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The theory of electronic transport in nano-junctions is essentially a model of many-body tunneling under non-equilibrium conditions imposed by a bias voltage that drives current through the junction. Under some conditions, this general theory can be cast in the form of a scattering theory where tunneling electrons experience an effective potential determined by the molecular electronic potential energy surface modified by the presence of the electrodes. Within this theoretical framework the current can be described as a transport phenomenon through molecular resonances whose width and energy position are strongly modified by the coupling between the molecule and the electrodes. In this contribution I will examine molecular conductance from this perspective and show that it shares many common features with other quantum scattering processes.