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Molecular Level



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## Electron collision cross section data base

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The need for comprehensive data base in atomic collision physics has becoming urgent nowadays when the level of sophistication of modelling processes in areas of plasma physics (astrophysical plasmas, plasma processing and etching, gas discharge lasers, fusion) and/or medical physics (radiation damage, radiation protection) reach the level of high precision by taking into account many possible atomic processes [1,2].

A logical model of information system in atomic collision physics has been developed in the joint work of researchers at University of Kragujevac, Serbia and The Institute of Physics, Belgrade [3]. The model has been implemented and recently presented as an Internet aided interface for structured data search [4]. The part of electron collision cross sections has been developed to the trail level where the search for a few examples of differential and integral cross sections for electron excitation of metal atoms was enabled. The main drawback of the introduced system was the procedure of input data that required the specialist to evaluate the published work and to extract the relevant data and parameters of the experiment or theoretical treatment.

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### Reference:

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### Certificate of Attendance

This is to certify that Prof./Dr./Mr./Ms.....**Bratislav Marinkovic**.....has attended the EIPAM 2007 Meeting held in Hveragerði, Iceland 25 – 29 May 2007.

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke, positioned above the name Prof. N.J. Mason.

Prof N.J.Mason

21 May 2007

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