2006 APS Industrial Membership Survey
Final Report
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by Raymond Y. Chu, Stacy Guo
American Institute of Physics
Statistical Research Center
One Physics Ellipse
College Park, MD 20740
301-209-3069
rchu@aip.org

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This is the final report on the 2006 APS Industrial Membership Survey. APS members working in industry responded to this survey in order to help APS develop programs and services for members working in the private sector.

2776 APS members residing in the U.S. with private company mailing addresses or private company email addresses were selected to participate in this survey. According to recent surveys of the APS membership, this represents about one half of the total APS U.S. membership working in industry.

The first email invitations were sent May 10th. The second mailing to those who did not respond to the first mailing was sent May 26th. 165 of those email addresses were undeliverable. Around 1200 of the selected members responded to the survey, of which 140 indicated they did not work in the private sector. So these data represent ~46% of all the invitees.

Please note that all these tables show the responses of APS U.S.-residents employed in industry:

Table 1. Size of the respondents' employer

	%
500 or more employees	50
100 to 499 employees	19
10 to 99 employees	17
Fewer than 10 employees	14
Number of respondents	1008

- Half of the respondents work in a location with 500 or more employees.

Table 2. Major product or service of the respondents' employer

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
Information technology	9	5	10	18	13
Aeronautics or aerospace	5	5	7	18	12
Semiconductors	8	9	6	10	9
Energy	7	6	12	8	8
Electronics	4	7	7	8	7
Contract research	21	20	9	6	11
Medical	4	5	6	5	5
Chemical	2	3	6	5	5
Automotive	2	1	4	2	3
Optics	5	7	2	1	3
Other	33	32	32	19	25
Number of respondents	132	167	180	497	976

- Over a third of the respondents work for employers in information technology, aeronautics or aerospace, or contract research.

Table 3. Distribution of how respondents relate their job to their knowledge of physics

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
Very closely	60	55	47	51	52
Somewhat closely	25	34	41	36	35
Very little	14	9	10	11	11
Not at all	1	2	2	2	2
Number of respondents	138	175	186	508	1007

- The majority of the respondents working in industry described their current jobs as very closely tied to their knowledge of physics.

- It is important to note that many APS members who are employed in industry are not physicists. Other recent APS surveys show that slightly less than half of industrially-employed members called themselves physicists. Over a quarter of the membership employed in industry identify themselves as engineers.

Table 4. Members belonging to other professional societies					
	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
APS only	30	36	25	30	30
IEEE – Institute of Electrical and Electronics Engineers	38	23	30	28	29
MRS – Materials Research Society	9	12	16	15	14
ACS – American Chemical Society	9	8	13	11	11
SPIE – International Society for Optical Engineering	14	8	11	7	9
OSA – Optical Society Association	10	10	7	8	8
AVS – The Science and Technology Society	3	3	4	5	5
Other	31	32	27	28	29
Number of respondents	133	171	181	501	986
Unit Affiliation within APS, self-reported					
FIAP	28	34	33	41	36
Number of respondents	138	172	186	506	1002

Table 5. Primary professional society					
	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
APS – American Physical Society	63	69	57	58	60
IEEE - Institute of Electrical and Electronics Engineers	10	11	15	14	13
ACS – American Chemical Society	3	4	4	6	5
MRS – Materials Research Society	1	1	6	3	3
OSA – Optical Society of America	3	3	3	2	3
SPIE - International Society for Optical Engineering	1	2	2	1	1
AVS – The Science and Technology Society	1	-	1	1	1
Other	18	10	12	15	14
Number of respondents	131	167	180	495	973

- Nearly a third of members in industry belonged to APS and no other major societies. Also, slightly more than a third belong to FIAP.
- About 3 out of 5 respondents in industry considered APS their primary professional society.

Table 6. Ways respondents frequently locate technical information on new topics for their work

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
Web search	96	96	97	95	96
Email contact with colleagues	82	81	79	81	81
Personal or phone contact with colleagues	72	72	76	77	76
References in a journal article	64	63	67	71	68
Use company's library	49	31	47	57	50
Visit a local library	29	14	9	10	13
Other	7	2	8	5	5
Number of respondents	137	174	185	509	1005

Footnote: Respondents were asked to indicate how frequently they located information in the following ways within the past 12 months on a 5-point scale, where: 1 is "Daily", 2 is "Weekly", 3 is "Monthly", 4 is "Rarely" and 5 is "Never". This table shows the percentages of those who chose 1, 2 or 3, that is, monthly or more often.

Table 7. Ways respondents frequently access data once they locate the pertinent information

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
Download free material from the web	88	88	89	90	89
Get it through a service offered by your company	18	25	43	59	44
Purchase copies of articles or books from web service	30	29	26	21	24
Visit a local library, check out or copy	25	15	10	16	16
Other	13	2	6	3	5
Number of respondents	135	173	183	502	993

Footnote: Respondents were asked to indicate how frequently they accessed information in the following ways within the past 12 months on a 5-point scale, where: 1 is "Daily", 2 is "Weekly", 3 is "Monthly", 4 is "Rarely" and 5 is "Never". This table shows the percentages of those who chose 1, 2 or 3, that is, monthly or more often.

- Virtually all respondents working in industry locate technical information through web searches. The majority also locate technical information through email or phone correspondences with colleagues and by checking references in journal articles.

- Members in large companies are more likely to access pertinent information through a service offered by their own companies and less likely to locate technical information from local libraries than members in small companies.

- Half of all respondents use the company library at least once a month.

Table 8. Ways respondents frequently network

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
Email	96	85	84	85	86
Telephone or personal conversation	88	81	81	82	83
Writing or replying to blogs	8	4	3	6	5
Attend a local professional meeting	10	4	2	4	5
Attend a national professional meeting	1	1	1	1	1
Other	2	3	1	1	2
Number of respondents	138	175	185	508	1006

Footnote: Respondents were asked to indicate how frequently they network with their colleagues in the following ways within the past 12 months on a 5-point scale, where: 1 is "Daily", 2 is "Weekly", 3 is "Monthly", 4 is "Rarely" and 5 is "Never". This table shows the percentages of those who chose 1, 2 or 3, that is, monthly or more often.

Table 9. Publications respondents frequently read

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
Physics Today	86	87	85	85	85
APS News	67	67	66	64	65
Number of respondents	138	175	186	506	1005

Footnote: Respondents were asked to indicate how frequently they read the following publications in the following ways within the past 12 months on a 5-point scale, where: 1 is "Daily", 2 is "Weekly", 3 is "Monthly", 4 is "Rarely" and 5 is "Never". This table shows the percentages of those who chose 1, 2 or 3, that is, monthly or more often.

- Physics Today and APS News are read regularly by industrially employed members of APS.

Table 10. Members who use the following virtual journals

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
Nanoscale Science & Technology	10	10	12	13	12
Quantum Information	2	5	3	3	3
Applications of Superconductivity	3	2	3	2	2
Biological Physics Research	1	4	2	2	2
Ultrafast Science	-	2	1	2	2
Number of respondents	138	175	182	503	998

- Please note, this table has been corrected since the initial preliminary table.
- Almost all respondents (95%) seem to know about journal packs, but only 3% have purchased them.

Table 11. Likelihood of viewing video of FIAP sessions at APS March Meetings

	Number of employees				
	<10 %	**10 to 99 %**	**100 to 499 %**	**500 + %**	**Overall %**
Definitely	4	3	4	6	5
Probably	15	18	19	19	18
Maybe	41	44	60	45	47
No	40	35	17	30	30
Number of respondents	137	174	185	505	1001

Table 12. Likelihood of viewing simulcast of FIAP sessions

	Number of employees				
	<10 %	**10 to 99 %**	**100 to 499 %**	**500 + %**	**Overall %**
Definitely	1	1	1	1	1
Probably	9	2	3	9	6
Maybe	21	18	35	26	25
No	69	79	61	64	68
Number of respondents	136	174	186	506	1002

- Less than 1 in 4 industrially employed members report that they would probably view a video of a FIAP sessions. Fewer still would view a simulcast.

Table 13. Time respondents are willing to spend to travel to APS workshops					
	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
One hour or less	27	32	25	27	27
2 hours	21	21	27	21	22
3 hours	12	10	12	12	12
4 hours	6	7	6	7	7
5 or more hours	22	20	18	20	20
No response	12	10	12	13	12
Number of respondents	138	174	186	509	1007

- Nearly a sixth of respondents did not answer this question. If options such as "I can travel any amount of time" or "I cannot travel at all" were offered, more might have responded to this item.

- About one quarter of the respondents indicate that they are willing to travel no more than an hour to APS workshop. Nearly a quarter have attended zero professional meetings in the past 12 months.

- The majority of respondents (53%) are interested in participating in computer-based virtual workshops on specific topics.

Table 14. Ways in which employers support APS members' attendance at professional meetings					
	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
Paying travel and living expenses to attend	79	93	91	91	90
Paying for time to attend	60	75	77	78	74
Including meeting attendance as one of their regular job responsibilities	41	53	49	50	49
Other	21	7	8	9	10
Number of respondents	126	148	170	463	907

- Nine out of ten members have employers who pay travel and living expenses to attend professional meetings. Three out of four also have employers who pay for their time to attend.

Table 15. Number of professional meetings attended within the past 12 months

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
5 or more	18	16	12	14	14
4	11	8	9	8	8
3	12	13	15	15	14
2	25	18	23	22	22
1	15	24	17	18	19
None	19	21	24	23	23
Number of respondents	131	168	183	499	981

Table 16. Total days spent attending professional meetings including travel time within the past 12 months

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
16 or more	18	17	13	17	17
11 to 15	28	25	35	29	29
6 to 10	16	22	20	20	20
1 to 5	38	36	32	34	34
Number of respondents	106	128	138	375	747

Table 17. APS meetings attended in the past three years

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
2 or more	21	18	12	17	17
1	12	17	13	14	14
0	67	65	75	69	69
Number of respondents	131	170	182	492	975

- Regardless of company size, 4 out of 5 members have attended professional meetings within the past 12 months and only 30% have attended one or more APS meetings in the past three years.

Table 18. Articles read in PR, PRL, or RMP in the past 12 months

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
21 or more	14	9	11	12	11
11 to 20	11	11	12	8	10
1 to 10	40	38	34	40	39
None	35	42	43	40	40
Number of respondents	116	153	155	439	863

Table 19. Articles published in PR, PRL, and RMP during the past three years

	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
4 or more	4	5	5	5	5
3	1	2	3	3	2
2	5	3	2	4	4
1	5	3	3	5	4
None	85	87	87	83	85
Number of respondents	126	168	176	480	950

- About 15% of APS members have published in PR, PRL, or RMP within the past three years.

Table 20. Members who have recently read APS journals and attended APS meetings

	APS meetings attended within past 3 years			
Articles read in PR, PRL, or RMP in past year	None %	1 %	2 or more %	Overall %
None	49	22	19	41
1 to 10	37	46	35	38
11 to 20	7	16	16	10
21 or more	6	17	31	11
Number of respondents	603	110	130	843

- Three out of five read APS articles in the past 12 months. 72% have been to no APS meetings within the past 3 years. 35% have neither read PR, PRL or RMP articles nor attended APS meetings recently.

Table 21. Size of the respondents' employer by age of the respondents					
	Number of employees				
	<10 %	10 to 99 %	100 to 499 %	500 + %	Overall %
39 or younger	6	19	18	18	16
40 to 44	8	19	9	13	12
45 to 49	9	11	16	12	13
50 to 54	12	16	21	17	18
55 to 59	14	12	17	18	16
60 to 64	19	11	14	12	13
65 or older	32	12	5	10	12
Number of respondents	117	161	174	452	904

- The majority of respondents who work at places with fewer than ten employees are 60 years old and older. Other surveys of the APS membership show that the percentage of self-employed members increases after the age of 60.

Table 22. Major product or service of the respondents' employer

	Age of respondents							
	< 40 %	**40 to 44 %**	**45 to 49 %**	**50 to 54 %**	**55 to 59 %**	**60 to 64 %**	**65 + %**	**Overall %**
Information technology	8	15	17	12	11	12	12	12
Aeronautics or aerospace	11	6	12	16	16	13	15	13
Contract research	7	12	10	12	9	11	17	11
Semiconductors	14	14	12	7	4	7	4	9
Energy	8	5	7	6	9	16	6	8
Electronics	6	4	11	8	5	8	5	7
Medical	5	8	4	5	6	5	5	5
Chemical	8	5	3	6	4	4	1	5
Automotive	2	3	3	1	4	2	3	2
Optics	4	5	1	3	1	3	2	3
Other	29	25	20	24	30	20	31	26
Number of respondents	146	107	109	148	141	116	106	873

Table 23. Distribution of how respondents relate their job to their knowledge of physics

	Age of respondents							
	< 40 %	**40 to 44 %**	**45 to 49 %**	**50 to 54 %**	**55 to 59 %**	**60 to 64 %**	**65 + %**	**Overall %**
Very closely	45	59	46	50	52	55	62	52
Somewhat closely	41	30	41	36	33	34	32	36
Very little	12	9	11	12	13	9	5	10
Not at all	2	2	2	2	2	2	1	2
Number of respondents	148	112	113	154	144	121	111	903

Table 24. Members belonging to other professional societies	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
APS only	35	27	25	36	31	27	28	30
IEEE – Inst of Electrical and Electronics Engineers	20	18	32	32	31	30	29	28
MRS – Materials Research Society	13	21	14	14	12	12	10	14
ACS – American Chemical Society	12	12	9	13	6	13	12	11
SPIE – International Society for Optical Engineering	8	7	10	5	11	10	10	9
OSA – Optical Society Association	8	8	12	7	10	3	13	9
AVS – The Science and Technology Society	3	6	7	5	7	3	3	5
Other	26	32	24	25	29	35	32	29
Number of respondents	147	109	111	151	140	119	107	884
Unit Affiliation within APS								
FIAP	34	36	47	36	38	40	32	37
Number of respondents	147	110	113	153	143	121	111	898

Table 25. Primary professional society	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
APS – American Physical Society	64	57	58	63	55	60	69	60
IEEE - Inst of Electrical and Electronics Engineers	7	10	16	13	18	15	9	13
ACS – American Chemical Society	3	6	5	7	4	7	4	5
MRS – Materials Research Society	3	7	4	1	1	2	-	2
OSA – Optical Society of America	4	2	5	2	2	-	3	3
SPIE - International Society for Optical Engineering	1	6	-	2	2	-	1	2
AVS – The Science and Technology Society	1	-	2	1	2	1	-	1
Other	17	12	10	11	16	15	14	14
Number of respondents	145	108	110	150	137	117	107	874

Table 26. Ways respondents frequently locate technical information on new topics for their work

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
Web search	94	96	99	99	97	93	91	96
Email contact with colleagues	80	81	80	78	85	83	80	81
Personal or phone contact with colleagues	77	70	76	73	82	79	75	76
References in a journal article	72	76	71	64	63	66	63	68
Use company's library	55	54	53	47	46	41	48	49
Visit a local library	9	14	14	13	10	11	18	13
Other	3	2	7	6	6	6	8	5
Number of respondents	148	111	112	153	144	121	112	901

Footnote: Respondents were asked to indicate how frequently they located information in the following ways within the past 12 months on a 5-point scale, where: 1 is "Daily", 2 is "Weekly", 3 is "Monthly", 4 is "Rarely" and 5 is "Never". This table shows the percentages of those who chose 1, 2 or 3, that is, monthly or more often.

Table 27. Ways respondents frequently access data once they locate the pertinent information

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
Download free material from the web	93	89	92	93	88	88	80	89
Get it through a service offered by your company	52	47	46	41	44	43	33	44
Purchase copies of articles or books from web service	26	26	28	23	23	22	20	24
Visit a local library, check out or copy	12	14	16	17	13	19	21	16
Other	1	7	3	5	4	9	5	5
Number of respondents	145	108	112	150	144	121	112	892

Footnote: Respondents were asked to indicate how frequently they accessed information in the following ways within the past 12 months on a 5-point scale, where: 1 is "Daily", 2 is "Weekly", 3 is "Monthly", 4 is "Rarely" and 5 is "Never". This table shows the percentages of those who chose 1, 2 or 3, that is, monthly or more often.

- Members under the age of 50 are slightly more likely than older members to check references in journal articles and to visit company libraries.

- Those 40 years old or younger are more likely than those 65 and over to get data access through services offered by their companies.

Table 28. Ways respondents frequently network

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
Email	79	80	85	88	88	89	96	86
Telephone or personal conversation	80	71	81	81	88	88	87	83
Writing or replying to blogs	2	5	7	5	6	6	8	5
Attend a local professional meeting	3	3	4	5	5	3	11	5
Attend a national professional meeting	1	1	1	1	1	-	1	1
Other	1	1	2	1	1	1	5	2
Number of respondents	148	111	113	154	144	121	111	902

Footnote: Respondents were asked to indicate how frequently they network with their colleagues in the following ways within the past 12 months on a 5-point scale, where: 1 is “Daily”, 2 is “Weekly”, 3 is “Monthly”, 4 is “Rarely” and 5 is “Never”. This table shows the percentages of those who chose 1, 2 or 3, that is, monthly or more often.

Table 29. Publications respondents frequently read

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
Physics Today	82	81	79	86	90	84	91	85
APS News	65	66	62	62	70	63	72	66
Number of respondents	147	111	113	154	144	120	112	901

Footnote: Respondents were asked to indicate how frequently they read the following publications in the following ways within the past 12 months on a 5-point scale, where: 1 is "Daily", 2 is "Weekly", 3 is "Monthly", 4 is "Rarely" and 5 is "Never". This table shows the percentages of those who chose 1, 2 or 3, that is, monthly or more often.

Table 30. Members who use the following virtual journals

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
Nanoscale Science & Technology	13	16	17	9	11	8	11	12
Quantum Information	3	2	6	4	4	1	2	3
Applications of Superconductivity	3	-	3	1	4	1	2	2
Biological Physics Research	3	2	4	1	4	-	1	2
Ultrafast Science	3	3	2	1	1	1	-	2
Number of respondents	145	109	112	154	143	120	111	894

Table 31. Likelihood of viewing video of FIAP sessions at APS March Meetings

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
Definitely	4	3	7	5	6	3	6	5
Probably	22	21	20	18	16	16	16	18
Maybe	47	48	50	52	47	44	40	47
No	27	28	23	25	31	37	38	30
Number of respondents	148	112	113	154	141	120	109	897

Table 32. Likelihood of viewing simulcast of FIAP sessions

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
Definitely	2	1	3	-	1	1	-	1
Probably	7	6	8	5	5	2	7	6
Maybe	22	30	29	30	25	23	21	26
No	69	63	60	65	69	74	72	67
Number of respondents	148	112	113	153	143	119	110	898

- There are no strong differences by age in the likelihood of viewing a video or a simulcast of FIAP sessions at March meetings.

Table 33. Time respondents are willing to spend to travel to APS workshops

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
One hour or less	25	20	24	28	29	27	24	25
2 hours	21	24	21	13	23	19	27	21
3 hours	16	12	13	10	10	8	13	12
4 hours	4	7	5	6	8	5	8	6
5 or more hours	21	22	20	23	17	17	10	19
No response	13	15	17	20	13	24	18	17
Number of respondents	152	124	119	166	154	129	117	961

- Members 55 or older are somewhat less likely than younger members to travel for 5 hours or longer to attend APS workshops.

Table 34. Ways in which employers support APS members' attendance at professional meetings

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
Paying travel and living expenses to attend	94	92	91	96	85	91	76	90
Paying for time to attend	80	75	75	81	76	70	59	75
Including meeting attendance as one of their regular job responsibilities	53	47	49	50	57	52	42	50
Other	5	6	9	6	15	11	22	10
Number of respondents	132	101	105	137	129	108	100	812

- Industrially employed members who are 65 or older are less likely to have their travel expenses covered by their employers. This might be due to the many self-employed members after the age of 60.

Table 35. Number of professional meetings attended within the past 12 months

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
5 or more	13	11	13	13	22	13	11	14
4	5	9	8	7	8	15	11	9
3	14	13	16	13	16	12	14	14
2	26	22	23	24	19	19	27	22
1	19	20	17	22	14	18	15	18
None	23	25	23	21	21	23	22	23
Number of respondents	148	111	110	150	140	120	102	881

Table 36. Total days spent attending professional meetings including travel time within the past 12 months

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
16 or more	11	18	19	15	22	17	17	17
11 to 15	36	22	23	28	31	32	26	29
6 to 10	19	26	22	23	17	17	22	20
1 to 5	34	34	36	34	30	34	35	34
Number of respondents	113	82	83	117	108	91	77	671

Table 37. APS meetings attended in the past three years

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
2 or more	27	14	16	16	13	13	15	17
1	16	13	19	11	11	13	10	13
0	57	73	65	73	76	74	75	70
Number of respondents	146	109	112	151	139	117	99	873

- Regardless of age, nearly 80% of respondents working in industry attended professional meetings within the past 12 months. This age pattern does not hold for APS meetings attendance. About 36% of members under the age of 50 attended an APS meeting in the past 3 years. But only a quarter of those 50 and older attended an APS meeting during the same time period.

Table 38. Articles read in PR, PRL, or RMP in the past 12 months

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
21 or more	15	13	18	12	7	7	5	11
11 to 20	9	16	6	7	12	13	5	10
1 to 10	44	40	39	34	35	36	47	39
None	32	31	37	47	46	44	43	40
Number of respondents	125	97	95	137	129	100	89	772

Table 39. Articles published in PR, PRL, and RMP during the past three years

	Age of respondents							
	< 40 %	40-44 %	45-49 %	50-54 %	55- 59 %	60-64 %	65 + %	All %
4 or more	8	10	3	5	1	4	3	5
3	4	3	1	2	1	2	2	2
2	5	4	3	5	5	1	2	4
1	5	4	6	3	5	1	1	4
None	78	79	87	85	88	92	92	85
Number of respondents	141	108	107	149	141	113	92	851

- Industrial members read and publish more articles early in their careers than later in their careers.

Verbatim comments: What types of FIAP sessions would be of interest to you?

1) Semiconductor physics 2) Sessions on physics and society, such as the impact of globalization on research and the status of industrial research

A primary focus for me is polymers and polymer composite materials.

Accelerator Physics and Technique

ADVANCED ENERGY CONCEPTS - FUSION

Advanced low cost, large area optical coatings for thermal control, solar cells, passive solar heating, cool roofs, etc.

Advanced semiconductor devices, semiconductor nanostructures, quantum information science and technology

Advances in Nanoelectronics (materials, processing, characterization), semiconductor manufacturing and processing, and advanced photonics

advances in optical sensing and remote sensing techniques

advances in spectroscopy, signal processing in physics

aerospace/defense, optical systems, nanotechnology, quantum information applications

Aerospace-related technology development for industry

All.

Analyses of the health of industrial physics (support, demographics, salaries) Learning about rather novel applications of physics in industry Academic-industrial collaboration How industrial scientists can support the well-being of the physics community

Anything having technical information relative to semiconductor technology _ especially information related to semiconductor materials metrology

Anything related to photoelectronics, eg photon detection, low light level imaging, high speed photoelectronics (~1 ps), etc.

Anything relating to energy - production, use, efficiency, storage etc

Application of physics in computer graphics

Applications of Network Dynamics/Science, Applications of Nonlinear Dynamics

Applications of physics, chemistry, and materials science at the nanoscale to solve problems in reliability. Physics of radiation effects in space systems. Applications of physics to solve real problems in the health and environmental areas. Imaging technology at the nanoscale. How to make a quantum computer.

Applications of statistics and other mathematical analysis tools to industrial problems.

Applied underwater methods and technology.

Automobile Accident Investigation and Reconstruction Fire Science

Being completely honest, I am totally unfamiliar w/ FIAP and what their sessions cover.

Bio physics

Biological Physics

biosensors, magnetics, microfluidics

Broader then just industrial physics/engineering

career advice

cargo inspection techniques radiation sensor development

climate physics

Computational Physics

Computational Physics, High Performance Computing

Computational Plasma Physics Networking with Non-FFRDC, Non-Government, Non-University Physicists on Non-Physics issues

Computer Analysis

Condensed matter. Please make the sessions avaiable via pocasts. Adapt ASAP.

Confessionals on invention process, patenting, bringing prouct to market, legal issues, competition, trade secrets, recruiting and hiring practices, how to publish but not perish, etc.

Conflict between (research and scientific opinion) vs. corporate values

Consulting opportunities

data analysis techniques

defense and nuclear radiation detection

Defense, energetic materials, guns, warheads.

Defense/aerospace. APS seems to disdain the employment areas of a large portion of its members. Part may be due to security, part due to politics. AIAA has classified sessions why can't APS? This could raise the stature of physicists in the defense industry (and there are huge numbers -- look at the companies represented in APS membership rolls).

Demonstrations (via video or computer animation) of the capabilities of new instrumentation or new industrial processes.

device physics

device physics, especially nanoelectronics, reliability physics, non-volatile memory technology, quantum devices, any and all applications of the previous categories

Discussions of Applied Physics use in Industry, particular solid-state phenomena. Also discussions and tutorials on new technologies.

Display science and technology, Energy scinence and technology

Display, Career

Do not know enough about what is available to have an intelligent answer!

Don' know.

Don't know had not heard of FIAP until now.

don't know enough about FIAP to comment (hint, you should advertise it more). Topical areas of interest include lasers & optics, sensors & instrumentation, computer simulation

don't know FIAP well enough to know what I would find usefull

Don't know, maybe many kinds. I have never heard of FIAP before.

Education of engineers and scientists - best practices

Educational

Effective Job Hunting

emerging technologies

Energy Environment Materials Fuel Cells Professional development

Energy generation and storage, display-related technologies (high power visible sources, nonlinear optical materials, etc.), communications and information storage, nanostructures, biotechnology and biosensing

Energy issues: What is APS doing? Optical materials Biosensors

energy related semiconductors

Energy related sessions, lasers/materials

Entrepreneurial themes

Entrepreneurship and starting businesses.

Epitaxial growth of nitride compound semiconductors on Silicon (111) substrates Development of optics and sensors for digital photography

Ethical challenges.

Extremely local lunch. Say, 20-30 people at Chevy's in Sunnyvale.

focus on medical/pharmaceutical/biotech

focused sesssions on special topics, such as ennergy, telecommunication, etct

frequency standards, oscillators, optical interferometry

Frontiers of microelectronics/optoelectronics/display technology/nanotechnology

Fuel cells, hybrid autos, composite surface protection, foreign patent procedures, lubricating oil quality monitoring, application of silica to auto tires. nanotechnology, superconductivity, free volume in composites

funding related

Fusion plasma, X-ray sources and diagnostics

Future funding for industrial research, new research areas of various industries

Gaseous Electronics Conference

Geophysics related

Global Change, Sustainability, Energy Technology, Environemental Technology

Have no idea what sessions there are.

Having never been involved, don't know.

High temperature electronics -- >=200C

Homeland security technology Applications of nuclear techniques

How a physics background enable R&D management across most fields.

How to better establish industrial collaborations.

H-storage materials, applications of atomistic modeling to topics of industrial relevance, battery technology, alternative energy technologies, thermoelectrics

Hydrogen Storage Computational Materials Science

I am not active in FIAP.

I am not interested.

I am not sure what the FIAP sessions woudl have to offer...

I am uncertain about what types of FIAP sessions would eb of interest. I need more background on this since I have never attended an FIAP session.

I am working on a Telemetry project right now. Probably none. In the past I worked on dichroic dye auto and truck mirrors and on PLZT deposition on glass for variable density lens for Mac. degen.

I didn't even know the division existed ...

I do not know anything about FIAP

I do not know what "types" of FIAP sessions exist!

I don't even know what they do.

I don't know

I don't know anything about the FIAP

I have no idea what FIAP is.

I have not been to a FIAP session thus I don't know what topics are presented.

I manage a 40 person department engaged in mathematical modeling of business problems. My background in physics is essential to my way of thinking and the tools we bring to problems. People have written about "business physics", which is not "real" physics, but a useful metaphor. FIAP sessions on real business problems for which real "physics-style" thinking actually solved a problem would be interesting. IN other words, go beyond physics as a metaphor.

I most likely would not have time to watch them.

ideas on short- or medium-term foreign assignments at little or no compensation (that is, self-supported)

I'm generally interested in the problem of basic research for new products in the industrial workplace. It's not being done any more. How do we convince top management, who are MBA trained, that if they don't invent new products, they won't have a business in the future? I've heard many research managers from a variety of corporations explain that doing it yourself is the "old" model. The "new" model is letting academic researchers do the basic research which industry then develops into products. Is there any company that is actually successful at this? Can that successful model be shared?

I'm not sure if any would be relevant.

I'm not sure. Perhaps something like "practical new optics for industrial dummies".

I'm very interested in learning more about atom and ion trapping and applications. I'd like to take a short course on atomic and ion trapping.

image and signal processing

Imaging, medical imaging, radiation physics, radiopharmaceuticals, radiotherapy, imaging in pharmaceutical development, image-guided radiotherapy, non-ionising radiation, bioengineeering. In short, many of the areas represented by the AAPM, IEEE and SPIE. How about cooperative sessions between FIAP and AAPM? How about, for physics students, presentations on medical physics or health physics that might present them with these as career choices?

Impact of physics on society history of influential and not-so-famous physicists roles and responsibilities and how FIAP can do a better job physics role on how to manage technology and society contribution of industrial physicists to corporate strategies impact and effects of nanotechnology on society.

industrial applications of nanotechnology

Industrial applications of physics, lasers, materials processing with lasers, optical fiber

Industrial applications of the following: Optics, E&M, atmospheric/oceanic physics and chemistry

Industrial lasers, manufacturing technologies (cutting/welding)

industrial sensing, process control, emerging technologies

instrumentation

Instrumentation related to radiation protection lasers related to medical applications

Instrumentation, especially related to nanotechnology.

Intellectual property, turning physics discovery into a business

Invited Sessions

Job situation in physics and other science/engineering disciplines

jobs research funding situation energy research environmental science technology for the third world

keynote speech

Laser and optic related sessions.

Laser communications, photonics, superconductivity, retirement planning, career development

laser radar high power lasers

Lasers, optics, & applications

Low Temperature Physics/Technology, Materials, Information Technology, and Computer Science and Applications. (Keep in mind that my career was mostly fundamental materials research (muon rotation, Moessbauser Effect in magnetic materials, He3-He-4 Dilution Refrigerators, Quantum Solids and Liquids, Federal funding of such research as well as advanced scientific computations and advanced computers (my computing career stared as an undergraduate in 1956.)

Magazine articles

Magnetic Storage Devices, Magnetism, Magnetic Materials, Spintronics, Semiconductors, Superconductors, Job Surveys, Intellectual Property,

Manufacturing Research Physics of Machining and Grinding Cold or Kinetic Spray Injection Molding Coatings

Material issues with ever finer interconnect structures

Material science

Materials and electromagnetics

materials and plasma

materials development and characterization, MEMS, microfluidics, surface science, micro and nano technologies

Materials oriented sessions

Materials physics related

materials, polymers

medical

Medical device physics, sensors, nanotechnology, cosmology, cross disciplinary topics

Medical imaging physics and image/data processing & analysis. Instrumentation for physiological monitoring (e.g., EEG, ECG, blood pressure, etc.). Cardiovascular fluid dynamics (has been featured at APS/DFD).

Medical imaging, biosensors, nanotechnology, microfabrication, x-rays,

Medical Imaging.

Metrology, EMI/EMC, plasma processing, acoustic modeling, thermal modeling, space environments/rad hardening

Molecular Spectroscopy

More Bio-polymer related sessions, Healthcare, data storage and energy,...

Most of them, especially defense related

MRI

Much of my work concerns material and structural behavior, and any sessions that dealt with either material or structural behavior would be of interest. eg. nanotech, MEMS, metals/ceramics, coatings, finite element analysis of nanotech scale behavior (eg. how should thermal conductivity be measured in coatings?) These kinds of things.

My current job requires so much of my time that I don't have freedom to attend anything that isn't immediately relevant to the project we are doing. Right now I am working on interoperability for Healthcare.....

My employment is as a Ph.D analytical/physical chemist (specifically, as an infrared spectroscopist). As such, my major organizational interest is with the Society for Applied Spectroscopy, followed by

the American Chemical Society, and then by APS. In addition, the bulk of my activities in these organizations have been focused on local section meetings and activities, as opposed to national meetings and ancilliary activities. I have previously been unaware of FIAP. Although I am interested in getting additional information about this forum, it is unlikely that I would actively participate in it to any great extent. (I am over-extended right now with respect to activities related to professional organizations.) However, if FIAP were ever to hold a local section meeting in the Cleveland/Northeast Ohio area, I would probably attend, and would certainly be interested in notification of such an event.

My field is too specialized to be of interest in academic physics

N/A

Nano- and Micro-technology, molecular modelling, 3D modelling, New Computational ideas, Biotechnology

Nanoelectronics

nanomaterials

nanotechnology

Nanotechnology RFID

nanotechnology, optics, charged particle physics, lithography

nanotscience and technology, electronic interfaces, surface sciences

national research policy

Need to learn more about FIAP

negative index, ferroelectrics, colossal MR, biophysics

New and developing technologies

new application of methods of theoretical physics in quantitative finance

New applications of technology

New Materials

New technologies

New technologies or new concepts

New technology workshop

New X-ray sources and X-ray optics.

New, innovative R&D work done at their company, broken down by discipline: optics, electronics, materials, bio-tech, IT, energy (renewable), etc. Focus on small companies.

No idea right now.

No idea. I have never been to a general meeting to see what is offered.

no thoughts

None in particular

non-technical type issues, such as strategy or project management

Not close enough to FIAP to know what is appropriate to suggest.

Not much

not of interest,

Not presently interested.

Not sure

Not sure at this time

Not sure what is avaliable.

Not sure. I would think that they would focus more on applied, multi-field topics.

On the technical topics listed in #26 below

Ones on Beers--sorry to be obsessive about beer.

Ones that are not dominated by slow moving academics

oppties for astronomy students in industry

optical metrology

optical scattering, semiconductor nanoelectronics

optical, thermal physics

optics

Optics (microscopy) Image analysis

optics and any related to new materials

pharmaceutical focus with emphasis on physical chemistry

Physics & mechanics of polymers and composites

Physics and its application in semiconductors. Many people do not realize that somethings are limited by Physics.

Physics in medicine R&D support

Physics research and what I do day-to-day for living have grown apart. Whereas I am deeply interested in the over all concepts, I am less interested in details of matters that do not concern me directly. The meetings that highlight advancements in physics, have some entertainment value, and inflict little pain on the audience (equation-after-equation)will be more appropriate. One excellent example was Schultz's presentation on "NASA's Deep Impact Mission" in your 2005 Baltimore meeting on Condensed Matter. You should be congratulated for arranging such a fine mix of papers.

plasma physics, lighting related

Plasma physics, tokamak engineering

Plasma Processing, Remote Sensing/Spectroscopy

polymer electronics

Presentations of the basic science that supports major technology applications

Printable electronic materials Novel antenna materials

Problems in semiconductor physics

Professional

Professional consulting after retirement.

publishing in an industrial environment keeping up technically in and industrial environment

quantum information

quantum key encryption, tether physics on satellites, rad hard electronics,

Radar, Sonar, Remote Sensing, Signal Analysis, Nermerical Modeling

real applications, research triends and breakthroughs, industrial needs

recent developments in industrial applications tutorial on new developments in physics and how these are being applied to industry

related to materials and energy

Related to semiconductor technologies and device applications

Relatively specialized concerning materials and processing techniques applicable to Information Technology

Research strategy and approach at large companies *Entrepreneurism and hi-tech start-ups (technology based) Sessions on collaboration between professors and industry (have both sides of the same collaboration present with their perspectives) Elevator Pitches -- have professors / research scientists pitch their ideas for physics and technology based devices or products to the FIAP community

Review of Advances on Physics Technology (e.g., nanotechnology, etc)

role of industrial research in the APS

Science and its relationship to economic growth, job creation, etc. Most scientists have faith that there is such a relationship, but there is little hard data, and scientists are not generally familiar with what data has been produced by economists, sociologists, etc.

'Scientific American' level presentations from recognized experts on topics of general interest to those of us who create things our companies sell to scientists so we can can create more things -- particulary areas linking physics and life sciences. Technology X and a panel's ideas of what's needed to move it from the physics lab (or early adopter status) to mainstream commercial laboratory instrumentation.

Selecting R&D projects for commercializing

Semiconductor Processing

Semiconductor technology

semiconductors

semiconductors, emerging nanotechnologies

Semiconductors, nanotechnology, materials, processing

semiconductors, polymer physics, condensed matter, granular materials, physics of fluids, stat mech, industrial stuff

semiconductors, surface science, charged particle beams

Session that would focus on importance of funding Research organizations in americal companies (just one example)

Sessions about computational techniques and machine learning.

Sessions about innovation methods and practices, and how major companies are using them. Sessions about government R&D roadmaps: What is the vision and timeline, what initiatives are funded, how to tap into that resource? Networking lunches.

Sessions describing new technologies.

Sessions involving electronics, telecommunications, space, nanotechnology, photonics

sessions on aerospace or optical sensors

Sessions related to energy or to joint industry-academia research consortia.

Sessions related to microfluidics and biosensors (biotechnology and medical devices)

Sessions specialised to petrophysicists (oil industry). This would attract hundreds of people in a field that is typically abandoned by APS.

Sessions that have relevance to geophysics or high-performance computing

Sessions that relate to the interaction between academia & industry.

Shock dynamics, Energetic Materials Applications and Technology(explosives, pyrotechnics, proppelants)

Short presentations on technologies being commercially applied, or ready or almost ready for commercialization, especially those related to manufacturing.

Since the technical focus of my work can change rapidly and without notice, it's hard to predict from one year to the next what topics might be of interest.

Small business or individual contractor related issues

solid state and sensors

solid state physics

spacecraft sensors, electronics, and environments processes for manufacturing

Spintronics, RF magnetics, MRAM

Sprays, combustion, flow, automotive, including measurement techniques in these areas

state-of-the art summaries of leading edge technologies. summary talks about the analysis underlying the decision to pursue a technology/area of business summary talks about experience in aquiring venture capital, etc.

Statistical applications in industrial settings, particularly Weibul statistics. How to maintain the balance of application and theory.

Statistics, particularly DOE

structural materials, coatings and finishes, nano

subjects like: better communication between academics and industrial physicists, better attitudes of each toward each other, methods to look for industrial jobs from universities, getting more women in industrial physics

Subsurface Sensing

Superconductor Topics

surface science, applied chem physics

sustainable energy technologies, including fuel cells, hydrogen systems, and photovoltaics

Symposia and Focus Sessions (with invited talks). Topics include: Thermoelectrics, Transport properties of mateials, Hydrogen materials science.

Target training that I get through other sources is likely better and more relevant.

Technology Applications

Technology commercialization

Technology overview and roadmap type presentations and sessions

Technology overviews, tutorials

Technology transfer from academia to industry

Technology, Marketing, Govt. Contracts

The variety at present seems fine

theory, modeling and simulation in industry -- best practices, establishing the business case, or experiences in career development discovery versus invention -- role of physics in intellectual property

there aren't any in my field (phase change materials)

Thermoelectrics, hydrogen storage

Thin Films, Optics, Photonics, MW Devices

Things related to data storage technology

Those focussed on the energy business.

Those that cross-link to diagnostic measurements, environment, water, energy, materials science

Those that offered potential application to industry, such as nanotechnology and alternate-fuel applications.

Those that would address my research interests.

THz, remote sensing

To be honest, I find nothing FIAP considers to be interesting.

topics in catalysis and electrochemistry

Topics in new semiconductor technologies, especially compound semiconductors. Topics in new materials research, especially as it applies to electronics applications.

topics in patent law

Topics related to indutrial applications of plasmas

tutorials

Unclear. My particular interests and needs don't overlap much with what I have seen of FIAP

Use of computational chemical physics in industry

Ushering new technologies into production quickly and successfully.

very few

what are my choices?

what types are there?

wide variety. Almost any topic would be interesting, but I'd make time or be able to justify attending on work time and at work expense only if it were very closely related to work done at my company.

will first look at what FIAP does, had never heard of it.

Verbatim comments: Please suggest a service that APS could offer its members that would help you locate technical information.

1. APS could create an Open Software Site for physics oriented software. 2. APS could create a web site for communications between applied researchers.

A "Google'-like search capability that was restricted to vetted scientific websites - not just formal papers or preprints, but tutorials, lecture notes, problem sets, book reviews, Physics Today articles, conference proceedings (including the non-APS ones, such as IEEE or SPIE), etc.

A broad and affordable technical literature search service like SCI or INSPEC. They are not affordable to small businesses and I usually have to go to the local university library to look for references.

A citation index for articles published in technical journals.

A conveniently searchable keyword index of APS member's specific research areas, updated yearly -- similar to the referee's interests list. Links to similar databases of other relevant societies where possible.

A database of abstracts organized by scientific topic.

A directory of web resources that is well-catergorized by topic. It could easily be compiled contributions from members.

A easier , less complicated way to locate journal articles. At present I have to wrestle with various partly compatible subscription services.

A free (killer) google-ish app w/ good rejection capabilities.

A good search engine for key words and topics within a chosen set of journals

A keyword search of the contents of abstracts from ALL articles published in the previous 6 or 12 months in Phys.Rev.Lett. AND all Phys.Rev. issues combined. The unique feature would be that the latest information from all of these journals would be accessible through a single search. The same service should be available for all abstracts from Appl. Phys. Lett. and Appl. Phys. J. combined.

A literature search engine that is more structured than Google, and less expensive (for members) than Web of Science. It should include ratings by number of citations, and other criteria of quality.

A more intuitive online journal search interface, and possibly larger abstracts of research papers? (Make it easier to determine what the article is 'really' about without having to pay for the article or subscribe, or make a trip to a University library.)

A preiodically update, concise, sales-pitch-free list and description of where the existing resources are, and what if anything they cost to access.

A search engine, like Google, but one that did not give me overwhelming numbers of irrelevant hits.

A set of web links to a variety of reference material, or particularly good websites would be very much appreciated.

A set of web links to references and resources,... aps maintained search engine

A single website that would allow citation lookups for all the relevant physics journals I typically read: PRL, PRB, APL, JAP, etc.

A single, one, unified, comprehensive article search site. At present there are several (many!), and it's time-wasting to search all. It would help if articles could be purchased through it (maybe in pdf format) for a reasonable price.

A subscription service that wouls allow one to access non-APA/AIP journals on line, access and copy full journal articles

A subscription to ISI publications would be handy

A very narrowly focussed Google would be useful

A web search engine that could narrow down results to relevant technical journals or institutions.

A weekly e-mail highlighting PRL's, APL's and other short articles announcing new results that may be relevant to electronics, photonics or other topics. The e-mail would be similar to the page in Physics Today announcing new discoveries.

a www. site where one could search all APS journals by word/phrase.

Access for a nominal fee to Web of Science

Access on a pay-per-use basis to search engines whose subscriptions are prohibitively expensive for small firms.

access to a broad range of technical journals including capability to download entire articles

Access to a full data base of scientific journals.

Access to full text articles on Google Scholar

Access to Inspec on a pay-as-yo-go basis

Access to INSPEC or equivalent database for a monthly fee.

Access to Science Direct journal access. If not realistic for current articles, then at least for older articles (older than 1 or 2 years).

Access to Scitation index

Access to sister society papers (JOSA, IEEE, etc.)

Access to Web of Science

acess to e-jornals (NON APS)

Actually a set of blogs with fairly narrow focus on types of technical information. (Otherwise there is often a long dialogue before the two parties are speaking the same language!)

ADS abstract and eprint archival services already exist. No need for duplication. Linking the physics journals and SPIRES to them more closely would be of value. I noticed that some of my refereed journal publications were listed as unrefereed reports by SPIRES. They should cross link to ADS which is very good and complete for astrophysical journals. SPIRES is not.

Advertise available services. I work in a field that is not nusually associated with mainline physics namely health physics/radiation protection. I accidentioally found the ARXIV service and wonder what else is there? I'm sure I am not aware of much that is available.

all-included journal article internet accesibility for AIP/APS journals (for a set fee)

An online library of papers from APS, IEEE, SPIE, and AIP.

APS Bulletin is sufficient.

APS website with search engine.

arrange for journal referees to have full text electronic access to all the available references in the article they have been requested to evaluate.

Articles in all APS/AIP journals should be sold separately instead of as part of a subscription. The references cited should be avaiable at no cost.

ARTICLES THAT CITE THE REFERENCE ARTICLE IN A JOURNAL, OR A CROSS REFERENCE TO SIMILAR JOURNAL ARTICLES

ArXiv seems to have it all together. Wouldn't it be nice if all preprints were available online?

Availability of full reprints of technical papers on-line free of charge.

better cross-linking of articles, especially older journals, and conference proceeding - these are hard to get from the web.

Better indexing of APS journals for ease in reading articles on the Web. Older articles are often hard to find and/or hard to get copies of.

Broad searchable database

Broader access to journals.

broader database searching such as theses, public reports

Catalogue of experts: names and contact information and areas of expertise

Cheaper access to AIP search engines

cheaper access to single journal articles ?

Citation tracking

CNP (career network profile) for the members - ie if each member can put their expertises and interests in a searchable format, then it would greatly facilitate the interactions between members.

collaboration with IEEE in sharing of searchable technical databases eg reciprocity agreement that would permit single access to J Appl Phys, Phys Rev, Trans on Electron Devices, etc.

Contact information for experts in particular areas.

Credible on-line encyclopedia of physics and engineering tutorials. I work in an engineering capacity that requires me to learn/relearn fundamentals in a wide area of topics. I benefit by tutorial-type expository writing on the internet, which is great because the internet is efficiently searchable, but not so great because you can't believe everything you read.

cross divisional indexing.

cross membership in IEEE

Cross referenced lietrature search and web based knowledge system with a technical bias for results.

Cross-journal searching by topic (I currently use ISI for this purpose)

database

Department of Defense Scientific and Technical Manuals and Specifications NASA Scientific and Technical Manuals and Specifications

detailed web page with updates notified through monthly e-mails

Don' know.

Easier access to SPIN WEB or its successors. The procedures and web site have changed somewhat in recent years, and I only have access because I am an SPIE member. Also, the search response can be flakey, I seem to remember getting very different results with the same or nearly the same inputs.

easier, cheaper access to on-line journals

Easier/cheaper access to electronic versions of journal articles

Easy access to search engine such as INSPEC

email alert based on keywords in articles for APS journals

e-mail alerts on selected topics

Engineering and physics article data base on the web that is searchable, would provide free look at abstracts, would have low costs for the full article (<$5).

Enhanced web search access to subscription services

existing services such as Scitation work well for published articles. A similar service for preprints might be useful.

Expanded journal search coverage at a reasonable price. Currently I must go to the local university to do this since commercial services are out of our price range.

For a fee, allowing downloads from any APS/AIP journal, or a package, still allowing access to all journals.

Fortunately, my company has a very good library on-site so I have access to all the technical journals and books I need.

free access and searches to journal articles

Free access for APS members to journal papers posted on-line, by sign-up subscription.

free access to a limited number of member journal articles strike a deal with Nature for access to physics articles

free access to all journal articles

Free access to its journals. I now get this through my association with a major laboratory, but others who don't have this advantage will really appreciate this. I fully support charging authors a little higher publication costs to pay for this service. I do think that $ 1,500 is excessive. I realize that competition with private publishers may be a sore point, but then, I think that they should be be made free-access too.

Free access to journal articles. Could limit access to certain time periods, a certain number of downloads per year, to APS memebers only, etc.

Free access to journals

Free access to Physcial Review journals

Free access to scientific journals (like absacs.harvard.edu) with free PDF download capability.

Free Access to some of the Research Journals

Free library service on the web to access copies of journals.

Free online access to many journals

free online journal access

Free search engine covering more than APS journals

Full access to the APS publications even if you are a small company or an individual

Full text journal articles available on line

Full txt search of all APS journals. Free access to search and view all articles (full text). Then nominal cost ($.99/article)to download pdf. (The abstract alone is usually insufficient to permit determination of whether the article is useful or not. The typical result is requesting full texts of several times as many articles as are actually useful. Need to view full text.)

fully text searchable listings of more journals

Give APS members free (or really cheap) access to Web of Science for journal searches.

Good search engine On-line library

Good way to search APS journals and retrieve interesting articles.

google

Google access to full PDF of all APS articles

google for scientists with better indexing of chemical terms and searches that are limited to types of sites (like only OEM web sites for products or only Societies for papers....rather than getting all the filter companies that pay to be infront of these sites)

Google is so pervasive that it would be hard to compete as a search engine. Perhaps APS could offer a service that organizes articles/information into useful technical bundles.

Google Scholar is good

group subscription access to search engines for technical databases.

Have members provide a list of interest areas and email notify them of articles that match those interests. Especially helpful for APS packs

have most APS journal articles be reachable from Google searches.

Have no good ideas.

hypertext journal search cross-search with other professional societies

I always use a 3rd party service (NERAC) for searching, so as long as APS is providing them with good indexes and keywords, or the ability to produce them, then the information will be located. The only improvement I could see over that would be to help make the retrieval of the abstracts or full text available at lower cost.

I am already satisfied with the tools available

I can locate information easily. However, I would like a quick inexpensive access to download complete journal articles. I would to do this myself. Current methods are time consuming and tedious and they are relatively expensive. It has always surprised me that researchers, either pay to publish or publish for free, their work in journals and industry magazines. Technically, this information is in the public domain. But the agencies then charge everyone for downloading this information. {just one of my pet peeves}

I definitely like the suggestion of videos of conference talks available on the web. Maybe eventually short courses for professionals also.

I don't believe the APS can offer anything more than what is on the web except for member only type of access to specific journals.

I don't know

I don't need the APS for this, since my company's library gives me such services.

I don't really need any help - everything I need is available at my job.

I find everything I need on the internet. I sometimes am hamstrung by paper charges or membership charges.

I find the web-site http://www.scirus.com/srsapp very useful. Making APS journals were freely accessible to members would be a benefit.

I frequently use the NASA ADS search engine (operated by Harvard Smithsonian), and I am not sure that APS should try to duplicate this service, although perhaps you could link to it.

I have a pretty good company library, so not much to suggest. However, something akin to the SPIE Digital Library search feature, linked to APS journals and corresponding physics journals, would be a help.

I have always thought the taping the March meeting and putting it on the web would be very valuable.

I have no suggestion. I do have a caveat: Make sure that you are creating something unique, rather than duplicating existing services and providers available elsewhere.

I like the APS online journal access setup. Member directory online access is also helpful.

I like the concept of the virtual journals although there has never really been one that matched my interests well. I tried to organize a local Silicon Valley chapter of APS to sponsor seminars that would be of interest to FIAP members but I didn't want to do it on my own and couldn't find anyone else to help me.

I think that sending article references using key words has helped me keep current with information.

I think that the best service you could do is 1) have an official website of physics and mathematics, especially numerical that we can browse, looking for the latest techniques, research news, and explanations, but 2) have the site peer-reviewed for accuracy: there's a lot of garbage from kooks-ville out there on the web, and I'm tired of wasting my time looking at it only to find out it isn't worth anything.

I think the current system is adequate.

I think the work that has gone into putting the articles on the web has been excellent. I have occasion to be able to get to a library that has subscriptions to AIP journals, and I find locating, browsing, and downloading articles to be fantastic. Since I use the web for most of my research, I don't see how you could substantially improve on what you have on the web.

I think there are many sources for getting information. Adding another one may no provide that much value.

I use Google.

I usually need current technological information for consulting, on the Physics Today level or somewhat higher, but on a broad range of topics in engineering and applied physics rather than basic physics.

I usually use IEEE's Xplore website. It's pretty good. My company pays for access.

I work in microelectronics/nanotechnology/semiconductors. Physicists often have good access to analytical services for material science study. A directory of such services available from either industrial or academic sources would be very helpful.

I would like to have electronic versions of the Journal issues that I have subscribed to. I would like to shed some of the hard copy journals that take up too much romm in my personal library. I would pay (some) extra for this capability.

I would like to see a free or low-cost advanced search of title, author, and/or abstract, similar to INSPEC or SPIN. With relevant citations, a trip to the library or article order would be more productive.

I'd like there to be a way of automatically keeping track of the latest issue of the APS online journals I've read (in the sense of checking the tables of contents of each issue) so I don't have to keep separate notes on which ones I've already read. What would be ideal would be a personalized web page with a list of the journals I read, the last issue I've looked at, whether there is a new issue available, and whether there is a complete (not partial) issue available.

IEEE INSPEC. Those of us not located at universities or big companies cannot afford the rates charged by the professional societies.

If only my job required technical information....

If you had something similar to google scholar, but from a physics bent, that would be hugely helpful

inexpensive, on-line professional library, not just for APS journals

integration of PROLA searches with ISI web of science/INSPEC or other general science search databases.

Intelligent searches of aps full text journals, community web development allowing users to contribute.

It has to look like a Google search. See comment for question 20 below.

it is already avaialable through WebOfScience, GoogleScholar etc - I doubt you could do better?

It is hard to beat google.com !!

It is very, very easy to locate and access technical information. No need to overdo it.

It would be advantageous to be able to find technical references using the internet. A single small annual fee from the APS would be OK.

It would be nice to have a web based seach and retrieval system

Journal web search tools (Like IEEE's Xplore)

Journals on line for little or no cost

Keep enriching the APS website with useful links

Key word search of APS journals.

Keyword and abstract searches on APS website for Phys Rev ect. Journals Reference Tree for papers

Less costly annual fee.

Less restrictive access to the electronic journals and perhaps a cross-license with engineering journals at a low personal rate!

library

Link APS journal article database with other society (SPIE, OSA, or IEEE) for one common search location.

Link to subject matter experts, institutional resources, and/or vendors for inquiries on a subject or instrument. Example- "uv/vis photometry" inquiry may lead to a page with links to people, service organization, and instrument makers

linked serach of other databases (e.g., chemistry)

Links to introductory/tutorial material on a search query. Often I have to learn new material rapidly to get up to speed with a project, and it's difficult to locate the basic information without being inundated with more advanced stuff that is just noise without some basic understanding of a topic.

links to sites like Azom.com Global Spec

List government information access sites.

list of web sites for searching journels and magazines

listing information on APS website

Literature search servive

Liturature searches

Local chapter activities

Locate articles and books by keyword or subject. Review and tutorial articles for the nonspecialist such as are offered in Chemical and Engineering News for chemists, and the IEEE Magazines for engineers. These would appear in Physics Today.

Locating information is not a real problem for me, since I have access to INSPEC and search engines.

Low cost on line search of APS journal archives

Low cost only line subscription library to all aps journals.

Lower cost journals

Lower prices to members.

Lower rate corporate subscriptions for small companies.

Lower the cost of online access to ALL APS and AIP journals. We are a scholarly society, not a business.

Make a great physics interface to Google.

Make all technical literature available to Google search.

Make available links to applied physics/Engineering journals

Make available something like a "standards reference library" including physics and engineering standards info. This tells you where to go to find various standards information, for example, thermal, electric...physical properties of materials.

Make journal articles available free after five eyars.

make more cross reference access across journal services for individual articles as part of membership. This is very necessary and very expensive

Make on-line journal access cheaper

Modest monthly member access to Science Citation Index. 60 minutes/month of gratis access would be exceedingly valuable.

More accessable web service based journals

More extensive free access to journal articles for non-academic researchers

more free access to APS journals

more notes about new instruments

Most of my information is obtained through IEEE (fee), SPIE (fee), or web searches. A central bank (fee) of info would be nice.

Most of what I need to look for does not fall under the conventional purview of APS.

my company offers, Knowledgegate, a service that enables me not only to search a huge segment of the literature through key words but also the ability to search Science Citation Index. For example, I can search my name for the year 1959, find my paper and then find out, for all following years, who had referenced this early paper. I can also print it out along with any of the papers that had referenced it. So, I am fairly content with this at present. However, the one thing I have tried to do in the past was search for the Bulletin of the American Physical Society the journal that catalogued all past talks at APS Meetings. Apparently this is not available.

My company-sponsored electronic resources are extensive and provide me with all I need (numerous electronic subscriptions, e-Books, search services, etc.). It's a huge investment that I greatly appreciate and keeps me at this company. I often wonder what I would do if I leave the company for another -- would I have access to the same? Perhaps the APS could think of a way of bridging this gap (perceived or real)?

Need a good and free journal reference search engine

NO IDEA

No suggestion

No suggestion at this time.

no suggestions

No suggestions

No suggestions come to mind. I usually find fairly easily what I am looking for among the physics journals and the physics-news items.

None. My (large) company has excellent resources to help me locate technical information.

Not required

Not so much locate technical information as most industrial physicists (IP), I believe, know who to do this, but rather of forum of exchange for IP professional and networking to further enable complementary collaboration.

not sure

not sure. look at what IEEE does...they are much more advanced, as far as I can tell

Nothing comes to mind

nothing, unless you have a search engine that is better than Google!

Offer an online electronic journal library service that covers a wide range of relevant journals. Create a membership division for technical organizations that would include access to this library.

Official APS information search and citation search

On line access to back-issues of journals that is included in the membership.

On line access to professional journals and meeting presentations without cost or special log-in or password complications.

on line search

Online access to all AIP journals at the same per-person rate that government, FFRDC, and Universities pay. I have subscribed to Phyics of Plasmas and Physics of Fluids for over 20 years. You would think I would get inexpensive online access to at least those Journals, but AIP wants yet more money for that.

On-line access to database in public and private libraries

Online access to databases such as INSPEC.

Online access to good abstract service (Chem. Abstracts suits me best).

on-line access to journals

on-line Citation search

online journal article search included with membership

online journal searches group subscription rate to professional information service such us NERAC

online journals (keep prices down!)

on-line journals at better prices

Online literature search (something like Melville)

Online questions and answers between members would be of great use. What one has encountered may help someone else, especially given the multidisciplinary nature our works in our times.

on-line reference search engine

on-line search (within category) to find articles, talks, publications on the subject. Needs to include APS, other professional socieities worldwide as well as information from other relevant associations (e.g., NCSLI) and conferences (e.g., CPEM).

Online search for IEEE and Nucl Instr and Meth authors, titles and abstracts.

Open access to physics journals for members

open publication or access to articles

Our journal search tool is rather restricted (e.g. can not be used from home) and a better one would be useful.

Our library already contracts for on-line, full text access to several societies' journal sets.

pan journal access, equivalent to that available in a university

Paper searches of all types

perhaps an information clearinghouse service which lists most published work in particular areas of interest?

Physics Today Online Industrial Physicist Online

Present APS website, e-mails (Phys. Rev. Focus, Latest PhysicsWeb Summaries, current awareness on nanotechnology and superconductivity) are fine.

price of online, web, journal access is far too expensive! Surprise? Living in a "remote" location means libraries are out, the web is in, but with most real journals charging a mint, the web is not too useful. I would be happy to pay some modest page charge, but this $1 per page at times seems crazy.

prola

PROLA is a wonderful service, but it has one glaring flaw: It badly needs a "search by author name" option. I can't speak for others, but my personal internal linked-list tracks a name much more effectively than "Phys. Rev. X, p. X."

PROLA is already rather good

Provide a GOOD bibliographic service for technical information (i.e., a search through all available physics/chemistry journals). Database information is particularly important.

Provide a listing of small companies in the physical sciences/engineering areas with cross-referenced key words that describe their various products or R&D interests.

Provide and categorize web links to all types of applied research that uses physics and provide background information

Provide search engine access as part of APS membership.

Provide the equivalent of PubMed for the harder sciences

Publish something like the old "Industrial Physicist" magazine. It gave industrial physicists a printed media for ideas. Usually the "Physics Today" magazine focuses on academia and Nuclear or high energy physics. The IOP magazine, "Physics World" gives a broader futuristic view which industrial physicists need to compete with the various engineering disciplines.

Put all journals on line, searchable full text, at least for members

put it on web so Google can find it

Reasonably priced (say $5 per journal article) access to all phyics-related technical journals.

Reduce cost for electronic journal reprints

reduce cost of on-line access to all APS journals

Require all APS journal use Internation System of Units, allow members access to abstracts of APS journals on line, either contribute to SRN or produce a similar system for APS journals.

science based search engines

SciFinder (a general search engin for papers and patents)

Scitation works just fine, thanks!

search engine covering AIP, etc.

Search engine that provodes access to a wider variety of different publications including books and journals from different publishing companies

Search engine with all physics (and other) periodicals. Should be able to do word searches.

search service

searchable database of material and structural behavior, technical data (eg thermal and mechanical properties of materials -- such as elastic moduli or conductivity -- from very hot to very cold), access to technical articles.

Searches which included all major journals plus on-line condmat archives

searching on APS and AIP web sites for articles works well, but a single uniform portal for all AIP society journals and searching would smooth things somewhat.

shared academic library access (Like UCSD locally gives employees) to online journals.

Similar to SPIE Search Software.

Small companies typically do not have the resources to provide online database search capabilities (such as INSPEC). I would find it very helpful to be able to perform electronic literature searches.

Something like CiteSeer for any journals or documents not covered by CiteSeer (if any).

something like IEEE Xplor or SPIE digital library for APS journals

something like IEEExplore

something similar with IEEExplore

Sorry, I can think of none. Maybe you are already offering such services, but I have not investigated them.

sponsor "electronic experts" with links to selected up to date information such as reviews on important areas

Stricter reviewing standards so that "resume-padding" articles don't get published, thus making it more worth one's time to actually review or read APS-published articles. Pay reviewers a substantial amount (cash or APS credits, e.g.) so that they will spend the time to carefully review the articles.

subscription to a service like web of science would be terrific

Subscriptions to technical journals online

support NASA Abstract Data Service fully: integrate citation info and full text from APS journals, following AAS example...

support NASA Abstract Data Service fully: integrate citation info and full text from APS journals, following AAS example...

Support scholar.google.com !

targeted search inside APS and something akin to rss feeds on specific research ideas and applications

Team up with Google for an APS-sepcific search using their engine tailored to our situation. (I don't know eny details but have heard about it also, that companies utilize this for their employees to use with internal searches of product and technical information.)

technical web search

Tell me what the FAIP is or does.

The AIAA provides web searching of AIAA archives, including their Conference Proceedings and Journals, as an element of membership. This greatly facilitates research, especially relating to non-archival information. Our corporate library has a difficult time providing access to the full range of journals relevant to a practicing chemical physicist with a wide range of interests and responsibilities, and the APS makes things difficult too. If the APS had an accessible research site that enabled article capture and print-out, it would accelerate research many-fold. Right now, I need to fill out a corporate library form, submit it to our corporate library, they spend the $25/50 and find a cash-source, and sometime within a month, I get blurred photocopy long after the fact.

The APS portal should link over to scientific and engineering resources way beyond the links to other societies and to sponsored journals.

The biggest problem is in obtaining technical data that may have been published 20 or 50 years ago, but is in no sense a research topic today. For example, the type of information that is in the CRC Handbook of Physics and Chemistry, the Landolt-Bornstein reference books, the Purdue University series of reference volumes on thermal properties of materials, various collections of phase diagrams, and the Intl. Centre for Diffraction Data. We are not going to subscribe to a dozen of these services, but we would subscribe to a single comprehensive reference source.

The IEEE does has a reasonably priced access to all their publications. Is this available at APS? Truthfully, most of the info I need is engineering oriented, but there are occasions when (semiconductor device) physics articles would be helpful.

The main thing would be to provide "Table of Contents" for APS journals. However, that is already available from other sources. So, that is not an issue.

The one thing that comes to mind is improved or 'smart' search capabilities, contextual, etc.

The search engine in place works well for me.

There are plenty of such resources already. The problem is getting through them and screening efficiently for truely relevant advances.

There needs to be a method that we can do literature searches across boundaries in the physics area. It is almost impossible to look at JAP, Phys Rev articles, JVS, and Electrochemical Society articles easily. The IEEE has a pretty integrated search engine and the digital library allows me to collect articles from many societies in the IEEE at once. The physics and chemical societies seem to be almost too proud of their articles to cooperate. One has to have a memebership in every society. That is ridiculous. It prevents good research, often much better than the IEEE, from getting into use. I think that a digital library allows more revenue than the method used by APS and its sibling societies.

Tie in with AIP member societies, etc., related to atmospheric, oceanic and space physics to be able to perform selectable topical searches.

topical or device application index from RSI articles.

Training in the best use of search tools within PROLA to maximize the effectiveness and efficiency of journal searching.

Unless you are planning to index every journal article published, everywhere, since the dawn of time, I think my needs are generally met by regular web search using Google.

Use of a Google type search engine

Virtual library access

Web access to all journal publications - full articles

Web access to scientific databases such as INSPEC as part of individual membership aceess is now available only from the library

Web based

web based access to APS journals to APS members, if there is an institutional subscription for the company

web search tool Much available data is fragmented across subdisciplines, and groups.

Web-based "index" of technologies that could be easily searched, especially with references, links, or contacts for more information.

Web-based index of information by topical area

wikipedia, with references to refereed journal articles so we can check the reliability of the entries.

Wonder if APS can relay important discoveries along the lines what is provided by "kwm@freshpatents.com". Of course this service only deals with patents and perhaps has a small database to search, but it sends me an email if a hit is made on my keyword. APS already knows what the new of the day is. Why wait another month to convey to eager physicists. Also, don't assume that we all read the magazine as soon as it arrives. APS has to force feed us the news of important discoveries.

Work to make the full text (not necessarily with figures) of all APS (AIP, IEEE ... all partner organizations) journals freely web-searchable and viewable.

Yahoo groups for specific topics where people can write in to the group. Creation of networking groups based on common interest. LinkedIn affiliation so we can see all APS members who care to join and their detailed backgrounds (www.LinkedIn.com).

You've got to be kidding. There are entire companies built around providing information services. I doubt there is a single service that APS could offer that would significantly impact the complex problem of information retrieval.

Verbatim comments: Please suggest a service that the APS and/or FIAP could offer its members that would help you access the technical information once you have located it.

1. Permit APS members to access online, and print, a limited number of journal articles per year at no cost. That is, include in the APS membership fee a cost that allows access to and printing of a certain number of journal articles (or pages). Obviously, I am talking about journals not already subscribed to. 2. Set up an "exchange" relationship with other organizations (e.g. Elsevier) to permit certain limited access (per year) of the type described above to their journals.

1. Offer APS journal packs also for 5, 10, 15, ..., etc. articles at reduced prices. 2. Include AIP journals in the service.

10 free publications downloads per month !

A "public" storage, where all the paper are categorized. All members can access this public storage and see other relative papers that are located there. This is almost like what amazon.com has. That is when you get a book it tells you other relevant books that other customers bought.

A complimentary web subscription to APS journals

A corporate account to download material. This service probably exists, but my Company is not a subsciber

A library of PDF version that could be downloaded

A range of journal subscriptions if possible!

A subscription service for members that would allow downloads at reduced rates or a fixed annual fee.

A well cataloged and searchable text book reference with content summaries and user ratings as per Amazon practice. (Browse and seach tools should be higher level ond more logical than Amazon.)

a yearly subscription fee to download APS Journal papers (as opposed to a fee/paper. For a small consulting company like mine, the fee/paper adds up to unaffordable very rapidly. There could be one fee for APS members and a higher fee for non-members, companies, libraries, etc. This would be a nice membership benefit. If fee/paper is maintained, could not the fee decrease with the age of the paper, i.e. charge the modst for the current "hot" paper and much less for more legacy papers?

ability to purchase article on the web. But this would be redundant with what ACS offers.

access to AIP journals

Access to Chinese journals Translation of Chinese journals

access to many journal articles on line without having to subscribe

access to papers free of charge

Again, online downloads of pdf's are my preferred access route.

Again, virtual access including downloading capability

allow download of the entire article published

Allow each member to have a couple free pdf articles to download each membership year

Already use the APS subscription service for APL and JAP.

An electronically-accessed "Thomas Register" comes to mind. Google doewn't have a "hype" filter, so it takes some effort to get real stuff from online service.

Any service that allows technical information to be accessed online would be good.

application notes and publications based on particular devices would be usefull.

APS Journals are available on-line. It would be nice if the older articles were available to APS Mambers without charge.

APS paper download works fine for this purpose.

Articles in all APS/AIP journals should be sold separately instead of as part of a subscription. The references cited should be avaiable at no cost.

Basically use the company provide electronic search facilities and associated purchasing of articles.

Being able to download

Better access to non-APS journals via a subscription service

cf. question 18

check out the services provided by the ACS

Citation tracking

Compiling summaries of new items and making them available on the web so that it is brought to our attention--have some focus topics.

Convenient and affordable downloads for APS journal articles.

discount on purchasing e-copies of articles

discounted purchase price for articles.

Don't know.

Don't know. You already have the Journal Pack listed bleow, but I have limited visiblity into the APS journals and hence would rarely have the need for 20 APS journal articles in a reasonable time frame. I do have access to the IEEE jorunal database through my company and regularly search it and download articles relevant to my work.

Dowload articles from APS journals through some kind of blanket contract.

downloading articles

Downloading electronic versions of the articles would also be nice. This is no doubt problematic. I typically need articles from non-APS journals.

Downloads for a fee (including some key journals like JAP, Material Research Society, etc.). It would be great if there were reciprocal agreements between the relevant professional societies for journal access. It's hard and expensive to be a member of them all.

Easy link to the information in question will be appreciated. Pay as you go or monthly billing.

Electronic access to all journal articles. Tax money paid for it all. It should be available within reasonable monthly limits for members in good standing.

Engineering and physics article data base on the web that is searchable, would provide free look at abstracts, would have low costs for the full article (<$5).

Enhanced access to web search located subscription services

Everyone is getting used to being able to Google the desired information and then see it immediately on screen. I think the best thing that APS could do would be to work out a distribution model with Google so that even more scientific journal content is available through web search. They have a model for making money. Can APS and other publishers find a way to share revenue with Google? Could scientific journals be supported by web advertising?

Fewer hassles in trying to access the information (hassles include having to remember usernames, passwords, and lengthy web site addresses)

flat-fee access to online information in all physics databases

For old articles (more than 5 years old, say), how about making the downloads free for APS members? Or free for everybody? I can't believe there is a lot of profit in old articles. Libraries that keep old journals in a separate area find that there are very few visitors. I happen to make use of older articles and have to visit a library regularly to read them.

Free access for APS members to journal papers posted on-line, by sign-up subscription.

free access for relatively rare journals

Free access of APS and AIP journals

free access to a limited number of member journal articles strike a deal with Nature for access to physics articles

Free access to APS journals on the web after six months, or a year, at least for current members. This seems to be a trend.

Free access to journal articles

Free access to journal articles. Could limit access to certain time periods, a certain number of downloads per year, to APS memebers only, etc.

Free access to many journals. Company library has cancelled many subscriptions and will soon be nearly useless.

Free access to search and view full text of all journal articles. Nominal cost ($.99/article)to download pdf. Download cost could be higher in first year after publication - say $2.99/article

Free download of journal articles for aps members.

Free downloads from relevant technical journals

Free Electronic Access to APS journals

free of charge journal articles

Free online access to all journals, books and conference proceedings.

Free online access to aps journals for members

free online journal access

Free online/CD access to the society's journals and conference proceedings (similar to AVS or MRS).

FREE SUBSCRIPTION TO TECHNICAL JOURNALS IN ORDER TO PRINT THE ARTICLE

Free web access to all APS journals and abstracts.

Friendly and acccessable websites

Getting articles from magazine Nature at much lower rates

Good Science Search

Google access to full PDF of all APS articles

Have a service that allows viewing the article in full before asking for purchasing... small businesses cannot afford to purchase blindly.

have most APS journal articles be reachable from Google searches.

have reciprocal relationships with other organizations such that publications can be purchased under APS membership at something less than extortion rates.

How about offering an online-only library, much like the university libraries, but one that can be accessed remotely, and making it available to anybody willing to pay the appropriate fee? There are many companies too small to run the complete gamut of technical journals (including databases such as inspec), but whose employees need frequent access, preferrably from their desks, without having to trek to the nearest university campus. I would pay up to $400/year for access to a complete enough collection.

I already have full online access to the APS/AIP publications

I already use on-line purchasing regularly.

I am so frustrated with site and journal blocks that I don't even want to think about it.

I believe APS should work with an information provider perhaps if pffered free to members the cost could be amortised somehow

I don't really need any help - everything I need is available at my job.

I doubt this is needed?

I have a company librarian who does this well, so I don't need the service. However, an extended service could be of great value to small businesses.

I have no suggestion.

I have strong resistance to buying an APS article based solely on the abstract. It's a gamble that your $3 or $4 will be worth it.

I like to see links and easier access to articles and publications from ANSI, ASTM, ISO, etc. The cost is not the issue. The point is getting the article and publication NoW!

I often use the NIST Library in Gaithersburg - because I attend the Quantum Computing Seminars there and have retired friend who also have access. I don't know it that would work for the APS, but it works fine for my interests.

I think this is pretty well covered now as far as I am concerned

I WOULD LIKE TO PAY A FLAT FEE FOR A SERVICE THAT ALLOWED ME TO DOWNLOAD ARTICLES FROM A LARGE NUMBER OF PROFESSIONAL JOURNALS.

If $100 membership is paid, it would be nice to have free publication service.

If located, downloading in pdf form is optimum.

I'm in a small company, so it's not possible to subscribe to many journals. Affordable single article delivery would be useful.

It would be excellent to have better access to AIP journal articles (individual articles for personal use, not for selling, for classes, or other presentations). For example, IOP offers free downnloads of journal articles for the first 30 days after the journal is out. I suppose they figure, people are going to photocopy them anyway, so why not make it easy for them to get it. Our library gets many print versions of APS or AIP journals, but the library is not huge and cannot afford to additionally get electronic access. Our librarian gets articles for us, but there is typically a time lag.

Journals on line for little or no cost

Let me know how to access "Nanoscale Science and Technology".

link to free web-based downloads

Links to the answers from 18, including the ability to buy single articles if necessary or to, say, buy a book through an on-line store. Ideally, this would have some natural way of passing any formal citation, so I can make use of my employer's library subscriptions.

Locating it is the hard part. Often I find useful publications just by reading mail flyers from publsihing houses.

Low cost on line access to APS journal archives

lower cost access to prola and online journals

Lower prices for access. Companies will not pay for many services.

Lower the cost of online access to ALL APS and AIP journals. We are a scholarly society, not a business.

make cross references available electronically for download: a quota of several articles of different cross reference journals could be established as a service with membership

make full text downloadable in html or pdf format

make it available on-line, such as in pdf format

membership discounts on fees

more free access to online journals

Most of my information is obtained through IEEE (fee), SPIE (fee), or web searches. A central bank (fee) of info would be nice.

Most of what I need to look for does not fall under the conventional purview of APS.

Mostly web downloads

My company cannot afford to have an extensive local library. I go to local university libraries to read journal articles. I find that more and more journals are going to electronic format. Since I do not have a student ID it is becoming increasingly more difficult for me to read and obtain copies of journal articles. The same trend is happening with books. I find that I am getting squeezed out of the information market. These university libraries are vital to my work. I would like to have a way of obtaining, basically for free, access to electronic journals and books that I have traditionally been able to browse for free at university libraries. Perhaps this can be done through APS (although the journals I need to access are mostly IEEE). Perhaps this could be done through the alumni association of the university I graduated from. I don't know, but my situation is getting worse quickly.

My employer has a site license to access journals from several publishers. This is a very valuable service.

My primary interests are in areas of basic and applied chemical physics and very low energy plasma physics, elements of materials science and propulsion and combustion science and technology. I thus fall well outside your usual interest group. However, most of the PhD scientists (20-25) I've hired to my Department over the past 30 years have training in chemical dymanics. What we need is quick, simple and unimpeded access to broad ranging research tools and the ability to capture and print the articles we've found. In some cases, it's OK if it takes a week or two to get a paper, but in the our environment, we sometimes have to respond to a satellite or space-borne crisis where time is of the essence, and here delay can be catastrophic. This drives my call for access. In all of this, all it takes is collaboration between the APS and our corporate library and the rest is easy.

N.A.

NO IDEA

No suggestion

None really. Other than my personal memberships (APS, AGU, AMS) my Company's Technical Library obtains technical papers, etc., for my personal use.

None. My (large) company has excellent resources to help me access technical information.

Not much, my company library can retrieve almost anything I request. I suppose one thing that is lacking is conference proceedings, as travel budgets are more and more restrictive.

not sure

not sure there is any APS-specific ore even FIAP-relevant level beyond what AIP and, for instance, SciFinder and other search services provide

not sure. generally, I can get anything I need throug my company's library services.

Nothing comes to mind

Nothing comes to mind, sorry. My company has an excellent information service, which I use heavily. That, together with access via the internet to journals on-line, serve my needs well.

Offer journal articles free or less than $10.00 each.

on line resources

One big problem I have an an industrial researcher is article search and delivery. Currently I have access to the University of Colorado libraries by physically showing up and using their resources as a "Library Patron." It would be nice if I could log into an APS site and peform INSPEC or COMDEX searches on specific topics, then have (limited) ability to download papers at a reasonable cost, less that $30/copy (say 5-10 bucks).

Online access to all AIP journals at the same per-person rate that government, FFRDC, and Universities pay. I have subscribed to Phyics of Plasmas and Physics of Fluids for over 20 years. You would think I would get inexpensive online access to at least those Journals, but AIP wants yet more money for that.

Online access to full-text journal articles.

on-line access to journals

On-line access with a good index or embedded search engine

On-line electronic journal rates for industrial libraries that are comparable to that available to universities.

online ordering of APS journal articles

Online service

Open access

pan journal access, equivalent to that available in a university

pdf download

Perhaps subsidize the cost of the material to APS members

Plans to buy a set of AIP artices (say 10) for a fixed price, as opposed to every article. Not just AIP (e.g. Applied Physics Letters and Physics of Plasmas) but also Phys. Rev.

Please see above.

Possibly access to a broad online literature service equivalent to the University of California's online listings, where literature searches and electronic versions of papers from most journals are available for download.

Price journal articles and conference proceedings in a way that makes them accessible to small companies and individual researchers! At present, only individual articles are affordable. Conference proceedings, which large companies and universities have in libraries, are not affordable in practice.

Privileges for full text download of papers from as many journals as possible.

Provide a certain number of free downloads for members

provide a fee for services document recovery service

Provide a way to access free versions of articles. For example, you could work on an APS-centric front end for ArXive, listing only those articles that were accepted for publication in APS journals.

Provide access to specific articles published by APS

Provide APS/FIAP members the opportunity to buy up to 20 articles from other organizations. For example, one might have a specific interest in drilling in ANWR and utilizing company resources to obtain research papers is unethical. However, if APS offered this service, I would probably pay $20 to my existing membership to be able to buy via APS portal, articles from any entity or organization.

Provide no-fee access to PDFs of older (>2yr?) publications and charge a nominal fee for PDFs of recent publications. Move toward eliminating paper journals. Change the revenue model from 'pay to subscribe' to 'pay to publish', perhaps with scientists from small entities being allowed to apply for an exemption. Encourage high-value publications by giving rebates or credits proportional to the number of citations by non-authors.

Put all journals on line, searchable full text, at least for members

Put the APS journals on line however, they are not very useful - 90% fluff just to get a paper.

Ready access to (pdf) files for a nominal fee.

Reasonably priced (say $5 per journal article) access to all phyics-related technical journals.

Reciprocal on-line full text access for IEEE, AAAS, Nature, and other high cost journals. That is, one membership fee fits all.

reduce cost of copy

Reduced prices for online access to AIP journals (particularly JAP and APL)

reduced rate or free clearinghouse of information developed through APS contacts

references that could be sent out via pdf formats are very useful

Research

Revive The Industrial Physicist

Same as 18.

Scan all ot the early APS pubs.(JAP, APL, Phys. Rev.,etc), convert to PDF, and make available on web. It is really a pain to try to get a copy of an important paper from the pre-computer era, Because old bound volumes of JAP are often moved to storage.

Science Direct

Search and article sale service similar to that provided by National Ground Water Assn.

Search engine at AIP

See above: first find it through ISI or some such service, or references, then give free access.

Sell members DVD collections of all archival articles, at reasonable price as does IEEE.

shared electronically searchable database with download capability

Should be able to download at nominal cost.

Simpler access to journal articles on the web.

So many times I find an article (via Google) but run up against a subscription fee when I want to read the full article. It would be great if APS could have a reciprocity (spelling?) relationship with other societies. I could give this website my APS member number and read the darned article.

Some form of cross-society access to journal articles could be valuable.

some method to purchase articles through my corporate library, or through a purchase order

Some sort of small business/individual contractor access to on-line journals. Small businesses typically do not have the resources to subscribe to more than a journal or two. It would be nice if there was a program for either reduced rate access to journals, or even better, a way that a block of articles could be purchased that span over the breadth of the AIP journals (this way one would not have to guess which one or two journals they would most likely need access to). Basically, something that falls between the Tier 1 pricing of multi-thousands of dollars and the member-only $50 article pack. I find when I do not have access to a library and I am working from my desk that it is not necessarily useful when one can only view a paper abstract. A lot of times you don't know whether the paper is worth reading, and hence purchasing. I am not sure of a good way around this, but perhaps you could make the paper viewable in low-rez (JPEG images perhaps) so one can get a feel for the paper, or perhaps make the text available but not the figures and tables.

something like IEEE Xplor or SPIE digital library for APS journals

Sorry, I can think of none.

Subscription or fee based limited access to pdf versions of journal articles.

Subscription services for a fixed number of PDF downloads from all AIP journals would be nice

Tecnical referral service

The ability to download articles appearing in conference proceedings is always helpful.

The ability to download individual articles in journals to which I do not subscribe at a reasonable price would be a great boon to physicists working at small companies without easy access to a large research library. ($30 per article is not reasonable!) I, for one, would be willing to pay a reasonable annual fee for such a service.

The ability to download information.

The ability to set up an open pay-per-service (or download) account linked to an AMEX card.

The Article packs are very useful. Expand this to more Journals. At that price, I could even afford to purchase for purely personal interest.

The best solution to this problem is to ensure that as much information as possible is available electronically to eliminate the need for the transfer of paper materials. APS has done an excellent job of this already with its online journal access.

The pay-per-article service is best. The main barrier is often that the company does not have a pre-authorized account. You might try a web form where a user like me could submit the name and contact information for our buyer, and then you could call up and set up the account. It is more trouble and cost for me to do this within my company than for you to call up (with my referral) and do it.

The present system seems to work. I need to access periodicals online through our library website at work, get the requisite cookie, and then can do citation lookups and downloads directly. I don't know how long the cookie persists, but it is long enough for my use patterns.

The web works fine for this

Too big a task for APS in my view. Google for the most part could do well on that. A general knowledge of library services of major universities or other institutions near-by would help, but that's too specific and fluid a thing for APS to keep track of I suppose.

Via web, provide the equivalent of access to a large technical library with associated reasonable fee for copy priveleges (e.g. 10-25 cents/page).

We pay for a web service to do searches based on topics and key words. APS might consider providing such a service.

Web access to electronic selected journals versions could be offered within the individual membership package

Web access to online journals.

Web based is best

Web download

Well, often-times I will find an article that EXACTLY fits what I'm looking for, an esoteric numerical technique, say, but then I find you have to be a member of that web site to use it by supplying an ID and password. Sometimes, we are expected to pay for it, for which I can't really use the service then because, it becomes difficult for me to get the company to pay for it. Also, I'm a little concerned about giving out personal information to set up an account on the myriads of sites that I may want to visit: many chances for ID theft, virus acquisition, losing time because the abstract or text precursor description was over-sold, hyperlinking to a site but finding that it was old and unavailable, etc. I wish bloggers would clean up there junk when they no longer support the web pages.

Well, reduced prices for on-line access to journals. Our company service only works on company site. At home, or when I travel, I have no access to the main journals. Perhaps a special rate which only allows a few accesses a month, rather than the usual subscription one which allows unlimited access.

Ah, I just now see question 24 below. I did not even know about the journal pack service. Perhaps FIAP could publicize this more.

Verbatim Comments: If APS set up a website to provide information to industrial members, what information would be most useful?

"industrial" = nonacademic? Nonacademic physics environments are too diverse to be addressed by the Society, and I don't believe the Society should try. Stick to basic physics research and discoveries. The American Institute of Aeronautics and Astronautics for example addresses one part of "industrial" physics and engineering.

(Should not that be "set up"? Google access to full PDF of all APS articles

1. Management of technical projects. 2. How to team in a technical project with other subject matter experts.

1. Technologies (see above) 2. An alternative to Monster for finding science and engineering hires

1. up-to-date links to industrial R&D web sites sorted by technical topic (no advertisements!). 2. job listings 3. a list of all APS/AIP journal articles, published during the previous month, in which at least one author was from a company.

A buyer's guide (similar to what is published annually in Physics Today, but searchable) with links to the vendors' web sites.

A good search engine for articles across the APS, AIP, and Japanese Physical societies. These have some very good information, but one has to go from web site to web site to collect it--a real nuisance.

A good search engine to find articles in topical areas of interest, and an easier, inexpensive way to get the articles

A listing of & Access information to: search engines for technical data, equipment, published papers, technical books, proposals, current funded research, software descriptions.

a place for employers to find job seekers, information about journals and meetings

A set of web links to references and resources,... aps maintained search engine

a web-based forum for question and answers might be useful.

Ability to locate/exchange information with other APS members working in a similar field to mine.

ABSTRACTS!!!!! Journal Articles, Reviews

Academic/industry/nat. laboratory collaborations, 'summer/winter schools' with hands on training for new research techniques and technologies

Accelerator Physics and Technique, RF systems for accelerators, ILC

Advances in semiconductor physics

Again, a set of links to good online informational and reference material would be useful. There is a hugh quantity of information on the internet. But, the frequently frustrating challenge is searching for useful information of good quality. Thanks for asking for our feedback!

alert on specific topics relating to applied physics and technology

All the information found in Physics Today

Anything impinging on the items I have mentioned above - i.e. the sociology of industrial physics, science-society issues, computer simulation of physical processes

Applied physics including optics, nanotechnology, microfabrication

applied research and advances in development of edge technologies as they relate to current research topics

Articles of describing how top rate applied research relies upon physics (and not just the brute force Edisonian approach). Strategies for how companies are linking up to university groups to gain access to new research.

Articles on how physics can be used to solve industrial problems

at my age (I recieved my Ph.d in 1958) and as a consequence of my historical connection with APS personal information regarding APS memebers. One can drift away from APS in terms of technical content but still be coupled as a consequence of history.

Better access to journals, past and present.

better publication access or a worldwide physics newsletter (We are too much focused on North America)

Book reviews

Break throughs in nanotechnology, superconductivity, surfaces. Workshop schedules,meeting abstract availability.

business development contacts at companies looking to in-license patent rights

Business information in display technology or sensor development

business news

Buyer's guide might be helpful for sources without websites, otherwise googling can usually locate sources directly.

Calendar of events, document submittal, and journal archives.

Capability to do literature searches across the APS journal database (at least to locate potential information sources) -- perhaps with abstracts available.

career info, research news

careers and professional trends

cataloged websites of interest to members (ranked & scored) ie collected/reworked personal bookmarks

Collections of application driven research, sorted by field, especially including topical editions of journals.

company affiliation, areas of technical expertise, geographical location

Company research and technology profiles.

conference or meeting announcements industrial research updates industrial R&D funding statistics, ...

CONFERENCE SCHEDULES, CUTTING EDGE APPLIED SCIENCE, INDUSTRY LEADERS, BUSINESS OPPORTUNITIES, SITUATIONS WANTED, AND SITUATIONS AVAILABLE.

Connecting physics Phds with jobs in industry - there are many jobs that physics Phds can do extremely well, but there isnt enough emphasis on getting the word out

Connections to other hi-tech companies. Employment, new products, how physics is being used.

Contact database by expertise and by company a focused "Google Scholar" search capability

contact info and interests

Contact information

Contacts and information on available heads.

Contacts by subject in other companies

Cross-discipline articles, information

cryo, nano

Current issues in plasma and materials applications and research.

current news, employment opportunities, lists of meetings, salaries, IP issues

Current technical advances, articles on topics of current interest such as energy, nanotech, etc.

Current Trends

Data on research in industry: publications by industrial researchers, web sites of industrial research, especially publication-quality research, statistics on publication rates and journals of industrial researchers (to help with local arguments about increasing industrial research funding). Information on the APS journal pack offering.

Database of material properties

Database with contact information for experts in particular technology areas. Upcoming conferences, workshops, symposia. Upcoming webinars. Technology assessments.

database, bibliographic information

definitely

developments in superconductivity, both material science and applied aspects.

directories of members, companies links to technical resources

directory of meetings and conferences that can be searched like the SPE web site

Don't know

Don't know. As an industrial player, it is difficult to think what APS can provide that I might not access through a more specialized society (optics, materials, electronics, etc.). I go back to my previous suggestion for a library of tutorials on fundamentals for "engineering" type usage.

Downloads of the pdf's of the articles

Either links to good technical search engines or websites that may be associated with specific topics of physics, engineering, and math (thermal properties of materials, hydrodynamics, integration algorithms, tutorials,...just to pull a few out of the air).

employer links making the transition from academia to industry / skills valued by industry

employment information, salary data

employment opportunities, salary surveys, what other industrial physicists are doing

employment, consulting opportunties, economic issues for physicists, letters to editor

Entry level industry positions. Not postdoctoral positions.

ethical issues

Evidence of value for industrial funded research

Examples of physics in industry Technical management by physicists in industry What to do after physics in industry -- university appointments? retirement? volunteer work?

Examples of successful applications of physics in industries. Profiles of industrial physicists.

For me, highlights in spectroscopic endeavors, advances, techniques, etc. However, I recognize that my interests are probably not shared by a very large number of my APS colleagues.

For one thing, simply putting together a web site with a compendium of industrial information such as materials properties, etc. (sort of like NIST used to do back in the 50's & 60's when it was NBS) would be good.

Free access to journals and abstracts.

Funding

funding information

funding opportunities for industrial partners news/reviews of current topics pertinent to industrial activities (similar to C&E News)

Good Question. How about a Wiki?

Government funding opportunities WITH INDUSTRY. NOT exclusive support to only universities.

Handbook databases, government regulation incursions before they grandfather into law.

Help wanted ads?

high level description research in universities and its potential impact on industry

High Temperature Electronics

Highlights of newly published research.

Highlights with synopsis of perceived-high-impact articles in Applied Physics Letters (US & international), including citations and link to full text options.

How do I get out of this racket and back to teaching?

How to find and download articles of interest.

How to implement "birth control" in Physics Depts.

I actively use the Divisions (both computational physics and plasma physics), but I don't really know what would be best from the industrial setting. Articles on standards, technology transfer, and intellectual property would be helpful

I am in an institute in a government lab that does fundamental physics research such as materia science.

I am still sure that most of my interests in Physics are far from application - but in computing my interests are what is hot. But I could not stir up iany interest in the DOE and my old office.

I depend on APS to keep me informed about fundamental physics rather than job related topics.

I do not consider myself an industrial member. I am a medical physicist working in an academic institution, so this survey is not really for me.

I do not know how or what to answer for many of the questions. Much of my work is classified, and hence, APS is not really a direct source of specific and pertinent information for my efforts.

I do receive & read the Phys Rev Focus & AIP Physics News Update emails. Very much appreciated -- they give me a taste of current research & results in physics, don't require much time, and provide a link if I want more information. I am unlikely to visit a web site for news updates rather I use the web as a source of information to answer specific questions.

I don't feel a need for a specific industrial physics website. I have reached information overload.

I don't visit the IEEE website, and probably wouldn't visit an APS website.

I find the web in general combined with internal company web-based resources to be superbly suited to my needs. Better than ever. The web-based searches are generally on topics with very short time cycle, minutes or hours, not something that an APS committee could plan out over years. For general background awareness of technological development I find Science magazine plus Business Week very helpful. Physics Today tends to focus on aracane subjects of limited practical concern plus celebration of the past. I remain an APS member to maintain some connection to my cultural roots. Seems that you have a very difficult challenge in the subject area of this questionnaire.

I forced myself to take time to read Physics Today each month as a way to keep from becoming a 100% engineer. This survey made me realize that I have not received Physics Today in months -- and had not noticed its absence. Maybe it is time to admit -- after 30 years -- that I am really not a physicist anymore and do not really fit into APS.

I liked The Industrial Physicist. If a virtual version existed, I would read it.

I noted above that I consider APS to be my primary society. Yet I have not attended an APS meeting or published in the traditional physics journals in years because my work has taken a much more applied bent and relates more closely to other societies (ASA, IEEE, SAE). Nevertheless I consider myself a physicist. I feel that my association with those other societies is potentially transitory, and I want to maintain a connection with "home."

I rarely have time to read current journals. In fact, I don't read journal articles, apart from articles (usually more than a year old) which I find as references to the work I am currently doing. I review articles written within the national research facility on which I work.

I read an interesting commentary on blogs in the recent APS News, and am intrigued enough to check them out. Perhaps the APS could set up one for members in industry?

I think that APS should go to the industrial development and research areas and showcase what is going on in those institutions. The university research is often far away from product development, which is not to say that there aren't interesting physics to be understood and taken into account when building devices or products.

I very much liked the content of _The Industrial Physicist_. It hit the nail on the head as far as I'm concerned. A discussion forum aimed at industrial physicists would be useful if it drew enough participants.

I would be delighted to discover which groups are building detectors for laboratory scale nuclear physics experiments, but somehow I don't think this was the kind of "information" you were contemplating.

I'm interested in basic research. I get my fill of applied material in my daily job.

I'm not an industrial physicist. I'm more an industrial computer network protocol specialist. So, I don't think you should spend these resources on me.

I'm not sure that there is any unique information that would be useflu for me

I'm not sure.

I'm satisfied with the services APS provides for the most part. For example, Physics Today seems to be doing a better job of including articles of a broad range of physics i.e., showing that physics is more than searching for fundamental particles.

index of taopics and papers

INDEXING to provide information on the subjects of upcoming conferences and workshops.

industrial applications and focus, employment information

Industrial connections are tenuous -- Iwork in technology development on a narrow research area, that of radioactive beam production targetry.

Industrial jobs.

Info on scientific equipment, analysis techniques

information about latest development in technology, information about who is working on what and who is an expert in certain areas, and information about students or postodcs who are looking for jobs in industry.

Information about physics-related patents

Information about refresher courses, in what industries the members work and what are they doing, how to stay current in the field, what new developments are taking place, etc.

Information about WHERE TO FIND INFORMATION!

Information on average compensation (this might already be available). Buyers guide Directory of companies (e.g. corporate members and/or companies who sponsor members or advertize)

Information on developing technologies, new applications of technology and their connection to basic physics.

information on government contracting opportunities information on needs of other small companies information on services offered by other small companies.

Information on roles of physicists in industry.

Information relating to the application of science in industry

Interesting research topics (like Search & Discovery in Physics Today) and a selection of abstracts in the more applied areas

It is really rather industry specific. In my case it would edge towards the chemistry side. Perhaps updates on the practical opportunities offered by newer methodologies. It would not be cutting edge physics, just well known physics canned and ready to apply.

It is true that I use finite element analysis to design steel joists and joist girders and my physics background has been a viable help. I write the computer programs to design these trusses. However at this time, my retirement is less than a year from now and I shall continue my membership in the APS albeit as a noncommittal member. Thank you.

It would be hard to improve on the physics-sites-with-links that are presently available.

It would be interesting to see what areas the other industrial labs were working on. Not sure how this could be done though.

It would be nice to have a database of members with information on their current work related activites to use as a resource. For example, someone else may have already solved a problem with which you are currently struggling. This may be difficult due to proprietary issues and the like.

It would be nice to see material at the interface between pure science and engineering.

It would be very helpful to have information on the hottest topic of industrial physical and materials research

Job listing.

Job openings from industry. Perhaps have a way to post these at minimal or no cost.

job opportunities, conferences, new tecnologies, scientific breakthroughs

job opportunties in my geographical area

job positions, salary review

Job postings. Job information. Career guidance.

job related information information related to stopping the political war on science and education in the US

jobs

Jobs, networking, opportunities.

jobs/careers (job postings, salary surveys), industrial R&D news & trends

Journal articles, technical news, startup news

knowledge based system to find people who are working or interested in working in areas.

late breaking news news in optics or materials

Latest discoveries How physics can help solve problem that face the country, (eg, IED detection, energy generation, nuclear waste storage)

latest patents, latest applications in materials and devices, major industrialist supporting fundamental research in energy and condensed matter, latest experimental breakthroughs

Latest physics NEWS. (See INteractions by the worldwide accelerator labs. Excellent!). Budgets, politics, who said what and when. (He/she said WHAT?)

latest technological and industrial breakthroughs

latest technology developments, funding avenues, employment info (salaries, where is everyone going), radiation detection/sensors, gamma/neutron spectroscopy, related data analysis algorithms

Lessons learned on developing and managing research portfolios. Lessons learned on industry/university collaborations. Networking tool connecting industry and academic researchers as well and connecting needs and capabilities.

links to conferences and resources from other professional societies in areas of mutual interest, industrial physics related issues in Washington, short authoritative summaries of hot areas, profiles of interesting people in industry, academia and government (good for networking)

links to databases of physical properties of materials, if they exist.

links to recent developments in emerging energy technologies

links to resources

Links to search sites, links to DOE, DARPA, NSF sites, news on conferences,

List of agencies which are funding research projects

List of companies that belonged to APS - may be higher-tech than ones with slick ads. List of conferences and physics-related trade shows in next few months.

list of companies, links to their websites, searchable list of description of companies' offerings

list of physicists by research interests

list of technical experts that are willing to talk for a short amount of time without a consulting fee.

local talks on selected topics. industerial members published patents and papers.

Magnetic Storage Devices, Magnetism, Magnetic Materials, Spintronics, Semiconductors, Superconductors, Job Surveys, Intellectual Property,

material data, physics fundamentals, etc.

Material properties such as specific heat, sound velocities, compressibilities, heat of fusion, etc.

materials, computaional physics, sensors

Meeting notices Conference highlights

Meeting reports & technical literature.

Member benefits: life insurance, health insurance, auto insurance, etc

member directory APS news in general

Member directory. Perhaps a wiki in which memebers can post their resumes and current activities. It would be nice to get some cross-industry collaborations going.

Member profiles

members listed with areas of technical expertise / interest online journal searches

members matched with their industrial expertise, by location

membership directory with associated areas of expertise, electronically searchable database of technical information

method to network with other industry members in other companies on common (non proprietary) technical problems.

most of my work is programming of solutions to very classical railroad track and vehicle tracking problems. I would like help with an optimization problem I have not yet been able to solve analytically.

Most searches are looking for practical articles. Most journals are by thier nature academic and as a result require many article searches, cross references, and very significant amounts of work to apply what is learned. Websites that help tie it all together and milk the practical information would bevery helpful. Reviews of topics are helpful.

much of the same content that was included in the Industrial Physicist magazine - that was right on target.

My "industrial" work is gov't funded remotely sensed earth science algorithm development (specifically NPOESS). I'm interested in the intersection of remote sensing, algorithm development and implementation, applied math, the physics of earth science from space, etc., in this context.

NA

Needs some discussion. My domain of interest is mathematical modeling of business problems, and physics guides my thinking. I am entertained by physics problems as metaphors, but I am more interested in real problem solving.

networking problem (opportunity) visibility company visibility

networking and job bank.

Networking between individual members

New applications of physics.

new applications, devices and sensors

New growth areas where physicists are contributing. Areas where there are problems that a physics approach might contribute to a solution.

New ideas, computer software for solving problems, ideas to help write our own software similar to the old days when physicists wrote Fortran programs to solve their problems. Today one needs expensive software like Mathematica, Maple, etc.

new instruments

new product listings in fields related to mine

New techniques and significant advances in instrumentation.

New technologies, methods, or theories relevant to applied research. Interdisciplinary fields that utilize physics. Profiles of accomplished industrial physicists regardless of their current roles

New technologies, new markets.

New Technology thrusts

News about new science software and a forum for discussing technical/compuational problems.

News in industry, developments in hot topics, conferences scheduled in near future.

news in quantum information

News of new and emerging technologies that depend heavily on current physics progress, but not simplistic as TIP tended to be.

News.

No comment.

no idea

No Need for special page for industrial members

No suggestion at this time.

No suggestions immediately come to mind

None, I am well served by websites for the chemical, biomedical engineering, statistical, and pharmaceutical sectors.

Not sure

Not sure what APS could offer that I do not already have.

not sure. what are you planning?

Nuclear Energy Renewable Energy Technology

Once again, I've no clue.

on-line access to journals

Online journal articles. Older articles (back to 50s) are more valuable than current ones, due to the time it takes from discovery to productization.

Opportunities for developing collaborative relationships

Opportunities for referral or networking

opportunities to interface with colleagues in academia

optical material properties, reviews of new instrumentation and products

Overviews of university research programs based on funding won to name one

People applying for jobs

Perhaps a chat board where I could post questions and problems with the intent to get answers.

Perhaps complete listings of where public physics research funding (and any voluntarily offered private funding) is going this would help in resource locating.

Pertinent Papers to a particular field, articles, SBIR sources and ideas

Physical property data

Physics applications to engineering technology

Physics related to defense issues

physics/math/computer simulation related jobs

Physics-based startups, semiconductor (Si) device physics

Podcast links to selected speakers, conferences, and other relater topics/announcements. This is clearly a superior way to disseminate presentations and even casual talks. I will use CaltechÆs "Ask an Astronomer" as an example how the younger audience is being reached and informed about physics (astronomy).

Potential academic collaborators in the vicinity who are also members

Practical review articles (like Rev Mod Phys, but with more of an engineering viewpoint)

problems one is expert on

product and company indexes, indexes on published data on devices/materials

properties of materials

Properties of semiconductors, presented as numerical tables, covering a broad range of compounds with a very extensive list of materials characteristics.

Q&A sharing - where people have found information and networking

radar signal processing

radiation detection

Radiation Interactions Radiobiology

Reference literature Yellow pages

references to material properties tables, various tables and parameters, links to various resources

References to, adn reviews of, free and commercial software related to Physics, data collection and analysis.

Related to semiconductor technologies and device applications

remote sensing / discrimination

Research alerts in pertiment areas

Research being done at a wide range of companies, technical management/networking information

research news related to applications, such as nano-engineering, quantum computing, material science, etc

Research summaries which have potential impact upon technology. While I obviously love physics, one thing I have found in the industrial world is that physicists are usually wildly optimistic (even unrealistic) about potential impacts of their work. There is a real need for more sober assessment and commentary on emerging research areas.

Review of topical subjects with information locating further information.

Reviews of new technology and industrial applications - not "gee whiz" brief paragraphs but tutorials 6 to 12 pages long written for intelligent nonspecialists.

Reviews of new technology, opportunities to use facilities at government labs,

Reviews of topics of interest, tutorials, headline physics news from the community (particularly applied physics developments)

reviews, trends, current events

salaries (appropriately categorized), persons seeking employment (appropriate classified by skills)

salary surveys, industrial research trends (budgets, hiring, hot areas, IP, international competition)

Science and technology news, blogs of 'thought leaders', resources for recruiting, webinar library of APS meeting invited speakers talks

searchable database on material and structural properties

Searchable index of company and personnel specialties

Searchable sumarry descriptions of all the research projects at National Labs

semiconductor, lithography, optics

Seminars, books, technical resources, jobs, news, funding opportunities, technology transfer opportunities.

Seminars, courses, and other materials that we won't readily find by using Google.

Services available, requests for teaming

Short articles with links to relevant sites

Since my work is government contract funded research there is not a commercial aspect to it and thus I have no particular "industrial" suggestions. Providing easy, open access and good search utilities for journal articles is most useful.

Small business related information, such as teaming opportunities with large companies. As you can tell from my comments, my interests are related to small businesses. I believe the APS serves the research universities and large industrial labs very well, but as a working member of a small business, I feel out of the loop. This may be just my impression, but apart from small companies that are set up by research professors either on the side, or as new ventures (and hence, these people are already well connected and experts in their areas), it is hard to stay in the professional loop without the resources (large IRAD budgets or teams) to publish a lot or attend many meetings (which, of course, is the chicken-and-egg problem that to stay well connected, you need to publish and attend meetings).

some of what used to be "The Industrial Physicist"

Some sort of physics highlights (with a reference or two) similar to what is found in the Physics Update page in Physics Today.

Some type of cross-linkage or forum to other member's applied research activities. There seems to be a large gulf between academic research activities and industrial (or otherwise applied) physics research. APS seems to primarily cater to the former.

Something like the I(no longer published) ndustrial Physicist -- news and articles relating to applied physics technology trends & techniques

space weather forecasting (solar flares, interplanetary shock waves, coronal mass ejections)

Subdirectory of just industrial members according to discipline and then company affiliation

sub-forums (e-mail listserv or RSS/blog) in specialty areas.

Summaries of what Physicists do in industry

Summaries of work being done at various companies might be useful.

summary of important articles, talks

Synopsis of advances in applied physics. Directory of university researchers by specialty.

Tables, links to NIST, links to other journals.

technical articles that show up on Google searches

Technical resources

Tecnical information, like an encyclopedia

The best thing the APS could do would be to accept publications based solely on content With all afilliations concealed. Also you might set up a website, like wikipedia, where the readers become the judge of the submitted content.

The same types of information and articles that used to be available in "The Industrial Physicist"

The search function in 18 to start. Beyond that, perhaps some way of linking to experts in a field - but that seems hard, and a potentially great imposition on anyone listed.

The use of various technologies in business, ranked according to viability, potential forecast of new trends in business. Access to free technical material (perhaps an archive site or other mechanism for members to share useful non-proprietary information).

There's already lots of web sites, don't do it.

Thorough list of websites to useful data in various disciplines.

Topic Search like OSA.

Topic, location and schedule of workshops.

Topics and details of upcoming meetings. Applied physics summary of recent publications - I would really like to be able to see the abstracts of all applied physics papers published in the main applied physics journals such as Applied Physics Letters, Optics Letters, etc. I would prefer only see articles in an area that I select, such as optical uses of materials.

Topics that relate to funding and opportunities for industry coopperation with academia

transfer of knowledge and methodology from Physics to industrial applications

Universities which offer free tuition for retired senior citizens Physics, astronomy, and amateur rocketry friendly communities for retirement Retirement locations (affordable, safe, with good medical facilities) where I could be part of an academic commumity and pretend to be a real physicist. Most of this information (except the very last part) would be of interest to the general APS community and maybe is already provided by APS. I'll have to check. The most important information for those of us approaching retirement and wanting to stay active is helping to keep healthy physics and astronomy programs at colleges and universities. The most impressive example of such a program is the Slawsky Physics Clinic at the University of Maryland, years ago when I was a graduate student there. I can still find references to it on the web. That program was aimed at non-physics majors. However, physics majors too can benefit, not only learning physics, but selecting a field, planning and maintaining a career, selecting an advisor, how to get grant money, how to write papers and give presentations, etc. Unfortunately, although I did well in my course work, I did not learn the other things as a physics graduate student and hence did not make it as a physicist.

Unknown

Unrestricted access, for a reasonable fee, to all APS & AIP Journals --- affordable to all self-employed society members.

Update on progress in Applied Physics with listing of compelling publications in the field

up-to-date links for searchable databases

Very brief current "Science News"-ish reports w/ links to longer versions.

video and sound records of confereneces.

Web forums to discuss issues of interest to the community.

Well, I know that the APS is mainly devoted to pure research. That's fine perhaps you could provide research results that you believe have some POTENTIAL application in the applied area. To tell you the truth, even when I read a pure-research article, I sometimes can find something, possibly a numerical technique, that I can use in my job. Sometimes it might just be a different way to approach research in general that might be useful to me in my job.

what areas industrial researchers are working in. This information is generally available for physicists in academia and government, but industry normally does not advertise what individual researchers do.

With Google, on-line journal articles and search services that our company provides (Hewlett-Packard) my needs are pretty well met. Perhaps a resource guide for physics-intensive devices, materials or instruments (ie. suppliers of quantum dots). Or employment opportunities for physicists.

With so much information available it is increasingly difficult to recognize its quality. For example, I must buy a number of books each year to keep current in my field (image processing). I can easily find these books on Amazon.com, and could easily purchase them. However, I have decided never to purchase a book without first browsing through it. I work close to three major universities. However, I cannot find the latest books in their libraries, and usually the latest books are checked out, so I cannot look before buying. The reviews on Amazon.com are useful, but I really need more reliable reviews, or be able to browse myself. Perhaps APS could work with publishers to provide electronic access, or provide a forum for exchange of reviews.

word searchable access to journal articles. Meeting calendars that included not only APS , but Am Chem Soc, Material Research Soc. , etc.

You've got to be kidding asking a question as broad as this.. It is abundantly clear that the APS hasn't a clue as to what makes Industrial Physicists tick. As far as APS goes-Academia Rules!

Email Invitation Letter

Dear _____:

The American Physical Society (APS) is conducting a survey of its industrial membership to gather feedback on member services and programs. You were chosen based upon your work address to receive the 2006 APS Industrial Member Survey.

In past surveys, the APS has gathered information that was extremely useful in helping the APS staff and volunteers develop programs and services to meet the needs and interests of the membership specifically to those working in the private sector. Even if you no longer work in the private sector, we still want your feedback.

I urge you to take the 10 minutes required to complete this online survey. The responses we receive will be essential in guiding APS's efforts to serve you and your industrial physics colleagues better in the upcoming years. If you start the questionnaire but are unable to complete it, please scroll down to the submit button and send your incomplete questionnaire anyway.

Please find the questionnaire at:

http://www.aip.org/cgi-bin/apsind06.pl?id=

Be assured that your responses will remain completely confidential. The survey and data analyses are being conducted by the AIP Statistical Research Center. The names of individuals will not be released in any form to the APS.

If you would prefer a paper version of the questionnaire be sent to you or if you have any questions about the survey, please do not hesitate to contact Raymond Y. Chu of AIP at rchu@aip.org or 301-209-3069.

Thank you for participating in this very important effort.

Sincerely,

Judy R. Franz
Executive Officer

2006 APS Industrial Member Survey

1. Do you work in the private sector, for an industrial company, are self-employed, or a company that contracts with the government?

O No
O Yes

2. What is the approximate head count of your company at your location?

O Fewer than 10 employees
O 10 to 99 employees
O 100 to 499 employees
O 500 or more employees

3. What is the major area of your company?

O Aeronautics or aerospace
O Automotive
O Chemical
O Contract Research
O Electronics
O Energy
O Information Technology
O Medical
O Optics
O Semiconductors
O Other, please list _____

4. How closely is your current job tied to your knowledge of physics?

O Very closely
O Somewhat closely
O Very little
O Not at all

5. Are you a member of FIAP (APS Forum on Industrial and Applied Physics)?

O No
O Yes

6. To which of the following other professional societies do you belong (check all that apply)?

□ ACS (American Chemical Society)
□ AVS (AVS Science and Technology)
□ IEEE (Institute of Electrical and Electronics Engineers)
□ MRS (Materials Research Society)
□ OSA (Optical Society of America)
□ SPIE (International Society for Optical Engineering)
□ Other, please list _____

7. Which of the following do you consider your primary professional society?

O APS (American Physical Society)
O ACS (American Chemical Society)
O AVS (AVS Science and Technology)
O IEEE (Institute of Electrical and Electronics Engineers)
O MRS (Materials Research Society)
O OSA (Optical Society of America)
O SPIE (International Society for Optical Engineering)
O Other, please list _____

8. How frequently did you use the following techniques to network within the past 12 months?

	Daily	Weekly	Monthly	Several times a year	Rarely or never
telephone or personal conversation	**O**	**O**	**O**	**O**	**O**
email	**O**	**O**	**O**	**O**	**O**
writing or replying to blogs	**O**	**O**	**O**	**O**	**O**
attend a national professional meeting	**O**	**O**	**O**	**O**	**O**
attend a local professional meeting	**O**	**O**	**O**	**O**	**O**
other _____	**O**	**O**	**O**	**O**	**O**

9. How many professional meetings did your attend within the past 12 months? _____

10. Approximately, how many total days did you spend attending these meetings including travel time? _____

11. Does your employer support your attendance at professional meetings by the following (check all that apply)?

□ paying your travel and living expenses to attend
□ paying for your time to attend
□ including meeting attendance as one of your regular job responsibilities
□ other, please indicate _____

12. How many APS meetings have you attended in the past three years? _____

13. Please list the APS meetings you have attended.

_____
_____
_____

14. If FIAP sessions at the APS March Meeting were video taped and available on the web, would you make use of the sessions?

O Definitely
O Probably
O Maybe
O No

15. Would you be more apt to watch these sessions if they were broadcasted simultaneously?

O Definitely
O Probably
O Maybe
O No

16. What types of FIAP sessions would be of interest to you?

_____

7. How frequently do you use the following techniques to locate technical information on new topics for your work?

	Daily	Weekly	Monthly	Several times a year	Rarely or never
personal or phone contact with colleagues	**O**	**O**	**O**	**O**	**O**
email contact with colleagues	**O**	**O**	**O**	**O**	**O**
web search	**O**	**O**	**O**	**O**	**O**
use your company's library	**O**	**O**	**O**	**O**	**O**
visit a local library	**O**	**O**	**O**	**O**	**O**
references in a journal article	**O**	**O**	**O**	**O**	**O**
other _____	**O**	**O**	**O**	**O**	**O**

18. Please suggest a service that the APS could offer its members that would help you locate technical information.

_____

19. Once you locate the pertinent technical information, how often do you access the data in the following ways?

	Daily	Weekly	Monthly	Several times a year	Rarely or never
visit a local library, check out or copy what you need	**O**	**O**	**O**	**O**	**O**
download free material from the web	**O**	**O**	**O**	**O**	**O**
purchase copies of articles or books from a web service	**O**	**O**	**O**	**O**	**O**
get it through a service offered by your company	**O**	**O**	**O**	**O**	**O**
other_____	**O**	**O**	**O**	**O**	**O**

20. Please suggest a service that the APS and/or FIAP could offer its members that would help you access the technical information once you have located it.

_____

21. How many articles published in the Physical Review, Physical Review Letters, or Review of Modern Physics have you read in the past 12 months?

_____

22. How many articles have you published in these journals during the past three years?

_____

23. Do you use the APS/AIP Virtual Journals that are listed below (check all that apply)?

□ Applications of Superconductivity
□ Biological Physics Research
□ Nanoscale Science & Technology
□ Quantum Information
□ Ultrafast Science

24. Have you ever purchased the APS journal pack that allows you to get 20 articles from any APS journal for $50?

O No
O Yes
O I don't know or don't remember

25. If APS planned small workshops on individual physics topics, how much time would you be willing to spend traveling to a workshop?

O One hour or less
O 2 hours
O 3 hours
O 4 hours
O 5 or more hours

26. What topics would be of most interest to you?_____

27. Would you be interested in participating in computer-based virtual workshops on specific topics?

O No
O Yes

28. How often do you read the following publications?

	Daily	Weekly	Monthly	Several times a year	Rarely or never
Physics Today	**O**	**O**	**O**	**O**	**O**
APS News	**O**	**O**	**O**	**O**	**O**

29. If APS setup a website to provide information to industrial members, what information would be most useful?

_____

Thank you for taking your valuable time to complete this questionnaire!

Please visit our website at www.aps.org.

If you have any questions about the survey, please contact Raymond Chu at rchu@aip.org .