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ABSTRACT

The basic characteristics of sixty-nine secondary services in physics were analyzed in terms of sponsorship and distribution by: (1) country of origin, (2) language, (3) age, (4) frequency of publication, (5) subject and geographical coverage and (6) size. The eight major services, in terms of size, are identified. The use of the services by the physics community was not determined. This is a part of the American Institute of Physics to determine the size, scope and sources of physics literature in all its forms for the purpose of developing a national physics information system. (Author/NH)

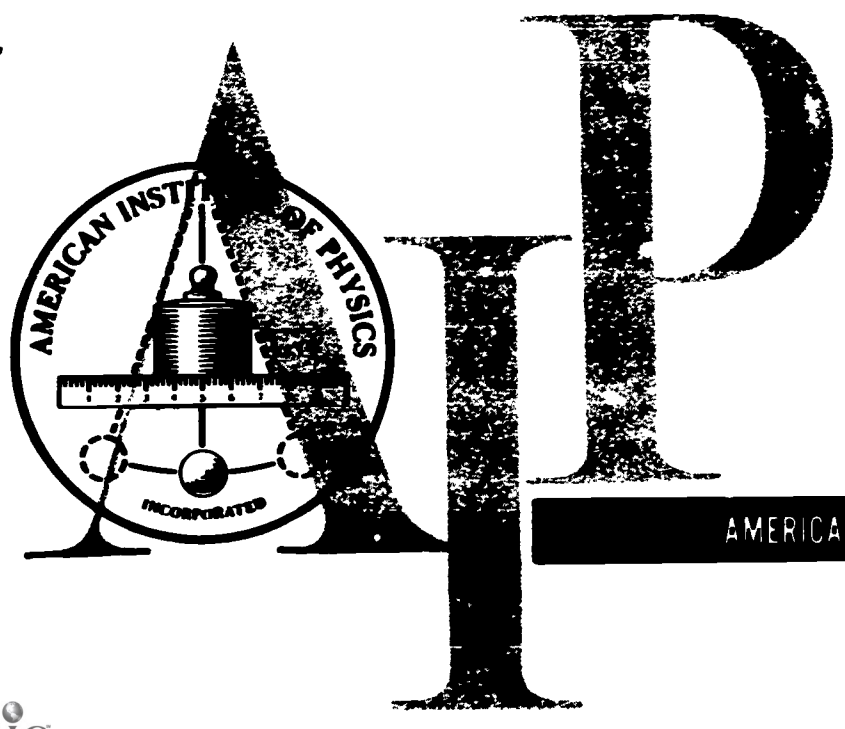
ID 69-2
(October 1969)



# SECONDARY SERVICES IN PHYSICS

Marianne Cooper and Edward Terry






Information Division

AMERICAN INSTITUTE OF PHYSICS • 335 East 45 Street New York N Y 10017

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# SECONDARY SERVICES IN PHYSICS


## ABSTRACT

Sixty-nine secondary services in physics have been studied and their basic characteristics analyzed in terms of sponsorship, distribution by country of origin, by language, by age, by frequency of publication, by subject and geographical coverage and by size. Eight services were identified, in terms of size, as the major ones. No survey was made of the physics community regarding use of services.

## I. Introduction

As a part of its overall program to develop a national physics information system, the American Institute of Physics has been engaged in studies to determine the size, scope, and sources of the physics literature in all its forms. Accordingly, this report presents a survey, analysis, and evaluation of the characteristics of the currently active and readily accessible secondary services in physics, the types of information they provide, and the format in which it is presented.

## II. Scope

The scope of the report is limited and defined in terms of AIP's interests. Thus, it was the primary purpose to identify and examine those services that are devoted exclusively either to the discipline of physics as a whole, to some of its subfields, or to related fields. Astronomy and geophysics, by this definition, have been included. In performing this study no survey was made of the physics community regarding use of these services. Thus data, reported in an earlier study,[1] concerning the services that are most "appreciatively used" by the physics community, have not been updated.

While the subject field is rather narrowly defined, i.e., physics as opposed to physical sciences, the term "secondary service" has

been broadly interpreted. It varies from separately published abstracting and indexing services, to publications that are contained within primary publications, and to recurring bibliographies that provide access to the primary literature. As far as function is concerned both alerting and retrieval are considered. Services or "modern information systems" produced and operated by a group or joint groups for a primarily limited internal consumption and therefore, generally unavailable to the public, are excluded. The various alerting or announcement bulletins of industrial, research and government organizations, SDI systems, and various other services are also absent from this report. Data compilations are considered as tertiary sources and are also outside the scope of the report.

## III. Methodology and Organization

Three previous studies have listed secondary services in physics. D. E. Gray and R. S. Bray reported on "Abstracting and Indexing Services of Physics Interest" in 1950.(1) The National Federation of Science Abstracting and Indexing Services (NFSAIS) published "A Guide to the World's Abstracting and Indexing Services in Science and Technology" in 1963,(2) and the International Federation for Documentation (FID) published "Abstracting and Indexing Services in Science, Technology, Medicine, Agriculture, Social Science, Humanities" in 1965.(3) From these guides a list was made of all journals which indexed or abstracted materials in physics and closely allied fields. New services, added since 1965 and

reported in the monthly FID News Bulletin, were also included. One hundred eighteen services were found in this manner. An additional eleven were added through a search of the basic periodical directories.

A form letter (Appendix A) was designed and sent to each service requesting an evaluation of their current status. Realizing that publishers are deluged with requests for information concerning their publications a description of each service, when available, was attached to each letter. The publisher was asked only to correct those items where changes had occurred.

A profile sheet (Appendix B) was also developed for the purpose of recording bibliographic data collected for each service. It was designed to provide as much information as possible, within practical limits, concerning these services. Whenever possible, all information included in the profile was taken from responses to the form letters and/or current sample copies acquired. Services from which responses were not received were updated through a search of current journal issues, using the facilities of a large research library. In all other instances, the information has been taken from the previously mentioned guides. Results of this phase of the study are summarized below:

| | |
|---|---|
| No. services originally considered for study | 129 |
| No. services deleted (limited circulation, peripheral subject scope, etc.) | 41 |
| No. services which have ceased publication | 19 |
| Total no. of services included | 69 |

| | |
|---|---|
| No. of included services which responded to form letter* | 45 |
| No. of included services updated through library facilities | 13 |
| No. services not updated | 11 |
| Total no. of services included | 69 |

*7 additional services responded but were deleted from the study because they were outside of the scope.

As shown above, of the 129 services originally considered for possible inclusion, 69 have been finally selected as the basis for this report. It should be noted that four of the 41 services deleted originate in the People's Republic of China. Although we located older issues of each in a large research library, we were unable to establish that any have been available in this country in recent years.

The following three factors were considered in the arrangement of the data:

1. Type and purpose of publication. The service is either a separate self-contained entity, devoted exclusively to the documentation of the primary literature, or it is a section in a primary journal.
2. Subject coverage. The service provides either an exclusive and concise coverage of physics and any one of its subfields, or it provides an overall and diffuse coverage of current science and technology of which physics forms only one part.

3. Accessibility and availability. These terms are interpreted broadly to include linguistic, political, and geographic factors. Thus, the basic consideration is whether the U.S. physicist can readily avail himself of the service.

Information concerning all services included have been arranged in table format. (A key to all codes used in the tables is presented as Appendix C.) The table in which a service is placed was determined by the factor most important to its characterization.

TABLE I is composed of the 32 major services that are readily available to U.S. physicists. Twenty of these publish abstracts of primary journal articles; 10 may be defined as reference services (i.e., citations only); two offer combinations of abstracts and/or references to articles.

TABLE II lists primary journals which devote one or more sections to abstracts or references. The section name or title follows the title of the parent publication in the TABLE. Of the 17 primary journals offering some form of secondary service as a regular feature, 12 are in the form of abstracts. Three journals publish references while two supply abstracts and references to papers of interest.

Seventeen services publish abstracts or references in languages little used by U.S. physicists. Because of the large number of bibliographic items produced by these publications, it was decided to present them separately. TABLE III is, therefore, comprised of six abstracting journals, six reference journals, and four journals offering a combination of services in little-used languages. English titles are given where available.

TABLE IV lists three foreign services published in English that abstract not only physics, but provide a more diffuse subject coverage.

The services listed in TABLE V have not been included in the statistical analysis. They are listed because of the results of a previous AIP study[4] in which U.S. physicists were asked to rank the published abstract journals of which they made most use. It became clear through this report that a large percentage of workers consult sources which are not restricted to physics but also provide a broad coverage in allied and peripheral fields. TABLE V, therefore, lists large services that are published in the U.S. and offer a diffuse subject coverage, an appreciable percentage of which is devoted to physics.

A special effort was made to classify the agencies that sponsor and publish secondary services. They all have been categorized according to one of the following types: national academies (A), commercial (C), government (G), non-profit (N), international bodies (W), and academic (U). Foreign services are included in the category which most closely approximates their U.S. counterpart. The major concern has been consistency in the placement of services originating from a similar source rather than following a rigid definition of publisher types. Therefore, services originating in the Soviet Union may appear in any of the six categories, although all Soviet agencies are government controlled. Services which appear to be sponsored by two collaborating agencies have been given both publisher type codes. A complete directory of journals with publishers' addresses is given in Appendix D.

## IV. Analysis

As noted previously, all data have been arranged in table format so that similarities and differences can readily be discerned. The summary of each service is based on the following salient features: title, type and form of service, publisher, publisher type (i.e., sponsorship), country of publication, first year of publication, scope (i.e., subject, regional and material coverage), frequency of publication, language of publication, and number of bibliographic items published per year. In addition to the above, TABLE I also includes the type and frequency of indeces, the arrangement of the publication, and, if available, the number of primary journals covered by the service.

Abstracting journals accounted for more than one-half of the number of services available. A total of 41, or 59.4% of the total publish abstracts alone. References alone are published by 20 services (29%) while 8 services (11.6%) offer a combination of both types.

Sponsorship of services was almost evenly divided between non-profit (31.9%) and commercial (30.6%) organizations, with governmental agencies following closely (26.4%). As shown in Table A, however, this pattern varies when the data is rearranged in the four TABLES. While sponsorship is evenly divided between commercial, governmental, and non-profit agencies in TABLE I, the division is basically only between commercial and non-profit organizations in TABLE II. Governmental, non-profit, and commercial establishments dominate TABLE III, while national academies prevail in TABLE IV.

## Table A

## Sponsorship of Services

| | Total Sample (69)* | | Table I (32)** | | Table II (17)*** | | Table III (17) | | Table IV (3) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| Commercial | 22 | 30.6 | 10 | 29.4 | 9 | 50.0 | 3 | 17.6 | 0 | 0.0 |
| Government | 19 | 26.4 | 10 | 29.4 | 1 | 5.6 | 7 | 41.2 | 1 | 33.3 |
| International | 3 | 4.2 | 3 | 8.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| National Academy | 4 | 5.6 | 0 | 0.0 | 0 | 0.0 | 2 | 11.8 | 2 | 66.7 |
| Non-Profit | 23 | 31.9 | 10 | 29.4 | 8 | 44.4 | 5 | 29.4 | 0 | 0.0 |
| University | 1 | 1.4 | 1 | 2.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

*Three services have dual sponsorship. These have been entered twice bringing the total to 72.
**Two services have dual sponsorship.
***One service has dual sponsorship.

Three services had dual sponsorship in the sample. Two occurred between a non-profit society and a commercial publisher in England and in France respectively while the third one was the product of cooperation between an international body and an American university press. All three publications sponsored by international bodies in the sample were in English and consisted primarily of references.

Tables B and C respectively show the distribution of services by country of origin and by geographical region. Six countries (35%) were responsible for 55 (80%) of the services. The remaining 20% was produced by 11 nations. While the most productive country is the United States the most productive region is Western Europe. When examined on a TABLE by TABLE basis Western Europe holds its leading

position in TABLES I and II. As expected, however, this leading position is divided between Eastern Europe and Asia, Africa, etc. in TABLES III and IV.

Table B

Distribution of Services by Country of Publication

| Country | No. of Services | % of Total |
|---|---|---|
| United States | 15 | 21.5 |
| Germany (East and West) | 10 | 14.4 |
| Japan | 10 | 14.4 |
| Great Britain | 9 | 13.0 |
| France | 6 | 8.5 |
| U.S.S.R. | 5 | 7.2 |
| Romania | 3 | 4.3 |
| Italy | 2 | 2.7 |
| Australia | 1 | 1.4 |
| Brazil | 1 | 1.4 |
| Bulgaria | 1 | 1.4 |
| Czechoslovakia | 1 | 1.4 |
| Hungary | 1 | 1.4 |
| India | 1 | 1.4 |
| Luxemburg | 1 | 1.4 |
| Netherlands | 1 | 1.4 |
| Spain | 1 | 1.4 |
| Total | 69 | 100.0 |

## Table C

## Distribution of Services by Geographical Region

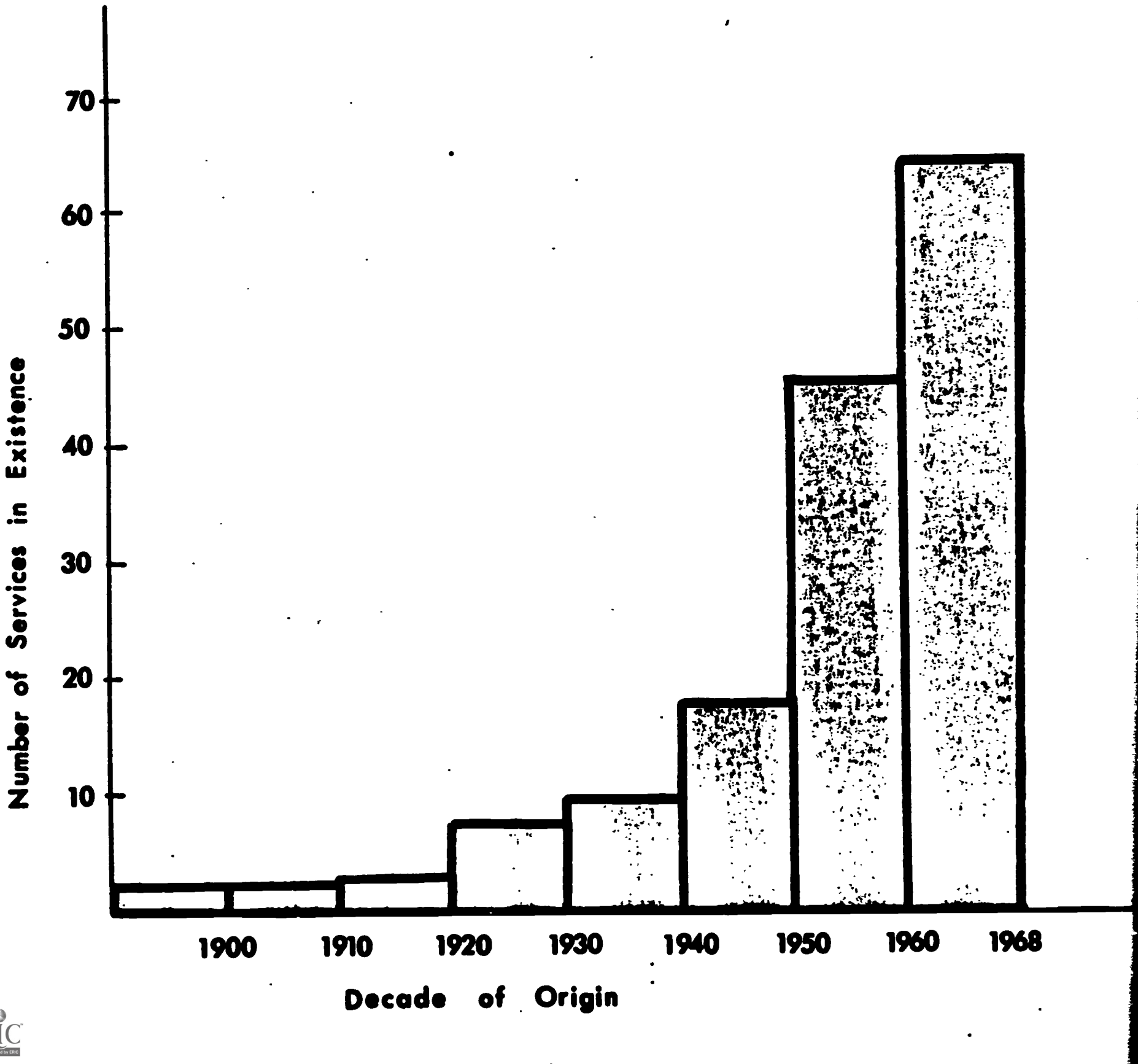
| Americas | | Western Europe | | Eastern Europe | | Asia, Africa, etc. | |
|---|---|---|---|---|---|---|---|
| Brazil | 1 | Austria | 1 | Bulgaria | 1 | India | 1 |
| USA | 15 | France | 6 | Czechoslovakia | 1 | Japan | 10 |
| | | Great Britain | 9 | Hungary | 1 | | |
| | | Germany | 10 | Romania | 3 | | |
| | | Italy | 2 | USSR | 5 | | |
| | | Luxemburg | 1 | | | | |
| | | Netherlands | 1 | | | | |
| | | Spain | 1 | | | | |
| Total | 16 | | 31 | | 11 | | 11 |

| | # | % |
|---|---|---|
| Americas | 16 | 23.3 |
| Western Europe | 31 | 44.9 |
| Eastern Europe | 11 | 15.9 |
| Asia, Africa, etc. | 11 | 15.9 |
| Total | 69 | 100.0 |

Figure 1 shows the time periods in which various segments of the sample were started. The two decades from 1950 to the present encompass 49 (67.2%) of the sample. It is interesting to note that there were only two (2.7%) services that started publication before 1900. The fact that no starting date was available for 6 (8.2%) services is significant.

## Figure 1

## Distribution of Services by Decade of Origin



The importance of the present and the recent past holds true for the data even when it were rearranged in the four TABLES. Some variations, however, are apparent. In TABLE II, for example, the period 1950-59 contains 58.7% of the services, while the rest is almost evenly divided among the following three decades: 1920-29, 1940-49, 1960 to present. Sine this TABLE contains primary publications where secondary services form a section this is more of an indication of the former's than that of the latter's age. In TABLE III the time span from 1940-1959 is the most prolific. Although 64.7% of the sample began during that time it is significant that there is a 17.6% unknown variable. The fact that all publications included in TABLE III are those not readily accessible in this country is the most likely explanation.

Frequency with which a service is published is an important factor in its characterization. Twelve issues per annum (a monthly schedule) was found to be the most popular arrangement. (The average is 11.3.) It was followed by four (quarterly) publishing dates. This finding held true for the data even when they were rearranged in the TABLES, except in TABLE II in which the bi-monthly arrangement preceded quarterlies. This data is shown in Table D.

## Table D

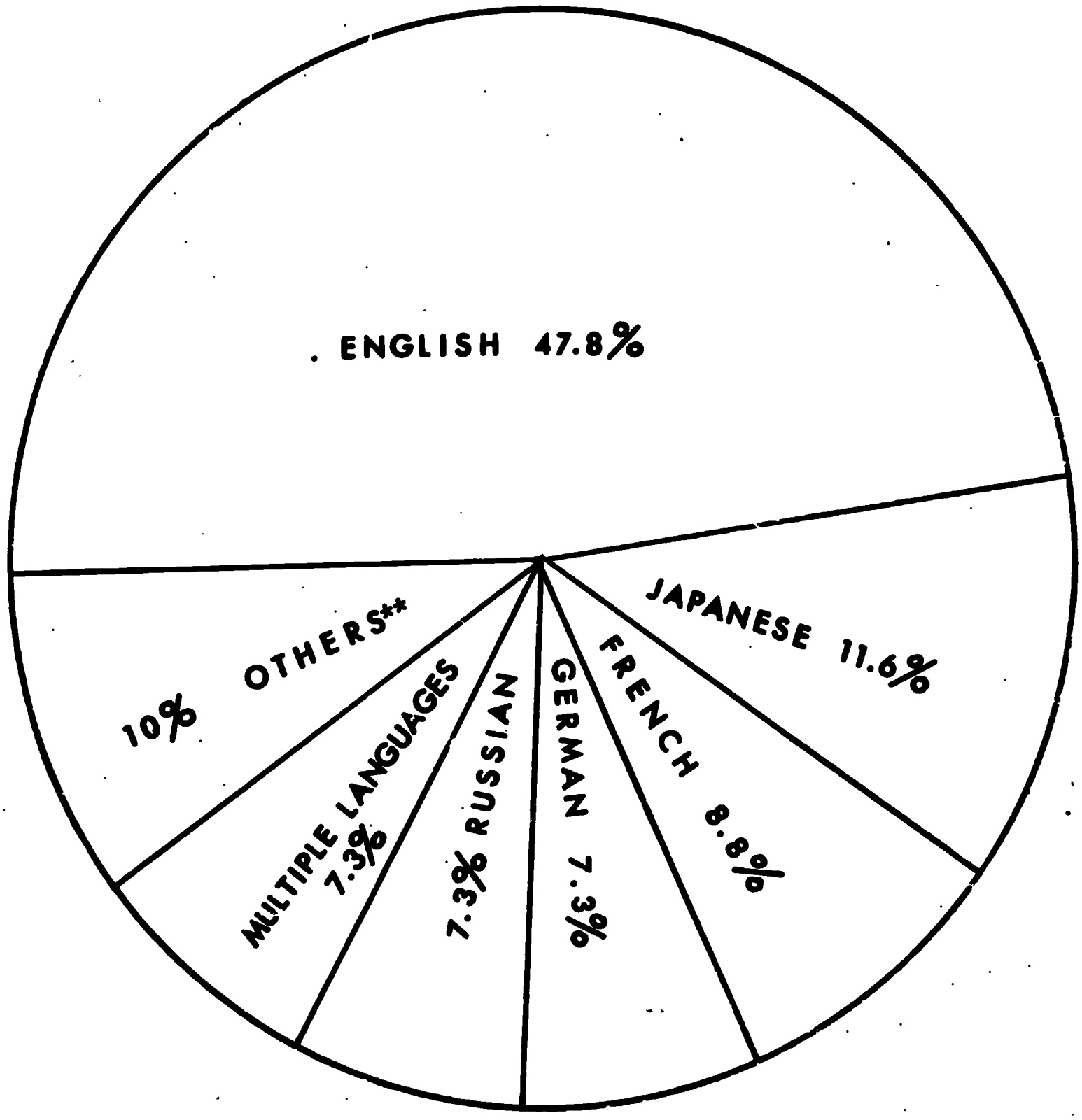
## Frequency Distribution

| Frequency | # | % |
|---|---|---|
| Irregular | 1 | 1.5 |
| 1 | 2 | 2.9 |
| 2 | 2 | 2.9 |
| 4 | 11 | 15.9 |
| 6 | 7 | 10.1 |
| 8 | 2 | 2.9 |
| 10 | 1 | 1.5 |
| 12 | 36 | 52.2 |
| 24 | 4 | 5.8 |
| 26 | 1 | 1.5 |
| 36 | 1 | 1.5 |
| 52 | 1 | 1.5 |
| Total | 69 | 100.0 |

The language of a publication was assumed to be that of the country of origin unless there were indications to the contrary. English was the most prominent language, followed by Japanese and French. (These data are shown in Figure 2.) It was found that 7.3% of the total sample were multiple language sources. The term multiple designates services that use more than one language; e.g., citation is left in the original while abstract is in the vernacular of the country of publication. It is interesting to note that the

Figure 2

Distribution of Services* by Language of Publication




*Total Sample = 69 Services

**Others:

| | |
|---|---|
| Italian | 2.9% |
| Romanian | 2.9% |
| Czech | 1.4% |
| Hungarian | 1.4% |
| Spanish | 1.4% |

extent of use of multiple languages varied, depending on the regional coverage, anticipated audience, and the accessibility of the language of the country of publication. Some of the services were translations. These included translations from non-Western to Western languages and vice-versa. The language of a publication is usually an indication of the purpose and the anticipated audience of the service. That is to say, when a publication is in the vernacular of the country that is not widely used outside its boarders it is aimed at internal consumption. The regional coverage here is, usually, both domestic and international. When the language of a publication is one of wide use, e.g., English, however, the service is frequently aimed at international markets. Often the purpose, in this case, is publicising local achievements. This pattern can be discerned in TABLES III and IV.

As previously noted, regional or geographic coverage by a secondary service is an important factor in its characterization. Table E indicates that inclusion of worldwide sources is the choice of the majority of services. Two publications, listed in TABLE III, although international in scope, are dealing only with Western sources. (The term "international" has been used to cover worldwide sources exclusively as well as domestic and worldwide sources.) It is interesting to note that five of the eleven publications that are selective in their geographic coverage, are devoted to publications from the Soviet Union exclusively. Three of them are in English and one in Italian and Romanian respectively. The six countries that devote a service to exclusive domestic coverage are: Bulgaria, France, India, Japan, Romania, and the Soviet Union. Except for those of France and the

Soviet Union all other publications are in English. These two are in their respective languages.

Table E

Distribution of Services by Regional Scope of Coverage

| | # of Services | % of Total |
|---|---|---|
| International Sources | 51 | 74.0 |
| Domestic Sources | 6 | 8.5 |
| Selective Sources | 11 | 16.0 |
| Not Given | 1 | 1.5 |
| Total | 69 | 100.0 |

An analysis of the subject coverage of the services indicates that approximately one-third of them is devoted to the discipline of physics, in general, without any stated emphasis of sub- (or allied) fields. Nuclear science and technology is the largest specialized area generating 23.2% of the publications. Astronomy and geophysics contribute 13% while vacuum science and technology 6% of the total. The remaining 17 publications are almost evenly distributed among 14 specialized areas. This data is shown in Table F.

The multiplicity of services available in some of the fields seems to point to an inevitable duplication and overlap among them. Since the languages, functions (i.e., current awareness and retrospective search tools), and anticipated audiences (i.e., domestic, foreign) greatly vary the extent of overlap and the gaps in coverage are difficult to determine.

Table F

Major Subject Areas Covered by Secondary Publications

| | # of Services | % of Total |
|---|---|---|
| Physics in General | 23 | 33.3 |
| Nuclear Science and Technology | 16 | 23.2 |
| Astronomy - Geophysics | 9 | 13 |
| Vacuum Science and Technology | 4 | 6 |
| Acoustics | 2 | 3 |
| Rheology | 2 | 3 |
| Solid State | 2 | 3 |
| Applied Physics | 1 | 1.5 |
| Glass | 1 | 1.5 |
| High Energy | 1 | 1.5 |
| Lasers | 1 | 1.5 |
| Nuclear Magnetic Resonance | 1 | 1.5 |
| Optics | 1 | 1.5 |
| Plasma Physics | 1 | 1.5 |
| Solar Energy | 1 | 1.5 |
| Spectroscopy | 1 | 1.5 |
| Thermodynamics | 1 | 1.5 |
| Ultrasonics | 1 | 1.5 |
| Total | 69 | 100.0 |

Since the type, form and coverage of services studied varied considerably an examination of size for comparative purposes became

important. Using the number of bibliographic items covered per year as the measure the 5001-10,000 category was found to be the most populous; nine services were identified. The largest services were those that published 20,001 or more items per year; eight were located. No information was available for eleven (15.8%) of the services. The average of those with known sizes was about 18,000. While Table G gives the data concerning size for the total sample, Table H summarizes the salient features of the eight largest services.

Table G

Bibliographic Items Covered/Year

| # of Bibliographic Items | # of Services | % of Total |
|---|---|---|
| 0-49 | 2 | 2.9 |
| 50-100 | 3 | 4.25 |
| 101-200 | 2 | 2.9 |
| 201-300 | 5 | 7.3 |
| 301-500 | 6 | 8.75 |
| 501-700 | 7 | 10.2 |
| 701-1000 | 1 | 1.5 |
| 1001-2000 | 4 | 5.8 |
| 2001-5000 | 7 | 10.2 |
| 5001-10,000 | 9 | 13.0 |
| 10,001-20,000 | 4 | 5.8 |
| 20,001-50,000 | 4 | 5.8 |
| 50,000, --- | 4 | 5.8 |
| Not Available | 11 | 15.8 |
| Total | 69 | 100.0 |

## Table H

## Characteristics of Principal Services in Physics

| Title | Type and Form of Service | Publisher Type | Country | Subject Coverage | Frequency | Language | Bibliog. Items/Year |
|---|---|---|---|---|---|---|---|
| Bulletin Signaletique | Abst. | G | FR | Phys. | 12 | F | 85,000 (Total) |
| Current Bibliography on Science and Technology; Phys. and Applied Phys. | Ref. | G | JA | Phys. | 24 | J | 38,000 |
| Current Papers in Physics | Ref. | N | GB | Phys. | 24 | E | 33,600 |
| Informatsionnyi Byulleten | Ref. | G | SR | Phys. | 36 | R | 25,000 |
| Nuclear Science Abstracts | Abst. | G | US | Nucl. Sci. & Tech. | 24 | E | 54,000 |
| Physics Abstracts | Abst. | N | GB | Phys. | 12 | E | 50,477 |
| Physikalishe Berichte | Abst. | C | GE | Phys. | 12 | G | 36,000 |
| Referativnyi Zhurnal | Abst. | A | SR | Phys. | 12 | R | 85,800 (Total) |

Productivity of the six major physics publishing countries was measured not only in terms of the number of services they each publish but also in terms of the total number of bibliographic items they each cover a year. Accordingly, the U.S.S.R. was found to be the most productive, covering 116,700 items through five services. The U.S. ranked second, publishing 102,290 items in fourteen services. Table J summarizes these data.

Table J

High Producer Countries

| Country | # of Bibliographic Items/Year | # of Services Published | # of Services Without Size Data in Sample |
|---|---|---|---|
| USSR | 116,700 | 5 | - |
| USA | 102,290 | 15 | 1 |
| France | 90,050 | 6 | - |
| Great Britain | 88,504 | 9 | 2 |
| Japan | 54,190 | 10 | - |

Based on the size of services published in different languages, English is the major language in physics. It is followed by Russian and German in that order. Table K shows these data for the five most productive languages.

Table K

| Language | # of Bibliographic Items/Year | # of Services Published | # of Services Without Size Data in Sample |
|---|---|---|---|
| English | 225,434 | 33 | 7 |
| Russian | 116,700 | 5 | - |
| French | 90,050 | 6 | - |
| Japanese | 53,950 | 8 | - |
| German | 53,450 | 5 | - |

Findings:

1. Secondary services in physics can be categorized according to the type and purpose of the publications, their subject coverage, and their accessibility to the U.S. physics community.

2. The most common type of secondary service in physics is the abstracting journal; it accounted for 60% of the sample.

3. Three classes of publishers were found to be sponsors of 83% of all services studied. These, in rank order, are: non-profit, commercial, and governmental organizations.

4. National academies sponsoring secondary services were located in Eastern Europe and were primarily engaged in abstracting.

5. Foreign services published in English were the products of their government, either through the national academies or through some other governmental agency.

6. Although the U.S. is the most productive country in terms of the number of services published, the U.S.S.R. is the most productive in terms of the number of bibliographic items covered per year.

7. Western Europe is the most prolific region both in terms of the number of services and the number of bibliographic items that originate from there.

8. Secondary services in physics are relatively young; only 24.6% are older than 20 years. Two services (2.7% of the total) are still active but older than 69 years, i.e., they began publication before 1900.

9. Twelve issues per annum (i.e., monthly frequency) was found to be the most common. 52.2% of the sample fell into that category.

Findings (Continued):

10. English is the most important language in physics both in terms of the number of services that are available and in terms of the extent of coverage they provide.

11. While 75% of the services are devoted to four broad subject areas (physics, nuclear science and technology, astronomy-geophysics, vacuum science and technology), the remaining 25% are dispersed among 14 specific fields.

## BIBLIOGRAPHY


1. Gray, D. E. and R. S. Bray. "Abstracting and Indexing Services of Physics Interest." American Journal of Physics, 18: 274-299, (May) 1950.

2. National Federation of Science Abstracting and Indexing Services. A Guide to the World's Abstracting and Indexing Services in Science and Technology. (NFSAIS Report No. 102) NFSAIS, Washington, D. C., 1963.

3. International Federation for Documentation. Abstracting Services in Science, Technology, Medicine, Agriculture, Social Science, Humanities. The Federation, The Hague, Netherlands, 1965.

4. Keenan, S. and M. Slater. Results of Questionnaire on Current Awareness Methods Used by Physicists Prior to Publication of "Current Papers in Physics." (Report No. AIP/CPP 1) AIP, New York, N.Y., 1967.

## IDENTIFICATION OF SUMMARY TABLES

| | |
|---|---|
| TABLE I: | 32 "major" services that are readily available to U.S. physicists. |
| TABLE II: | 17 primary journals sections of which are devoted to secondary services. |
| TABLE III: | 17 services published in languages little used by U.S. physicists. |
| TABLE IV: | 3 foreign services published in English. |
| TABLE V: | 11 large U.S. services offering diffuse subject coverage (these data are excluded from statistical analysis). |

| TITLE | TYPE & FORM OF SERVICE | PUBLISHER | PUBLISHER TYPE | COUNTRY | BEGAN PUB. | SUBJECT COVERAGE | REGIONAL COVERAGE | MATERIAL COVERAGE | FREQ. | LANG. | INDEXES | ARRANGEMENT | BIBLIOG. ITEMS/YR. | NO. JNLS. COVERED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ASTRONOMISCHER JAHRESBERICHT | Abst. & Ref. | Walter de Gruyter | C | GE | 1899 | astron. | Internat. | ----- | 1 | G | A-Ann.<br>S-Ann. | Subject | 13,500 (1965) | ----- |
| BIBLIOGRAFIA BRASILEIRA DE MATEMATICA E FISICA | Ref. | Ins. Brasileiro de Bibliografia e Documentacao | G | BR | 1955 | math., phys. | Internat. | jnls., books, repts. | IR | Orig. | A/S alpha. | UOC | ------ | ----- |
| BULLETIN SIGNALETIQUE Astronomie & Astrophysique, Physique du Globe | Abst. | CNRS | G | FR | 1940 | astron., astrophys., geophys. | Internat. | jnls., conf. papers, dissert. | 12 | F | A-12, Ann.<br>S-Ann. | Subject | 16,000 (1968) | 1,200 (total for 5 sections -1964) |
| Physique I | " | " | " | " | " | phys., mech., acous., thermodyn. | " | " | " | " | " | " | 21,000 (1968) | " |
| Physique & Technologie Nucleaires | " | " | " | " | " | nucl. phys. | " | " | " | " | " | " | 13,000 (1968) | " |
| Structure de la Matiere | " | " | " | " | " | struct. matter, cryst., spectr. | " | " | " | " | " | " | 31,000 (1968) | " |
| Biophysique, Biochimie | " | " | " | " | " | biophys., biochem. | " | " | " | " | " | " | 4,000 (1968) | " |
| BULLETIN OF THERMODYNAMICS AND THERMOCHEMISTRY | Abst. & Ref. | IUPAC-Univ. Michigan | W,U | US | 1958 | thermodyn. thermochem. | Internat. | pub. & unpub. res. results | 1 | E | A-Ann.<br>Substance Property - Ann. | Subject | 3-4,000 (1968) | ----- |
| CURRENT PAPERS IN PHYSICS | Ref. | IEE | M | GB | 1966 | phys. | Internat. | jnls. | 24 | E | none | Subject | 33,600 (1968) | 1,000 (1968) |
| GEOPHYSICAL ABSTRACTS | Abst. | US Geological Survey | G | US | 1929 | geophys. | Internat. | jnls., books, conf. papers | 12 | E | S-12<br>A,S-Ann. | Subject | 7,000 (1968) | ----- |
| HIGH ENERGY PHYSICS INDEX | Ref. | ZAED | N | GE | 1963 | high en. phys. | Internat. | jnls., books, conf. proc., repts., preprints | 12 | E | A-12, Ann.<br>S-12, Ann.<br>Preprint & Rept. No.-12 | Subject | 8-9,000 (1968) | ----- |
| INDEX DE LA LITTERATURE NUCLEAIRE FRANCAISE | Abst. | Commisseriat a L'Energie Atomique | G | FR | 1968 | nucl. phys. | National | repts., theses, conf. proc., briefs, jnls. | 12 | F | A-12, Ann.<br>Conf.-12, Ann.<br>Lab.-12, Ann.<br>Source-12, Ann.<br>All-Ann. | Subject | 3,500 (1968) | ----- |
| INFORMATIONEN ZUR KERNFORSCHUNG UND KERNTECHNIK | Ref. | ZAED | N | GE | ---- | nucl. res. & technol. | Internat. | repts., conf. papers, dissert. | 12 | E,G | A-12, Ann.<br>S-12<br>Rept. No.-12 | Subject | ----- | ----- |
| LASER ABSTRACTS | Abst. (cards) | Lowry-Cocroft | C | US | 1963 | lasers | Internat. | jnls., pats., conf. papers | 52 | E | none | Subject | 2,000 (1968) | 150 (1968) |
| LIST OF REFERENCES ON NUCLEAR ENERGY | Ref. | IAEA | W | AU | 1959 | atomic en. | Internat | repts. | 24 | E | A-Ann.<br>CA-Ann.<br>Rept. No.-24, Ann. | Subject | 11,000 (1967) | ----- |
| NATUURKUNDE EN REACTOR TECHNOLOGIE | Abst. | Technisch Documentatie-en Informatiecentrum voor de Krijgsmacht | N | NE | 1950 | phys. | Internat | repts., jnls. | 12 | D,E, F,G | ------ | Subject | 400 (1968) | ----- |
| NUCLEAR MAGNETIC RESONANCE ABSTRACTS | Abst. cards also | Preston Technical Abstracts Company | C | US | 1964 | nucl. mag. resonance | Internat. | jnls., books, pat., repts. | 12 | E | A-Ann.<br>S-Ann. | Subject | 2,700 (1968) | 176 (1968) |

TABLE NO. 1 (cont'd)

| TITLE | TYPE & FORM OF SERVICE | PUBLISHER | PUBLISHER TYPE | COUNTRY | BEGAN PUB. | SUBJECT COVERAGE | REGIONAL COVERAGE | MATERIAL COVERAGE | FREQ. | LANG. | INDEXES | ARRANGEMENT | BIBLIOG. ITEMS/YR. | NO. JNLS. COVERED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NUCLEAR POWER PATENTS BULLETIN | Abst. | Derwent Publications Ltd. | C | GB | 1958 | nucl. tech. | GB,F,G,SA, IN | patent specifications | 12 | E | ----- | Subject | ----- | ----- |
| NUCLEAR SCIENCE ABSTRACTS | Abst. | USAEC | G | US | 1947 | nucl. sci. & technol. | Internat. | repts., pats., books, jnls. | 24 | E | A-24,Q,SA,Ann,QQ S-24,Q,SA,Ann,QQ Also CA, Rept. No. Indexes | Subject | 54,000 (1968) | ----- |
| NUCLEAR SCIENCE ABSTRACTS OF JAPAN | Abst. | Japan Atomic Energy Res. Ins. | G | JA | 1961 | nucl. sci. | Domestic | jnls. | 4 | E | ----- | By research organization | 200 (1965) | 50 (1965) |
| PHYSICS ABSTRACTS | Abst. | IEE | N | GB | 1898 | phys. | Internat. | jnls., conf. papers, monogr. | 12 | E | A-12, SA S-12, SA Bk.-12, Conf.-12 | Subject | 50,477 (1968) | 495 (1965) |
| PHYSICS & CHEMISTRY OF GLASSES | Abst. | Society of Glass Technology | N | GB | 1960 | glass | Internat. | jnls. | 6 | E | A-Ann. S-Ann. | Subject | 500 (1968) | ----- |
| PHYSICS EXPRESS | Abst., Excerpts, Complete papers | Internat. Physical Index, Inc. | C | US | 1958 | phys. | SR | jnls. | 12 | E | A-12 | Subject | 9,000 (1968) | 101 (1965) |
| PHYSIKALISHE BERICHTE | Abst. | Friedr Vieweg & Sohn. GmbH, | C | GE | 1920 | phys. | Internat. | jnls., books, conf. papers | 12 | G | A-12,Ann. S-Ann. | Subject with UDC numbers | 36,000 (1968) | 600 (1968) |
| PLASMA PHYSICS INDEX | Ref. | ZAEO | N | GE | 1966 | plasma phys. | Internat. | jnls., repts. | 12 | E | A-12,Ann. S-12,Ann. | Subject | 5,000 (1967) | ----- |
| QUARTERLY CHECK-LIST OF GEOPHYSICS | Ref. | American Bibliographic Service | C | US | 1960 | geophys., geology, ocean-ography, meteor-ology | Internat. | books, monogr., brochures, separates | 4 | E | A-Ann. Ed.-Ann. Trans.-Ann. | By author | 300 (1968) | ----- |
| QUARTERLY CHECK-LIST OF PHYSICS (INCLUDING ASTRONOMY & ASTROPHYSICS) | Ref. | American Bibliographic Service | C | US | 1960 | solid st., theoret., celestial mech., cosmology, etc. | Internat. | books, monogr., brochures, separates | 4 | E | A-Ann. Ed.-Ann. Trans.-Ann. | By author | 600 (1968) | ----- |
| REFERATIVNYI ZHURNAL Astronomiya | Abst. | Soviet Academy of Sciences | G | SR | 1953 | astron. | Internat. | jnls., books, conf. proc., patents, etc. | 12 | R | A-12,Ann. S-12,Ann. | Subject with UDC numbers | 7,200 (1965) | ----- |
| Fizika | " | " | " | " | 1954 | phys. | " | " | " | " | " | " | 36,000 (1965) | " |
| Geofizika | " | " | " | " | 1957 | geophys. | " | " | " | " | " | " | 19,200 (1965) | " |
| Jadernye Reaktory | " | " | " | " | ---- | nucl. reactors | " | " | " | " | " | " | 1,800 (1965) | " |
| Mekhanika | " | " | " | " | 1953 | mechanics | " | " | " | " | " | " | 21,600 (1965) | " |
| RESUMENES DE ARTICULOS CIENTIFICOS Y TECNICOS: SERIE B. FISICA APLICADA | Abst. | Centro de Informacion y Documentacion | G | SP | 1964 | appl. phys. | Internat. | jnls. | 12 | S | A-Ann. | UDC | 10,000 (1965) | 1,530 (1965) |
| REVUE D'OPTIQUE THEORIQUE ET INSTRUMENTALE | Abst. | Inst. d'Optique Theo. et Appl. Syndicat General de l'Optique | N | FR | 1922 | optics, optical instruments | Internat. | open lit. | 12 | F | A-Ann. S-Ann. | ----- | 600 (1963) | ----- |
| RHEOLOGY ABSTRACTS | Abst. | British Soc. of Rheology Pergamon Press | N,C | GB | 1958 | rheology | Internat. | jnls. | 4 | E | A-Ann. S-Ann. | Subject | 900 (1968) | 100 |

TABLE NO. 1 (cont'd)

| TITLE | TYPE & FORM OF SERVICE | PUBLISHER | PUBLISHER TYPE | COUNTRY | BEGAN PUB. | SUBJECT COVERAGE | REGIONAL COVERAGE | MATERIAL COVERAGE | FREQ. | LANG. | INDEXES | ARRANGEMENT | BIBLIOG. ITEMS/YR. | NO. JNLS. COVERED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SOLID STATE ABSTRACTS | Abst. | Cambridge Communications Corp. | C | US | 1960 | solid st. phys., semiconductors | Internat. | jnls., conf. papers, dissert. | 12 | E | A-12,Ann.<br>S-12,Ann.<br>Source-12 | Subject | 16,000 (1968) | 550 (1968) |
| SOVIET-BLOC RESEARCH IN GEOPHYSICS, ASTRONOMY & SPACE | Abst. | JPRS | G | US | 1961 | astron., meteorology, oceanography, geophys. | Selective | open lit. | 26 | E | ----- | Subject | 550 (1968) | ----- |
| SURFACE & VACUUM PHYSICS INDEX | Ref. | ZAEO | N | GE | 1966 | surface & vacuum phys. | Internat. | jnls., repts. | 12 | E | A-12,Ann.<br>S-12,Ann. | Subject | ----- | ----- |
| TRANSATOM BULLETIN | Ref. | Commission of the European Communities | W | LU | 1960 | atomic en. | Selective | jnls. | 12 | E | A-12,Ann., QQ<br>Source-12,Ann., QQ | Subject | 10,000 (1968) | 8,400 (1968) |
| U.S.S.R. SCIENTIFIC ABSTRACTS: PHYSICS & MATHEMATICS | Abst. | JPRS | G | US | 1964 | phys., math. | SR | jnls. | 12 | E | ----- | Subject | ----- | 2,820 (1968) |

TABLE NO. II

| TITLE OF PARENT PUBLICATION | TITLE OF SECTION | TYPE & FORM OF SERVICE | PUBLISHER | PUBLISHER TYPE | COUNTRY | BEGAN PUB. | SUBJECT COVERAGE | REGIONAL COVERAGE | MATERIAL COVERAGE | FREQ. | LANG. | ARRANGEMENT | BIBLIOG. ITEMS/YR. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOMIC MARKETS | The Magazine Market | Ref. | Atomverlag Bonn | C | GE | 1958 | atomic en., nucl. technol. | Internat. | 35 jnls. (1963) | 6 | Orig. | alphe by journal | ----- |
| BERICHTE DER DEUTSCHEN RHEOLOGISHEN GESELLSCHAFT, E.V. | Bibliographie; Documentation; Reports | Ref. | Deutsche Rheologische Gesellschaft | N | GE | 1954 | rheology | Internat. | open lit. | 2 | G | Subject | 3,500 (1963) |
| BULLETIN D'INFORMATION A.T.E.N. | Revue de Presse | Abst. | A.T.E.N. | N | FR | 1956 | nucl. technol. | Internat. | jnls. | 6 | F | by geographic subj. headings | 350 (1968) |
| ENERGIE NUCLEAIRE; REVUE DE PHYSIQUE ET DE CHIMIE NUCLEAIRES ET DE GENIE ATOMIQUE | Documentation | Abst. | Les Publications Techniques Associees | Co | FR | 1959 | nucl. phys. | Internat. | open lit. | 8 | F | Subject | 500 (1968) |
| GEOPHYSICS | Reviews; Abstracts | Abst. | Soc. of Exploration Geophysicists | N | US | 1936 | geophys. | Internat. | books, jnls. | 6 | E | var s | 40 (1968) |
| JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA | Current Publications on Acoustics | Ref. | American Institute of Physics | N | US | 1929 | acoustics | Internat. | books, papers, patents | 12 | E | Subject | 5,500 (1968) |
| JOURNAL OF NUCLEAR ENERGY | Absts. of papers from Soviet jour. Atomnaya Energiya | Abst. | Pergamon Press, Ltd. | C | GB | 1954 | nucl. en. | Selective (SR) | jnls. | 12 | E,F,G | ----- | 100 (1968) |
| JOURNAL OF NUCLEAR SCIENCE & TECHNOLOGY | Absts. of Japanese articles | Abst. | Atomic Energy Soc. of Japan | N | JA | 1964 | nucl. sci. & technol. | Selective | jnls. | 12 | E | * | 40 (1968) |
| NOTIZIARIO | Sommario | Abst. | Comitato Nazionale per l'Energia Nucleare | G | IT | 1955 | nucl. sci. & technol. | Selective | open lit., patents also | 12 | I | Subject | 600 (1963) |
| PHYSICS IN MEDICINE & BIOLOGY | Absts; Reviews of Books | Abst. & Ref. | Taylor & Francis Ltd. | C | GB | 1956 | phys. | Internat. | jnls., books | 4 | E | Subject | 1,300 (1968) |
| PHYSIKALISCHE BLATTER | Bucher | Abst. | Physik-Verlag, GmbH | C | GE | 1945 | phys. | Selective | books | 12 | G | varies | 200 (1968) |
| SOLAR ENERGY | Solar Abstracts | Abst. | Assoc. for Applied Solar En. Arizona State Univ. | N | US | 1954 | solar en. | Internat. | open lit. | 4 | | Subject | 500 (1963) |
| TRANSACTIONS OF THE AMERICAN GEOPHYSICAL UNION | Reviews; Recent pubs. of interest to geophysicists; English transl. of Russian & other scientific papers & jnls. | Abst. & Ref. | American Geophysical Union | N | US | 1920 | geophys. | Internat. | books, papers, jnls. | 12 | E | Author | 600 (1968) |
| ULTRASONICS | Abstracts | Abst. | Iliffe Industrial Publications, Ltd. | C | GB | 1963 | ultrasonics | Internat. | jnls. | 4 | E | alpha by author | ----- |
| VACUUM | Classified Absts. | Abst. | Pergamon Press, Ltd. | C | GB | 1951 | vacuum sci. & technol. | Internat. | jnls. | 6 | E | Subject | 1,627 (1968) |
| VAKUUM-TECHNIK | Referate; Buchbesprechungen | Abst. | Rudolf A. Lang Verlag | C | GE | 1952 | vacuum technol. | ----- | jnls., books | 8 | G | ----- | 250 (1963) |
| LE VIDE: TECHNIQUE, APPLICATIONS | Documentation | Abst. | Societe Francaise des Ingenieurs et Techniciens du Vide; Le Vide | N,C | FR | 1946 | vacuum technol. | Internat. | open lit. | 6 | F | Subject | 100 (1963) |

*Chronological by date of receipt of primary jnl.

| TITLE (Original Language) | TITLE (English) | TYPE & FORM OF SERVICE | PUBLISHER | PUBLISHER TYPE | COUNTRY | BEGAN PUB. | SUBJECT COVERAGE | REGIONAL COVERAGE | MATERIAL COVERAGE | FREQ. | LANG. | BIBLIOG. ITEMS/YR. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BIBLIOGRAFIA SCIENTIFICA | ----- | Ref. (Tables of contents) | Centro di Documentazione sulla Scienza a la Tecnica Sovietiche | G | IT | 1954 | biol., chem., math., phys., med., agric., technol., educ., econ., nat. sci. | SR | jnls. | 4 | I | ----- |
| BULETIN DE INFORMARE STIINTIFICA: SERIA FIZICA, SERIA MATEMATICA, ASTRONOMIE | ----- | Abst. | Academia Republicii Socialiste Romania | A | RO | 1964 | phys. | Internat. | jnls. | 12 | M | 12,000 (1968) |
| BUNKO KENKYU | JOURNAL OF THE SPECTROSCOPICAL SOCIETY OF JAPAN | Abst. (Sect. of primary jnl.) | Spectroscopical Society of Japan | N | JA | 1951 | spectroscopy | Internat. (Western) | open lit. | 4 | J | 300 (1963) |
| BUTSURI TANKO | GEOPHYSICAL EXPLORATION | Ref. (Sect. of primary jnl.) | Society of Exploration Geophysicists of Japan | N | JA | 1948 | geophys. | Internat. | jnls. | 4 | J | 250 (1963) |
| FIZIKA V SHKOLE | ----- | Abst. & Ref. (Sect. of primary jnl.) | Ministerstvo Prosveshcheniya | G | SR | ---- | astron., engineering, phys. | SR | open lit. | 6 | R | 700 (1968) |
| GENSHIRYOKU KANKEI SHIRYO MOKUROKU | MONTHLY LIST OF ATOMIC ENERGY PUBLICATIONS | Ref. | Japan Atomic Industrial Forum, Inc. | C | JA | 1955 | atomic en., chem., bio. & med., eng., phys., reactor technol. | Internat. | open lit., repts. | 12 | J | 6,500 (1963) |
| INFORMATSIONNYI BYULLETEN NOVYKH INOSTRANNYKH KNIG POSTUPIVSHIKH V BIBLIOTEKU IMENI V.I. LENINA | ----- | Ref. | Ministerstvo kul'tury RSFSR | G | SR | 1956 | phys., math., chem., geology., geography, engineering | Internat. | open lit. | 36 | R | 25,000 (1968) |
| KAGAKU GIJUTSU BUNKEN SOKUHO: BUTSURI, OYO BUTSURI HEN | CURRENT BIBLIOGRAPHY ON SCIENCE & TECHNOLOGY: PHYSICS & APPLIED PHYSICS | Ref. | Japan Information Center of Science and Technology | G | JA | 1959 | phys. | Internat. | open lit. | 24 | J | 38,000 (1968) |
| KISHOCHO TOSHO GEPPO | METEOROLOGICAL & GEOPHYSICAL BIBLIOGRAPHY | Ref. | Japan Meteorological Agency | G | JA | 1955 | meteorology, geophys. | Internat. (Western) | open lit., govt. pubs. | 12 | J | 7,200 (1963) |
| MUSZAKI LAPSZEMLE FIZIKA. MERES-ES MUSZERTECHNIKA. AUTOMATIKA | ----- | Abst. | Hungarian Central Technical Library | G | HU | 1949 | automation, instrumentation, phys. | Internat. | jnls., pats., standards, repts., dissert. | 12 | H | 6,000 (1968) |
| NIHON BUTSURI GAKKAISHI | PROCEEDINGS OF THE PHYSICAL SOCIETY OF JAPAN | Abst. (Sect. of primary jnl.) | The Physical Society of Japan | N | JA | 1946 | phys. | Internat. | non-serial lit. | 12 | J | 100 (1968) |
| NIHON GENSHIRYOKU GAKKAISHI | JOURNAL OF THE ATOMIC ENERGY SOCIETY OF JAPAN | Abst. (Sect. of primary jnl.) | Atomic Energy Society of Japan | N | JA | 1959 | nucl. phys. | Internat. | open lit. | 12 | J | 300 (1968) |
| NIHON ONKYO GAKKAISHI | THE JOURNAL OF THE ACOUSTICAL SOCIETY OF JAPAN | Abst. & Ref. (Sect. of primary jnl.) | Acoustical Society of Japan | N | JA | 1939 | acoustics | Internat. | open lit. | 4 | J | 1,300 (1963) |
| NOVINKY LITERATURY-PRIRODNI VEDY: RADA MATEMATICKO-FYZI-KALNI | NEWS FROM FOREIGN LITERATURE: MATHEMATICO-PHYSICAL SERIES | Abst. | State Library of the Czechoslovak Socialist Republic | G | CZ | ---- | mathematics, phys. | Internat. | open lit. | 10 | Z & orig. | 4,000 (1968) |

TABLE NO. III (cont'd)

| TITLE (Original Language) | TITLE (English) | TYPE & FORM OF SERVICE | PUBLISHER | PUBLISHER TYPE | COUNTRY | BEGAN PUB. | SUBJECT COVERAGE | REGIONAL COVERAGE | MATERIAL COVERAGE | FREQ. | LANG. | BIBLIOG. ITEMS/YR. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOVYE KNIGI ZA RUBEZHOM | ----- | Abst. & Ref. | Isdatel'stwo Inostrannovi Literatury | C | SR | 1948 | math., mech., astron., phys., geophys., chem., geology | Internat. | non-serial lit. | 12 | R | 4,600 (1965) |
| REVISTA DE REFERATE DIN LITERATURA SOVIETICA DE SPECIALITATE: FIZICA | ----- | Abst. & Ref. | Academia Republicii Populare Romine | A | RU | ---- | phys. | SR | jnls. | 12 | M | 500 (1963) |
| USPEKHI FIZICHESKIKH NAUK | ----- | Ref. (Sect. of primary jnl.) | Isdatel'stwo Nauka | C | SR | 1918 | phys. | Internat. | open lit. | 12 | R | 600 (1968) |

TABLE NO. IV

| TITLE | TYPE & FORM OF SERVICE | PUBLISHER | PUBLISHER TYPE | COUNTRY | SUBJECT COVERAGE | REGIONAL COVERAGE | MATERIAL COVERAGE | LANG. | BIBLIOG. ITEMS/YR. |
|---|---|---|---|---|---|---|---|---|---|
| ABSTRACTS OF BULGARIAN SCIENTIFIC LITERATURE | Abst. | Bulgarian Acad. of Sciences | A | BU | math., phys., astron., geophys. geodesy | Domestic | ----- | E | ----- |
| INDIAN SCIENCE ABSTRACTS | Abst. | Indian National Scientific Doc. Centre | G | IN | scientific & technical lit. | Domestic | jnls., pats., standards | E | ----- |
| RUMANIAN SCIENTIFIC ABSTRACTS (Natural Science) | Abst. | Academia Republicii Socialiste Rumania | A | RO | math., astron., chem., phys., bio. | Domestic | jnls., books | E | ----- |

| TITLE | TYPE & FORM OF SERVICE | PUBLISHER | PUBLISHER TYPE | SUBJECT COVERAGE | REGIONAL COVERAGE | MATERIAL COVERAGE | BIBLIOG. ITEMS/YR. |
|---|---|---|---|---|---|---|---|
| APPLIED MECHANICS REVIEWS | Abst. | American Society of Mechanical Engineers | N | appl. mech. & related engineering sci. | Internat. | jnls., books, films | 9,426 (1968) |
| APPLIED SCIENCE & TECHNOLOGY INDEX | Ref. | H.W. Wilson Company | C | aeronautics, automation, chem., construction, electricity & electronics, engineering, geology & metallurgy, industrial & mechanical arts, machinery, phys., telecommunication, transportation | Eng. lang. jnls. only | jnls. | 77,000 (1968) |
| CURRENT CONTENTS; PHYSICAL SCIENCES | Ref. (Tables of contents) | Institute for Scientific Information | C | experimental & theoretical phys., astrophys. & astron., space engineering, earth sciences, nuclear phys. & engineering, math., information & computer sci., electronics, instrumentation | Internat. | jnls. | 104,000 (1968) |
| DISSERTATION ABSTRACTS SECTION B | Abst. | University Microfilms, Inc. | C | physical sci., engineering | Domestic | disserts. | 11,000 (1967) |
| ELECTRICAL & ELECTRONICS ABSTRACTS | Abst. | Institute of Electrical Engineers | N | electrical sci. & practice | Internat. | jnls., conf. proc., books | 30,000 (1968) |
| THE ENGINEERING INDEX | Abst. | The Engineering Index, Inc. | N | engineering, aerospace sci., civil engineering, computers, electrical engineering, engineering materials, geology, geophys., industrial economics, instrumentation, marine & naval engineering, etc., mechanical engineering, metallography, mining, nucl. tech. | Internat. | open lit. | 60,000 (1968) |
| INTERNATIONAL AEROSPACE ABSTRACTS | Abst. | American Institute of Aeronautics & Astronautics | N | aeronautics, astronautics | Internat. | jnls., conf. proc., mtg. papers | 34,000 (1968) |
| METEOROLOGICAL & GEOASTROPHYSICAL ABSTRACTS | Abst. | American Meteorological Association | N | meteorology, oceanography, hydrology, geophys., astrophys. | Internat. | jnls., texts, monogr., etc. | 10,000 (1968) |
| SCIENCE CITATION INDEX | Ref. | Institute for Scientific Information | C | agriculture, acoust., aerospace sci., behavioral sci., biol., chem., computers, cybernet., engineering & technol., geosci., info. sci., math. med., oceanography, phys., physiol., psychol., psychiat., zool. | Internat. | jnls., repts., book reviews, notes, letters, bibliog., etc. | 3,387,139 (1967) |

| TITLE | TYPE & FORM OF SERVICE | PUBLISHER | PUBLISHER TYPE | SUBJECT COVERAGE | REGIONAL COVERAGE | MATERIAL COVERAGE | BIBLIOG. ITEMS/YR. |
|---|---|---|---|---|---|---|---|
| SCIENTIFIC & TECHNICAL AEROSPACE REPORTS | Abst. | National Aeronautics & Space Administration | G | aeronautics, astronautics | Internat. | report lit. | 30,600 (1967) |
| U.S. GOVERNMENT RESEARCH & DEVELOPMENT REPORTS | Abst. | Clearinghouse for Scientific & Technical Information | G | aeronautics, argiculture, astron. & astrophys., atmosphere sci., behavioral & social sci., biological & medical sci., chem., electronics & electrical engineering, energy conversion, etc. | Domestic | govt. sponsored res. & devel. repts. | 25,000 (1967) |

APPENDIX A


# AMERICAN INSTITUTE OF PHYSICS

335 EAST 45 STREET, NEW YORK, NEW YORK 10017 • (212) 685-1940

INFORMATION DIVISION
ARTHUR HERSCHMAN
*Director*
FRANZ L. ALT
*Deputy Director*


August 30, 1968

Gentlemen:

The Information Division of the American Institute of Physics is currently undertaking a study of secondary services of importance to the physics community. The following description of your journal was published in a guide to abstracting services:

**Nuclear Science Abstracts**
***U. S. Atomic Energy Commission, Division of Technical Information Services Extension, P. O. Box 62, Oak Ridge, Tenn.***
**semimonthly; since 1947; 33,000 abstracts in 1961 from world literature including patents; subject classification; semimonthly personal author, corporate author, report number, and subject indexes and quarterly, semiannual, annual, and quinquennial cumulative indexes; free to government agencies, exchange from the Extension in Oak Ridge; $22 domestic, $27.50 foreign for semimonthly issues, $15.00 and $17.50 for cumulative indexes to general public from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.**
**nuclear science**
**QC770.U64**

If the description of your publication has since changed, we would appreciate any information concerning the current status. We are also interested in any new services which you may have added, such as microforms, computer tapes, etc. If you could supply a sample issue or masthead pages, we would be grateful.

Sincerely,

Edward Terry

Edward Terry
Research Associate

ET:cs

APPENDIX B

ABSTRACTING & INDEXING SERVICE
DATA PROFILE SHEET

ABST._____

REF._____

TITLE_____

PUBLISHER_____

ADDRESS_____

EDITOR_____

FREQUENCY_____ LANGUAGE_____

CURRENT STATUS_____ COUNTRY of PUB_____

HISTORY_____

PRICE

SCOPE of COVERAGE

TYPES of MATERIALS COVERED

AVAILABILITY

INDEXES (type, form(computerized, etc.), frequency)

CLASSIFICATION SCHEME

JOURNAL LIST

SUBSIDIARY SERVICES (microforms, tape, etc.)

OTHER PUBLICATIONS

STATISTICS

| | No. Absts. Pub | No. Journals |
|---|---|---|
| 1963 | | |
| 1965 | | |
| 1968 | | |

## APPENDIX C

### CODES USED IN TABLES I-V

#### Publisher Types

A = Academies, National
C = Commercial
G = Governmental
N = Non-Profit
U = Universities
W = International Bodies

#### Country of Publication

AS = Australia
BR = Brazil
BU = Bulgaria
CZ = Czechoslovakia
FR = France
GB = Great Britain
GE = Germany
HU = Hungary
IN = India
IT = Italy
JA = Japan
LU = Luxemburg
NE = Netherlands
RO = Rumania
SP = Spain
US = United States
SR = Soviet Union

#### Language of Publication

Z = Czechoslovakian
E = English
F = French
G = German
H = Hungarian
I = Italian
J = Japanese
M = Rumanian
R = Russian
S = Spanish

#### Frequency of Publication

52 = Weekly
36 = Three times a month, or 36 times a year
26 = Biweekly
24 = Twice a month
12 = Monthly, or twelve times a year
10 = Ten times a year
8 = Eight times a year
6 = Every two months, or six times a year
5 = Five times a year
4 = Quarterly, or four times a year
3 = Three times a year
2 = Twice a year
1(or Ann.) = Annual
IR = Irregular or varies

#### Indexes

A = Author
S = Subject
CA = Corporate Author
Conf. = Conference
Lab. = Laboratory
Bk. = Book
Ed. = Editor
Trans. = Translations

APPENDIX D

# DIRECTORY OF JOURNALS & PUBLISHERS' ADDRESSES

Abstracts of Bulgarian Scientific Literature
Bulgarian Academy of Sciences, Center for Scientific and Technical Information and Documentation, 1, Rue 7 Noemvri Street, Sofia, Bulgaria

Applied Mechanics Reviews
The American Society of Mechanics Engineers, United Engineering Center, 345 E. 47th Street, New York 10017

Applied Science and Technology Index
H.W. Wilson Company, 950 University Avenue, Bronx, New York 10452

Astronomisher Jahresbericht
Walter de Gruyter, 13 Genthiner Street, Berlin W 35, Germany

Atomic Markets
Atomverlag Bonn, Dahlmannstrasse 20, Bonn 9, Western Germany

Berichte der Deutschen Rheologishen Gesellschaft, E.V.
Deutsche Rheologische Gesellschaft, Unter den Eichen 87, Berlin-Dahlem, Germany

Bibliografia Brasileira de Matematica e Fisica
Instituto Brasileiro de Bibliografia e Documentacao, Av. General Justo, 171 - terreo, 3° e 4° andares Rio de Janeiro, Brasil

Bibliografia Scientifica
Centro di Documentazione sulla Scienza e la Tecnica Sovietiche, Piazza della Repubblica 47 Rome, Italy

Buletin de Informare Stiintifica: Seria Fizica, Seria Matematica Astronomie, Academia Republicii Socialiste Romania, Centrul de Documentaire Stiintifica, Str. Gutenberg 3 bis,Bucuresti, Sect. VI, Romania

Bulletin D'Information A.T.E.N.
Association Technique pour L'Energie Nucleaire, 26 Rue de Clichy Paris - IX, France

Bulletin Signaletique
Centre de Documentation du C.N.R.S. (Centre National de la Recherche Scientifique), 15 Quai Anatole-France, Paris 7e, France

Bulletin of Thermodynamics and Thermochemistry
International Union of Pure and Applied Chemistry, University of Michigan, Publications Distribution Service,615 E. University Avenue, Ann Arbor, Michigan 48106

Bunko Kenkyo
Spectroscopical Society of Japan, c/o Institute for Optical Research Kyoiku University, 400, 4-tyome, Hyakunin-tyo, Sinzyuku-ku, Tokyo, Japan

Butsuri Tanko
The Society of Exploration Geophysicists of Japan, 135, Hisamoto-cho, Kanagawa-shi, Kanagawa-ken, Japan

Current Contents; Physical Sciences
Institute for Scientific Information, 325 Chestnut Street, Philadelphia Pa. 19106

Current Papers in Physics
Institution of Electrical Engineers, Savoy Place, London WC 2, England

Dissertation Abstracts Section B
University Microfilms, Inc., 313 North First Street, Ann Arbor, Michigan 48106

Electrical & Electronics Abstracts
Institute of Electrical Engineers, Savoy Place, London WC 2, England

Energie Nucleaire; Revue de Physique et de Chimie Nucleaire et Degenie Atomique
Les Publications Techniques Associees, 80 Route de Saint-Cloud, 92-Rueil-Malmaison, France

The Engineering Index
The Engineering Index, Inc., 345 E. 47th Street, New York, New York 10017

Fizika v Shkole
Ministerstvo prosveshcheniya SSSR, 3rd Prvezd Mar' inoi roshchi 41, Moscow, USSR

Genshiryoku Kankei Shiryo Mokuroku
Japan Atomic Industrial Forum, inc., Minato-ku, Tokyo, Japan

Geophysical Abstracts
United States Geological Survey, Superintendent of Documents, U.S. Gov't Printing Office, Washington, D.C. 20402

Geophysics
Society of Exploration Geophysicists, P.O. Box 3098 Tulsa, Oklahoma 74101

High Energy Physics Index
Zentralstelle fur Atomkernenergie-Dokumentation (ZAED) der Gesellschaft fur Kernforschung m.b.H. Karlsruhe 6, Frankfurt, (Main), Western Germany

Index de la Litterature Nucleaire Francaise
Commissariat a L'Energie Atomique, Centre d'Etudes Nucleaires de Saclay B.P. n° 2, 91-Gif-sur-Yvette, France

Indian Science Abstracts
Indian National Scientific Documentation Centre, Hillside Road, New Delhi-2, India

Informationen Zur Kernforschung Und Kerntechnik
Zentralstelle fur Atomkernenergie-Dokumentation (ZAED) der Gesellschaft fur Kernforschung, Karlsruhe, Postfach 90 10 69, 6 Frankfurt 90, Western Germany

Informatsionnyi Byulleten Novykh Inostrannykh Knig Postupivshikh v Biblioteku imeni V.I. Lenina
Ministerstvo kul'tury RSFSR, Gosudarstvennaya ordena Lenina Biblioteka SSSR imeni V.I. Lenina, Moscow, USSR

International Aerospace Abstracts
AIAA Technical Information Service, 750 3rd Avenue, New York 10017

Journal of the Acoustical Society of America
American Institute of Physics, 335 E. 45th Street, New York 10017

Journal of Nuclear Energy
Pergamon Press, Ltd., 44-01 21st Street, Long Island City, N.Y. 11101

Journal of Nuclear Science and Technology
Atomic Energy Society of Japan, c/o Japan Atomic Energy Research Institute, No. 1-13, 1-chome, Shimbashi Minato-ku, Tokyo, Japan

Kagaku Gijutsu Bunken Sokuho: Butsuri, Oyo Butsuri Hen
Japan Information Center of Science and Technology, 5-2, 2-Chome, Nagata-cho, Chiyoda-ku, Tokyo, Japan

Kishocho Tosho Geppo
Japan Meteorological Agency, 1-7, Ote-machi, Chiyoda-ku, Tokyo, Japan

Laser Abstracts
Lowry Cocroft Abstracts, 516 Main Street, Evanston, Illionis 60202

List of References on Nuclear Energy
The Library, International Atomic Energy Agency, Kaerntner Ring 11-13 1010 Vienna, Austria

Meteorological and Geoastrophysical Abstracts
American Meteorological Association, 45 Beacon Street, Boston, Mass. 02108

Muszaki Lapszemle Fizika. Meres-es Muszertechnika. Automatika
Hungarian Central Technical Library, Budapest, Hungary

Natuurkunde en Reactor Technologie
Technisch Documentatie-en Informatiecentrum voor de Krijgsmacht, Van Alkemadelaan 774, Building 140, The Hague, Netherlands

Nihon Butsuri Gakkaishi
The Physical Society of Japan, Room 211, Kikai-Shinko Building 21, Shiba-Koen, Minato-Ku, Tokyo, 105, Japan

Nihon Genshir Yoku Gakkaishi
Atomic Energy Society of Japan, c/o Japan Atomic Energy Research Institute, No. 1-13, 1-chome, Shimbashi Minato-ku, Tokyo, Japan

Nihon Onkyo Gakkaishi
Acoustical Society of Japan, c/o Aeronautical Research Institute, University of Tokyo, Komaba, Meguro-ku, Tokyo, Japan

Notiziario
Comitato Nazionale per l'Energia Nucleare, Via Belisario 15, Rome, Italy

Novinky Literatury-Prirodni Vedy: Rada Matematicko-Fyzikalni
State Library of the Czechoslovak Socialist Republic, Prague 1-190, Czechoslovakia

Novye Knigi Za Rubezhom
Isdatel'stwo Inostrannoi literatury, Moscow, USSR

Nuclear Magnetic Resonance Abstracts
Preston Technical Abstracts Company, 909 Pitner Avenue, Evanston, Illinois 60202

Nuclear Power Patents Bulletin
Derwent Publications, Ltd.,Rochdale House, 128 Theobalds Street, London W.C.1, England

Nuclear Science Abstracts
U.S. Atomic Energy Commission, Division of Technical Information Extension, P.O. Box 62, Oak Ridge, Tenn. 37830

Nuclear Science Abstracts of Japan
The Japan Atomic Energy Research Institute, Tokai-Muar, Naka-Gun, Ibaraki-Den, Japan

Physics Abstracts
Institute of Electrical Engineers , Savoy Place, London WC 2, England

Physics and Chemistry of Glasses
The Society of Glass Technology, Thornton, 20 Hallam Gate Road, Sheffield, S 10 5BT, England

Physics Express
International Physical Index, Inc., 1909 Park Avenue, New York 10035

Physics in Medicine and Biology
Taylor & Francis , Ltd., Red Lion Court, Fleet Street, London E. 4, England

Physikalishe Berichte
Friedr. Vieweg & Sohn GmbH, 33 Braunschweig Postfach,185, Western Germany

Physikalische Blatter
Physik-Verlag, GmbH, Hans der Physik, Mosbach/Baden, Western Germany

Plasma Physics Index
Zentralstelle fur Atomkernenergie-Dokumentation (ZAED) der Gesellschaft fur Kernforschung m.b.H.,Karlsruhe 6,Frankfurt (Main), Western Germany

Quarterly Check-List of Geophysics
American Bibliographic Service, Box 1141, Darien, Conn. 06820

Quarterly Check-List of Physics (Including Astronomy & Astrophysics)
American Bibliographic Service, Darien Conn.

Referativnyi Zhurnal
Soviet Academy of Sciences, 14 Baltic Street, Moscow A-219, USSR

Resumenes de Articulos Cientificos Y Tecnicos: Serie B. Fisica Aplicada
Centro de Informacion y Documentacion del Patronato "Juan de la Cierva" del C.S.I.C. Joaquin Costa 22, Madrid 6, Spain

Revista de Referate din Literatura Sovietica de Specialitate:Fizica
Academia Republicii Populare Romine, Institutul de Studii Romino-Sovietic, str. Gutenberg 3 bis, Bucharest, Rumania

Revue D'Optique Theorique et Instrumentale
Institute d'Optique Theorique et Appliquee and Syndicat General de l'Optique, et des Instrument de Precision 3 et 5, Boulevard Pasteur, Paris (15e)

Rheology Abstracts
Pergamon Press, Ltd., 465 Fitzroy Square London W.1, England

Rumanian Scientific Abstracts (Natural Science)
Academia Republicii Socialiste Rumania, Centrul de Documentare Stiintifica str. Gutenberg 3 bis, Bucuresti,Sect. VI, Romania

Science Citation Index
Institute for Scientific Information, 325 Chestnut Street, Philadelphia, Pa. 19106

Scientific & Technical Aerospace Reports
National Aeronautics & Space Administration, Washington, D.C. 20546

Solar Energy
Association for Applied Solar Energy, Arizona State University Campus, Tempe, Arizona 85281

Solid State Abstracts
Cambridge Communications Corp., 1612 K. Street, N.W. Washington, D.C. 20006

Soviet-Bloc Research in Geophysics, Astronomy & Space
Joint Publications Research Service, Clearinghouse for Federal Scientific & Technical Information, U.S. Dept. of Commerce, Springfield, Va. 22151

Surface and Vacuum Physics Index
Zentralstelle fur Atomkernenergie-Dokumentation (ZAED) der Gesellschaft fur Kernforschung m.b.H., Karlsruhe 6, Frankfurt (Main), Western Germany

Transactions of the American Geophysical Union
American Geophysical Union, 2100 Pennsylvania Avenue, N.W. Washington 5, D.C. 20037

Transatom Bulletin
Commission of the European Communities, Transatom Service, European Center, Kirchberg, Luxemburg

Ultrasonics
Iliffe Industrial Publications, Ltd., Dorset House, Stanford Street, London S.E.1., England

U.S. Government Research & Development Reports
Clearinghouse for Scientific & Technical Information, Springfield, Va. 22151

U.S.S.R. Scientific Abstracts
Joint Publications Research Service, Clearinghouse for Federal Scientific & Technical Information, U.S. Dept. of Commerce, Springfield, Va. 22151

Uspekhi Fizicheskikh Nauk
Isdatel'stwo Nauka, Moscow, USSR

Vacuum
Pergamon Press, Ltd., 44-01 21st Street Long Island City, New York 11101

Vakuum-Technik
Rudolf A. Lang Verlag, 4 Limburger Strasse, Esch/Taunus, Germany

Le Vide: Technique, Applications
Societe Francaise des Ingenieurs et Techniciens du Vide; Le Vide, c/o Secretariat Administratif, 147 ter A, Boulevard de Strasbourg, Nogent-sur-Marne, France