INTERFACE**



Without an Energy Dissipation Interface



With an Energy Dissipation Interface

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Energy Dissipation Interface??

We Need you!

- To define an applicable prototype

  Energy Dissipation Interface
- A team of 2 or 3 self driven students are required on this project for their Senior Design Project

Support

- Technical support shall be provided by:
- The GA, the PI and Co-PI
- Equipment and Materials shall be provided

Reward

- A decent grade!
- Opportunity to apply knowledge gained and prove your ingenuity!

Contacts

- You can reach the GA, Dr. Marin or Dr. Kim as follows:

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Thank you