

***SOCIETY MEMBERSHIP PROFILE:  
2002 REPORT  
U.S. Residents Only***

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## **Methodology**

The AIP Membership Sample Survey is the largest survey conducted by the AIP's Statistical Research Center (SRC), and for the first time, the 2002 survey was completed entirely electronically. More than 19,300 individuals, approximately one-fourth of the U.S. members of the AIP's Member Societies, were selected on the basis of a stratified random sample and asked to report their salary and employment data as of October 2002 in this survey. Nearly 11,600 responded, for a 60% response rate, after three e-mail requests.

The data represent responses from members of the American Physical Society, Optical Society of America, Acoustical Society of America, The Society of Rheology, American Association of Physics Teachers, American Crystallographic Association, American Astronomical Society, American Association of Physicists in Medicine, AVS Science and Technology Society, and American Geophysical Union. The SRC conducts research and provides survey services. Within the research portion of its mission, the SRC collects, analyzes, and disseminates data on education and employment in physics and related fields. The next Membership Sample Survey will be conducted in 2004.

**Table 1. Society membership figures, 1986 to 2002.**

<b>Year</b>	<b>APS</b>	<b>OSA</b>	<b>ASA</b>	<b>SoR</b>	<b>AAPT</b>	<b>ACA</b>	<b>AAS</b>	<b>AAPM</b>	<b>AVS</b>	<b>AGU</b>
2002	42007	13688	6629	1610	10041	2061	6049	4425	5239	34043
2001	41570	14441	6988	1633	10176	2100	6429	4590	5148	31169
2000	42622	12528	7304	1619	10476	2100	6270	4535	5397	32590
1999	41477	11746	7014	1616	11352	2256	6265	4412	5515	32000
1998	40767	11620	7215	1821	11633	2299	6092	4334	5960	31772
1997	41500	11491	7058	1657	11573	2247	6170	4281	5884	30468
1996	41000	10906	7143	1506	11343	2272	6101	4290	5576	29989
1995	41670	11522	7080	1416	11220	2100	6355	4155	5602	28855
1994	43173	11377	7108	1333	11176	2100	6380	3768	5375	28751
1993	43710	12040	6609	1269	11178	2015	6280	3691	5547	28061
1992	43207	12045	6918	1204	10853	2135	6000	3382	5600	27013
1991	41645	11405	6860	1110	10863	2010	5610	3044	5483	25244
1990	41753	10350	6650	1061	10664	2086	5346	2975	5482	24706
1989	41251	10440	6350	1027	10267	2112	5068	2843	5956	22586
1988	39396	10344	6180	1063	10101	2011	4729	2686	5650	21182
1987	39767	9763	6050	1177	10411	1830	4517	2524	5750	19573
1986	36830	9359	5880	1156	10361	1700	4349	2434	5766	17272

- ❖ APS = American Physical Society
- OSA = Optical Society of America
- ASA = Acoustical Society of America
- SoR = Society of Rheology
- AAPT = American Association of Physics Teachers
- ACA = American Crystallographic Association
- AAS = American Astronomical Society
- AAPM = American Association of Physicists in Medicine
- AVS = AVS – The Science & Technology Society
- AGU = American Geophysical Union

- ❖ Source: Handbook for AIP Member Society Officers 1986 to 2002

**Table 2. Society cross-membership (U.S. members only), 2002.**

	APS	OSA	ASA	SoR	AAPT	ACA	AAS	AAPM	AVS	AGU
APS	77	22	6	20	30	9	17	5	26	5
OSA	5	73	1	0	3	-	1	0	3	1
ASA	1	0	89	0	1	0	-	1	-	1
SoR	1	0	0	80	0	0	-	-	-	0
AAPT	8	4	2	1	65	1	4	1	2	1
ACA	0	-	0	0	0	91	-	-	1	0
AAS	3	1	-	-	3	-	71	-	0	4
AAPM	1	0	1	-	0	-	-	94	0	-
AVS	3	2	-	-	1	1	0	0	71	0
AGU	3	3	4	1	3	0	13	-	1	89
Total respondents	3914	960	513	127	1205	157	810	447	463	2569

- ❖ Percents should be read as columns not as rows (e.g., 8% of APS members also belong to AAPT, while 30% of AAPT members also belong to the APS. Numbers along the diagonal (upper left to lower right) represent the percent of members who belong to only that society (e.g. 71% of AVS members belong to AVS and none of the other nine societies).
- ❖ Columns add to more than 100% because some members belong to more than 2 of the 10 AIP Member Societies.
- ❖ Numbers are derived from a sample of U.S. resident members in each society. Retired and student members are excluded.
- ❖ Source: AIP Member Society Survey: 2002 Society Profiles, by Raymond Y. Chu and Megan Henly

**Table 3. Professional self-identification for each society (U.S. members only), 2002.**

	APS	OSA	ASA	SoR	AAPT	ACA	AAS	AAPM	AVS	AGU	All
Physicist	71	43	17	17	59	6	18	91	33	8	41
Engineer	11	39	40	63	3	3	3	3	41	7	15
Astronomer	2	1	0	-	3	-	72	-	0	4	7
Geologist	0	-	-	-	0	-	0	-	-	16	4
Atmospheric scientist	1	2	1	-	1	-	1	-	-	17	5
Chemist	5	3	0	7	2	21	0	1	13	5	5
Geophysicist	0	0	2	-	1	-	0	-	0	12	3
Ocean scientist	0	0	6	-	0	-	0	-	0	12	3
Hydrologist	0	-	0	-	-	-	-	-	0	8	2
Crystallographer	0	-	-	-	-	58	-	-	-	0	1
Other scientist	7	7	30	11	10	12	4	4	9	9	9
Non-scientist	3	5	4	2	21	-	2	1	4	2	5
Total respondents	3914	960	513	127	1205	157	810	447	463	2569	9184

- ❖ Excludes full-time students and retired members.
- ❖ "All" represents the total unduplicated membership of all 10 societies, that is, each person who belongs to more than one society is only counted once.
- ❖ Many AAPT members identify themselves as educators rather than as discipline-specific scientists.
- ❖ ASA has a remarkably diverse set of "Other scientists" including, acousticians, audiologists and psychologists, etc.
- ❖ Source: AIP Member Society Survey: 2002 Society Profiles, by Raymond Y. Chu and Megan Henly

**Table 4. Employment sector for each society (U.S. members only), 2002.**

	APS %	OSA %	ASA %	SoR %	AAPT %	ACA %	AAS %	AAPM %	AVS %	AGU %	All %
<b>ACADEMIC</b>											
University	42	22	30	28	29	35	43	3	23	41	34
4-Year college	5	2	2	-	18	4	4	0	2	2	4
2-Year college	1	-	0	-	8	-	2	0	1	1	1
Secondary school	0	0	0	-	38	-	0	-	-	1	5
Medical school	1	2	7	-	0	5	0	26	-	0	2
UARI	3	2	5	2	0	1	10	0	1	6	4
<b>NON-ACADEMIC</b>											
Industry and self-employed	22	55	37	60	3	23	10	19	52	16	24
Government	7	9	13	3	2	8	12	4	7	21	10
FFR&DC	17	7	2	4	1	14	14	1	12	8	11
Hospitals and medical services	1	0	1	-	0	2	0	46	-	0	3
Non-profit	1	1	3	3	1	8	5	1	2	4	2
Total respondents	3914	960	513	127	1205	157	810	447	463	2569	9184

- ❖ Excludes full-time students and retired members.
- ❖ "All" represents the total unduplicated membership of all 10 societies.
- ❖ UARI = University-affiliated research institutes and university-affiliated observatories  
FFR&DC = Federally-Funded Research and Development Center
- ❖ Member Societies differ dramatically in terms of employment across universities, high schools, medical schools, industry and government.
- ❖ Source: AIP Member Society Survey: 2002 Society Profiles, by Raymond Y. Chu and Megan Henly

**Table 5. Level of highest degree for each society (U.S. members only), 2002.**

	APS	OSA	ASA	SoR	AAPT	ACA	AAS	AAPM	AVS	AGU	All
	%	%	%	%	%	%	%	%	%	%	%
Doctorate	93	76	73	86	53	95	89	50	69	81	79
Masters	5	16	15	6	37	3	6	47	15	14	15
Bachelors	2	7	9	7	9	2	4	2	13	5	5
Associates	0	1	1	1	0	-	0	0	4	0	0
Professional	0	0	2	-	1	-	1	1	-	0	1
Total respondents	3914	960	513	127	1205	157	810	447	463	2569	9184

- ❖ Excludes full-time students and retired members.
- ❖ "All" represents the total unduplicated membership of all 10 societies.
- ❖ While the vast majority of members of most Member Societies hold a PhD, AAPT and AAPM are comprised of significant numbers of employed members with a Masters degree.
- ❖ Source: AIP Member Society Survey: 2002 Society Profiles, by Raymond Y. Chu and Megan Henly

**Table 6. Primary work activity for each society (U.S. members only), 2002.**

	APS %	OSA %	ASA %	SoR %	AAPT %	ACA %	AAS %	AAPM %	AVS %	AGU %	All %
Basic research	33	14	21	20	5	52	45	2	18	39	27
Applied research- long range	13	16	15	16	2	12	6	5	17	13	12
Applied research- short range	7	13	9	27	1	8	4	5	11	8	7
Engineering, design, or development	8	26	16	20	1	3	7	3	22	4	9
Teaching	21	9	16	5	81	14	19	2	10	15	22
Clinical or patient care	0	0	2	-	0	-	0	60	-	-	3
Administration	10	15	9	9	6	3	10	8	13	9	10
Consulting	2	3	9	1	1	-	1	8	2	5	4
Other	6	4	3	2	3	8	8	7	7	7	6
Total respondents	3914	960	513	127	1205	157	810	447	463	2569	9184

- ❖ Excludes full-time students and retired members.
- ❖ "All" represents the total unduplicated membership of all 10 societies.
- ❖ Primary work activity differs significantly across Member Societies and is consistent with the differences seen in places of employment (table 4).
- ❖ Source: AIP Member Society Survey: 2002 Society Profiles, by Raymond Y. Chu and Megan Henly

**Table 7. Gender for each society (U.S. members only), 2002.**

	APS	OSA	ASA	SoR	AAPT	ACA	AAS	AAPM	AVS	AGU	All
	%	%	%	%	%	%	%	%	%	%	%
Female	10	9	22	8	19	24	20	18	10	21	16
Male	90	91	78	92	81	76	80	82	90	79	84
Total respondents	3914	960	513	127	1205	157	810	447	463	2569	9184

- ❖ Excludes full-time students and retired members.
- ❖ "All" represents the total unduplicated membership of all 10 societies.
- ❖ Source: AIP Member Society Survey: 2002 Society Profiles, by Raymond Y. Chu and Megan Henly