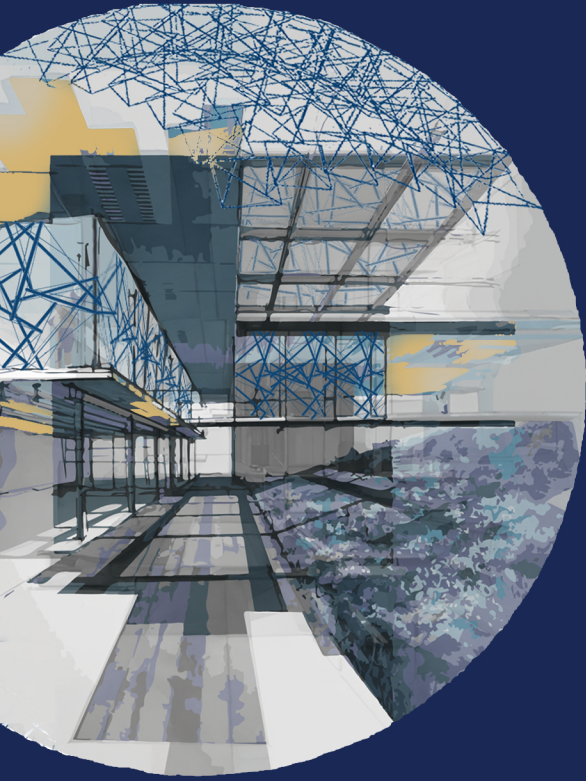


# Advances in Transformable Building Technology

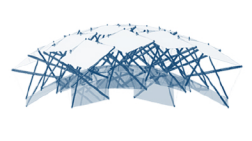
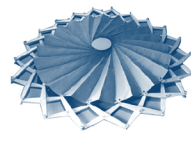
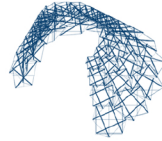
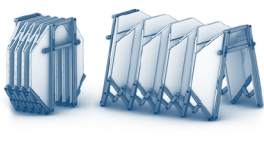
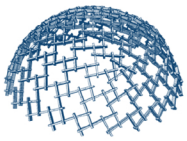


Reconfigurable structures, distinguished by their inherent ability to alter form to suit diverse purposes, offer numerous advantages over permanent building structures

- ✓ Reduced labor and resource requirements
- ✓ Minimized construction time
- ✓ Reusable

Rapidly assembled and deployable structures encompass

- Scissor-hinge linkage systems
- Reciprocal frame structures
- Rigid or structural origami
- Tensegrity structures and others



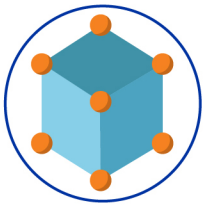
## ASCE Special Collection on Reconfigurable Structures

This collection explores critical design issues, constructability, and fabrication processes, as well as challenges and drawbacks in their design, analysis, and applications in the building sector



### Design process

- Geometric conception
- Kinematic conception
- Morphological considerations
- Functional configuration



### Simulation models

- Geometric modeling
- Kinematic simulation methods
- Material properties
- Structural performance



### Assembly and erection

- Fabrication detailing and joint design
- Constructability and maintenance issues
- Assembly, erection, and deployment methods
- Performance evaluation



### Construction assessment

- Real-world applications in building design and construction
- Challenges and drawbacks in their design, analysis, and applications in the building sector

This Special Collection compiles high-quality papers that can guide the design, analysis, and applications of reconfigurable structures in the building sector and pave the way to sustainable and versatile construction systems