Abstract Submitted
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eMOL Evaluating electron-water scattering data NIGEL MASON, Department of Physical Sciences, The Open University, Walton Hall, Milton Keynes, Mk7 6AA United Kingdom — The eMOL (electron molecule) project has been established to establish the process by which such data will be reviewed, validated and recommended data sets published. In particular eMOL seeks to suggest whether any particular data set be used as a primary or secondary source of data for the wider community. Primary would mean that is judged to the best representation of that particular interaction/cross section and therefore be used as a "recommended" value for users. The first target to be reviewed by eMOL was water with 8 members of the eMOL board meeting in Vienna in May 2013. The Board used the most recent review of electron-water scattering (Itikawa and Mason J. Phys. Chem. Ref. Data 34 1-22 (2005)) as its reference point. Over 80 papers (collected and disseminated by eMOL's bibliometrician Dr D Jaksch) that had been published subsequent to this review were reviewed and recommendations made as to whether such data should replace recommendations in the earlier review. The Meeting also identified areas (cross sections) for future research, data inconsistencies and reviewed the allocation of uncertainty estimates for complete datasets (assembled from a combination of both experimental and theoretical data). In this presentation I will therefore both present the findings of this review and discuss this study as an exemplar of the wider eMOL programme which will review some 15 electron-molecule datasets in 2013-15 including many of interest to the GEC (plasma) community.

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