Nonlinear continuum mechanics for finite element analysis 2nd. edition corrections 1

• Page 78 Equation (3.37c) this should have a minus in front of the half, as below.

$$\begin{aligned} \dot{\varepsilon}_p &= -\left. \frac{d \ln \lambda_e}{dt} \right|_{\ln \lambda = \text{const}} \\ &= -\frac{1}{\lambda_e} \left. \frac{d\lambda_e}{dt} \right|_{\lambda = \text{const}} \\ &= -\frac{1}{2} \left. \frac{d\lambda_e^2}{dt} \right|_{\lambda = \text{const}} \lambda_e^{-2} \end{aligned}$$

- Page 79 third line above Equation (3.44)
- ... must be such that $f(\tau, \bar{\varepsilon}_p)$ remains equal to zero,
- Page 83 Equation (3.57), subscript p missing, see below.

$$\Delta \varepsilon_p = \int_{t_n}^{t_{n+1}} \dot{\varepsilon}_p \, dt \quad ; \ \varepsilon_{p,n+1} = \varepsilon_{p,n} + \Delta \varepsilon_p$$

• Page 84 last line. n + 1 should not be a subscript to p, p and n + 1 are the same subscript (as above), see below.

... the yield criterion $f(\tau_{n+1}, \bar{\varepsilon}_{p,n+1}) = 0.$

• Page 87 Equation (3.71d) differential symbol d missing, see below.

$$= E - \frac{E\operatorname{sign}(\tau_{n+1}^{\operatorname{trial}})}{E+H} \frac{d\left|\tau_{n+1}^{\operatorname{trial}}\right|}{d\tau_{n+1}^{\operatorname{trial}}} \frac{d\tau_{n+1}^{\operatorname{trial}}}{d\varepsilon_{n+1}} - E\Delta\gamma \frac{d\operatorname{sign}(\tau_{n+1}^{\operatorname{trial}})}{d\varepsilon_{n+1}}$$

• Page 313, the following text book should be insert in the bibliography before the Zienkiewicz, O.C. and Taylor, R.L.

ODEN, J. T., Finite Elements of Nonlinear Continua. McGraw-Hill, 1972. Also Dover Publications, 2006.