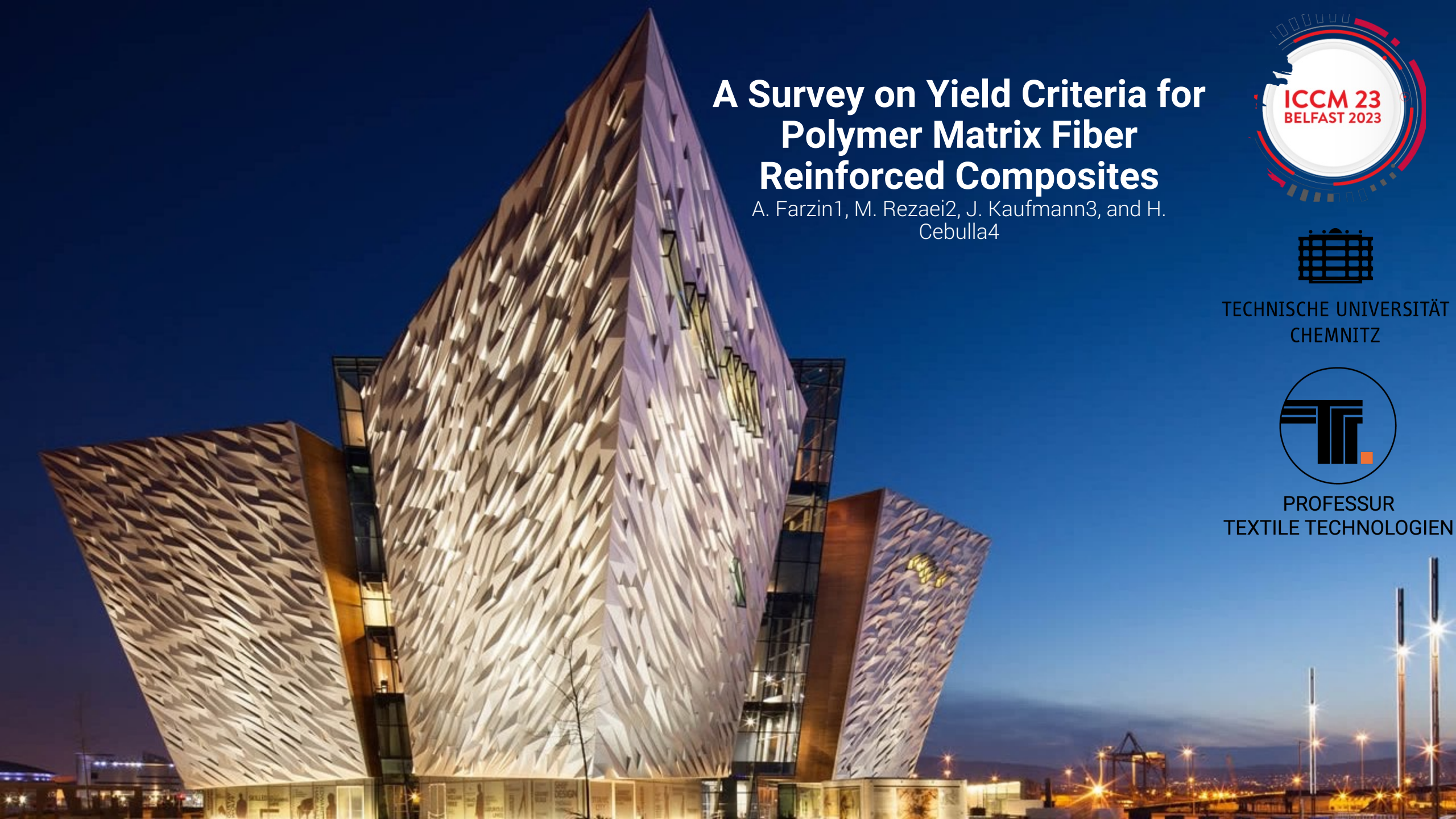

A Survey on Yield Criteria for Polymer Matrix Fiber Reinforced Composites

A. Farzin1, M. Rezaei2, J. Kaufmann3, and H. Cebulla4

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Conclusion

Results

Methods

Introduction

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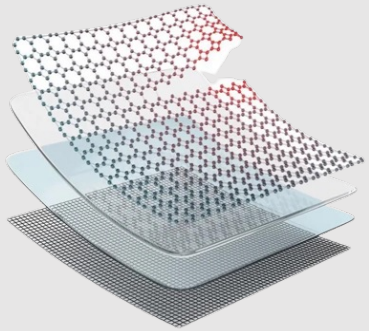
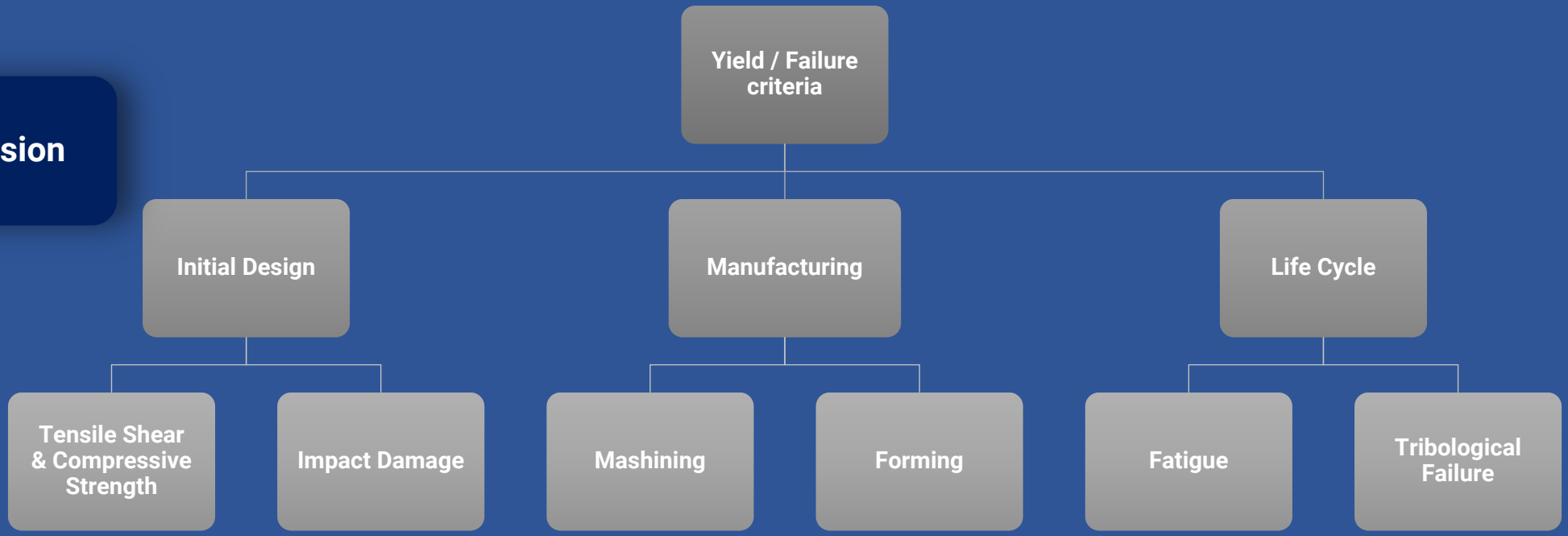
- Meta-review.
- Challenging prediction of the behaviors due to their nonlinear and anisotropic deformations.



- Surveying the saturated trends on the criteria.
- Providing insights into the most suitable failure criteria for specific projects.

- Duration after the 2000s.
- The topic is mentioned in at least three well-cited review articles.

- In each review, at least four novel approaches on the topic.
- Compasses a brief guide to some of the most cited reviews on the field.


Yield / Failure criteria
Initial Design
Manufacturing
Life Cycle
Tensile Shear & Compressive Strength
Impact Damage
Mashining
Forming
Fatigue
Tribological Failure

- More case specified failure scenarios.
- Dynamic failure situations tend to be more of interest.
- AI and machine learning potentials for yield point predictions.

- Paper offers comprehensive roadmap for PMFRC failure behavior understanding.
- enabling new researchers to deploy the most precise criteria for their applications, avoiding parallel studies.

Thank you for your attention

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