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## Electron collision cross section data base: from Hveragerði 2007 to Trieste 2009

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The necessity for comprehensive data base in atomic collision physics has becoming materialized in a newly developed and funded programme at European scale, virtual data centre - VAMDC [1]. It is supposed to cover a wide range of applications, from atmospheric and environmental sciences [2], radiation damage [3] to astrophysics and fundamental issues of particle interactions. An overview of current activities at the Institute of Physics Belgrade (IPB) in the period up to 2007 was presented at the EIPAM meeting in Hveragerði, Iceland [4].

On the basis of a logical model, a new bibliographic information system (BIS) has been developed at the IPB. It enables a fast survey of references, formation of a group of papers related to a certain subject, creation of a book which consists of spreadsheets, text editors, public presentation programs, scanned graphic and 3D images, PDF files, and even *cahier de manipe*. Selection of the papers could be done by larger number of parameters such as key words, authors, categories, experimental or theoretical methods of study, PASC, DOI, etc. Publications that consider data in atomic and molecular collision physics are presented in this data base in the structured way that enables such survey. The possibility to access BIS through Internet is intended in near future. Data input is supervised by the specialist evaluating the published work and extracting and categorizing the relevant data and parameters of the experiment or theoretical treatment. Another advantage of the BIS is that it can serve as a local and global tool for any research institution.

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### Reference:

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- [4] B. P. Marinković, G. García, D. Šević, and N. J. Mason, "Electron Collision Cross Section Data Base", *Proc. Third Annual Meeting of ESF Programme on Electron Induced Processing at the Molecular Level (EIPAM 07) Hveragerði, Iceland, 25-29 May 2007*. Eds. N J Mason and O Ingólfsson, Invited Talk No.6. <http://theochem.org/eipam07/program.html>