

Annual report of the Finnish Academy of Science and Letters for 2014

Olli Martio

Higher education policy discussions during the year 2014 were dominated by new proposals for the financing of scientific research and teaching and for making full use of the results achieved by science. A number of government decisions were taken that affected the direction in which scientific research was expected to proceed in Finland, and a sum of 55.6 million euros was set aside for “strategic research”, most of which was to be distributed during 2015 in accordance with guidelines laid down under the themes “Changing institutions and the exploitation of breakthroughs in technology”, “A climate-neutral and resource-sparing society” and “Equality and its promotion”. The boosting of exports was well to the fore in all these themes. This government initiative met with a somewhat mixed reception in research circles, however, as it was felt to represent a clear directive from above and it was feared that the funds devoted to it would be taken away from other research functions, particularly basic research. The Finnish Academy of Science and Letters, for example, has always underlined the importance of basic research for the country’s future.

Another important issue during the year was the impending adoption of a new

model for the funding of the nation’s universities, which would effectively reduce the weight attached to the numbers of doctorates earned and increase the emphasis placed on the quality of scientific publications in connection with the distribution of funds. One should not underestimate the significance of the model accepted for this purpose, as witnessed by the over-production of doctors in recent times and the fact that the quality of research papers is assessed at present on the basis of the channels through which they are published. As is to be expected, researchers have only now begun to take an interest in this matter, so that there has been growing criticism of the classification used at present. The Finnish Academy of Science and Letters cannot wholeheartedly support the plans for a more detailed classification of publication channels and adjustments to the numbers of points assigned, however. In the first place, the outcome is likely to be an escalation in the competition between university departments and their members for the accumulation of these points, and secondly, many Academy members have taken part in drawing up the necessary “ranking lists” and have seen the drawbacks inherent in the system. In common with EASAC, the academies of science in the

USA and many international scientific organizations, the Academy has discussed the faults in this ranking system and has warned against its uncritical adoption, especially as a means of evaluating the work of young scientists.

The Finnish Academy of Science and Letters also attaches great importance to the proposal put forward by Kari Raivio, former chancellor of the University of Helsinki, for the appointing of a scientific advisor to the Cabinet and has arranged a number of meetings to discuss his report. The proposal has also received unreserved support within the scientific community. Corresponding positions have been created in many other countries and have enjoyed the support of their national academies of science. The board of the Finnish Academy of Science and Letters is prepared to support the idea if necessary by employing a scientific secretary whose job it would be to take part in coordinating and organizing advisory services dealing with scientific matters. There are many Academy members with the necessary knowledge and expertise for suggesting where a suitable person to hold the position of scientific advisor to the Cabinet might be found, but unfortunately many people in both political and scientific circles have quite the wrong idea about this advisor. The intention is not that this person should direct the country's science policy but that he or she should make the findings and opinions of the scientific community available to those working in the political or administrative sphere.

The Finnish Academy of Science and Letters has continued to exert pressure on behalf of basic research by concentrating primarily on financing young scientists, and in this connection its Governing Board engaged in serious discussions during 2014 concerning an annual allowance of

approx. 1600 euros for "general costs" to be added to each postgraduate grant and paid directly to the university concerned. The intention is that this should take effect as from 2015. Other suggestions for the financing of basic research through the medium of the Academy's funds and the foundations that it administers have also been considered.

The grants awarded from the Väisälä and Eino Jutikkala funds in 2014 went predominantly to postgraduates, and it is noticeable that the sums concerned have increased steadily from year to year, while the numbers of applicants have also increased, especially in the case of the Eino Jutikkala Fund, where less than 5% of the applications were successful. The grants made from the Academy's Mathematics Fund were chiefly intended to support conferences to be arranged by Finns or participation by individual scholars in conferences held abroad. The Academy also continued to administer the assets of the Emil Öhmann Foundation and the Hilikka and Otto Brusiin Foundation, grants from which could be applied for in conjunction with those from the Jutikkala Fund. The Emil Öhmann Foundation supports studies in German language and culture, and the Hilikka and Otto Brusiin Foundation legal studies and research. The total value of the grants distributed by the Academy in recent years has been well in excess of two million euros annually, with about 85% of this sum going to young scientists.

The Academy also revised its own strategy during the year, shifting the emphasis more towards higher education policy and attempts to "introduce science into politics". Details of this new strategy can be found on the Academy's website, which also contains a forum for contributions on the same themes as mentioned above.

These web pages were accessed over 40,000 times during 2014, implying a couple of thousand more visits than in the previous year. The work of re-designing the pages will continue into 2015.

The communication of information to members has been improved by means of membership letters containing not only notices about forthcoming meetings but also details of the decisions taken by the Governing Board, other meetings dealing with scientific matters, statements and reports presented on scientific issues at home and abroad and news items.

Among the prizes traditionally presented by the Finnish Academy of Science and Letters, the Academy Award for 2014 went to Markku Leskelä, professor of chemistry at the University of Helsinki, the Jutikkala Prize for work in the humanities to Mirka Hintsanen, professor of psychology at the University of Oulu, and the Väisälä Prizes to Mikko Salo, professor of mathematics, and Paul Greenlees, professor of physics, both at the University of Jyväskylä. Each of these prizes was worth 15,000 euros. The Academy also recommended a number of Finnish scholars for international scientific awards.

Having conferred honorary membership on Risto Ihmuotila, former chancellor of the University of Helsinki, in the course of 2014, the Academy had a total of 11 honorary members, 708 Finnish members and 178 external members at the end of the year.

As has been the custom in recent times, two of the regular monthly meetings were devoted to the distribution of grants and prizes from the Väisälä Foundation, the Eino Jutikkala Fund and the Emil Öhmann and Otto and Hilikka Brusin Foundations, together with papers presented by the recipients of the prizes. The meeting in May

was a panel discussion involving all the members who had served as chairman of the Academy since 2002, on the theme "Where is the Academy of Science and Letters heading?"

The Academy Club for Young Scientists entered its sixth year in autumn 2014. The club is intended to provide young researchers with an opportunity to tell others, and the public at large, about their field of study, and its members are selected on the basis of recommendations from the various subject groups within the Academy for a period of one year, the requirements being that less than five years should have elapsed since they gained their doctorate and they should have continued to be successful in their research during that time. Recordings of the meetings have been made available on YouTube and have attracted a wide audience. Many academies of science in other countries have similar schemes nowadays.

In the matter of publications we have continued to progress towards a more open policy. The Kannanottoja (Statements of Opinion) series has always been freely available on the internet since its inauguration, and the mathematics series *Ann. Acad. Sci. Fenn. Math.* has similarly been accessible on the Academy's web pages for some time. During 2014 all the publications in the series from 1969 onwards could be consulted on these web pages. Folklore Fellows' Communications has also moved over to publishing on the internet.

Governing Board

The previous vice-chairman, Eva-Mari Aro, was elected chairman of the Finnish Academy of Science and Letters at the Annual Meeting held on 11th April 2014, and Kirsi Tirri, previously an ordinary member of the

board, was elected vice-chairman. Olli Martio continued as secretary-general and chairman of the Publishing Committee, Pekka Ilmakunnas as treasurer, Erkki Hollo as secretary of the Section of the Humanities and Olavi Nevanlinna as secretary of the Section of Science. Kimmo Kontula continued as an ordinary member of the board, and Pertti Haapala, Anne Kovalainen and Jukka Seppälä were elected as new board members.

The Governing Board held nine meetings in the course of the year, and also an additional meeting in May to consider proposals for the Academy's new strategy.

Publications

Olli Martio, secretary-general and editor-in-chief of the two *Mathematica* series, was re-elected as chairman of the Publishing Committee, and Raija-Leena Punamäki, representing the *Statements of Opinion* series, as vice-chairman. The other members were Jaakko Hämeen-Anttila, chief editor of the *Humaniora* series, Pekka Hakamies, chief

editor of *Folklore Fellows' Communications (FFC)* and Markku Löytönen, editor of the *Geologica-Geographica* series. Dr. Mika Koskenoja continued to act as the committee's secretary. The purpose of the Publishing Committee is to coordinate the Academy's publishing activities in the *Mathematica*, *Mathematica Dissertationes*, *Geologica-Geographica*, *FFC* and *Humaniora* series, and the *Statements of Opinion* series. The Publishing Committee met twice during the year.

The joint publications committee of the Finnish Academy of Science and Letters and the Finnish Society of Sciences and Letters did not meet during the year. The committee's chairman is Professor Jaakko Frösén of the Finnish Society of Sciences and Letters, with Jaakko Hämeen-Anttila of the Academy of Science and Letters as vice-chairman. The secretary is Dr. Mika Koskenoja.

As in previous years, the Academy continued to publish under the titles of *Annales Academiae Scientiarum Fennicae*, *Folklore Fellows' Communications* and *Kannanottoja (Statements of Opinion)*. The

The Governing Board 2014

Member	Position	Term of office
Jorma Sipilä	chairman	2012–2014
Eva-Mari Aro	vice-chairman	2012–2014
	chairman	2014–2016
Kirsi Tirri	member	2013–2014
	vice-chairman	2014–2016
Olli Martio	secretary-general	2014–2019
	chairman, Publishing Committee	2014–2019
Pekka Ilmakunnas	treasurer	2014–2019
Erkki Hollo	secretary, Section of Humanities	2014–2019
Olavi Nevanlinna	secretary, Section of Science	2014–2019
Raija-Leena Punamäki	vice-chairman, Publishing Committee	2011–2014
Keijo Hämäläinen	member	2013–2014
Pertti Haapala	member	2014–2015
Kimmo Kontula	member	2014–2015
Anne Kovalainen	member	2014–2015
Jukka Seppälä	member	2014–2015

Mathematica series and its subordinate series Mathematica Dissertationes are open access features on the Academy's web pages, and all the issues in these series since their inception in 1975 were made available on the web pages during 2014. The Mathematica series itself was accessed more than 12,000 times in the course of the year. The FF Network Magazine is freely accessible on the FFC series website.

The Kannanototja (Statements of Opinion) is also available on the Academy's website and was accessed frequently in 2014, with almost 1900 readers consulting the various statements during the year. The guidelines for this series were revised and updated at the end of the year.

A total of 60 research papers and statements of opinion were published in 2014, amounting to 2551 pages, as follows:

- Mathematica, 55 papers, 981 pages
- Humaniora, 3 papers, 1032 pages
- FFC, 2 papers, 538 pages

Also published during the year were:

- FF Network magazine, 2 issues, 64 pages
- Vuosikirja – Year Book 2013, 180 pages

The Academy received 130,700 euros in government assistance for its publishing work, and incomes from the sale of publications amounted to 29,388.56 euros (as compared with 29,850.43 euros in 2013). Distribution of the Academy's publications on an exchange basis took place through the Exchange Centre for Scientific Literature run by the Federation of Finnish Learned Societies. The Academy had 506 overseas exchange partners at the end of 2014 (542 in 2013), and a total of 902 copies of publications were sent out in this way (967 in 2013).

Academy publications have also been on sale through the Tiedekirja (Scientific Books) company, which opened a new, spa-



Suomalaisen Tiedeakatemian toimitilat sijaitsevat Helsingissä, osoitteessa Mariankatu 5 (2. kerros).

The Helsinki office of the Finnish Academy of Science and Letters is on the first floor at Mariankatu 5.

cious bookshop at Snellmaninkatu 13 in Helsinki, and also at the Gaudeamus company's new Kirja&Kahvi (Books and Coffee) bookshop in the Kaisa building, the premises of the University of Helsinki's central library.

Staff and administration of assets

The Property Management Group which advises the Governing Board on financial matters, monitoring the development of its assets and managing its investment portfolio, consisted of the chairman, vice-chairman, treasurer and secretary-general together with Erkki Hollo and Antti Tanskanen. The group held two meetings during the year. The Academy's assets were in the hands of Nordea, Union Bancaire Privée and LocalTa-

piola Asset Management. A significant proportion of the assets of both the Academy itself and the funds administered by it (the Vilho, Yrjö and Kalle Väisälä Foundation, the Eino Jutikkala Fund and the Mathematics Fund) are invested in shares in Finnish listed companies, but investments have increasingly been made in overseas companies, the finance market and bonds. The incomes from these sources are important for ensuring that the Academy can make its awards consistently from one year to the next, and the diversification of its investments has increased the role of their appreciation in value as far as the ability to award grants is concerned.

The total value of the investments made in the name of the Academy and its various funds was around 92.5 million euros at the end of 2014 and the book value of its property holdings approximately five million euros, in addition to which the foundations administered by it had further assets of around 3 million euros. The Academy also has property investments through the Väisälä Foundation at Unioninkatu 30 (owned jointly with the Alfred Kordelin Foundation, the Finnish Literature Society and the Niilo Helander Foundation) and Mariankatu 5, where its offices and the meeting room of the Governing Board are located. In addition, the Väisälä Foundation together with the Emil Öhmann Foundation also owns office space in a building administered by the housing company Asunto Oy Helsingin Bulevardinaukio, and the Eino Jutikkala Fund owns an apartment in Eira. The total annual yield from the Academy's assets is of the order of 7.5%.

The auditor of the Academy's accounts and administrative procedures in 2013 was the chartered accountant Markku Koskela, with the chartered accountant Riku Kärnä as his deputy. A financial report and audi-

tor's statement are to be found as appendices to this Yearbook.

The long-serving head of the Academy's office, Eija Jussila, B.B.A., retired on 1.8.2014, and Leila Sarajärvi, M.A., was appointed on 1.3.2014 to succeed her. The office secretary is Nina Rapelo, M.A., who is also responsible for the layout of the Academy's Yearbook. The treasurer is Pekka Ilmakunnas.

Meetings

The Academy held its meetings in the traditional manner on the second Monday of each month in the House of the Estates. The average attendance was 90 persons. No meeting was held in January. The February and May meetings were devoted to discussions on the opportunities that the Finnish Academy of Science and Letters has for influencing Finnish higher education policy and on the role of science in political decision-making processes, while both the March meeting and the Annual Meeting in April included discussions of changes to the Academy's rules. The proposed changes were approved unanimously on both occasions.

13th February: Towards a new flourishing of science in Finland

- A joint meeting of the Finnish Academy of Science and Letters and the Finnish Society of Sciences and Letters held in the Small Hall of the University of Helsinki
- Prof. Gunnar Öquist (Royal Swedish Academy of Sciences): Fostering breakthrough research – a comparative study
- Acad. Prof. Anne Kovalainen (University of Turku): The economic recession – an opportunity for a new rise in science
- Prof. Kari Raivio, former chancellor of the University of Helsinki: Measures for reviving university research



Eino Jutikkalan rahaston sekä Emil Öhmannin ja Hilikka ja Otto Brusiinin Säätiöiden apurahat jaettiin Säädytalon 13.10.2014. Tilaisuudessa Jutikkala-palkinto myönnettiin Oulun yliopiston psykologian professori Mirka Hintsaselle (2. oikealta).

The grants awarded by the Eino Jutikkala Fund and the Öhmann and Brusiin Foundations were presented at the House of the Estates on 13th October. On the same occasion the Jutikkala Prize was presented to Prof. Mirka Hintsanen, professor of psychology at the University of Oulu (2nd from right).

- Anita Lehikoinen, permanent secretary, Ministry of Education and Culture: Who will raise up Finnish science?
- These presentations were followed by a lively discussion chaired by Prof. Fred Karlsson of the Finnish Society of Sciences and Letters
- Prof. Markku Ollikainen (University of Helsinki): Economic growth and the environment
- A proposed change in the Academy's rules was discussed and approved unanimously.

11th April: Annual Meeting

- Prof. Markku Leskelä (University of Helsinki): Challenges facing experimental research in the natural sciences in Finland
- Presentation of the Annual Report for 2013 by the secretary-general, Olli Martio
- Prof. Matti Pohjola (Aalto University): Economic growth, welfare and sustainable development

- Conferral of honorary membership of the Finnish Academy of Science and Letters on its former chairman Risto Ihamuotila
- Presentation of the Academy Award for 2014 to Prof. Markku Leskelä
- Other statutory matters belonging to the agenda for the Annual Meeting were discussed, together with a proposed change in the Academy's rules, which was approved unanimously.

14th May: "Where is the Finnish Academy of Science and Letters heading?"

- Prof. Kari Raivio, former chancellor of the University of Helsinki: Science in the service of political decision-making – why and how? A presentation based on the speaker's report commissioned by the Council of State on the use of research findings in government decision-making processes.
- Panel discussion on the Academy's role in higher education policy, in which the panelists were the Academy's chairmen from 2002 onwards, professors Risto Ihamuotila, Kari Raivio, Sirpa Jalkanen, Simo Knuuttila, Arto Mustajoki and Jorma Sipilä.

8th September: Welcoming of new members

- Prof. Juha Siltala (University of Helsinki): When do people act collectively and when individually?
- Outi Vaarala (University of Helsinki, vice-president and director of research, Astra/Zeneca): The narcolepsia epidemic arising from the Pandemrix vaccine: what do we now know?
- Presentation of membership diplomas

13th October: Presentation of the Jutikkala Prize and grants from the Eino Jutikkala Fund and the Emil Öhmann and Hilikka and Otto Brusiin Foundations

- Prof. Mirka Hintsanen (University of Oulu): The significance of personality for health and welfare
- Emmi Lahti, Phil.Mag. (doctoral student, University of Jyväskylä): Magic in Finland in the second half of the 18th century
- Presentation of the Jutikkala Prize to Prof. Mirka Hintsanen
- Distribution of grants from the Eino Jutikkala Fund and the Brusiin and Öhmann Foundations

10th November: New prospects for bioeconomics

- Mika Aalto, industrial counsellor, Ministry of Employment and the Economy: Finland's bioeconomic strategy
- Research Prof. Merja Penttilä (VTT): The future role of biotechnology and synthetic biology in bioeconomics
- Anu Harkki (director of research, MTT): The role of natural resources research in the implementation of a bioeconomic strategy
- Prof. Outi Krause (Aalto University): High quality biofuels for transport use

8th December: Presentation of prizes and grants awarded by the Väisälä Foundation

- Prof. Mikko Salo (University of Jyväskylä): Gauge conditions in conformal geometry
- Prof. Paul Greenlees (University of Jyväskylä): On the shores of the island of stability
- Presentation of the Väisälä Prizes to Professors Mikko Salo and Paul Greenlees
- Presentation of grants awarded by the Väisälä Foundation

Revision of the Academy's rules and development of its activities

It was decided in spring 2014 to revise and update the rules governing the Academy's

activities. The chief drawback with the existing rules was that where the Academy's activities are planned in the framework of a calendar year, the Governing Board is elected in April to serve until the following April. This was felt to be problematical, especially in matters of financial responsibility, which have become more important than ever as the assets administered by the Academy through its funds and foundations have increased in magnitude.

The most far-reaching change made to the rules approved at the 2014 Annual Meeting was the decision to divide the agenda for that meeting into two parts: those matters to be decided upon at an Autumn Meeting (election of a governing board, other officials and auditors for the coming calendar year), and those to be decided upon at a Spring Meeting, i.e. the former Annual Meeting (approval of the annual report for the previous calendar year, discharge of the previous year's governing board from financial liability and the election of new members on the basis of proposals submitted by the sections and subject groups). In this way the new governing board would always take up office at the beginning of the new calendar year.

Alongside these changes to be made to the rules, discussions also extended to the role of the Academy itself, in which the hope was expressed that it could play a more prominent part in promoting the use of research findings in support of administrative and political decisions. When the Finnish Patent and Registration Office returned the new version of the rules for corrections at certain points, which meant that they had to be discussed in a further meeting of Academy members, the Governing Board decided in autumn 2014 to undertake a more extensive revision, with a view to developing the Academy's activities as well as addressing the above-mentioned administrative prob-

lems. This revision work, which continued into 2015, was aimed at ensuring a more active approach to the Academy's role in society at large and greater visibility within both the Finnish academic community and government decision-making. A further purpose of the revision was to render the Academy and its aims more immediate and comprehensible as far as its members are concerned.

The first step was to improve the format of the letter sent out to members as of autumn 2014, so that it included not only details of forthcoming meetings but also reports of past meetings and other activities and news items regarding the academic world in general. Work also began during autumn 2014 on enhancing the image of the Academy as a whole, a project that will continue into 2015 and include, among other things, the posting of new web pages.

Membership

The Annual Meeting on 11th April elected 31 new Finnish members and 7 new external members. The new members elected to the Section of Science from Finland were Professors Ari Jokinen (University of Jyväskylä), Jarkko Kari (University of Turku), Esko Kauppinen (Aalto University), Juha Kinnunen (Aalto University), Mikael Knip (University of Helsinki), Reko Leino (Åbo Akademi), Kaisa Miettinen (University of Jyväskylä), Pekka Niemelä (University of Turku), Mikko Niemi (University of Helsinki), Pertti A. J. Panula (University of Helsinki), Pasi Puttonen (University of Helsinki), Hanna Vehkamäki (University of Helsinki), Kristiina Wähälä (University of Helsinki), Academy Professors Moncef Gabbouj (Tampere University of Technology), Yrjö Helariutta (University of Helsinki) and Olli Raitakari (University of Turku) and Research Pro-

fessor Outi Vaarala (National Institute for Health and Welfare).

The new members elected to the Section of the Humanities were Professors Mervi Helkkula (University of Helsinki), Olli Koistinen (University of Turku), Matti Laine (Åbo Akademi), Markku Lanne (University of Helsinki), Jari Lavonen (University of Helsinki), Pirjo Markkola (University of Jyväskylä), Virpi Mäkinen (University of Helsinki), Heikkli Pihlajamäki (University of Helsinki), Tuula Sakaranaho (University of Helsinki), Jukka Sihvonen (University of Turku), Hannu Simola (University of Helsinki), Academy Professor Anne Kovalainen (University of Turku) and Administrative Counsellor Kari Kuusiniemi (Supreme Administrative Court).

The new external members elected were Professors Gunnel Engwall (Stockholm University), Ove Eriksson (Stockholm University), Björn Hånell (Swedish University of Agricultural Sciences), Ernest Lepore (Rutgers Center for Cognitive Science), Christoph Levin (Ludwig Maximilian University of Munich), Kenneth Ruud (University of Tromsø – The Arctic University of Norway) and Academy Professor Jan Klabbers (University of Helsinki).

The Academy mourned the deaths of the following Finnish members in the course of the year: Matti Bergström, Jorma Koivulehto, Tapani Lehtinen, K. J. Neuvonen, Reijo Raivola, Marjatta Rautio, Pekka Suvanto, Paavo Yli-Vakkuri and Asko Vilkuna. News was also received of the deaths of the following external members: Philip Converse, Maurice Duverger, Lars Gårding, William R. Mead, Patrick Suppes, Chuner Takami and Eric Welin.

The Academy had 708 Finnish members and 178 external members at the end of the year. The sections' membership quotas remained unchanged at 194 places in the Sec-

tion of Science and 139 in the Section of Humanities.

Grants and prizes

The **Finnish Academy of Science and Letters Award for 2014**, a sum of 15,000 euros, was presented to Markku Leskelä, professor of inorganic chemistry at the University of Helsinki, in recognition of his major scientific achievements.

2014 was the 50th year in which grants were awarded by the **Vilho, Yrjö and Kalle Väisälä Foundation**, their distribution having begun in 1964 with four scholarship to a total value of 6000 Fmk. Professor Vilho Väisälä had sent a letter to the Governing Board on 2nd April 1963 indicating that he wished to donate 3000 shares in the Vaisala Company to the Finnish Academy of Science and Letters provided that it could accept them under certain specific conditions. Now the resulting foundation is acknowledged as one of the major sources of financial support for research in the fields represented by the Väisälä brothers: mathematics, physics, geophysics, astronomy and meteorology.

The sum to be distributed in 2014 was almost 1.5 million euros, and a total of 377 applications had been received, representing an overall sum of about 7.7 million euros, exceeding the previous year's total by more than 300,000 euros. Thus, although the proposals were of a high standard, it was possible to make awards to only 89 applicants, less than a fourth of the total. These included 57 post-graduate research grants of 23,000 euros each for full-time scientific work over a period of one year and two grants covering part of a year for the production of a doctoral thesis. Grants for work abroad and other justifiable research purposes were made to a total value of around 150,000 euros. The grants went to a total of

nine universities and research institutes in Finland, in addition to which eight recipients were carrying out their research abroad.

It has also been possible for some years now to apply for grants from both the Väisälä Foundation and the Eino Jutikkala Fund for visits abroad of between two weeks' and three months' duration, and it would seem that the need for financial support for such visits is on the increase.

The Academy continued its custom dating from the year 2000 of awarding 1–3 **Väisälä Prizes** to distinguished researchers in the fields supported by the Väisälä Foundation who are still at an active stage in their career. This time the Governing Board decided to award two such prizes, of 15,000 euros each, to

- Mikko Salo, professor of mathematics, University of Jyväskylä, and
- Paul Greenlees, professor of physics, University of Jyväskylä.

The **Eino Jutikkala Fund** was distributing grants for research in the humanities for the seventh time. Altogether 522 applications were received, covering all the branches of study falling within the scope of the Section of Humanities and amounting to a total sum of about 11.7 million euros. Eventually 29 awards were made, totalling over 480,000 euros. These included 15 grants of 23,000 euros each to postgraduate students to enable full-time work for a year towards a doctoral thesis, eight grants for part of a year and five other research grants. These awards went altogether to four universities in Finland and to five scholars working in universities abroad. Travel grants were awarded to nine post-graduate applicants.

The **Jutikkala Prize** of 15,000 euros for a researcher in the humanities at an active stage in his or her career was presented to Mirka Hintsanen, professor of psychology at the University of Oulu. This was the fourth

year in which this annual prize had been awarded.

The **Mathematics Fund**, which chiefly distributes grants for the arranging of high-level mathematical conferences in Finland and for foreign travel, awarded additional travel grants to a total of 18,700 euros in 2014 to enable 11 scholars to attend the International Congress of Mathematicians in South Korea, bringing the overall sum paid out in grants during the year to 43,708.59 euros. This fund was set up in 1979 to support Finnish research in mathematics and is administered by a body of trustees elected for a five-year period from among the members of the Academy's mathematics group. The trustees in 2014 were Olli Lehto, Olli Martio (chairman), Olavi Nevanlinna, Pertti Mattila and Arto Salomaa.

Academy Club for Young Scientists

The Club for Young Scientists met 9 times during the year 2014 in the Academy's Väisälä Room. The papers presented and the discussions that followed may be seen on the Academy's website, where they were consulted almost 3,000 times during the year.

The purpose of the club, which began these activities in the academic year 2009–2010, is to give young scientists an opportunity to explain their own research to others working in different fields and to increase interdisciplinary discussions and understanding. Members are selected for one academic year at a time on the basis of recommendations from the Academy's subject groups.

Those taking part in the academic year 2013–2014 were:

- Anu Castaneda, Ph.D. (Psych.), National Institute for Health and Welfare (psychology)



Nuorten Akatemiaklubi kokoontuu Tiedeakatemian toimiston Väisälä-salissa yhdeksän kertaa toimintakautensa aikana. Kokousten videoinnit ovat nähtävillä Tiedeakatemian kotisivuilla www.acadsci.fi.

The Club for Young Scientists met in the Väisälä Room at the Academy's office nine times during 2014. Video recordings of its proceedings are available on the Academy's home pages (www.acadsci.fi).

- Elise Garritzen, P.D., University of Helsinki (history)
- Anton Granvik, Ph.D., Swedish School of Economics and Business Administration (Spanish philology)
- Aku Heinonen, Ph.D., University of Helsinki (geology)
- Kristiina Karhu, D.Sc. (Agr. & For.), University of Helsinki (environmental science)
- Assoc. Prof. Katri Kauppi, née Karjalainen, Aalto University (logistics)
- Docent Aleksi Lehikoinen, Finnish Museum of Natural History (biology)
- Kati Mikkola, Ph.D., Finnish Literature Society/University of Helsinki (comparative religion)
- Kirsi-Maria Nummila, Ph.D., University of Turku (Finnish language)
- Matti Rissanen, Ph.D., University of Helsinki (physical chemistry)
- Aleksi Saarela, Ph.D., University of Turku (mathematics)
- Antti Siirtola, Ph.D., Aalto University (computer science)
- Jaakko Seppälä, Ph.D., University of Helsinki (cinema and television studies)
- Daniel Strbian, D.Med.Sc., University of Helsinki (neurology)
- Pauli Virtanen, D.Sc. (Tech.), Aalto University (theoretical physics)
- Docent Juha Vuori, University of Turku (political science)

The new members selected for the academic year 2014-2015 were:

- Venla Bernelius, Ph.D., University of Helsinki (geography)
- Tapio Helin, D.Sc. (Tech.), University of Helsinki (mathematics)
- Linda Henriksson, D.Sc. (Tech.), Aalto University (neuroscience)
- Pauli Kallio, Ph.D., University of Turku (biochemistry)
- Pia Koivunen, Ph.D., University of Tampere (history)
- Emilia Korkea-aho, LL.D., University of Helsinki (European law)
- Eerika Koskinen-Koivisto, Ph.D., University of Helsinki (ethnology)
- Hemmo Laiho, Ph.D., University of Turku (philosophy)
- Ndegwa Henry Maina, D.Sc. (Food sciences), University of Helsinki (food chemistry)
- Juha Merilainen, D.Theol., University of Helsinki (church history)
- Jussi Naukkarinen, D.Med.Sc., Institute for Molecular Medicine (medicine)
- Pekka Peljo, D.Sc. (Tech.), École Polytechnique Fédérale de Lausanne, Switzerland (physical chemistry)
- Kirsi Peltonen, Ph.D. (Psych.), University of Tampere (psychology)
- Maura Ratia, Ph.D., University of Helsinki (English philology)
- Marjaana Rautalin, D.Soc.Sc., University of Tampere (sociology)
- Olli-Pekka Saira, D.Sc. (Tech.), Aalto University (technical physics)

International activities

The international activities of the Finnish academies of science and letters mostly take place nowadays under the auspices of the Council for Finnish Academies, the chairman of which was Marianne Stenius of

the Finnish Society of Sciences and Letters, with Olavi Nevanlinna of the Finnish Academy of Science and Letters as vice-chairman. The Academy's other representative on the council was Eva-Mari Aro.

Eva-Mari Aro was also the representative of the Finnish academies of science and letters on the board of the European Academies' Science Advisory Council (EASAC), a collaborative body representing the national academies of science of the EU member states, the purpose of which is to place impartial scientific knowledge at the disposal of influential European politicians and decision-makers. In this respect the year 2014 marked the initiation of collaboration with the EASAC energy panel, a project to be coordinated by the Finnish Academy of Science and Letters and due to be implemented from the beginning of 2015 onwards. This will be a highly significant undertaking with regard to policy decisions in the fields of energy and climate change both in Finland and in the EU as a whole.

A joint statement of opinion issued by nine European academies of science under the title *Mastering demographic change in Europe* was published in 2014, having been approved by the Academy's Governing Board in December 2013. The Academy's representative in the working group responsible for producing the document was Jorma Sipilä.

The Academy proposed a number of candidates for international prizes and awards in the course of the year.

Other activities

The Academy's science and research policy strategy was updated and the new strategy was announced on its web pages in December 2014. The purpose of the revision was to emphasize the Academy's policy role

and improve its ability to influence society's decision-making processes. One practical step towards this will be to encourage Finnish scientists to take part in drawing up international reports intended to communicate the results of scientific research to decision-makers, an activity that has increased markedly in recent times, especially in Europe.

The Academy responded to a number of requests for statements of opinion in the course of the year, the most important of which concerned the report submitted by Kari Raivio, former chancellor of the University of Helsinki, regarding the organization of a means whereby advice based on reliable research findings could be communicated to decision-makers in Finland. As is customary, the Governing Board also made proposals for new members of various working groups and representative bodies.

As a member of the Federation of Finnish Learned Societies, to which 264 societies operating in various fields were affiliated at the end of the year, the Academy was represented on its board by Ilkka Niiniluoto and Keijo Hämäläinen, with Kirsi Tirri and Olli Martio as their respective deputies. Ilkka Niiniluoto has been the board's chairman ever since his appointment as the Academy's representative in the year 2000. The Academy was represented at the Federation's annual general meeting on 31st March by Eva-Mari Aro and at its autumn meeting on 7th October by Olli Martio. Jorma Sipilä has been the Academy's representative on the organizing committee for Science Forum 2015.

The Academy was represented at the shareholders' meeting of Vaisala Oyj on 26th March by Pekka Ilmakunnas and at the annual meeting of the Finnish zoological and botanical publications committee on 26th March by Olli Martio, who also attend-

ed the annual meeting of the Finnish Society of Sciences and Letters on 29th April.

The Academy was represented in the long-term storage working group of the Data Services for Research project by Kimmo Pitkänen, developmental manager at the Finnish Institute for Molecular Medicine.

The Academy was represented on the governing board of the Alfred Kordelin Foundation by Markku Leskelä and Simo Knuutila, with Keijo Hämäläinen and Martti Nissinen as their respective deputies, and in the foundation's science section by Eija Kalso and Seppo Hentilä, with Hilikka Soininen and Jorma Sipilä as their deputies. Other representatives were Kirsi Tirri, with Leena Syrjälä as her deputy, in the popular education section, Heta Pyrhönen, with Marjatta Palander as her deputy, in the literature section and Ville Lukkarinen, with Annikka Waenerberg as his deputy, in the arts section.

Olavi Nevanlinna continued on the board of the Council of Finnish Foundations.

The Academy's representative on the board of the Sodankylä Observatory was Heikki Nevanlinna, with Risto Nieminen as his deputy. The representative on the board of the Helsinki University Museum Foundation was Juha Karhu of the University of Helsinki, and the representatives on the Finnish Zoological and Botanical Publishing Board were Pertti Uotila and Jukka Jernvall.

The following members were serving on Academy of Finland research councils at the end of 2014: Marja-Liisa Helasvuo, Matti Laine, Aila Lauha, Pirjo Markkola, Matti Sintonen and Juuso Välimäki on the Council for Culture and Society, Paula Eerola, Juha Kinnunen, Juha Pekka Lunkka, Jukka Pekola, Heikki Tenhu and Esko Ukkonen on the Council for Natural Sciences and Engineer-

ing, Jaakko Kaprio, Asla Pitkänen and Anu Wartiovaara on the Council for Health, and Erkki Korpimäki and Lea Sistonen on the Council for the Biosciences and the Envi-

ronment. Of these, Paula Eerola was acting in the capacity of chairman.

The year 2014 was the 107th in the Academy's active history.