



Contributions to the Joint European Torus fusion research work programme

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JET (Joint European Torus) is the largest controlled nuclear fusion facility in the world. It is operated, used and developed by the European fusion community working under the European Fusion Development Agreement (EFDA). The Romanian Fusion Association has made during the last 5-6 years a number of really significant contributions to the JET research programme by participating in the development of new technologies, components and devices,

as well as by participating in JET experiments.

The presentation is intended as a review of some of the activities in which the author has been directly involved. It will focus on the impact and significance of these contributions to the JET work programme, rather than on the technical details of the particular activities.

Examples will include tungsten and beryllium coatings for the JET wall tiles, diagnostics systems for gamma-ray imaging and gamma-ray spectroscopy, and neutron measurements during the JET experimental campaigns.

In particular, the contribution of the Romanian scientists and engineers to the recently completed "ITER-Like Wall" project (the largest single fusion project EFDA has ever had) was outstanding. It represents an example on how a small dedicated research team working within a favourable international environment can produce impressive research results.

The presentation will also include some lessons learned from the activities carried out so far pointing out some drawbacks and inconsistencies with the hope of avoiding them in the participation to future JET projects.

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