

*Supplementary Materials*

**Table S1.** Stress at 100, 200, 300, and 400% elongation of non-aged and thermal-aged CS/R-VNRL and CS/RP-VNRL composites with varying CS contents of 0, 2, 4, or 6 phr.

| Sample  | Chitosan content (phr) | Stress at 100% elongation (MPa) |             | Stress at 200% elongation (MPa) |             | Stress at 300% elongation (MPa) |             | Stress at 400% elongation (MPa) |             |
|---------|------------------------|---------------------------------|-------------|---------------------------------|-------------|---------------------------------|-------------|---------------------------------|-------------|
|         |                        | Before aging                    | After aging | Before aging                    | After aging | Before aging                    | After aging | Before aging                    | After aging |
| R-VNRL  | 0                      | 0.03                            | 0.03        | 0.07                            | 0.07        | 0.10                            | 0.11        | 0.13                            | 0.15        |
|         | 2                      | 0.04                            | 0.05        | 0.10                            | 0.11        | 0.14                            | 0.15        | 0.18                            | 0.18        |
|         | 4                      | 0.05                            | 0.05        | 0.11                            | 0.12        | 0.17                            | 0.19        | 0.22                            | 0.24        |
|         | 6                      | 0.06                            | 0.07        | 0.15                            | 0.18        | 0.23                            | 0.29        | 0.29                            | 0.37        |
| RP-VNRL | 0                      | 0.03                            | 0.03        | 0.06                            | 0.07        | 0.09                            | 0.09        | 0.11                            | 0.11        |
|         | 2                      | 0.04                            | 0.05        | 0.07                            | 0.09        | 0.11                            | 0.15        | 0.15                            | 0.20        |
|         | 4                      | 0.04                            | 0.05        | 0.08                            | 0.11        | 0.14                            | 0.16        | 0.17                            | 0.21        |
|         | 6                      | 0.06                            | 0.06        | 0.13                            | 0.13        | 0.18                            | 0.19        | 0.23                            | 0.23        |