

The IAEA Atomic and Molecular Data Unit

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A+M Data Unit Overview

Part of the Nuclear Data Section, Division of Physical and Chemical Sciences, IAEA, Vienna.

Maintains bibliographical and numerical databases.

Participates in Data Centre Network, Code Centre Network, XSAMS project.

Organizes occasional Schools, e.g. at ICTP.

Organizes Coordinated Research Programmes

Bas Braams, Hyun K. Chung, Khalid Sheikh.

Coordinated Research Programme (CRP)

Focussed research, identified as important for fusion.

Duration 3–5 years.

10–15 participating institutions.

Usually 1 preparatory Technical Meeting, 3 Research Coordination Meetings.

Some Research Contract funds, for developing countries only.

Participants have their national funding; the CRP may help.

Recently Concluded CRPs

Atomic Data for Heavy Element Impurities in Fusion Reactors.

Atomic and Molecular Data for Plasma Modelling. (Divertor and Near-Wall Plasma Modelling)

Ongoing CRPs

Data for Surface Composition Dynamics Relevant to Erosion Processes. (Mixed materials). 2nd meeting was held in March, 2009.

Characterization of Size, Composition and Origins of Dust in Fusion Devices. 1st meeting was held in December, 2008.

Atomic and Molecular Data for Light Elements in Fusion Devices. 1st meeting to be held in November, 2009.

Planned CRPs

Atomic Data for Collisions and Spectroscopy of Tungsten in the Temperature Range 1 eV – 20 keV. Hope to have first meeting in fall of 2010.

Characterization and Control of H/He Isotopic Composition in Fusion Devices. Maybe start this in 2011.

