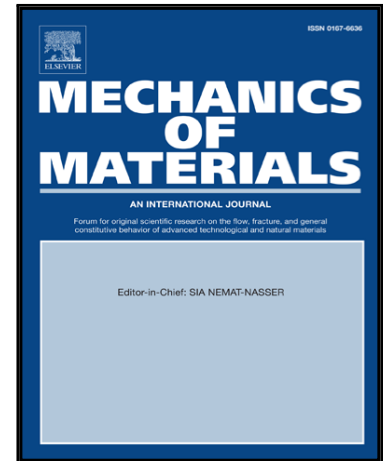


Accepted Manuscript

Influence of strain rate and temperature on the mechanical behaviour of rubber-modified polypropylene and cross-linked polyethylene

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PII: S0167-6636(17)30217-X
DOI: [10.1016/j.mechmat.2017.07.003](https://doi.org/10.1016/j.mechmat.2017.07.003)
Reference: MECMAT 2759



To appear in: *Mechanics of Materials*

Received date: 23 March 2017
Revised date: 29 June 2017
Accepted date: 5 July 2017

Please cite this article as: Joakim Johnsen, Frode Grytten, Odd Sture Hopperstad, Arild Holm Clausen, Influence of strain rate and temperature on the mechanical behaviour of rubber-modified polypropylene and cross-linked polyethylene, *Mechanics of Materials* (2017), doi: [10.1016/j.mechmat.2017.07.003](https://doi.org/10.1016/j.mechmat.2017.07.003)

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Highlights

- XLPE and PP tested in tension and compression
- XLPE and PP tested at different temperatures and strain rates
- DIC used to extract strains in all tests
- Substantial self-heating is observed in both materials at elevated strain rates
- Yield stress as function of strain rate and temperature described by Ree-Eyring flow

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