

# Table 1: Budgets for MFE Chamber Technology and Related Technology Programs in \$K

	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>
MFE Chamber Technology* <sup>+</sup>	2831	2957	3224
PFC	7098	6459	6056
Materials	6840	7160	6660
<b>Total Technology</b>	<b>36.5</b> (+ 8.4 ITER Magnet)	<b>35.5</b>	<b>34.2</b>

\* In the late 80's to the early 90's, the "blanket" program was typically about \$6M per year.

+ Serious budget cuts in 97, down to \$900K, almost "crippled" the program.

## Table 2: Budgets for MFE Chamber Technology Sub-elements in \$K

	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>
<b>APEX</b> (Including ALIST contributions in FY 2001)	1715	2122	1865
<b>JUPITER-II</b> (Thermofluid and thermomechanics tasks beginning in FY 2000)	---	54	684
Materials System <b>Thermomechanics</b>	400	400	360
Neutronics	185	100	125
<b>Free Surface Renewal</b> (Competitive Award in FY 2000)	---	146	130
<b>Insulators</b> Coating for MHD Effects	280	---*	---
<b>Others</b> (ALPS Support, SnLi, FLiBe)	251	135	60
<b>Total</b>	<b>2831</b>	<b>2957</b>	<b>3224</b>

\* Moved task/budget to Materials Program

## Table 3: APEX Budget by Task\*+

	<b>FY 00</b>	<b>FY 01</b>
<b><u>Task I</u></b> Exploring options and issues for testing liquid walls in plasma devices	<b>405</b>	<b>400</b>
<b><u>Task II</u></b> Experiments and modeling for free-surface MHD flows (with and without MHD and turbulence) and fundamental analysis of fusion liquid walls	<b>707</b>	<b>515</b>
<b><u>Task III</u></b> Engineering issues for liquid walls	<b>615</b>	<b>560</b>
<b><u>Task IV</u></b> Advanced solid wall concepts	<b>395</b>	<b>390</b>
<b>APEX Total</b>	<b>2122</b>	<b>1865</b>

\* Budget allocations for cross-cutting Tasks A, B, C, and D are included under Tasks I through IV.

+ Task V is a new task (on innovative use of liquid metals for improving plasma stabilization and confinement) and was initiated in mid FY01. The budget allocation for Task V is included in Tasks I and II.

## Table 4: Rough Budgets by Presentation

(Approximate because presentations are organized to effectively cover interrelated scientific and technical topics rather than budget categories)

	<b>FY 2000</b>	<b>FY 2001</b>
Morley Parts of APEX Tasks I and II, JUPITER-II thermofluids, part of surface renewal	<b>642</b>	<b>845</b>
Kaita Parts of APEX Tasks I, II, A, B, and V	<b>277</b>	<b>280</b>
Ulrickson APEX/ALIST: Parts of APEX Tasks I, A and B	<b>305</b>	<b>310</b>
Nelson APEX Task III, plus part of surface renewal	<b>610</b>	<b>620</b>
Wong Task IV and part of neutronics	<b>440</b>	<b>440</b>
Ghoneim APEX Materials (Part of Task II, III, and IV)	<b>80</b>	<b>55</b>
Ying Material system thermomechanics plus JUPITER-II thermomechanics	<b>400</b>	<b>495</b>
Others covered only in Overview	<b>203</b>	<b>179</b>
<b>Total</b>	<b>2957</b>	<b>3224</b>