An error has been found effecting the stress values in the experimental and analytical comparisons in tension. In short, within the spreadsheet utilized for all comparisons in tension the incorrect cross-sectional area was calculated resulting in stress values being twice the actual correct value (e.g. 200 MPa was calculated instead of the correct 100 MPa). This error does not affect other comparisons or calculated material properties as those were performed separately. Further, since no postulations or conclusions were made based on directly these miscalculated stress values, only relations, all postulations and conclusions hold true. For example, in the method of comparison for acceptable correlation, the analytical peak stress had to be within 10% of the experimental peak stress. Since both were miscalculated by the same factor, the relations remain identical. To ensure the reader has access to the correct data determined in this endeavor, all incorrect figures have been updated below. It is recommended that the reader utilize these figures in place of those as noted.

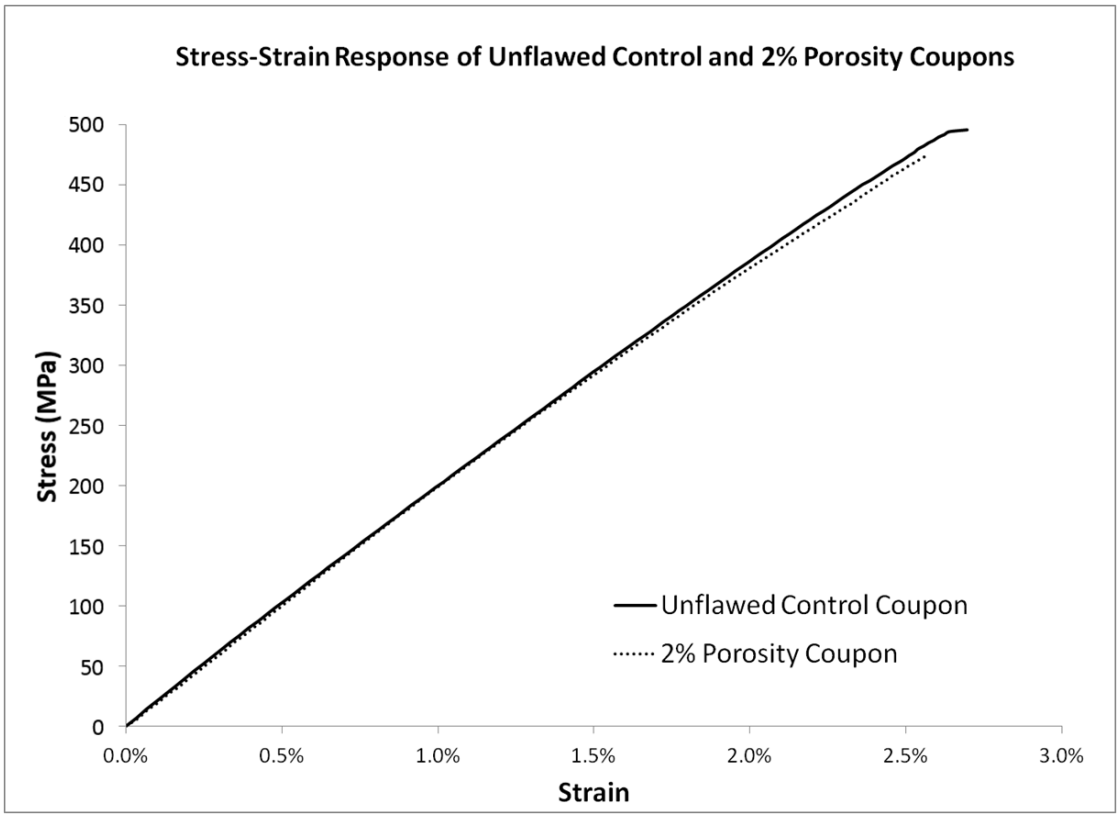

Figure 1 (corrected, p. 73): Stress-strain of unflawed control and 2% porosity coupons tension utilized for analytical/experimental correlations.

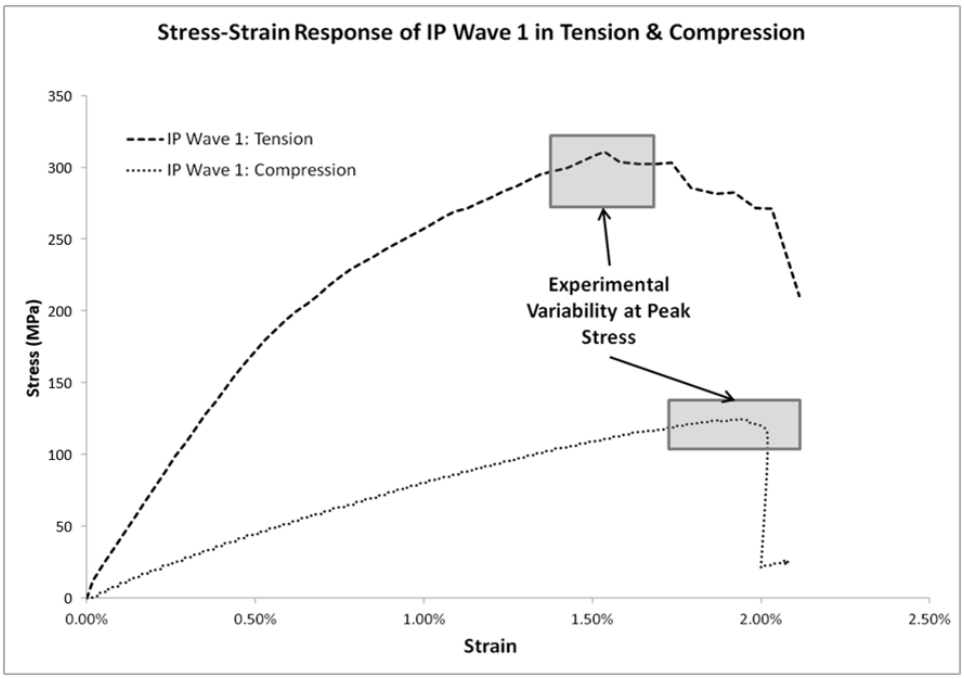

Figure 2 (corrected, p. 90): Stress-strain of IP Wave 1 in tension and compression utilized for baseline model correlations with associated experimental variability.

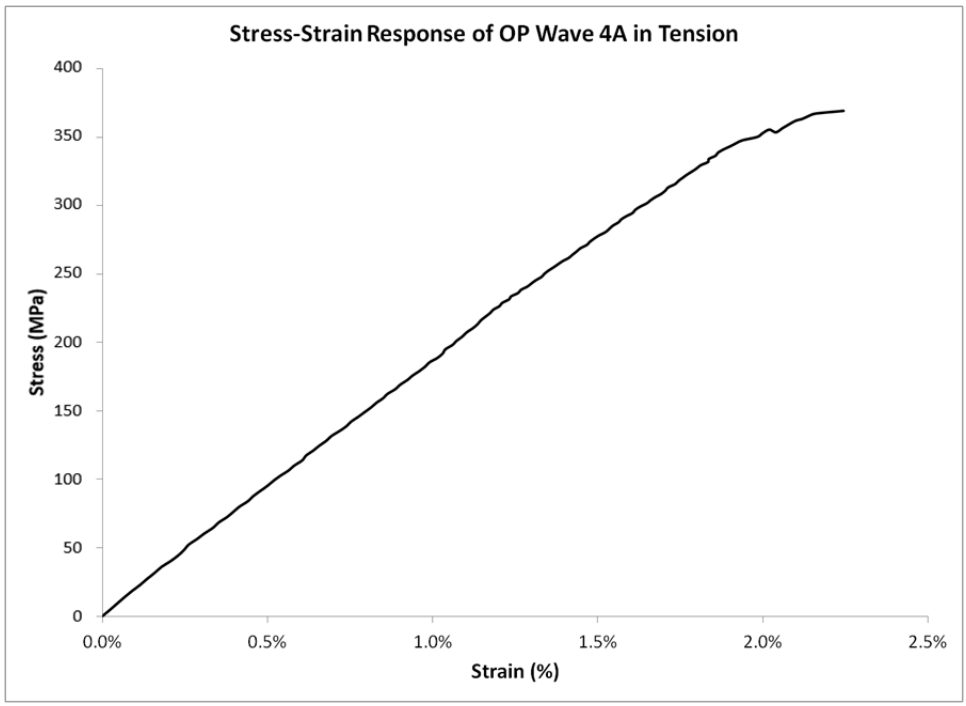

Figure 3 (corrected, p. 92): Stress-strain of OP Wave 4A in tension utilized for initial OP wave model correlations.

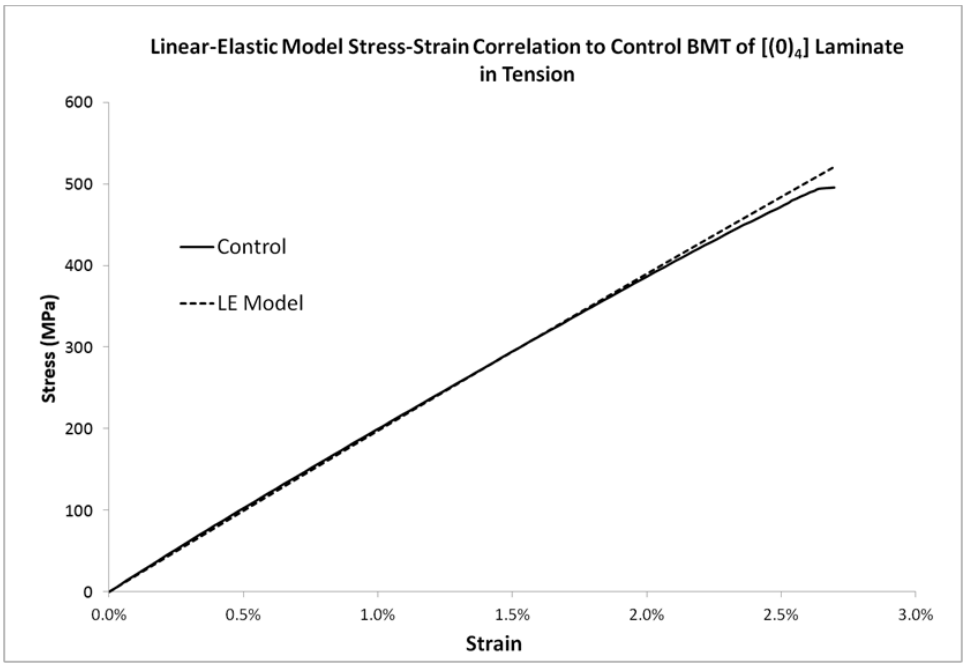

Figure 4 (corrected, p. 115): Comparison of $[(0)_4]$ laminate BMT Control and linear elastic model in tension results indicating good correlation.

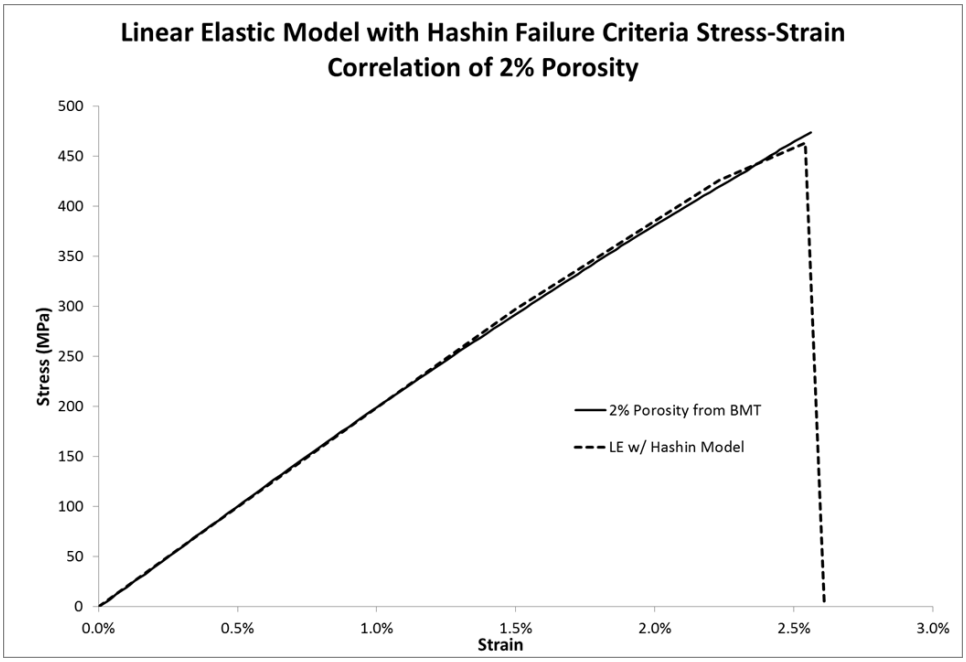

Figure 5 (corrected, p. 131): Comparison of 2% Porosity BMT and linear elastic with Hashin failure criteria model in tension results indicating good correlation.

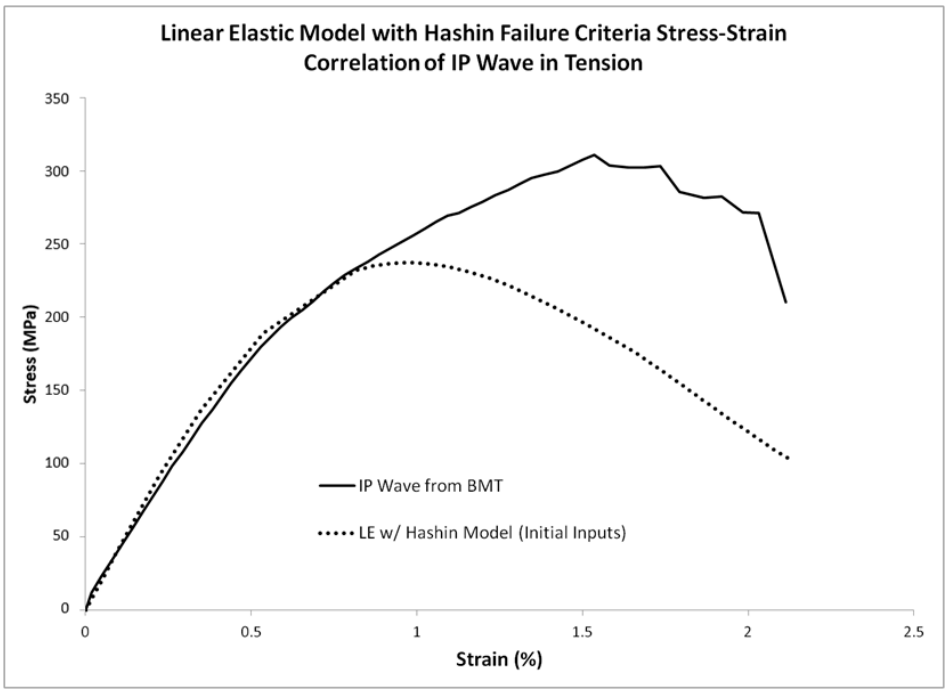

Figure 6 (corrected, p. 135): Stress-strain comparison of IP wave BMT and linear elastic with Hashin failure criteria model in tension results indicating good correlation.

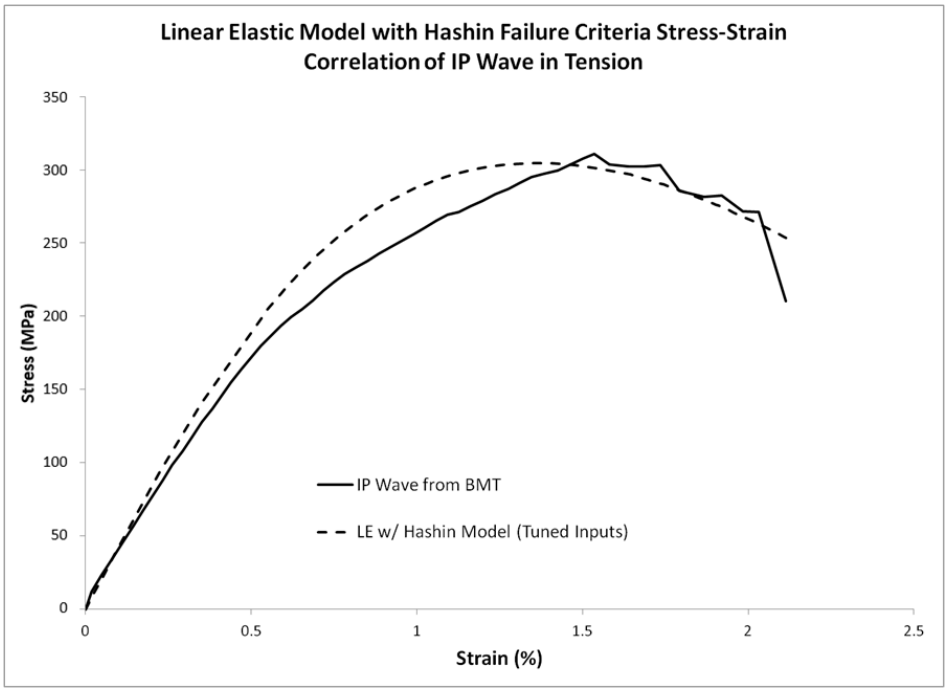

Figure 7 (corrected, p. 137): Stress-strain comparison of IP wave BMT and linear elastic with Hashin failure criteria model in tension results indicating good correlation.

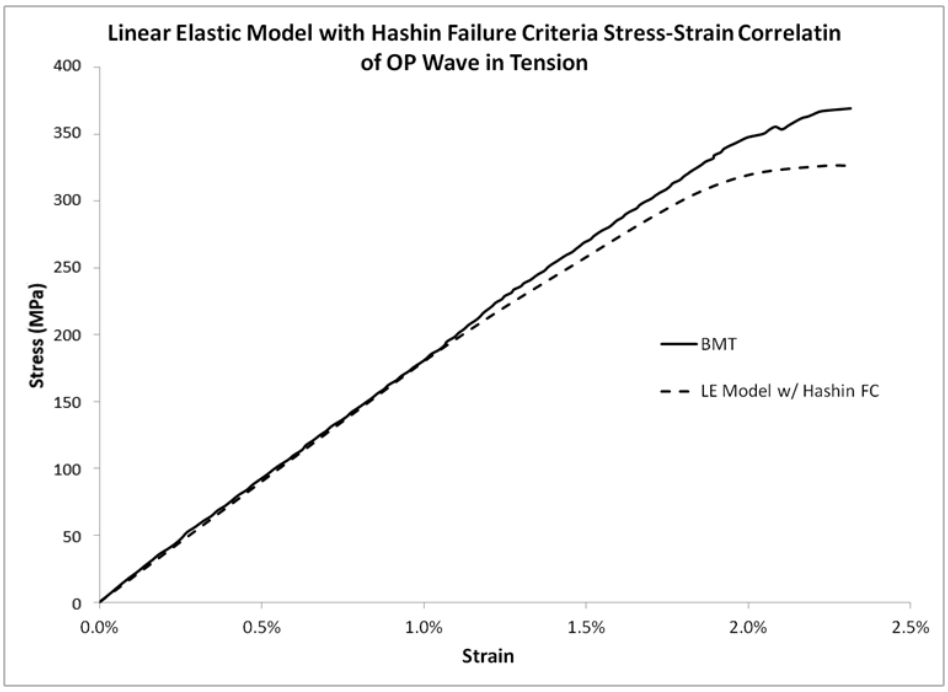

Figure 8 (corrected, p. 147): Stress-strain comparison of OP wave BMT and linear elastic with Hashin failure criteria model in tension results indicating good overall correlation.

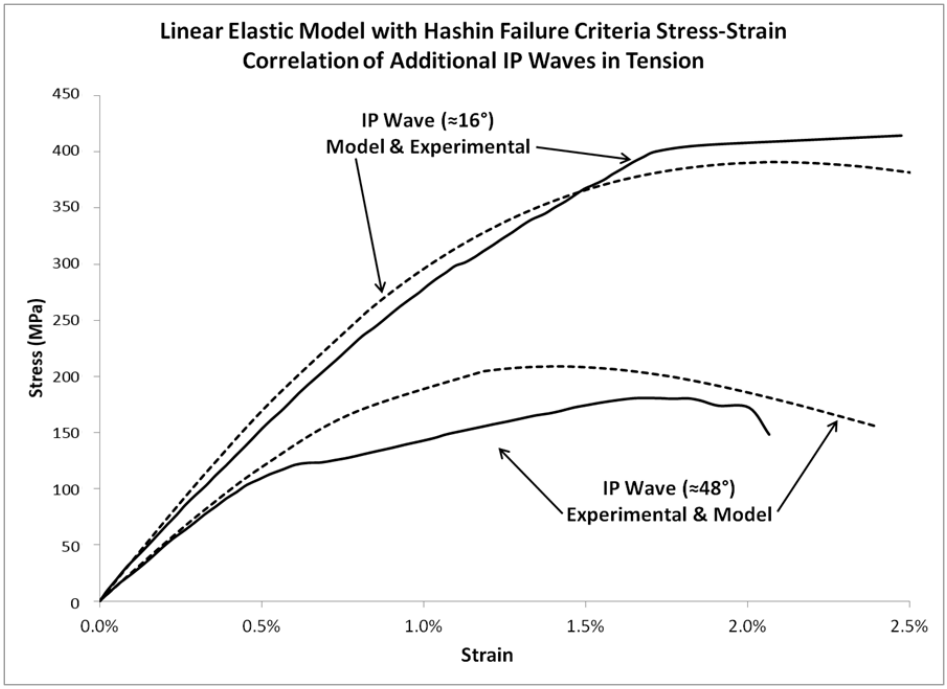

Figure 9 (corrected, p. 149): Stress-strain comparison of 16° and 48° IP waves cases in tension results indicating reasonable overall correlation and prediction.

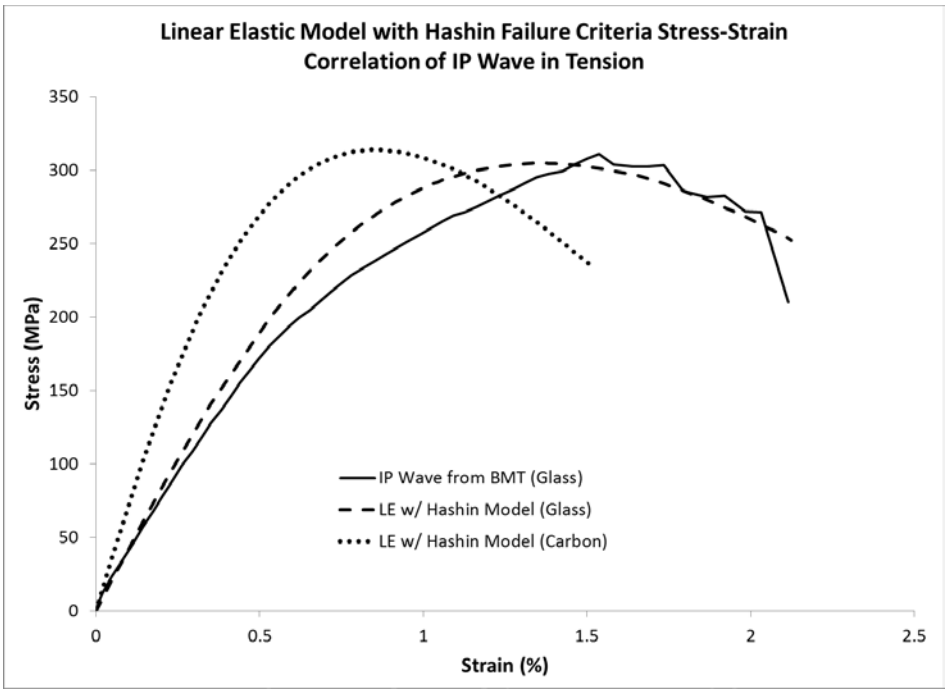

Figure 10 (corrected, p. 153): Stress-strain comparison of fiberglass composite from BMT and model with Hashin failure criteria with predicted carbon response for IP wave with same Hashin model.

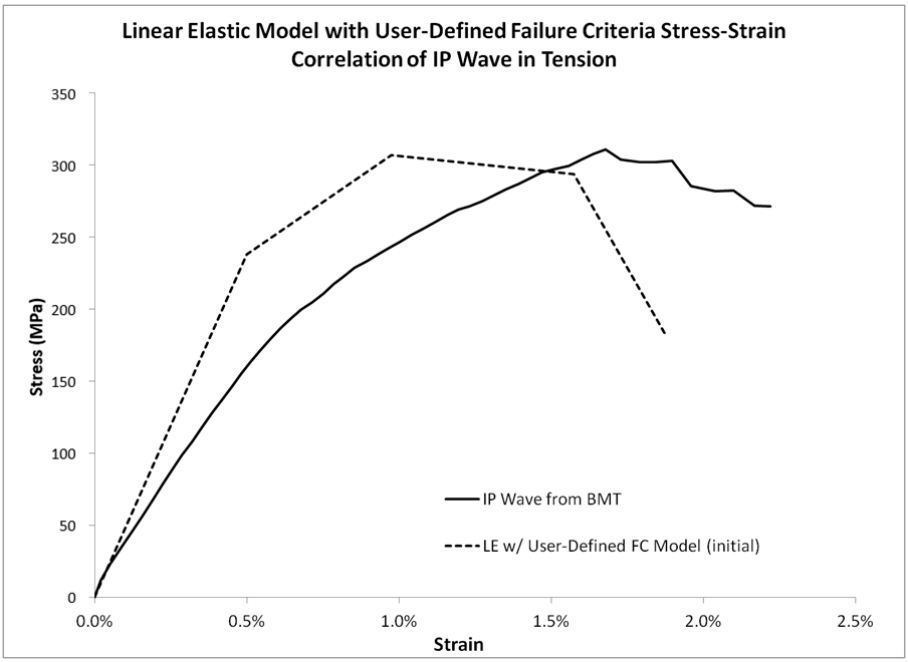

Figure 11 (corrected, p. 173): Stress-strain comparison of IP wave BMT and initial linear elastic with user-defined failure criteria model in tension.

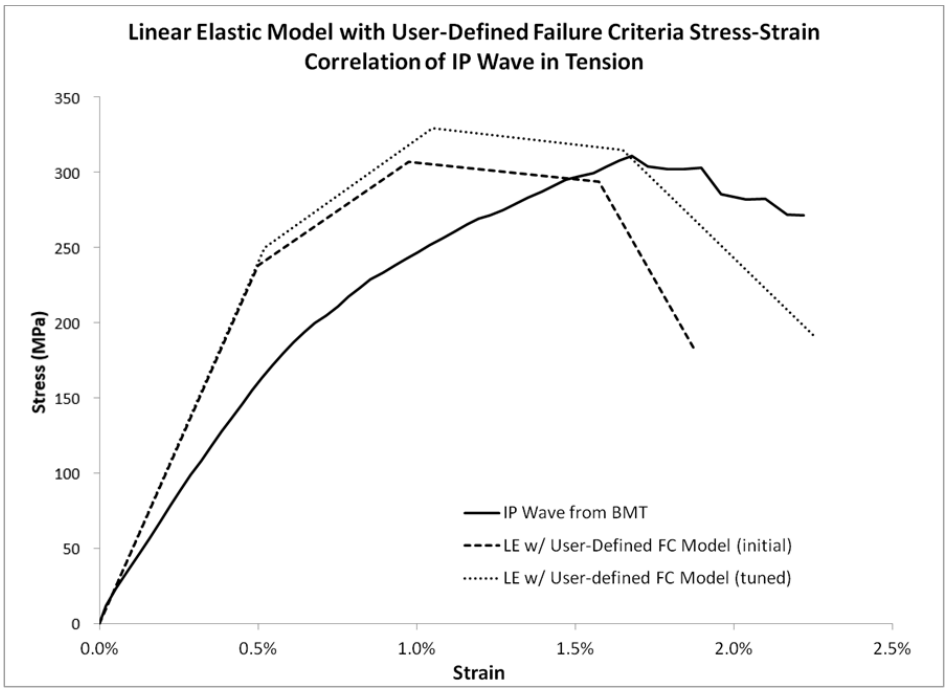

Figure 12 (corrected, p. 175): Reprint of stress-strain curve from Figure 76 with addition of tuned linear elastic with user-defined failure criteria model in tension.

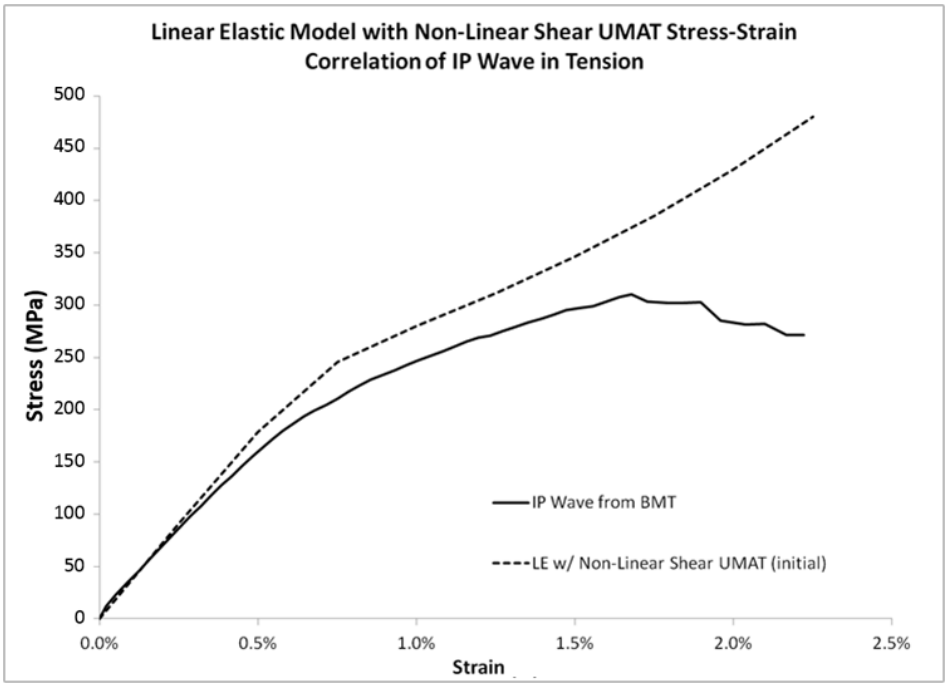

Figure 13 (corrected, p. 195): Stress-strain comparison of IP wave BMT and initial non-linear shear UMAT model in tension.

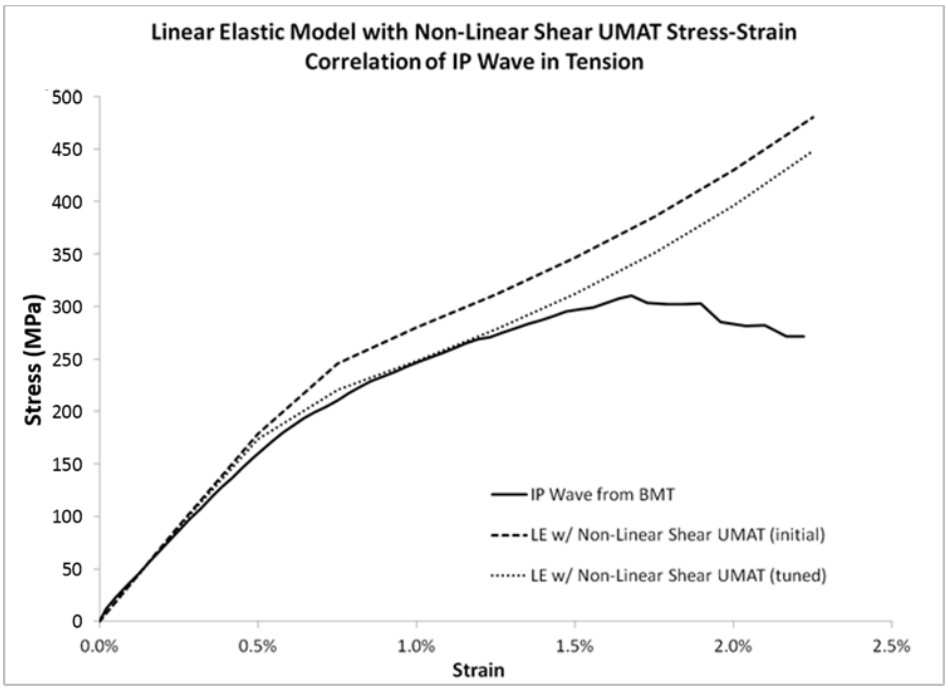

Figure 14 (corrected, p. 196): Reprint of stress-strain curve from Figure 84 with addition of an unacceptably tuned non-linear shear UMAT model in tension.

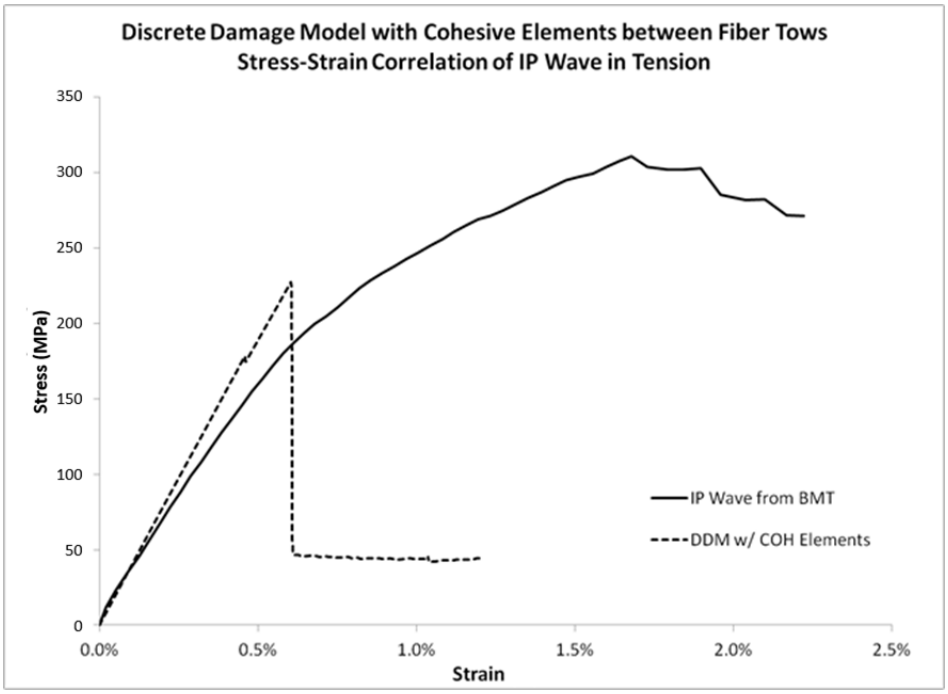

Figure 15 (corrected, p. 214): Stress-strain comparison of IP wave BMT and cohesive element DDM in tension.

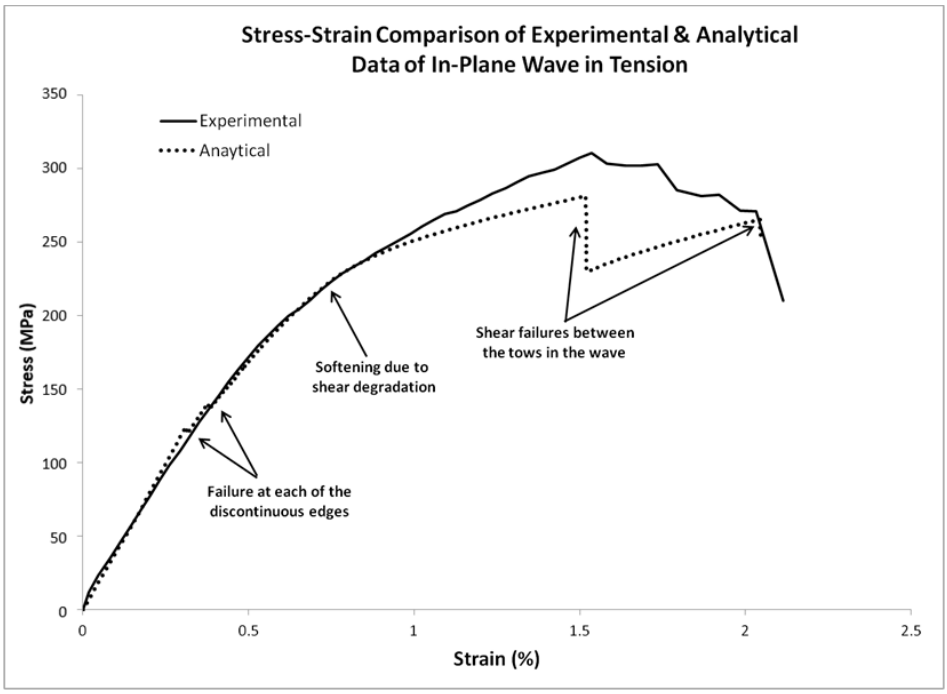

Figure 16 (corrected, p. 237): Stress-strain comparison of IP wave BMT and combined model in tension.

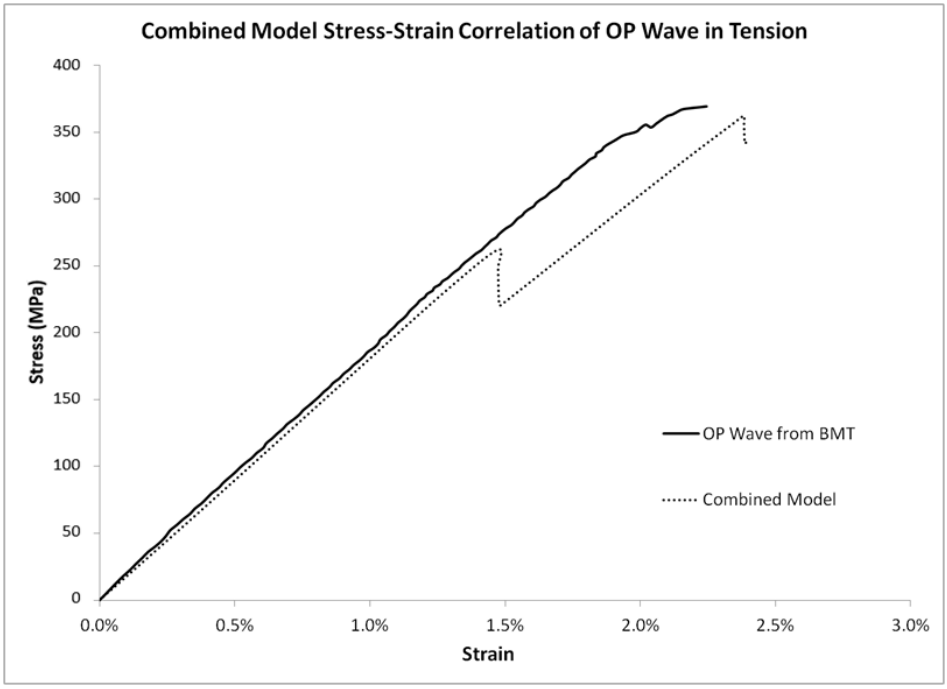

Figure 17 (corrected, p. 246): Stress-strain comparison of OP wave BMT and combined model in tension.

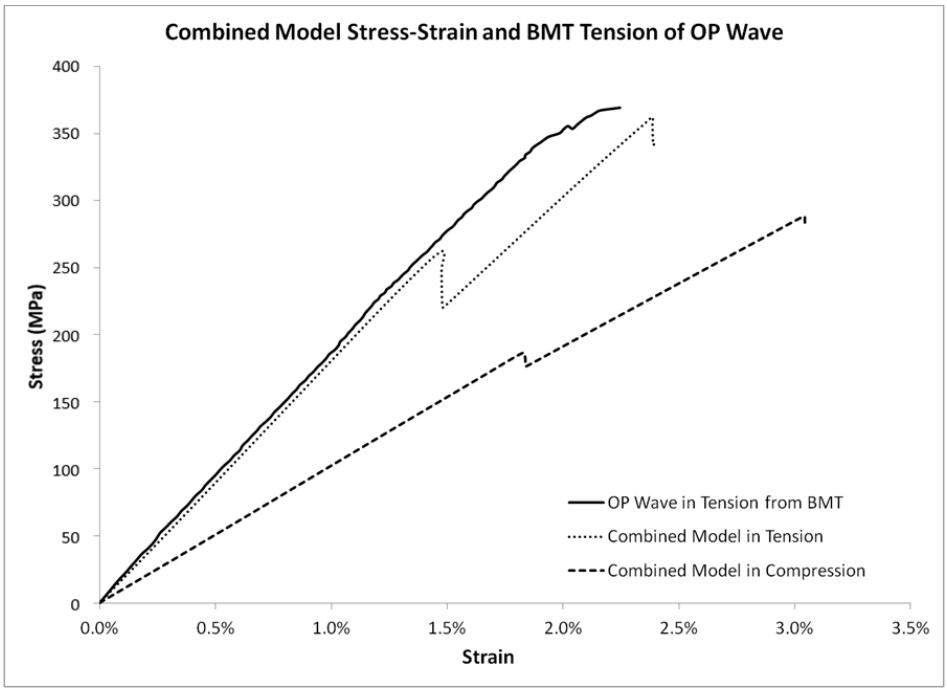

Figure 18 (corrected, p. 249): Stress-strain response of combined model in compression shown with OP wave BMT and combined model in tension for comparison.

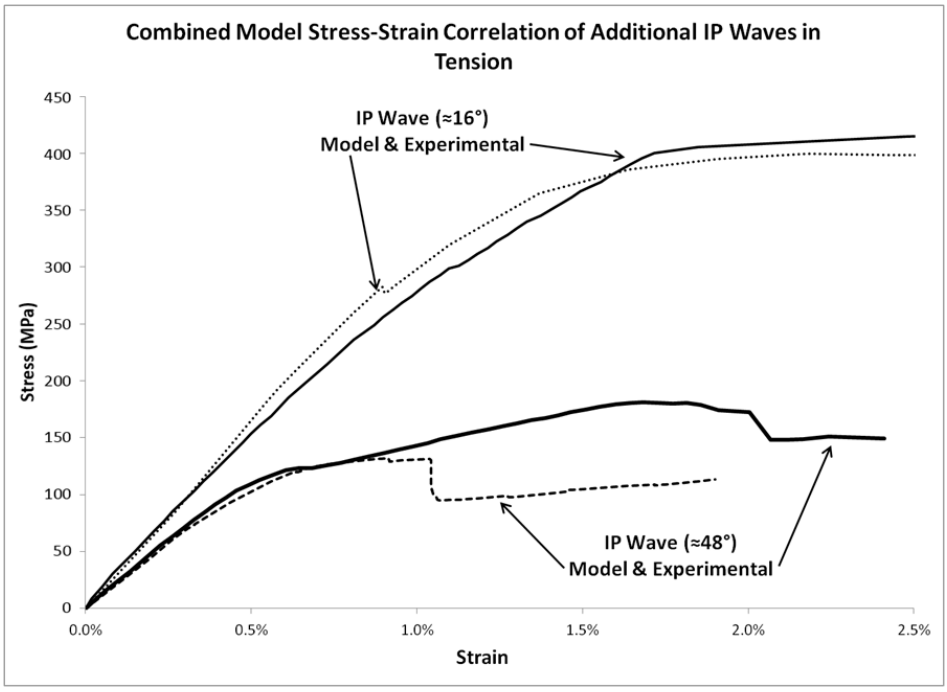

Figure 19 (corrected, p. 251): Stress-strain comparison of 16° and 48° IP wave cases in tension with results indicating reasonable overall correlation and prediction.

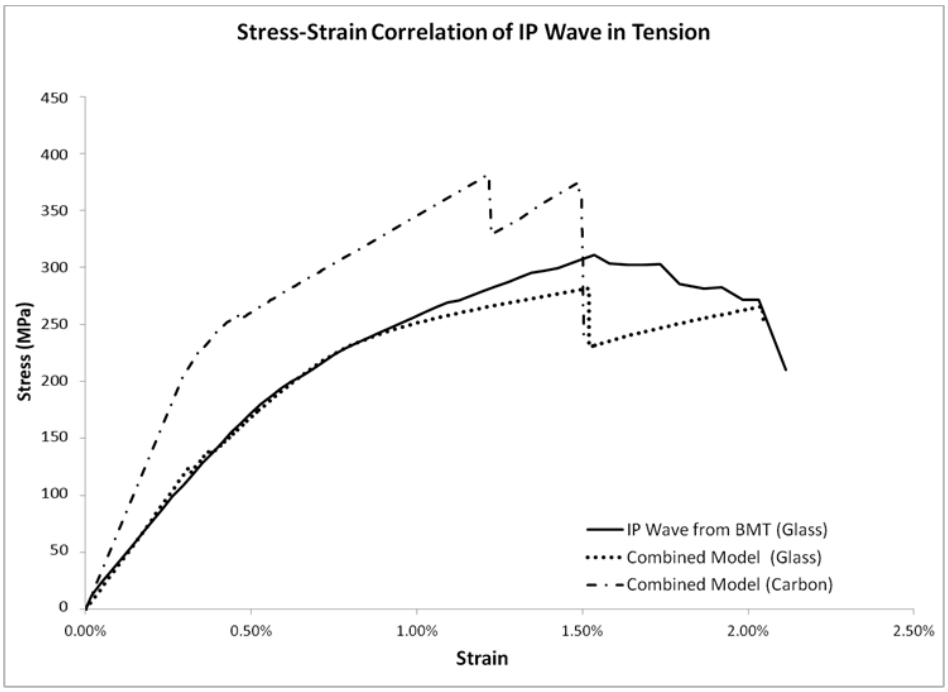

Figure 20 (corrected, p. 256): Stress-strain comparison of fiberglass composite from BMT and combined model with predicted carbon response for IP wave with same combined model.

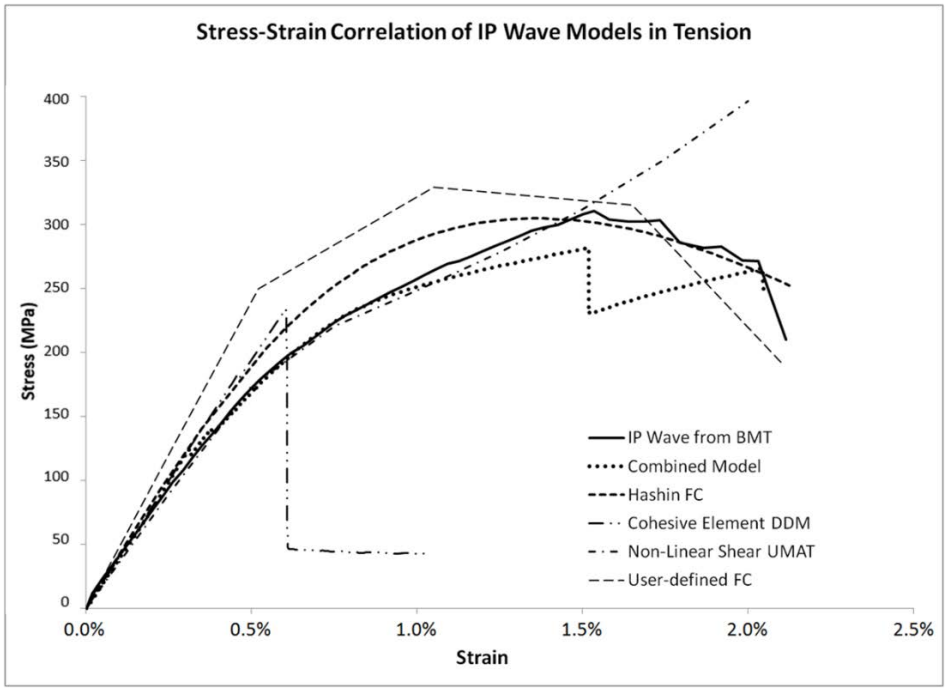

Figure 21 (corrected, p. 262): Stress-strain correlations of common IP Wave for each model technique compared to BMT results.

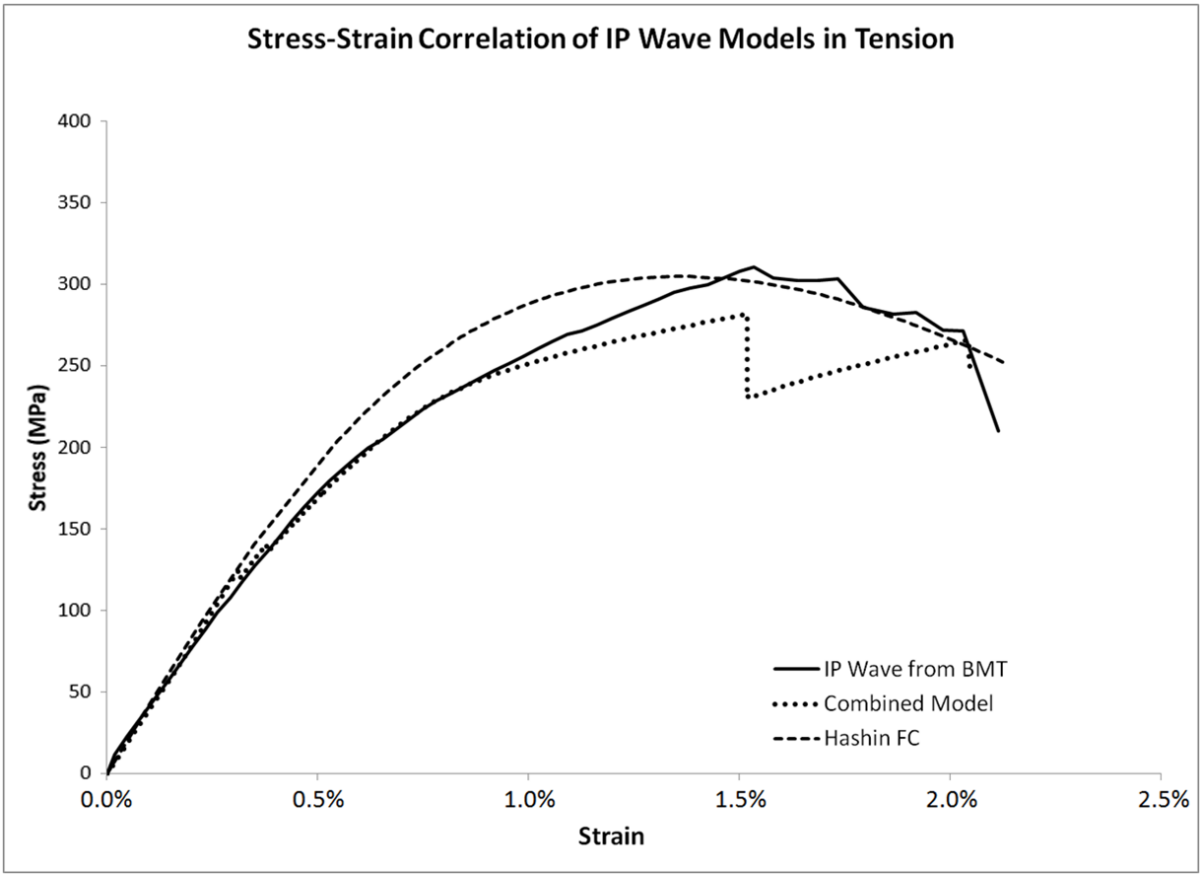

Figure 22 (corrected, p. 269): Stress-strain correlations of common IP Wave for Hashin FC and Combined techniques compared to BMT results.