

# Modelica Evolution – From My Perspective

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This paper intends to tell the story of Modelica ([www.Modelica.org](http://www.Modelica.org)) from the author's perspective. It is a fantastic saga that for me started in April 1976. The saga includes studying the needs, the original idea, the development of a solution, waiting for mature hardware technology, a start-up company, a fantastic collaboration, an automotive company caring for its software supplier, how to get momentum by standards collaboration, forming the right team, and the magic phone call from the right company.

$$\frac{d}{dt} [c_{dm8} m_{dm8} + (V_{dl8} - V_{ds8}) \rho_{dw8} h_{dw8} + (V_{ds2} + V_{ds8}) \rho_{ds2} h_{ds2}] =$$

$$= q_{dm8} + w_{dl5} h_{dl4} - w_{ps1} h_{ds2} - w_{dw8} h_{dw8} \quad (9.1)$$

The mass balance the steam-water mixture in the risers and the steam in the drum becomes:

$$\frac{d}{dt} [(V_{dl8} - V_{ds8}) \rho_{dw8} + (V_{ds2} + V_{ds8}) \rho_{ds2}] =$$

$$= w_{dl5} - w_{ps1} - w_{dw8} \quad (9.2)$$

Multiplication of equation (9.2) by  $h_{dw8}$  and subtraction from equation (9.1) gives:

