

**Errata to “Numerical Methods for Chemically Reacting Fluid
Flow Computation under Low-Mach Number Approximation”**
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1. On page 168, the sentence on line 21, “We next review the formulation of . . .” should have a reference to a crucial paper “M. BRAACK and R. RANNACHER, Adaptive finite element methods for low-Mach-number flows with chemical reactions, *VKI Lecture Series*, 1999–03, 1999”.
2. On page 173, the third term on the right-hand side of Eq. (32) should be “ $\rho(\sum_i^N C_{p_i} D_i \nabla Y_i) \cdot \nabla T$ ”.
3. On page 183, Eqs. (103), (104), (105), (106), and (107) should be as follows:

$$\frac{\mathbf{v}^{n+1} - \mathbf{v}^n}{\Delta t} = -(\mathbf{v} \cdot \nabla)\mathbf{v} + \frac{1}{\rho} \nabla \cdot \boldsymbol{\tau} + \mathbf{g} - \frac{1}{\rho^{n+1}} \nabla p_{hyd}^{n+1}. \quad (103)$$

$$\frac{\hat{\mathbf{v}}^{n+1} - \mathbf{v}^n}{\Delta t} = -(\mathbf{v} \cdot \nabla)\mathbf{v} + \frac{1}{\rho} \nabla \cdot \boldsymbol{\tau} + \mathbf{g} - \frac{1}{\rho^{n+1}} \nabla p_{hyd}^n, \quad (104)$$

$$\frac{\mathbf{v}^{n+1} - \hat{\mathbf{v}}^{n+1}}{\Delta t} = -\frac{1}{\rho^{n+1}} \nabla \delta p_{hyd}^n. \quad (105)$$

$$\left[1 + \frac{1}{2} \Delta t \left\{ \mathbf{v} \cdot \nabla - \frac{\mu}{\rho} \nabla^2 \right\} \right] \delta \hat{\mathbf{v}}^k = -(\mathbf{v}^k - \mathbf{v}^n) + \frac{1}{2} (rhs_m^k + rhs_m^n) - \frac{\Delta t}{\rho^{k+1}} \nabla p_{hyd}^k, \quad (106)$$

$$rhs_m = -\Delta t \left[(\mathbf{v} \cdot \nabla)\mathbf{v} - \frac{1}{\rho} \nabla \cdot \boldsymbol{\tau} - \mathbf{g} \right], \quad (107)$$

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