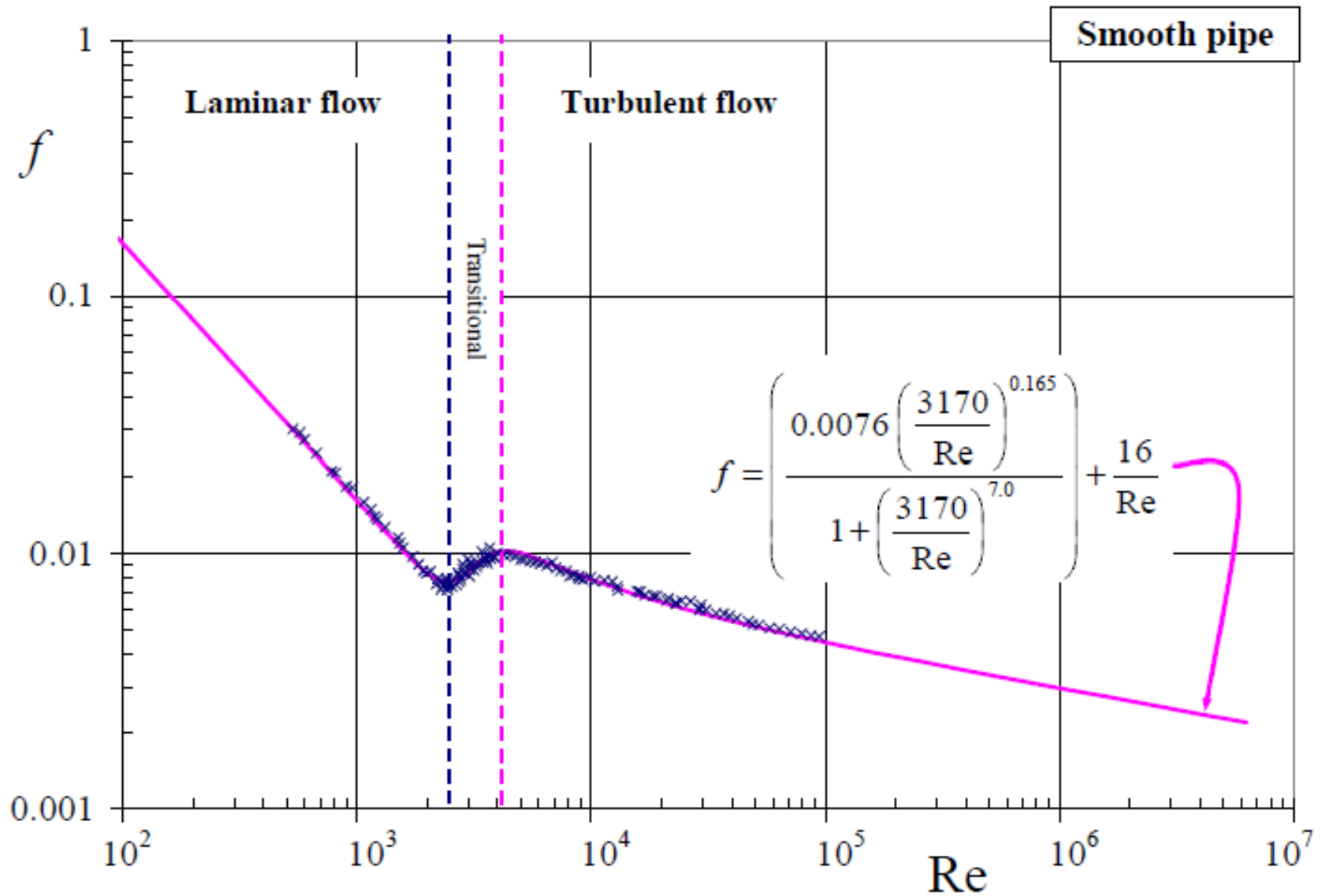


FIGURE 2.10-3. Friction factors for fluids inside pipes. [Based on L. F. Moody, *Trans. A.S.M.E.*, 66, 671 (1944); *Mech. Eng.* 69, 1005 (1947). With permission.]

Reference:

C. J. Geankoplis, Transport Processes and Unit Operations, 3<sup>rd</sup> Edition (Prentice Hall, Upper Saddle River, NJ, 1993), page 88.



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 Michigan Technological University, Houghton, MI (2010)  
[www.chem.mtu.edu/~fmorriso/DataCorrelationForSmoothPipes2010.pdf](http://www.chem.mtu.edu/~fmorriso/DataCorrelationForSmoothPipes2010.pdf)

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