

Notices from the ISMS

(Novae Scientiae Mathematicae)

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Scientiae Mathematicae Japonicae, Notices from the ISMS

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UNION OF CZECH MATHEMATICIANS AND PHYSICISTS

Martina Bečvářová¹

The Union of Czech Mathematicians and Physicists is one of the oldest scientific societies in the Czech Republic and also in central Europe. It will celebrate 150 years of its existence in 2012. The main aim of the Union is to promote development of mathematics and physics in academic institutions and industrial spheres as well as improvement of teaching of these subjects at all types of schools.

1. Introduction

In the second half of the 19th century, due to the rise of nationalistic movements, the Czech and German communities separated in the Czech lands. This separation was also reflected in science and education. An important feature of that period was the process in which Czech science was “becoming independent”. While the German speaking community gradually became bilingual, the Czech one was getting stronger and finally prevailed. This process was accompanied, on the one hand, by protracted national conflicts and, on the other hand, by expensive constructions of new schools, the establishment of new associations and the development of the Czech scientific terminology, journals and monographs. As a consequence, finances were drained and the development of the Czech science delayed.

Up to the end of the 1850's, the education system of secondary schools and universities was solely in German. Only since 1861, the first Czech secondary schools have been built. In the period between 1861 and 1865 some subjects at the state secondary schools were taught in Czech, while the teaching of others remained in German. In the second half of the 1860's the German and Czech secondary schools were coexisting with equal standard. Thus, the graduates of the Czech stream of education who entered universities started to require lectures in their mother tongue.

In the 1860's, the efforts of Czech political representatives and intellectuals as well as the movement of university students to have their studies in Czech language required an establishment of Czech mathematical lectures and Czech departments at the Prague Technical University (1864). At first they existed in parallel with German ones that had better teachers and more funding. The arrival of better qualified Czech teachers and students who have been educated at Czech secondary schools led to the strengthening of the positions of Czech mathematical departments at the Prague (or the Czech) Technical University and the establishment of a similar department at the Prague University (1871). Their professional standard was comparable to that of the German departments and even began to exceed in student enrolment. While the importance of the Czech mathematical departments was increasing with the growth of the number of teachers and students, the number of German students was decreasing, because most of the German professors considered Prague to be merely a temporary place on the way to Vienna or Germany.²

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² More about the reasons leading to the establishment of the independent Czech educational system see M. Bečvářová: *Česká matematická komunita v letech 1848–1918* [Czech Mathematical Community 1848–1918], edition Dějiny matematiky, volume 34, Ústav aplikované matematiky FD ČVUT, Matfyzpress, Praha, 2008.

2.1 History of the Union of Czech Mathematicians and Physicists – the 19th century

An interesting feature in the 19th century was a gradual formation of scientific institutions which – in spite of the initial lack of finances and a small number of experts – organised lectures and scientific discussions, published professional journals, monographs and textbooks and issued reports on their activities. Scientific associations that originated at the end of the 18th and in the first half of the 19th centuries combined Czech and German speaking specialists of various branches and were usually bilingual. Their activities were not considerably influenced by nationalistic conflicts. After the fall of Bach absolutism (1859), the Czech society formed enough space for various activities and for the formation of various associations. In the mid of the 1860's, they started to show their professional and language particularities.

The development of mathematics in the Czech lands was influenced considerably by the foundation of *Spolek pro volné přednášky z matematiky a fyziky* [Association for Free Lectures of Mathematics and Physics]. At the beginning, it brought together Czech and German university students of mathematics and physics and later students of the Technical University became its members. It was founded in the school-year 1861–1862 by four students of the Faculty of Philosophy in Prague, Gabriel Blažek (1842–1910), Josef Finger (1841–1925), Josef Laun (1837–1915) and Josef Vaňaus (1839–1910). The Association received an official permission from the Austrian authorities on March 8, 1862, and thus it became an association of academic character under the direct patronage of the Faculty of Philosophy. Only full-time students of mathematics and physics could become its members.³ The Association was headed by an elected president, a vice-president and a secretary. The main aims of the Association were to practice lecturing, to support scientific endeavours in the fields of mathematics and physics, to improve education in mathematics and physics, and to prepare new young teachers for teaching at secondary schools. The Association was located in Prague, and meetings were held every week. On the program there were regular lectures, commentaries on individual talks, discussions on proposals for scientific activities, admitting new members and expelling negligent members. At the beginning, lectures were held in German, but as early as in 1864 Czech became dominant, although both languages were used till 1869.⁴

Soon, the Association obtained support from university professors and teachers, the most important persons were Jakub Filip Kulik (1793–1863), Ernst Mach (1838–1916), Wilhelm Matzka (1798–1891) and August Seydler (1849–1891). In 1863, J. F. Kulik donated to the Association a good part of his mathematical library. In 1868, E. Mach offered the Association his lecture hall for meetings and his laboratory for physical experiments. The promising start of this Association was possible namely because of the personal activity of the few members who founded it. The Association became a suitable centre for mathematical activities, linked together the university professors with the high school teachers and students and with the primary schools teachers and recruited new persons interested in mathematics and physics. Nevertheless, only a few members worked in the Association with full energy

³ From 1868 full-time students at the Czech Polytechnic could also be members.

⁴ The proceedings of the meetings of the *Association for Free Lectures in Mathematics and Physics* are stored in the Archive of the Czech Academy. For more information see M. Bečvářová M.: *Z historie Jednoty 1862–1869* [From the History of the Union 1862–1899], edition *Dějiny matematiky*, volume 13, Prometheus, Praha, 1999, F. Houdek: *Dějepis jednoty českých matematiků* [History of the Union of Czech Mathematicians], JČM, Praha, 1872, V. Posejpal: *Dějepis Jednoty Českých Matematiků* [History of the Union of Czech Mathematicians], JČM, Praha, 1912.

among the students at universities and secondary schools, and became a model for future mathematical journals. It must be noted that authors of individual articles were Czech beginners in physics and mathematics who were significantly engaged in the development of the Czech science.

In 1871, the *Union* published its first summary under the title *Zpráva o činnosti Jednoty českých matematiků v Praze za první a druhý ročník* [The Report on the Activity of the Union of Czech Mathematicians in Prague during the First and Second Year]⁸ in which it informed about its professional and cultural activities. One year later, the report *Zpráva o činnosti Jednoty českých matematiků v Praze za třetí ročník* [The Report on the Activity of the Union of Czech Mathematicians in Prague during the Third Year]⁹ followed up.

Since no financial difficulties occurred in the course of issuing the Reports, in February 1872 the Union decided to publish its own journal named *Časopis pro pěstování matematiky a fyziky* [Journal for Cultivation of Mathematics and Physics] whose first issue appeared in March. Its content fully complied with the atmosphere of the Czech National Revival and the attempts to raise a scientific awareness of the Czech nation and to promote culture. The journal which was one of the first purely mathematical-physical periodical on the territory of the Austro-Hungarian Empire faced a lot of problems for several years, especially financial ones resulting from the lack of regular subscribers. Nevertheless, it has always been a wide field for activity of Czech authors, students and teachers of the secondary schools because of its policy to address a broad audience of readers. In addition, contributions of the leading mathematicians were published there.¹⁰ In the 1892, the Union began to publish the quite innovative and special supplement titled *Příloha pro středoškolské studenty* [Supplement for Secondary School Students] which was included in the membership journal.¹¹ The journal made every effort to broaden the horizon of mathematical education. It initiated professional and educational activities and informed about the activity of the Union, concerning meetings, lectures and the number of members. As a result, the interest in active participation in the Union increased. In addition, the journal provided a link between the Czech intellectuals scattered all over Austria and Hungary and the Prague centre of the Union.

In the period between 1873 and 1875 the association published its bulletin *Věstník Jednoty českých matematiků* [Bulletin of the Union of Czech Mathematicians] that provided information about all its activities and contained summaries of the most important recent

Report of the Union of Czech Mathematicians], tiskem dra E. Grégra, nákladem Jednoty českých matematiků, Praha, 1871, 96 pages + 1 tablet which was edited by M. Neumann and A. Pánek.

⁸ *Zpráva o činnosti Jednoty českých matematiků v Praze za první a druhý ročník, totiž od 14. října 1869 do 15. října 1871*, nákladem Jednoty českých matematiků, Praha, 1871, 23 pages.

⁹ *Zpráva o činnosti Jednoty českých matematiků v Praze za třetí ročník, totiž od 15. října 1871 do 7. července 1872*, nákladem Jednoty českých matematiků, Praha, 1872, 38 pages.

¹⁰ The journal was published continuously (with a forced break during World War II) until 1951, when it was split into *Časopis pro pěstování matematiky* [Journal for Cultivation of Mathematics] and *Československý časopis pro fyziku* [Czechoslovak Physics Journal]. In 1991, *Časopis pro pěstování matematiky* was renamed as *Mathematica Bohemica* with the subtitle *Journal for Cultivation of Mathematics*. It is published in English and has exclusively professional character. Each volume from 1872 up to now can be found in the Czech Digital Mathematics Library (DML-CZ) which preserved in a digital form the content of major part of mathematical production that has ever been published in the Czech lands. For more information see <http://dml.cz/handle/10338.dmlcz/133460>.

¹¹ In 1922, the Supplement became the independent journal published by the Union under the title *Rozhledy matematicko-fyzikální* [Scopes of Mathematics and Physics].

Czech and foreign scientific literature. In 1878, the bulletin was replaced by the report titled *Výroční zpráva* [Annual Report].¹²

ČASOPIS
PRO PĚSTOVÁNÍ
MATEMATIKY A FYSIKY,

KTERÝŽ SE ZVLÁŠTNĚM ZÁMĚREM K STUDIJNÍM

REDIGUJE

DR. F. J. STUDNÍČKA,

PROFESSOR MATEMATIKY NA C. K. UNIVERSITĚ PRAŽSKÉ

A VYDÁVA

JEDNOTA ČESKÝCH MATEMATIKŮ.



V PRAZE.

TISKEM DR. EDVARDA GRÉBLA. — NÁKLADEN JEDNOTY ČESKÝCH MATEMATIKŮ.
1872.

The title page of the first volume of the *Journal for Cultivation of Mathematics and Physics* (1872).

In 1873 the Union began to publish textbooks in mathematics, physics and descriptive geometry. Czech authors wrote textbooks according to foreign models and in respect to their professional interests; they published them either at their own expense in various publishing houses or at the expense of richer booksellers. They were facing not only a lot of professional problems (the absence of domestic patterns, imperfect terminology and methodology) but also financial ones – there were few readers. The textbooks published in the 1870's were mostly just revisions or free modifications of older ones. It should be noted that this trend did not appear only in mathematics but also in other disciplines. From

the 1880's, the mathematical textbooks were namely published by the Union of Czech Mathematicians. It was the first systematic and profitable publishing of Czech textbooks for secondary schools. By the end of the 19th century these textbooks complied with European standards.

During the Union's boom in the first half of the 1870's, a significant change occurred. The role of the "professional and scientific" journal was taken over by a new international periodical called *Archiv matematiky a fyziky* [Archive of Mathematics and Physics]. The journal *Časopis pro pěstování matematiky a fyziky* [Journal for Cultivation of Mathematics and Physics] focused exclusively on topics important for secondary school students – elementary mathematics, physics, history and didactics – trying to reflect interests of students and teachers and broaden its constituency. However, it became clear very soon that the editors of the *Archiv* overestimated both their potentialities and the interest of the Czech society in mathematics and physics. This is why the Archive ceased in 1878 after publication of only two issues. After that, the Journal for Cultivation returned to its original objective, i.e. publishing professional, educational, didactic and informative articles. It kept this function up to the end of the 19th century.

2.2 Activities of the Union of Czech Mathematicians and Physicists – the 20th century

At the beginning of the 20th century the Union was a centre of mathematics and physics in the Czech lands because these subjects were flourishing at the Prague university as well as at technical universities and newly founded secondary schools. Its members took part

¹² They have been published every year in the extent of 10–15 pages.

in discussions about a strong movement towards the reforms of education in mathematics and nature sciences. In 1912, the Union started to use the new name *Jednota českých matematiků a fyziků* [Union of Czech Mathematicians and Physicists] and prepared its new status and style of activities. The number of members of the Union increased and Union's branches outside Prague soon began to emerge; the first of them was created in 1913 in Brno.

When the independent Czechoslovak Republic was established in 1918, its government implemented the important changes in the education system and support of scientific researches. For example the Faculty of Natural Sciences separated from the Faculty of Philosophy (Charles University in Prague), the Prague Polytechnic was reorganised and called the Czech Technical University, and the new Masaryk's University was opened in Brno. The Union became a respected partner of the government and started to play the important role in the development of mathematics and physics in the country through its suggestions and ideas for improvement of the teaching style. In 1921, the Union adopted its name to *Jednota československých matematiků a fyziků* [Union of Czechoslovak Mathematicians and Physicists] and used it up to the 1990's. The number of members of the Union rapidly increased as well as its activities (writing textbooks, monographs, scientific and popularizing articles, teaching and lecturing, organising competitions for gifted students at all levels, young researchers and teachers). The Union became practically the only publisher of textbooks for secondary schools and universities, monographs and journals in mathematics, physics, descriptive geometry and related sciences. In 1919, it obtained a license for printing, publishing and selling books and established its own Publishing House which earned a big respect and recognition. In 1933, this Publishing House merged with *Prometheus*, a specialised publishing house of mining engineers, and the new big centre for publishing mathematical, physical and technical literature was created. In 1938, Union built its own house in the centre of Prague and moved its place there.¹³



The photo of the Union's building, bookshop and library (1930's). Now, the modernized house is occupied by the Mathematical Institute of the Academy of Sciences of the Czech Republic (Žitná Street 25, Prague).

The World War II brought difficulties for the Czech nation, for its life and economy, industry and trades, culture, education, study and scientific work. The Czech universities were closed by the Nazis; the number of Czech secondary schools and students was essentially reduced. In this difficult period the Union was the good island of studies and research. It did many good things for gifted and talented students which had mostly no possibilities to study. The Union conveyed information about the development of mathematics and physics abroad, organized various courses and lectures

¹³ Nowadays, the building is the official house of the Mathematical Institute of the Academy of Sciences of the Czech Republic.

for its members, published monographs, textbooks and books written in generally understandable and readable manners, published its membership journal until it was prohibited by the Nazis in 1942.

After World War II, the Union and its members took part in renovation of the Czech and Slovak education system and scientific research.¹⁴ But in 1948, the Communist regime assumed power in Czechoslovakia. As the result of political changes and especially the forced nationalisation of private property, the Union lost its building, Publishing House, library, bookshop and also its independence. In 1952, the Czechoslovak Academy of Sciences was established and the Union became only one of learned societies attached to the Academy.¹⁵ Fortunately, its library and building has been assigned to the Mathematical Institute of the Czechoslovak Academy of Sciences which has been taking care of it. But the Union's activities were nearly paralysed in the first half of the 1950's. From the mid of the 1950's the Union could participate in publishing journals *Matematika a fyzika ve škole* [Mathematics and Physics at School] (founded in 1948 according a Russian model) and *Pokroky matematiky, fyziky a astronomie* [Advances in Mathematics, Physics and Astronomy] (founded in 1956 as the membership journal).



Postage stamps issued by Czechoslovakia on February 26, 1962, on the 100th anniversary of the founding of *the Union of Czechoslovak Mathematicians and Physicists*. The two mathematics stamps were part of a series of seven stamps named "Personalities of culture life." The first stamp shows physicist František Závíška (1879–1945) and mathematician Karel Petr (1868–1950), the second stamp shows two mathematicians Miloslav Valouch (1878–1952) and Juraj Hronec (1881–1959).

The better period came at the beginning of the 1960's, when the Communist regime unbent for a short time. In the new political climate, the Physical Research Section was established in 1968 and through its representation the Union became a member of the European Physical Society. In 1969, a political federalisation took place in Czechoslovakia and as a result the Union of Slovak Mathematicians and Physicists came to existence. After the fall of reforms of the so called Prague Spring, the Union became an oasis of free scientific and colleague apolitical work and collaboration and kept this role during 1970's and 1980's. It has organised Mathematical Olympiads (since 1951), Physical Olympiads (since 1959), research conferences and meetings for teachers at all levels. Absolutely new occasions emerged after the Velvet Revolution (1989) which brought freedom and democracy to Czechoslovakia.¹⁶ After 1990, many active members of the Union found quite new

¹⁴ In 1945, the Union had 3400 active members.

¹⁵ In 1956, the Union had only 560 members.

¹⁶ For more information see L. Pátý, J. Veselý (eds.): *Union of Czechoslovak Mathematicians and Physicists, JČSMF, Praha, 1984, L. Pátý (ed.): Jubilejní almanach Jednoty čs. matematiků a fyziků 1862–1987* [Anniversary Almanac of the Union of Czechoslovak Mathematicians and Physicists 1862–1987], Jednota čs. matematiků

possibilities for business, work, research, travel etc. and some of them reduced their activities in the Union.



Postage stamps issued by Czechoslovakia on July 6, 1987, on the 125th anniversary of the founding of the *Union of Czechoslovak Mathematicians and Physicists*. The first stamp shows Prague's astronomical clock, a computer graphic and a formula. The second stamp shows mathematician Josef Maxmilián Petzval (1807–1891), physicist Čeněk Strouhal (1850–1922), and mathematician Vojtěch Jarník (1897–1970) and a formula. The third stamp shows a picture of surveying work (17th century) and two computer graphics.

Since the mid of the 1990's the members of the Union either independently or jointly with universities, Mathematical Institute of the Academy of Sciences of the Czech Republic and other research institutions have organised national and international conferences, colloquia, symposia, schools and seminars, various competitions, etc. Its members have exerted themselves to improve teaching of mathematics and physics in all types of schools. They have assisted in writing and publishing textbooks and monographs as well as articles in the journals *Pokroky matematiky, fyziky a astronomie* [Advances in Mathematics, Physics and Astronomy],¹⁷ *Matematika-fyzika-informatika* [Mathematics-Physics-Informatics],¹⁸ *Učitel matematiky* [Teacher of Mathematics],¹⁹ *Rozhledy matematicko-fyzikální* [Scopes of Mathematics and Physics],²⁰ *Československý časopis pro fyziku* [Czechoslovak Journal for Physics], *Školská fyzika* [Physics in School]²¹ and *Informace České matematické společnosti* [Newsletter of the Czech Mathematical Society].²²

In 1990 the Union (namely the Czech Mathematical Society as its internal unit) became a founder member of the European Mathematical Society and from 1992 a reciprocity member of the American Mathematical Society.

a fyziků, Praha, 1987, L. Pick: *The Union of Czech Mathematicians and Physicists*, EMS Newsletter, March 2002, pp. 20–21.

¹⁷ The journal is specialized on survey papers from modern mathematics, physics and astronomy, discussions of educational and pedagogical topics, and short information about the Union's activities.

¹⁸ The journal is focused on the teaching theory and practice of these three subjects.

¹⁹ The journal contains mathematical and didactical articles for teachers especially from secondary schools.

²⁰ The journal is destined to gifted and talented students from elementary, secondary and high schools. Articles focused on the enlargement and improving student's knowledge, inspiring examples and information about competitions and Olympiads are published there.

²¹ The journal is devoted to the teaching of physics at all levels.

²² The Newsletter gives information on current activities of the Czech Mathematical Society, the Union of Czech Mathematicians and Physicists, the European Mathematical Society, etc.

3. Present situation

Today the Union is a vocational professional corporation which has about 2500 members (university teachers, secondary school teachers, researchers, students and supporters of mathematics and physics) organised in 15 branches covering the whole region of the Czech Republic. The supreme body is the Union Congress assembling every four years; between them the activities are administered by the Committee headed by the President. The current President of the Union is Josef Kubát, a distinguished Czech secondary school teacher.²³ The Union could not regain its confiscated property, however its activities are supported by the Czech state through the Academy of Sciences and the Ministry of Education, Youth and Sports. The office of the Union is located again in its original building in Prague, in rooms provided by the Institute of Mathematics AS CR.

In addition to the branches, the Union is naturally divided into four special sections – the Czech Mathematical Society (formerly known as the Mathematical Research Section), the Czech Physical Society (formerly the Physical Research Section), the Mathematics Teachers Society (formerly the Mathematical Pedagogical Section) and the Physical Pedagogy Society (formerly the Physical Pedagogical Section). Each section has its own structure and bodies, publishes its membership bulletin and organizes meetings, seminars, conferences and further activities.²⁴

²³ The past Presidents were significant scientists, university professors and important representatives of scientific a cultural life in Czechoslovakia, respectively in the Czech Republic (for example Bohumil Bydžovský, Vladimír Kořínek, František Závíška, Miroslav Valouch, Josef Novák, Ivan Úlehla, Jaroslav Kurzweil, Štefan Zajac).

²⁴ For more information on current activities see <http://www.jcmf.cz/index.html?l=en>.

Communications :

(I) Call for Proposals and Organizers for Special Sessions in IVMS 2011 and 2012

The International Video Conferences of Mathematical Sciences (IVMS) can be held upon request of the ISMS members. The ISMS members can organize sessions in the IVMS. These sessions will be devoted to special fields of study, for example Fixed point theory and its applications. The organizers of each session will decide the type of the videoconference: presentation of original papers (contributed and/or invited papers) and/or expository articles, or tutorials.

The IVMS will be held using TANDBERG 6000 or TANDBERG 550 at Nakanoshima Center of Osaka University. Your institutions can be connected with the system as far as your system satisfies the ITU-T standards.

Organizers should appoint invited speakers and call for papers for their sessions. The selection of the papers is left to the organizer's own choice. They should inform the ISMS of their programs with the titles and author's names of the papers. They should send us the following data from the following URL.

http://www.jams.or.jp/hp/ivms_organizers.html

- (1) Name of the organizer
- (2) E-mail address
- (3) Title of the planned special session
- (4) Names and affiliations of the co-organizers of the joint universities/societies , if any
- (5) Name(s) of the invited speakers, if any.

The ISMS:

(I) Contributions (Gift to the ISMS)

We deeply appreciate your generous contributions to support the activities of our society. The donation are used (1) to make medals for the new prizes (Kitagawa Prize, Kunugi Prize, and ISMS Prize), (2) to support the IVMS at Osaka University Nakanoshima Center, and (3) for a special fund designated by the contributors.

Your remittance to the following accounts of ours will be very much appreciated.

- (1) Through a post office, remit to our giro account (in Yen only):
No. 00930-1-11872, Japanese Association of Mathematical Sciences (JAMS)
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Call for Papers for SCMJ :

(I) Call for Papers for SCMJ

Scientiae Mathematicae Japonicae(SCMJ) calls for excellent papers.

- (1) Authors should choose one of the editors in the Board of Editors and send their papers directly to him/her for refereeing which promises **quick refereeing and publication**.
- (2) If the SCMJ authors prepare their files in the ISMS standard format (Js.), the lead time from acceptance to the online publication **will be extremely short or nil**.
- (3) For the files in the categories of Paper or Tex, we will publish the paper on the Web as soon as we receive the corrected galley proof from the authors.
- (4) The Journal is reviewed by **Mathematical Review** and **Zentralblatt from cover to cover**.

(A) Submission

Authors are requested to choose one of the editors of the SCMJ Board of Editors and send their papers, satisfying all of the following conditions, **directly to the editor as well as to the ISMS**. The editors list can be obtained from (i) <http://www.jams.or.jp/Editors.pdf> or (ii) “ Board of Editors” of SCMJ(Vol.72, No. 1, July 2010).

- **To the editor’s e-mail address**; Form for Submission (with the abstract)
- **To the editor**: Two hard copies of your paper and two hard copies of the Form for Submission (with the abstract) to the editor’s postal address **or** a pdf file to the editor’s e-mail address.
- **To the e-mail address of the ISMS** (See <http://www.jams.or.jp/hp/submission f.html>); Form for Submission (with the abstract)
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The received date of the paper is the date when the editorial office receives the paper together with the Form for Submission, and not necessarily the date when the editors receive them.

The e-mail Form for Submission is mandatory to support the editor-receive-system, not to waste the precious research time of the editors and promote efficiency in the editorial procedure.

(B) Abstract

Every paper should contain an abstract. Try to limit your abstract to 20 lines when typed in TeX. The abstract should be a kind of mini research announcement which is **self-contained** and gives **the overview** of your paper. Abstracts of accepted papers are **very rapidly displayed** on the ISMS home page and are announced **all over the world via Internet**.

(C) Data

The full postal address, telephone and facsimile numbers, e-mail address of the author should be specified at the bottom of the last page of the manuscript. 2000 AMS Subject Classification and Keywords should be written both in Paper, E-mail Form and at the **footnote** on the first page of the manuscript.

(D) Receipt

ISMS will send a letter of receipt when we receive a hard copy, a Paper Form and E-mail Form (if the author has e-mail facility). The received date is to be specified in the letter.

(E) Revision

If revision of your paper is necessary, the editor informs you directly. When you revise abstract of your paper in that case, you should send new Paper Form with new abstract and E-mail Form with new abstract also.

(F) Acceptance or Rejection, Page Charges

The ISMS will inform authors of **acceptance or rejection** of their papers **by e-mail**.

Authors should choose one of the following 3 types of his final draft he will send after acceptance of his paper, (1) **P**: Paper draft only (2) **T**: Paper prepared using TEX and its source file (3) **Js**: Paper prepared using TEX with ISMS style file, and its source file.

List of the page charges for SCMJ

Every accepted paper is charged ① **¥1,000(US\$10, €7) as handling charges** plus ② **page charges**. The page charges per printed page are reduced as follows.

	ISMS members	Non-members
P	¥ 3,500 (US\$35, €23)	¥ 4,000 (US\$40, €27)
Tex	¥ 2,000 (US\$20, €14)	¥ 2,500 (US\$25, €17)
LateX2e, LaTeX	¥ 700 (US\$ 7, € 4)	¥ 1,000 (US\$10, €7)
Js (ISMS style file)	¥ 500 (US\$ 5, € 3)	¥ 800 (US\$ 8, €5)

The above page charges include 20 offprints. The additional page charge may be required for the figures contained in the papers. For more information, see our Web Page.

1) **Js** (ISMS style TeX) files mean the files which are ready for publication without any process by our Publication Dept.

Please note whether the file meets the requirement of the ISMS style or not **is judged by ISMS Publication Dept.**

Js files can be made using the ISMS style file for LaTeX, or LaTeX2e, which can be downloaded from ISMS Web Page.

The procedure to make Js files :

- (a) Prepare your paper in LaTeX, or LaTeX 2e.
- (b) Use the following ISMS style file to make your paper "ISMS style TeX" (Js). (The ISMS style files can be obtained from ISMS Web Pages.)
If your paper contains graphs or figures which cannot be processed even in LaTeX(2e), make them EPS (Encapsulated Post Script) files and then PDF files.

(G) After Acceptance

If the paper is accepted, P authors are requested to send the following (1) & (2), T and Js authors (1) – (4).

(1) A hard copy of the final draft(for publishing)

- (2) Paper Form for WWW
- (3) The source file of the final draft in TeX, by e-mail or on diskette.
- (4) E-mail Form for WWW

(H) Proofreading

ISMS will send a galley proof to P and T authors only but **not to Js authors**. We regard the final files sent by Js authors as ready for publication.

(I) Offprints

Every author can obtain a **password to read his paper and** can make **as many offprints as they want**, using Acrobat Reader.

(J) Online version of SCMJ

The full texts of the accepted papers will be located on the online version of SCMJ in the following two manners from Vol.66, No. 1 (July 2007).

- (1) A list of papers in the order of the accepted date.
- (2) A list of accepted papers organized by field of specialization with a link to (1). The field of specialization of the accepted papers will be chosen by the authors in the fields of f-1 - f-14.
(See a list on page 25)

(II) Items required in “ Form for Submission ”

Give the following information by filling in the items on the list.

105. Write the name of the editors whom you will send your manuscript to be refereed.
 110. Date of dispatching this form
 120. Title of Paper
 125. Abbreviated Title (Running Title) of Paper (**Less than 35 letters**)
 130. The field of specialization in the fields of f-1~f-14 of the paper (See page 5)
 132. Keywords and phrases
 135. Number of Pages of the manuscript
 140. Number of Authors
 151. First author's name, affiliation (institution /university) and its postal address
 152. Second author's name, affiliation (institution /university) and its postal address
 153. Third author's name, affiliation (institution /university) and its postal address
- In typing author's names the order should be Last (Family) name, First name, Middle name. In case there are four authors or more, please write their names, affiliations and their postal addresses as items 154, 155. . . . If the authors are temporarily studying or teaching in Japan, please type the affiliations (or universities they graduated from) in their own countries.
170. Author's name to whom correspondences should be sent
 180. Author's address of 170
 190. Phone
 195. Fax
 197. E-mail address
200. Please type P or T or Js (see CALL FOR PAPERS (F)).
For the following 201~210 items, authors T and Js are requested to answer. Authors P may skip these items.
201. Do you send your files via e-mail or on diskette? Please type “e-mail” / “diskette” or both.
 202. What kind of TeX; do you use?
Please type, LaTeX(old version), LaTeX2e or other TeX
 203. Please type you platform you are using. Type WINDOWS, Macintosh or others.
 204. If you have used the ISMS style file, then please type the name of the style file you have used.
 207. Are you using figures in your paper?
If yes, please type `a figure' or `figures', and type also they will be processed in LaTeX or not?
 208. Is your electronic graphics file (if any) is saved in Encapsulated PostScript (EPS) format or in TIFF, PICT, GIF or other standard graphics format?
 209. If you send the above files with attachments, you should also send its extension name . Please type the file name and the extension name.
 210. If you use compress utility of your file, please type ZIP, gzip, tar, tar + gzip, tar + compress, or etc.
 213. Are you a member of the ISMS? If yes, type M. If you are not a member, type NM in case you apply for the membership together with an application form, and type NN in case you do not apply for the membership.
 214. What is the special field of the paper? Choose one of the category from f-1 - f-14. (See the next page.)
 217. Are you sure that you or your institution will pay the required page charge when this paper is accepted for publication? ; YES or NO.
 218. Signature
 219. Type Abstract of your paper **in Text file**. (If you use TeX file, you should write the kind of TeX as notes.)
 - 159, 179, 189. For Japanese Author(s), write 151~158, 170, 180 in Japanese.

Special Fields (f-1 - f-14)

- f-1. Mathematical logic, Set theory, Relative systems, Algebra systems
- f-2. Classical algebra, Number theory, Combinatorics, Cryptology
- f-3. Topology, Geometry, Imaging
- f-4. Real analysis, Complex analysis
- f-5. Functional analysis, Operator theory
- f-6. Differential equations, Integral equations, Functional equation, Numerical analysis
- f-7. Infinite dimensional dynamical systems, Inverse problems
- f-8. Fluid dynamics, Atmospheric research, Rheology, Computer aided design, Control theory, Nanoscience
- f-9. Probability theory, Statistics, Experimental Design, Quality control
- f-10. Operations Research, Decision theory, Queuing theory, Scheduling, Mathematical finance, Mathematical economics
- f-11. Informatics, Pattern recognition, Imaging, Computer science, Computer simulation
- f-12. Biomathematics, Proteomics, Imaging, Bioscience, System biology
- f-13. Mathematical education, History of mathematics
- f-14. Over several fields (Ex. Fixed point theory)

Call for ISMS Members
Call for Academic and Institutional Members

Discounted subscription price: When organizations become the Academic and Institutional Members of the ISMS, they can subscribe our journal *Scientiae Mathematicae Japonicae* at the yearly price of US\$300. At this price, they can add the subscription of the online version upon their request.

Invitation of two associate members: We would like to invite two persons from the organizations to the associate members with no membership fees. The two persons will enjoy almost the same privileges as the individual members do including the discount of the page charge. Although the associate members cannot have their own ID Name and Password to read the online version of SCMJ, they can read the online version of SCMJ at their organization.

To apply for the Academic and Institutional Member of ISMS, please use the following application form.

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Subscription of SCMJ Check one of the two.	Print (US\$300)	Print + Online (US\$300)
University (Institution)		
Department		
Postal Address where SCMJ should be sent		
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Person in charge	Name: Signature:	
Payment Check one of the two.	Bank transfer	Credit Card (Visa, Master)
Name of Associate Membership	1.	
	2.	

Call for Regular Members

ISMS Membership Dues

A new category "life member" has been established and can be applied for from 2005. An eligible member may become a life member by making a one-time payment of dues. A member who has been an ISMS member for ten years or more is eligible for a life member. The amounts of dues are : ¥70,000 for the domestic members, US\$ 600 (€480) for the foreign members, and US\$ 500 (€400) for the members in developing countries.

We have reduced the ISMS membership dues since 2001 and copies of the printed journal have not been distributed to the members, free of charge. Instead, we give User Name and Password to each member so that he/she can view or print out the full text of the papers published in SCMJ except papers in the international plaza from our Web site (<http://www.jams.or.jp>).

The Membership Dues for each category is as follows. Applications for the 3-year members can be made only in 2005 and in every three years.

Membership Dues for this year

Categories	Domestic	Overseas	Developing countries
1-year member (1A)	A1: ¥9,000	F1: US\$75, €60	D1: US\$45, €36
3-year member (3A)	A3: ¥24,000	F3: US\$200, €160	D3: US\$117, €93
1-year students or aged (1S)	SA1: ¥5,000	SF1: US\$40, €32	SD1: US\$27, €21
3-year students or aged (3S)	SA3: ¥12,000	SF3: US\$100, €80	SD3: US\$71, €57
Life member* (L)	AL: ¥90,000	FL: US\$740, €592	DL: US\$616, €493

*The members who have been the ISMS members for more than 10 years are eligible for this category. The categories 1S and 3S are for students or persons over 70 years old. The figure 1 and 3 means a year and 3 years respectively. Category D is for those who reside in the countries of Eastern Europe, CIS or developing countries.

Payment Instructions

Payment can be made through a post office or a bank, or by credit card. Members may choose the most convenient way of remittance. Please note that we do not accept payment by bank drafts (checks). For more information, please refer to an invoice.

Methods of Overseas Payment:

Payment can be made through (1) a post office, (2) a bank, (3) by credit card, or (4) UNESCO Coupons.

Authors or members may choose the most convenient way of remittance as are shown below. Please note that **we do not accept payment by bank drafts (checks)**.

(1) Remittance through a post office to our giro account No. 00930-1-11872 or send International Postal Money Order to our postal address (2) Remittance through a bank to our account No. 94103518 at Shinsaibashi Branch of CITIBANK (3) **Payment by credit cards** (AMEX, VISA, MASTER or NICOS), or (4) Payment by UNESCO Coupons.

Methods of Domestic Payment:

Make remittance to:

(1) our Post Office Transfer Account - 00930-3-73982 or

(2) our account No.1565679 at SUMITOMO BANK, Sakai, Osaka, Japan.

All of the correspondences concerning subscriptions, back numbers, individual and institutional memberships, should be addressed to the Publications Department, International Society for Mathematical Sciences.

Membership Application Form

To determine what membership category you are eligible for, read "Join ISMS" on the inside of the back cover.

1. Name: Family Name, First Name, Middle Name (in this order)

2. Home Address

3. Name of Firm or Institution affiliation

4. Postal address to which correspondence should be sent

5. e-mail address

6. Telephone Number, Fax Number

7. Membership Category

8. Panel (Please choose one out of the following 14panels in the page 26 and write the panel number. You could choose one or more.)

9. Would you like to buy the printed copies of SCMJ, whose prices a year are US\$60(6,000yen) for 1-year-members(A1, F1, D1, SA1, SF1, SD1)and US\$55(5,500yen) for 3-year-members(A3, F3, D3, SA3, SF3, SD3) ? Type YES or NO.

10. If you apply for an aged member (70 years old or over), please type the year of your birth.

11. If you wish to be a student member, please verify.

12. Is your university (institution) an Academic or Institutional Member of the ISMS? Yes or No.

13. If the answer of 12 is Yes, please answer the following. Are you designated associate member by your university (institution)?

14. Date

15. Signature

For Japanese Applicants, please send two application forms, one in English and the other in Japanese.

I wish to enroll as a member of ISMS and will pay to International Society for Mathematical Sciences the annual dues upon presentation of an invoice. Copies of *Mathematica Japonica*, *Scientiae Mathematicae* and *Scientiae Mathematicae Japonicae* received as an ISMS member will be for my personal use and shall not be placed in institutional, university or other libraries or organizations, nor can membership subscriptions be used for library purposes.

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Join ISMS !

ISMS Publications: We published **Mathematica Japonica (M.J.)**, which enjoyed an international reputation, for about sixty years in print and its offshoot **Scientiae Mathematicae (SCM)** both online and in print. In January 2001, the two publications were unified and changed to **Scientiae Mathematicae Japonicae (SCMJ)**, which is the “21st Century New Unified Series of Mathematica Japonica and Scientiae Mathematicae” and published both online and in print. Ahead of this, the online version of SCMJ was first published in September 2000. The number of the annual total pages of the print version has been from 900 to 1,200 pages in six issues since January 1978. The whole number of SCMJ exceeds 240, which is the largest amount in the publications of mathematical sciences in Japan. The features of SCMJ are:

- 1) About 90 eminent professors and researchers of not only Japan but also 20 foreign countries join the Editorial Board. The submitted papers are received directly by the editors and are refereed quickly. The accepted papers are published online with no lead time after compiling or proofreading. SCMJ is reviewed by Mathematical Review and Zentralblatt from cover to cover.
- 2) SCMJ is distributed to many libraries of the world. The papers in SCMJ are introduced to the relevant research groups for the positive exchanges between researchers.
- 3) The original papers and surveys of distinguished mathematical scientist appear in every issue of SCMJ. The section called “International Plaza” of SCMJ has very interesting expository papers written by the eminent mathematical scientist of the world. Presentations of recent research frontier including award lectures by the winners of the ISMS Prize or Shimizu Prize are made.
- 4) **ISMS Annual Meeting:** Many researchers of ISMS members and non-members gather and take time to make presentations and discussions in their research groups every year.
- 5) The ISMS holds inter-regional videoconferences called **International Videoconference of Mathematical Sciences (IVMS)** via internet. There is no need for the participants to travel abroad.

Privileges to ISMS Members: (1) Free access (**including printing out**) to the online version of SCMJ, (2) Discounted price for the printed version of SCMJ (See **Table 1**), (3) Discounted page charges (See **Table 2**).

Privileges to Institutional Members: (1) Two associate members can be registered, free of charge, from an institution. (2) The discounted page charges (Table 2) are applied to the associate members.

Table 1: Subscription Price

	Individual 1-year mem.	Individual 3-year mem.	Institutional member	List Price
Print / year	¥ 6,000 US\$60, €48	¥ 5,500 * US\$55, €44	¥ 33,000 US\$300, €240	¥ 45,000 US\$400, €320
Online/year	Free	Free		
Online+Print / year	¥ 6,000 US\$60, €48	¥ 5,500 * US\$55, €44	¥ 33,000 US\$300, €240	¥ 45,000 US\$400, €320

Postal charge is US\$2 (€1.6) per issue. *In case three-year members make the payment at a time in advance, the price for 3 years is ¥ 15,000 (US\$150, €120). The authors can buy a copy of the print version at a price of ¥ 1,200 (US\$12) per issue including postage.

Table 2: Publication charge for accepted papers

The charge system for accepted papers has been changed and the basic publication charge has been introduced to reduce the total publication charge. The publication charge consists of the **basic publication charge (¥1,000(US\$10, €7))** and the **page charge**. The page charges per printed page are **drastically reduced** as follows.

	ISMS members	Non-members
p	¥ 3,500 (US\$35, € 23)	¥ 4,000 (US\$40, €27)
Tex	¥ 2,000 (US\$20, € 14)	¥ 2,500 (US\$25, €17)
LateX2e, LaTeX	¥ 700 (US\$ 7, € 4)	¥ 1,000 (US\$10, € 7)
Js (ISMS style file)	¥ 500 (US\$ 5, € 3)	¥ 800 (US\$ 8, € 5)

Table 3: Membership Dues for this year

Categories	Domestic	Overseas	Developing countries
1-year member (1A)	A1: ¥ 9,000	F1: US\$75 , €60	D1: US\$45, €36
3-year member (3A)	A3: ¥ 24,000	F3: US\$200, €160	D3: US\$117, €93
1-year students or aged (1S)	SA1: ¥ 5,000	SF1: US\$40, €32	SD1: US\$27, €21
3-year students or aged (3S)	SA3: ¥12,000	SF3: US\$100, €80	SD3: US\$71, €57
Life member* (L)	AL: ¥ 90,000	FL: US\$740, €592	DL: US\$616, €493

*The members who have been the ISMS members for more than 10 years are eligible for this category. The categories 1S and 3S are for students or persons over 70 years old.