



The Royal Academies for Science and the Arts of Belgium

THE ROYAL ACADEMIES FOR SCIENCE AND THE ARTS OF BELGIUM

ANNUAL REPORT 2009

Belgian Federal Science Policy Office

Table of Contents

1. The Royal Academies for Science and the Arts of Belgium		
New projects		
ALLEA		
EASAC	6	
H.R. NETWORK	6	
IAP	6	
ICSU	7	
UAI		
2. Annual Report of the National Committees		
1. The National Committee for Antarctic research		
2. The National Committee for Astronomy	9	
3. The National Committee for Biochemistry and Molecular Biology		
4. The National Committee for Biological Sciences		
5. The National Committee for Biomedical Engineering		
6. The National Committee for Biophysics		
7. The National Committee for Chemistry		
8. The National Committee for Crystallography		
9. The National Committee for Geodesy and Geophysics		
10. The National Committee for Geography		
11. The National Committee for Geological Sciences		
12. The National Committee for Logic, History and Philosop		
Sciences		
13. The National Committee for Mathematics		
14. The National Committee for Mechanics		
15. The National Committee for Microbiology		
16. The National Committee for Oceanology		
17. The National Committee for Physics		
18. The National Committee for Physiology and Pharmacol		
19. The National Committee for Psychological Science		
20. The National Committee for Quaternary Research		
21. The National Committee for Radio-Electricity		
22. The National Committee SCOPE - IGBP		
23. The National Committee for Soil Sciences		
24. The National Committee for Space Research	41	
3. National Committees Members	43	
Antarctic Research		
Astronomy		
Biochemistry and Molecular Biology		

Biological Sciences	44
Biomedical Engineering	
Biophysics	
Chemistry	45
Crystallography	45
Geodesy and Geophysics	46
Geography	
Geological Sciences	47
Logic, History and Philosophy of Sciences	47
Mathematics	
Mechanics	48
Microbiology	49
Oceanology	49
Physics	49
Physiology and Pharmacology	50
Psychological Sciences	50
Quaternary Research	50
Radio-Electricity	
SCOPE-IGBP	51
Soil Science	51
Space Research	52

1. The Royal Academies for Science and the Arts of Belgium

'The Royal Academies for Science and the Arts of Belgium' (RASAB)

Since March 2001, 'The Royal Academies for Science and the Arts of Belgium' (RASAB) follows the work of the National Committees.

The status of RASAB were published in the 'Moniteur Belge / Begisch Staatsblad' of April 19 2001.

Composition of the General Assembly		
KVAB	ARB	
Willems D., Chair	Richelle M., Chair	
Schamp N., Permanent Secretary	Hasquin H., Permanent Secretary	
Smeyers P. (Klasse van de Natuur-	Mawhin J. (Classe des Sciences)	
wetenschappen)	Debusscher G. (Classe des Lettres	
Witte, Barones E. (Klasse van de	et des Sciences Morales et	
Menswetenschappen)	Politiques)	
Laporte A. (Klasse van de Kunsten)	orte A. (Klasse van de Kunsten) Samyn P. (Classe des Beaux-Arts)	
Frimout D. (Klasse van de Technische		
Wetenschappen)		

Board of Directors	
KVAB	ARB
Willems D., Chair	Richelle M., Chair
Schamp N., Permanent Secretary	Hasquin L., Permanent Secretary

New projects

For the year 2009, RASAB received an increase of its budget for several new projects:

- The appointment of a 'liaison officer': this person will give more visibility to the European federations of Academies (EASAC, ALLEA, EU-ICSU,...) in the European institutions and increase the impact of their reports and other activities.
- RASAB wants to stimulate international scientific cooperation by funding scientists who want to perform or broaden their research during a 2 week stay in a foreign institute acknowledged by the Belgian Academies.
- Supporting the foundation of a National Congolese Academy.

Since this increase wasn't officially confirmed until the beginning of 2010, these projects only started in 2010.

ALLEA

All European Academies; a European federation of national Academies of Sciences and Humanities. ALLEA was founded in 1994 and is the Federation of 53 National Academies of Sciences and Humanities in 40 European countries.

On 16 and 17 november, their was an Extraordinary Strategy Meeting in Amsterdam, where RASAB was represented by prof. Dominique Willems, prof. Marc Richelle and prof. Niceas Schamp.

On 28 to 30 june, ALLEA organised the symposium "Towards a European Code of Conduct on Scientific Integrity?" where Belgium was represented by prof. Paul Van Houtte (member Klasse Natuurwetenschappen KVAB).

Report:

Bedoeling van deze vergadering was, de "Member Academies" de kans te geven hun informatie uit te wisselen over de praktijk in hun diverse landen, op de rol van hun Academie hierin, of hun visie hierop, en tot een consensus te komen over een tekst voor een "Code of Conduct". Deze tekst zal dan voorgesteld worden op het "2nd World Congress on Research Integrity" in Singapore, 21-22 juli 2010.

Overeenkomst werd bereikt over een tekst, waarvan de basisconcepten niet echt verschillen van die van onze eigen teksten (zie verder).

Verder werd veel aandacht besteed aan het probleem van "Good research conduct" wanneer het onderzoek gebeurt in internationale consortia (bijvoorbeeld Europese projecten).

Een andere belangrijke discussie ging over de rol die Academies kunnen spelen op het vlak van de bewaking van de Wetenschappelijke Integriteit. Twee luiken worden onderscheiden:

- het ontwikkelen van een nationale "Code of Conduct". Dat is in België gebeurd;

- actieve deelname in diverse organen belast met de opvolging van wetenschappelijke integriteit (met inbegrip van onderzoek naar inbreuken, voorstel tot sanctie, enz.). Tot nu toe werd deze rol in België overgelaten aan de Universiteiten. Op dit moment beraden ook

organisaties zoals het FWO, de Federale Overheidsdienst voor Wetenschapsbeleid zich erover of ze ook zo'n rol zouden kunnen spelen.

In a cooperation with IAP, ALLEA organized a meeting on the foundation of a European working group on science education. RASAB was represented by Luc Moens, vice-rector of the Ghent University, who will also be a member of the working group that starts in 2010.

EASAC

European Academies Science Advisory Council; EASAC – the European Academies Science Advisory Council – is formed by the national science academies of the EU Member States to enable them to collaborate with each other in providing advice to European policy-makers.

Prof. Niceas Schamp represented RASAB at the Council Meeting in Madrid on 4 to 6 June. On 3 and 4 december, RASAB hosted the EASAC Council Meeting in the Palace of the Academies.

On 11 June, the latest EASAC report "Transforming Europe's Electricity Supply: an infrastructure for a reliable, renewable and secure power system" was launched in The Centre in Brussels. Prof. Schamp gave an introduction on EASAC at this event. The report describes the the developments that are required in the planning, operation and infrastructure to establish a pan-European electricity grid. Prof. Ronnie Belmans (Klasse Technische Wetenschappen, KVAB), was one of the autors of the report.

H.R. NETWORK

The 'International Human Rights Network of Academies and Scholarly Societies' is a worldwide network of about 60 academies that assists scientists, scholars, engineers, and health professionals around the world who are subjected to severe repression solely for having nonviolently exercised their rights as promulgated by the Universal Declaration of Human Rights (UDHR). It also promotes human rights consciousness-raising and institutional commitment to human rights work among national academies and scholarly societies worldwide.

Belgium is represented by Prof. Marie-Claire Foblets (Klasse Menswetenschappen KVAB), who attended the meeting in Rabat on 21-23 May. At her proposal a human rights commission will be founded with representatives of all Classes of the ARB and the KVAB.

IAP

Interacademy Panel on International Sciences; IAP is a global network of the world's science academies, launched in 1993. Its primary goal is to help member academies work together to advise citizens and public officials on the scientific aspects of critical global issues. IAP is particularly interested in assisting young and small academies achieve these goals and, through the communication links and networks created by IAP activities, all academies will

be able to raise both their public profile among citizens and their influence among policy makers.

RASAB presented several experts to evaluate applications for IAP projects. In 2009 prof. Oscar Vanderborght (member of the National Committee for Biological Sciences) and prof. Jean Berlamont (Klasse Technische Wetenschappen KVAB and member of the National Committee for Oceanology) evaluated some applications.

ICSU

The International Council for Science is a non-governmental organization with a global membership of national scientific bodies (121 members) and international scientific unions (30 members). All National Committies are member of one of these international scientific unions.

On 29 and 30 September there was a meeting of the European subsection of ICSU in Podgorica, attended by prof. Schamp and prof. Dumortier (president of the National Council of the Scientific Unions). It was decided to put new life into the ICSU-Europe Member Forum, under management of RASAB.

UAI

The Union Académique Internationale, founded in 1919, represents a federation of Academies or groups of Academies having a national character and national learned institutions comparable with them, created for international cooperation. It has 39 member countries. The secretariat is managed by the ARB.

2. Annual Report of the National Committees

1. The National Committee for Antarctic research

According to its (revised) Terms of Reference, the goals of BNCAR are defined as follows:

General Terms of Reference

- **Forum** to bring members together to share information, identify common problems and to seek collective vision and endeavors for Belgian Antarctic (and Arctic) research.
- **Strategy** to identify scientific and operational issues of strategic importance with respect to Belgian Antarctic (and Arctic) research and activities.
- **Voice** to express a collective vision for the future Belgian Antarctic (and Arctic) research and activities in relation to developments in Belgium, Europe and the World.

Specific National Terms of Reference

- Participate in the Belgian coordination bodies concerning Antarctic research.
- Establish by means of invited speakers or surveys an overview (State of the Art) of Belgian Antarctic (and Arctic) research and activities.
- Organize whenever appropriate manifestations, symposia etc to promote Antarctic (and Arctic) research.
- Voice whenever appropriate or necessary our concerns about the state of the environment in Antarctica (and Arctica) within the framework of sustainable development.
- Promote Polar science in general within the Belgian context.

Specific International Terms of Reference

- BNCAR is the official representing body of Belgium within SCAR (Scientific Committee on Antarctic Research, ICSU). This implies that BNCAR members can participate in SCAR meetings, contribute to establish the Belgian annual report to SCAR and respond to particular information requests from SCAR.
- Give advice or respond on matters raised within international bodies such as the ATCM (Antarctic Treaty Consultative Meeting) and its CEP (Committee for Environmental Protection), CCAMLR (Convention for the Conservation of Antarctic Marine Resources), CCAS (Convention for the Conservation of Antarctic Seals), EPB (European Polar Board).
- Promote (Belgian) Polar Science at an international level.

Meetings of the Committee in 2009

Plenary meeting of 14 October 2009

The Committee reviewed its Terms of Reference, and internal rules of procedures, discussed the opportunity to include Arctic research in its interests, expressed the need to review and renew its membership, and decided to organize a meeting devoted to the future of Belgian Antarctic Research, as well as a IPY Symposium in 2010 devoted to the

contributions of the Belgian research to the achievements of the International Polar Year 2007-2009.

Plenary meeting of 10 December 2009

The meeting was entirely devoted to a "Forum on the Future of the Belgian Antarctic Research" and the redaction of the Committee's recommendations concerning the overarching themes and priorities in future Belgian Antarctic research, to be submitted to Belspo, at its requirement.

In addition to the plenary meetings the Board met 4 times during the year.

Other activities in 2009

Press and communication activities

- The Secretary and several members participated in the RTBF TV series "SOS Antarctique" and VRT series "SOS Antarctica" in January and February 2009.

- The Secretary participated to the documentaire "White Shadows" by Didier Volckaert on the *Belgica* expedition (première on 1 February 2009) and gave a interview to VTM (Pascal Vranckx) on 19 February 2009.

- The Vice-Chairman, the Secretary and several members of the Committee participated to the wide-audience TV broadcast of RTBF ``

Belgian SCAR representation and secretariat

As usual, BNCAR has pursued its role of SCAR representative in Belgium. The National Committee prepared the annual report to SCAR covering all Antarctic-related research done in Belgium. The report is distributed to the Antarctic researchers of SCAR country members through their SCAR National Committees.

BNCAR also forwarded to Belgian researchers all useful information from SCAR.

Documentation and information

BNCAR has continued to represent the Belgian Antarctic research by answering to information requests at Belgian or international level. The distribution of books related to Antarctica and Belgium has been pursued.

On the other hand, the National Committee has continued to manage its Antarctic documentation as well as the archives of the *Belgica* expedition held at the Royal Belgian Institute of Natural Sciences and part of the archives of the Belgian and Belgian-Dutch Antarctic Expeditions.

Future perspectives

- Organisation of an "International Polar Year 2007-2009 Symposium" under the auspices of RASAB and with the support of the Contact Forum initiative of KVAB, on 26 May 2010 at the Palace of the Academies.
- Participation to the XXXI statutory meeting of the Scientific Committee on Antarctic Research (SCAR) in Buenos Aires (30 July-13 August 2010), to the meeting of the SCAR Life Science Standing Committee and to the SCAR Open Science Conference.

2. The National Committee for Astronomy

The BNCA annual report used to be written by academic year; last year, the RASAB

asked the committee to refer to the civil years. This report is the first of this new series and covers thus the period from September 2008 to December 2009.

Astronomy & Astrophysics (A&A)

C. Sterken is the Belgian delegate in the A&A editorial board, where he represents the BNCA and introduces its potential questions or requests. He reported at each BNCA meeting about A&A matters, mentioning the important items about the journal politics and statistics, the rejection and acceptation rates, the mandates, the selection of a new publisher.

A summary is provided in each of the minutes of the BNCA meetings held this year. Documentation is also made available through the BNCA website, to which we refer for further information http://www.bnca.be.

Belgian National ESO Committee (BNEC)

Reports on the two BNEC meetings that took place on 22/05/2008 and 12/6/2009 were presented by its president, J. Surdej or its secretary, S. Van Eck, during the BNCA meetings following the BNEC meetings. Details and comments are regularly added by C. Waelkens, Belgian representative at the ESO Council.

ESA matters

W. Verschueren, in charge of ESA matters at BELSPO, has been elected as associate BNCA member, and therefore reports about ESA matters (such as budget, missions and their evolution, delays or problems, the Belgian participations, the main political issues...) at each BNCA meeting.

International Year of Astronomy: IYA2009

The BNCA was informed by R. Alvarez, Belgian representative for the activities regarding IYA2009. This information is updated on the web site : http://www.iya2009.be. Rodrigo Alvarez, Thierry Hanon - Degroote, Stijn De Jonge and a student represented Belgium at the opening ceremony of IYA2009 in Paris (UNESCO) on 15 and 16 January 2009.

Space connection

J. Cuypers (ROB) coordinated the preparation of a special issue of Space Connection (issued by Belspo) presenting Astronomy in Belgium in the framework of IYA2009. This bilingual special Space Connection issue was published and distributed during the open days at the ROB.

FNRS / ROB Contact Group

During this year, M. Arnould (ULB) and J. Sauval (ORB) continued their activities as President and Secretary, respectively, for the organisation of FNRS/ROB Contact Group Astronomy and Astrophysics meetings. The annual meeting was held on 6 May 2009 in the Planetarium of the ROB.

After 10 years, a new organizing team (Contact Group bureau) should be officially designated by FNRS; BNCA thanked the president and secretary for their efficient organization.

International Astronomical Union

A. Lemaitre was the Belgian national delegate for the IAU General Assembly at Rio de Janeiro (2 - 14 August 2009). Her report was presented in the BNCA meeting of October 2009.

The eleven candidates proposed by the BNCA as new IAU members were all accepted : Bram ACKE (1979) - KUL, Jesse ANDRIES (1977) - KUL, Maryline BRIQUET (1976)

- KUL, Nicolas CHAMEL (1978) - ULB, Benoît FAMAEY (1978) - ULB, André FUZFA (1978) - FUNDP, Ozgür KARATEKIN (1971) - ORB, Giovanni LAPENTA (1965) - KUL, Sophie PIREAUX (1974) - ORB, Tijl VERHOELST (1979) - KUL and Marie YSEBOODT (1977) - ORB.

Budget Matters

Some financial support was given to the Belgian representatives at the opening ceremony of IYA2009. The RASAB financed the participation of A. Lemaître to the IAU GA in Rio.

3. The National Committee for Biochemistry and Molecular Biology

The members of the National Committee on Biochemistry and Molecular Biology are also member of the board of the Belgian Society of Biochemistry and Molecular Biology and as such are involved in the preparation and organization of all the activities of this Society. The Society/National Committee has organized in 2009 the following three scientific meetings:

- « Biomedical glycobiology and glycobiotechnology », April 23rd, 2009, Ghent, organized by the BMB working group glycobiology (N. Callewaert).
- 201st meeting. A joint meeting with the « Groupe de contact FNRS Protéomique » and the « Groupe de contact FNRS Processus oxydatifs – antioxydants », 15 May, 2009 in Namur. Organizers: Martine Raes, R. Wattiez, B. Knoops. More than 100 participants attended this meeting.
- 202nd meeting. A Joint meeting with the Netherlands Society of Biochemistry and the German Biochemical society is scheduled for 27-30 September, 2009 in Aachen, Germany. Topic: "Signal transduction and Disease". More than 500 participants attended the meeting.

Possibilities were provided for young scientists to submit an abstract and to present posters about their research topics. Further information about these meetings is available at the website of the Society: <u>http://www.biochemistry.be</u>.

The 34th Annual Congress of the Federation of European Biochemical Societies (FEBS) took place in Prague, Czeck republic, from 4-9 July, 2009. The meeting was attended by many Belgians. The Belgian delegate who participated in the Council meeting of the FEBS, was the vice-chairman of the Belgian Society for Biochemistry and Molecular Biology, Dr. Thierry Arnould (FUNDP, Namur).

Prof Stalmans (KUL) is publications officer of the International Union of Biochemistry and Molecular Biology.

Prof Marc De Ley (KUL) represented Belgium in the council meeting of the International Uninion of Biochemistry and Molecular Biology whic took place in Shanghai, Peoples Republic of China, 2 – 7 August, 2009.

Most members of the National committee have participated in many international scientific events. However it would be impossible to provide a an extensive list of all these activities.

4. The National Committee for Biological Sciences

The national Committee of Biological Sciences is a collaboration between the International Union of Biological Sciences (IUBS) and Belgian scientists active on the field of biological sciences.

Meetings of the Committee in 2009

There have been no meetings of the Committee of Biological Sciences in 2009.

General Assemblies of the Scientific Union in 2009

The general assembly of the Scientific Union, held in South Africa, was not attended by members of the National Committee.

<u>Other activities in 2009</u> There have been no activities organised by the Committee of Biological Sciences in 2009.

Future Perspectives

In 2010, the International year of Biodiversity, several activities will be planned by the National Committee of Biological Sciences, in an attempt to motivate the broad public for biodiversity topics.

5. The National Committee for Biomedical Engineering

Biomedical Engineering is the multidisciplinary field concerning Engineering research, developments and applicat ions in (bio)medicine.

The Belgian National Committee on Biomedical Engineering aims to bring together the Belgian academics, students, researchers and professionals, active in the broad field of biomedical Engineering.

The aims of the National Committee are:

- Stimulating scientific and educational interactions
- Linking with international organizations and societies
- Representation of the Belgian academic point of view

Setting up a forum for interested students and professionals.

Meetings of the Committee in 2009

- dates
- The Committee met on: March 5th, June 19th, October 5th, December 4th
- main conclusions
 - Continuing efforts for a yearly Contact Forum
 - Involving young scientists and professionals, alumni of our master programs
 - Continuing liaison efforts with European, world-wide associations
 - Need for continuing efforts in promoting research and development and an awareness of the community

General Assemblies of the Scientific Union in 2009

- dates

The IUPESM General Assembly took place in Munchen, during the World Congress 2009, September 8-12.

- main conclusions

The IUPESM Union remains an union of the IFMBE (Federation Biomedical Engineering) an of the IOMP (International Organization for Medical Physics) and is functioning as an "umbrella organization".

Good results were obtained in the ICSU action(s): t

he IUPESM has set up a Health Technology Task Group (HTTG) which is intended to assist countries in defining their health technology needs, and identifying and rectifying health system constraints for adequate management and utilization of health technology, particularly through training, capacity building and the development and application of appropriate technology.

Marc Nyssen has been elected as member of the IFMBE Administrative Council

Other activities in 2009

- description
 - Belgian Day on Biomedical Engineering (December 4th 2009) Contact Forum with 3 invited speakers, a "short presentation" session and a poster session of new research results
 - 2. The European liaison Day with EAMBES executive board (December 3rd 2009)
- goals

- Bring Belgian researchers in contact with internationally recognized speakers (this year's theme: patient safety) and allow them to present their work in a short presentation and poster (Belgian Day)

Evaluate the future activities of EAMBES.

- attendance

75 persons attended the "Contact forum" on December 4th 2009

Future perspectives

The committee aims at expanding the involvement of students and of captains of industry in the Committee's future activities.

As there are now 5 "master in biomedical engineering" programs (UGent/VUB, KUL, ULB, UCL, Ulg) the Committee wants to become the meeting place for communication in between these programs (also for Phd's linked to the masters), in order to strive to a full recognition of the title "Master in biomedical engineering".

Keeping in contact with the alumni.

A "Youngsters Board" was set up.

Clarification of abbreviations:

- IFMBE: International Federation for Biomedical Engineering: the "World Federation"
- EAMBES: European umbrella association, regrouping societies and teaching/research departments
- ICSU: International council of scientific unions (links with national Academies)

6. The National Committee for Biophysics

The National committee collaborates intensively with the Belgian Biophysical Society. BOARD OF THE BELGIAN BIOPHYSICAL SOCIETY:

During the general assembly of the society on the 1st of September 2006 a new board was elected, which became active in 2007. (Composition published in het Staatsblad/Le Moniteur).

President: Dr. André Matagne (U. Liège),

Vice-president: Prof. Dr. Bart Devreese (U. Gent)

Board members:

Prof. Dr. Marc Demaeyer (U. Leuven)

Dr. Moreno Galleni (U. Liège),

Dr. Philippe Cronet (Eurogentec)

Prof. Annemie Lambeir (U. Antwerp)

Permanent Secretary-treasurer: Prof. Dr. Yves Engelborghs (U. Leuven)

Activities organized in 2009

The following events were organized:

1) A symposium on "Intrinsically Disordered Proteins" on the 9th of January at the University of Leuven, organized by Y. Engelborghs and L. Wyns, with support from the FWO-contactgroup on Protein, structure, folding and dynamics.

Attended by some 70 persons.

(See attached program)

2) On the 1st of April a joint meeting took place with the Belgian Physical Society at the University of Hasselt, with a session organized by the Biophysical Society. (see website; www.Biophysics.be) (See attached program)

3) at the beginning of July a 3-day symposium was organized at the University of Liège at the honor of the emeritation of Prof. Jean-Marie Frère. The symposium included the annual folding meeting. (See attached program)

4) The National committee worked out a Contactforum on Nanobiotechnology, originally planned for December but postponed till the 8th of January 2010. (See attached program).

For the organization of these events, the board had a few meetings in Leuven (Lab. of Prof. Engelborghs, centrally situated for most members) but most of the organization was done by email.

Activities planned for 2010

1) Contactforum on **Bionanotechnology** in the Academy Palace, Brussels the 8th of January(with about 80 participants) (See attached program)

2) **Symposium about Synchrotron Radiation applied to Biological Systems** Planned for April 2010 in Liège

3) The 8th Meeting on Protein Folding

Planned for September 2010 in Liège

4) Summerschool on **Molecular and Cellular Biophysics at the level of Single Molecules**, to be organized in Leuven.

7. The National Committee for Chemistry

The National Committee for Chemistry is an organization gathering experienced scientists, researchers, University Professors, representatives of science organizations, experts from the Industry and Industry Associations. They represent the three regions of our country.

We focus on the main issues of chemistry in Belgium which we are also facing outside Belgium, in Europe ans US as well:

- education of chemistry
- attractiveness of chemistry for young people;
- image of chemistry in the public.
- the role of chemists in the industry
- background of chemists and chemical education

Our role is to challenge these subjects and to contribute as well as possible to implement our proposals through the networks of the Commmittee members and have the suggestions percolated through the different organizations concerned in Belgium.

The National Committee for Chemistry is also representing Chemistry in Belgium at the International Union of Pure and Applied Chemistry (IUPAC) being the sole and unique organization in charge of the standards in all the fields of chemistry and also today encouraging the development of chemistry in developing countries.

Meetings of the Committee in 2009

Two Meetings of the National Committee : April 24th and October 4th

At the two meetings the essentials were to discuss aout how our contribution as National Committee can be coordinated in Belgium (hereafter 6) with all the people and organizations beeing involved in IYC 2011.

With invited guests and participants from the Jeunesses Scientifiques, and Centre d'Histoire de la Chimie , the first actions have been decide;

A very positive contact with the "Poste" will end with the emission of stamps to celebrate at the same time the International year of Chemistry and the celebration of the First Solvay Council of Physics in Brussels..

A strong request from Universities to visitr them for the promotion of IYC 2011.

Taking part of the 45th General Assembly of the Internation Union of Pure and Applied Chemistry in Glasgow-Scotland from Aug 1rst to 6th.

Attendance of 400 participants from 54 countries

With the following main **conclusions and actions:**

- Approval by the Council of six new National Adhering Organization to IUPAC (Ceylan, Malaysia, Luxemburg, Saudi Arabia, Thailand, Tunisia) with a target of 40 new ones in 10 years.
- Election of Prof Kazuyuki Tatsumi (Japan) as IUPAC future Vice-President

These two decisions emphasize the importance of eastern countries and far east to modern chemistry developments and center of excellence with consequences on Europe.

- In the meetings, emphasis was given to the importance of convincing the world that chemistry can really contribute to the resolution of critical issues like sustainability , nutrition and new non fossile energy ressources.
- It was pointed out that IUPAC perception and importance of the role are not well perceived and consequently recognized even in the chemical community and priority is given to develop actions to improve the perception.

- Organization of round-tablesdiscussions led to very fructuous discussions and actions around the themes of the year 2011:
 - How to interest young people in chemistry
 - Involvement of public and politicians
 - Celebration of Marie Curie Nobel prize in Chemistry in 1911 and role of women in key positions in Companies, Universities etc..

The General Assembly of the IUPAC and IUPAC Congress are planned :

2011 In Puerto Rico 2013 In Istamboul/Turkey 2015 Seoul /South Korea

Other Activities in 2009

- Meeting at Frankfurt with Euchem and IUPAC including participants from Australia, Korea, US, UK, Germany, France, Belgium, Nederlands, Poland, (Jan 2009)
- Belgium/Brussels is invited to welcome the Closing Event of the International year of Chemistry in 2011.
- Designation by the IUPAC to chair the Organizing Committee for the **Closing Event** in Brussels.as the representative of the IUPAC.
- Membership of the Organing Committee of the Opening Event in Paris under ther leadership of Professor Moreau (President elect of the IUPAC and the UNESCO.
- Attendance to the preparatory meetings for the **Opening Event in Paris** in January 2011.(July 22nd , Sept11th, Nov.12th, Dec8th.)
- Putting in place a Committee of Sponsors for the Closing Event of IYC2011 in Brussels with help of Solvay SA.

Meetings with Committee of Sponsors as preparatory meetings for **Closing Event** of IYC2011 in Brussels (June 5^{th} , Oct 19^{th} , Dec 7^{th})

 List of sponsors: DuPont, Dow Chemicals, BASF, GlaxoSmithKline Biologicals, UCB, Janssen Pharmaceutica, CEFIC (Comité Européen des Fédération des Industries Chimiques), and Solvay SA.

Meeting in Brussels with IUPAC President, Jung Il (Korea) and Vice president, Professor Moreau.(France) in November 2009

Future perpectives for 2010

The activity of the NCS/CNC in the year 2010 will be essentially focused on the preparation of the International Year of Chemistry in the year 2011 in two aspects:

A Coordination of the stakeholders involved in the process of the activities in Belgium for the year 2011. and Finalize the organization of theClosing Event in Brussels

The "partners" involved with different extent of participation:

- The European Commission
- The three Regions (Flanders. Wallonia and Brussels)
- The Communities
- The Federal
- The Universities and Technical Colleges
- Les "Jeunesses Scientifiques"
- SRC and KVCV
- FNRS and IWT
- The Solvay Chemistry and Physics Institutes.
- The city of Brussels
- Essenscia
- CEFIC
- EUCHEMS
- The chemical Industries in Belgium
- La Poste:/De Post
- And
- The Academy of Sciences and hopefully with the support of his Royal Highness Prince Philippe of Belgium

B. Coordination of the projects for Belgium in 2011 with the main "motto": **Chemistry our life, our future**" and guidelines as hereafter.

- collaboration with the governments and administration in Belgium to emphasize and develop their perception of the importance of chemistry in education, industry, economy, and society as well
- improve attractiveness of chemistry for the kids and younsters through appropriate demontrations
- organize the visit of production factories (plastic factories, refineries,..) and research centers open to public
- bring to the public (radio, tv..) the positive aspects of chemistry in the economy and the importance of chemistry of its contribution to health, environment, renewable ressources, new forms of energy needs.
- Encourage meetings and forums with youngsters to develop together soultions to main issues through chemistry
- Lectures for the public..
- Etc..

6.

C. Committee Meetings

To respond to the heavy agenda in 2010, the number of meetings will be increased to

In order to respond also more efficiently to the fast moving issues in chemistry and avoid duplication of actions in the different organizations in Belgium we intend to broaden a little the committee to new memebrs.

D. Participation at the COCI /IUPAC meeting (Committee for chemistry in Industry) in Dubai.

8. The National Committee for Crystallography

De eerste vergadering werd gehouden op 18 maart 2009. Tijdens deze vergadering werd de organisatie van het Fifth Belgian Crystallography Symposium BCS-5 als zeer positief geëvalueerd. Tevens werd een overzicht gegeven van de inschrijvingen en voorbereidingen bij de Belgische Kristalgroeiwedstrijd 2009 en werd het programma van de prijsuitreiking in het Paleis der Academiën op 13 mei 2009 vastgelegd.

Tijdens deze vergadering werd eveneens de samenstelling van het Comite aangepast. De leden Alain Jonas, Savvas Savvides en Dominique Schryvers werden vervangen door Michele Sferrazza, Frank Blockhuys en Lazlo Vincze. Het nieuwe bureau is als volgt samengesteld: Dirk Poelman, voorzitter, Paulette Charlier, ondervoorzitter, Luc Van Meervelt, secretaris en Johan Wouters, adjunct-secretaris.

Tenslotte werd de Belgische vertegenwoordiging tijdens de en Council Meeting van de European Crystallographic Association (ECA) te Istanbul besproken.

Tijdens de tweede vergadering die plaats vond op 14 oktober 2009 bracht Bernard Tinant en Luc Van Meervelt verslag uit van de Council Meeting en de Executive Committee meeting van de European Crystallographic Association (ECA) gehouden te Istanbul. De voorbereidingen van de tiende editie van de Belgische Kristalgroeiwedstrijd in 2010 en de zesde editie van het Belgian Crystallography Symposium (BCS-6) werden opgestart.

Het Nationaal Comité voor Kristallografie organiseerde in 2009 met steun van beide Academiën en de firma Chem-Lab een succesvolle negende editie van de Kristalgroeiwedstrijd voor leerlingen uit het secundair onderwijs (zie ook website http://www.chem.kuleuven.be/bcc/). Voor deze editie werd kaliumdiwaterstoffosfaat (KDP) als te kristalliseren verbinding gekozen. De jurering van de ingezonden kristallen vond plaats op 25 april 2009 te Namen. Op 13 mei 2009 vond in het Paleis der Academiën de officiële prijsuitreiking plaats. Prof. Em. Hugo Decleir (VUB) gaf een interessante lezing over ijskristallen en onderzoek in het Prinses Elisabeth station op de Zuidpool.

Bernard Tinant en Joke Hadermann vertegenwoordigden het Comité tijdens de vergaderingen van de European Crystallographic Association te Istanbul. Luc Van Meervelt nam als lid van het Executive Committee van de European Crystallographic Association, samen met Frederique Hatert (ULiège) als voorzitter van SIG5 – Mineral and Inorganic Crystallography, eveneens deel aan deze vergaderingen.

9. The National Committee for Geodesy and Geophysics

Belgium was among the 9 countries who established the International Union of Geodesy and Geophysics (<u>IUGG</u>) on July 28, 1919 in Brussels. The Belgian National Committee for Geodesy and Geophysics (BNCGG) was created shortly after in 1921. The running expenses were covered until 1950 by the National Cartographic Institute and later on by Royal Academy of Belgium, now split into <u>"Koninklijke Vlaamse Academie van Belgïe voor Wetenschappen en Kunsten"</u> and <u>"Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique".</u>

The BNCGG serves as a link between \underline{IUGG} and the Belgian scientists working in the fields of Geodesy and Geophysics. This activity reaches a climax every four years at the \underline{IUGG}

general assemblies. The BNCGG is charged to propose to the Academy the national representatives to <u>IUGG</u> and to its eight Associations, as well as to designate the national delegates to the IUGG and Association assemblies:

International Association of Cryospheric Sciences (IACS); International Association of Geodesy (IAG); International Association of Geomagnetism and Aeronomy (IAGA); International Association of Meteorology and Atmospheric Sciences (IAMAS); International Association of Hydrological Sciences (IAHS); International Association of the Physical Sciences of the Ocean (IAPSO); International Association of Seismology and Physics of the Earth Interior (IASPEI ; International Association of Volcanology and Chemistry of the Earth Interior (IAVCEI).

The BNCGG regularly organises conferences by well-known Belgian or foreign scientists with the aim to promote interdisciplinarity and a system-oriented approach to the Earth sciences.

The BNCGG also tries to encourage the participation of young scientists to the <u>IUGG and</u> <u>Association</u> General Assemblies by attributing grants.

In parallel with the BNCGG there exists since 1955 an "Association sans buts lucratifs de droit belge" called "Comité National Belge de Géodésie et de Géophysique", with its official seat at Brussels. It administers the finances of the Committee.

Meetings of the Committee in 2009

During 2009, the BNCGG held one General Assembly (22.01.2009) and two other meetings (27.04.09 and 18.06.09) with several talks.

The following talks were given to the Committee:

22.01.09

At 15h00 Prof. Eric Deleersnijder (UCL) presented a talk in English entitled:

"The unreasonable effectiveness of dimension reduction in complex geophysical flow modelling : How to reduce the number of degrees of freedom of a complex model by a factor of 1000 or more."

Summary:

Nowadays complex numerical models produce so huge an amount of real numbers that making sense of them, i.e. producing verbal interpretations of them, has become a challenging task. Post-processing methods are needed that reduce the amount of information to be submitted to the human being in charge of interpreting model results. In this respect, dimension reduction is an approach that is worth considering. No theoretical developments about dimension reduction methods will be presented. Instead, four applications will be dealt with, which are all concerned with tracer transport in the sea. First, the Mururoa Atoll lagoon is reduced to a well-mixed box. The lagoon-averaged tracer concentration of this one-variable model compares very well with that of a complex, 3D model encompassing tens of thousands of variables. A somewhat similar approach is applied to the Prince William Sound, Alaska; in this case, a box and a pipe are seen to be necessary. Then, the ventilation of the World Ocean is idealised by a leaky funnel model, i.e. a semi-

infinite pipe with porous walls, whose section is variable. Finally, the timescale to tracer equilibrium in the World Ocean is tackled with a complex model that can be idealised as a three-box model, yielding indications of importance for paleoclimate studies. These examples illustrate the usefulness of dimension reduction as a tool for interpreting the results of complex models. That this tool is efficient is essentially due to the fact that the parameters of reduced-dimension models have a clear physical meaning.

24.07.09

At 14h00 Mr. Clovis Jacinto de Matos (ESA), presented a talk in English entitled:

"Scientific Research and Global Navigation Satellite Systems."

Summary:

Several Global Navigation Satellite Systems (GNSS) are presently in operation such as, for example, the American GPS and the Russian GLONASS.

In the near future the European Galileo system will complement these already existing constellations. Although the main applications of these systems are currently essentially civilian and military, they can also be used, to different extents, to carry out scientific research in a wide variety of domains such as, for example: Earth sciences (geodesy, geophysics, oceanography, meteorology, space-weather), metrology (measurement and global distribution of time and frequency), and fundamental physics (verification and utilization of the fundamental laws of quantum and relativistic mechanics in the framework of the satellite constellation). Thus, GNSS can be seen as providing a new, genuine, multi-disciplinary scientific application to different scientific communities and will most probably benefit from these communities with respect to its future evolution.

After the coffee-break, the meeting continued at 15h45 with Dr. Thierry Camelbeeck (ROB) who presented a talk in English entitled:

"The earthquake activity in central Belgium since July 2008."

Summary:

Since 12 July 2008, a seismic sequence started in the region of Ottignies – Court-Saint-Etienne some 20 km to the southeast of Brussels. The most important earthquake occurred on July 13 and had a magnitude $M_L = 3.2$. Up to March 2009, 120 earthquakes have been recorded with magnitude as low as 0.

Surprisingly, even earthquake of magnitude smaller than $M_L = 1.0$, not necessarily recorded by the Belgian monitoring permanent network, have been observed despite the fact that their focal depth, well-constrained by a mobile seismic network, is around 5 km.

We present a preliminary analysis of the numerous collected data and observations. We will interpret them in the framework of the seismotectonic model of stable continental Europe. This seismic sequence demonstrates the difficulty to assess seismic hazard in these tectonically stable continental regions and the importance of conducting detailed specific studies of past earthquakes that occurred before the development of modern seismic networks.

18.06.2009

A meeting was organized in collaboration with the Solar-Terrestrial Center of Excellence in the form of a mini-symposium on the occasion of the visit of Prof. Eugene Parker, who discovered the solar wind.

14:05 Introduction to solar/stellar winds, J. Lemaire (BISA) 14:25 The kinetic structure of 1D and 2D magnetic discontinuities, M. Echim (BISA) 14:45 Stellar X-ray emission and spontaneous discontinuities in magnetic fields, E. Parker (U Chicago)

15:45 Coffee break

16:00 EUV imaging of the solar corona, D. Berghmans (ROB) 16:30 Large scale modeling of CMEs, G. Lapenta (KULeuven)

Prof. Eugene Parker from University of Chicago presented a talk in English entitled:

"Stellar X-ray emission and spontaneous discontinuities in magnetic fields."

Summary :

There is the curious fact that the X-ray corona of the Sun appears to be heated by the dissipation of the magnetic energy in a plasma so hot $(1 - 5 \times 10^6 \text{ K})$ that there is very little resistivity. The X-ray corona would seem to be an unlikely place to find dissipation of magnetic field.

Note then that the photospheric footpoints of the re-entrant magnetic fields of the X-ray active regions are continually shuffled about by the photospheric convection, so that the field lines are randomly interlaced. This reduces the characteristic transverse scale of variation, of course, but not enough to accomplish significant resistive dissipation of the associated electric currents. It appears that the dissipation is accomplished through the remarkable properties of the magnetic equilibrium equation, taking the form in the simplest case of uniform plasma pressure. This equation has two families of complex characteristics and one family of real characteristic, viz. the field lines. In the presence of an interlaced field line topology an intrinsic part of the equilibrium field is the existence of surfaces of tangential discontinuity, i.e. current sheets lying along the field lines. In the relaxation to equilibrium the stresses in the magnetic field push the field gradients to concentrate into individual surfaces of discontinuity, thereby providing resistive dissipation of the magnetic free energy no matter how small the resistivity. We suggest that this effect is responsible for heating the X-ray corona of the Sun, and, by inference, the X-ray coronas of other late main sequence stars.

General Assemblies of the Scientific Union in 2009

Inside the International Union of Geodesy and Geophysics (<u>IUGG</u>) there are seven associations (see Goals of CNBGG). For each of them, there is a National Representative who can vote for Belgium during the General Assembly of the Association.

- Johan De Keyser attended the IAGA 2009 scientific assembly (Sopron, Hungary, August 23-30, 2009) as Belgian delegate (<u>http://www.iaga2009sopron.hu/</u>).
- Carine Bruyninx attended the IAG 2009 scientific assembly (Buenos Aires, Argentina, August 31 – September 4, 2009) to replace the Belgian representative Véronique Dehant.

- Belgian delegates were also present at the joint IAMAS, IAPSO and IACS meeting (Montréal, Canada, July 19-29, 2009).

These assemblies settled some internal affairs, such as changes in the secretaries of the Associations (e.g. for IAGA), the designation of locations for future assemblies, a preview on the 2011 IUGG Assembly in Melbourne, ... Also, a number of formal statements or recommendations have been issued at these assemblies, in order to promote or endorse certain research and public outreach activities. Please refer to the websites of the Associations for specific details.

Other activities in 2009

The BNCGG sponsored the International Year of the Planet Earth with activities in Belgium from 2007-2009 (<u>http://we.vub.ac.be/~dglg/Web/IYPE/IntroIYPE.html</u>).

The purpose of the International Year of the Planet Earth was to:

- Reduce risks for society caused by natural and human-induced hazards
- Reduce health problems by improving understanding of the medical aspects of Earth science
- Discover new natural resources and make them available in a sustainable manner
- Build safer structures and expand urban areas, utilizing natural subsurface conditions
- Determine the non-human factor in climatic change
- Enhance understanding of the occurrence of natural resources so as to contribute to efforts to reduce political tension
- Detect deep and poorly accessible groundwater resources
- Improve understanding of the evolution of life
- Increase interest in the Earth sciences in society at large
- Encourage more young people to study Earth science in university

Several activities (described on <u>http://we.vub.ac.be/~dglg/Web/IYPE/IntroIYPE.html</u>) were organized for the large public.

Future perspectives

- The XXV General Assembly of IUGG will be held on June 27 - July 8, 2011, in Melbourne, Australia (<u>http://www.iugg.org/assemblies/2011melbourne/</u>).

10. The National Committee for Geography

<u>FR</u>: "Le Comité réunit les géographes des Universités belges, assure la promotion et la défense de la géographie dans la sphère scientifique en Belgique, développe les liens entre les géographes belges et la géographie internationale, en particulier en tant que membre belge de l'Union géographique internationale, veille à la diffusion des sciences géographiques dans l'enseignement secondaire, en coopération avec ses associations de professeurs, encadre les travaux de l'Atlas national de Belgique".

<u>NL</u>: "Het Comité verenigt de geografen van de Belgische universiteiten, verzekert de uitstraling en verdediging van de geografie in de Belgische wetenschappelijke wereld,

ontwikkelt de banden tussen de Belgische geografen en de internationale geografie, draagt zorg voor de verspreiding van de geografische wetenschappen in het secundair onderwijs en, in samenwerking met de verenigingen leraars, omkadert de werkzaamheden van de Nationale Atlas van België"

Meetings of the Committee in 2009

- dates: 14-02-2009, 17-10-2009
- discussion topics:
- 1. 1. competences of the students in geography

FR : Le point de vue du Comité National de Géographie quant à l'équivalence des diplômes est souhaitable. Surtout après le bachelor, les étudiants se dirigent de plus en plus vers d'autres études. Tant les étudiants du bachelor en géographie qui ne poursuivent pas le master en géographie que les étudiants venant d'autres formations choisissent la géographie ou des cours du master en géographie et ce sans posséder la base nécessaire. Les étudiants font du « shopping » dans plusieurs universités. Il a été constaté qu'en France le master en géographie est à peine suivi, contrairement à l'aménagement du territoire. Ce problème est particulièrement prononcé dans les formations francophones en géographie. Les bachelors français en géographie sont autorisés dans certaines universités belges à suivre un master sans avoir bénéficié d'une formation de base dans le domaine des sciences naturelles alors que dans d'autres , ils doivent suivre les cours de mathématique, physique, chimie, biologie...pour pouvoir accéder au master. Des problèmes similaires se posent également en Flandre.

NL: De visie van het Nationaal Comité op de equivalentieverklaring van diploma's. Vooral na de bachelor kiezen studenten steeds meer andere richtingen. Dit geldt zowel voor studenten uit de bachelor geografie die niet doorstromen naar de masters geografie, als voor studenten uit andere richtingen die in de master of er opleidingsonderdelen volgen. De bestaande overbruggingsprogramma's worden afgezwakt door vrijstellingen, o.m. studieduurverkorting (waarbij een master in één jaar behaald kan worden). Studenten shoppen ook meer tussen universiteiten. Er wordt vastgesteld dat in Frankrijk er nauwelijks nog master geografie gevolgd wordt, maar meer master ruimtelijke planning, enz. Dit probleem is vooral uitgesproken in de Franstalige geografie-opleidingen. Zo worden bachelors geografie uit Frankrijk toegelaten tot de masteropleidingen in België zonder de nodige (natuurwetenschappelijke) basisopleiding. Gelijkaardige problemen komen voor in Vlaanderen.

1. 2. lack of teachers in geography

FR : On demande de prêter attention à la formation d'enseignants du secondaire. Il y a dans l'enseignement secondaire un manque important d'enseignants en géographie et les enseignants diplômés dans d'autres disciplines enseignent la géographie. Les enseignants en géographie doivent bénéficier d'une base élaborée.

NL : Men vraagt aandacht voor de opleiding van de leraars in het secundair. Er is een groot gebrek aan leraars aardrijkskunde en heel wat opgeleiden uit andere richtingen verzorgen het geografieonderwijs. Aardrijkskundeleraars moeten over een geode basis beschikken.

1. 3. publication 'culture'

FR : On constate en général qu'en Belgique l'intérêt de publier dans des revues A1 (Web of Science) est plus grand qu'à l'étranger et que les normes sont strictement appliquées ce qui désavantage les géographes belges.

NL : Algemeen wordt vastgesteld dat in België het belang van publiceren in A1-tijdschriften (Web of Science) veel groter is dan in het buitenland en als strenge norm wordt toegepast, hetgeen de concurrentiepositie van Belgische geografen benadeelt.

1.4. diploma recognition

FR : En rapport avec les possibilités de débouchés pour les nouveaux masters en géographie, il faut informer les administrations et les employeurs potentiels sur les capacités des géographes et plaider le fait que les nouvelles dénominations de diplômes soient mentionnées pour des postes qui seraient ouverts.

NL: Met betrekking tot de tewerkstellingskansen van de nieuwe masters geografie is het nodig de overheden en potentiële werkgevers te informeren over de capaciteiten van de geografen en te bepleiten om ook de nieuwe diplomabenamingen op te nemen bij de diplomavereisten voor nieuwe jobs.

1.5 sub-commissions

1.5.1. Subcommission Geomorphology.

FR: Le secrétaire a envoyé le rapport 2008-2009 en anglais du 'Belgian Association for Geomorpholgy' (BAG) (en annexe du rapport de la session du 17 octobre 2009). A noter dans le rapport un changement dans le comité : J. Poesen est président, A. Dumoulin est vice-président.

NL: Voor de Belgian Association for Geomorphology (BAG) stuurde de secretaris het rapport van 2008-2009 in het Engels op (in bijalge verslag zitting 17 oktober 2009). Te noteren valt de wijziging in het bestuur: J. Poesen is voorzitter, A. Dumoulin vice-voorzitter.

1.5.2. Subcomission Carto-GIS

FR : La sous-commission s'est réunie le 23 juin à Bruxelles avec l'objectif de préparer la représentation belge au Congrès International de Cartographie à Santiago (Chili) au mois de novembre 2009. On a discuté de la possibilité d'y présenter un maximum de produits cartographiques belges, et en particulier la reproduction de l'Atlas de Ferraris. Au Chili ,se sont rendu Frank Canters (VUB) et Philippe De Maeyer (UGent), ainsi que des collaborateurs de l'IGN.

Du 3-5 juillet fut organisé à Gand par la sous-commission en partenariat avec UGent le 15th *INTERCARTO-INTERGIS*. Ce congrès fut précédé d'une première partie à Perm (Russie) du 29 juin au 1^{er} juillet et continua ses activités à Gand. Deux workshops suivirent le congrès le 6 juillet (thèmes: *cartography and sustainable development; production management*).

La sous-commission constate que la contribution à l'ACI reste un problème qui est actuellement résolu par la bonne volonté des membres de la sous-commission. Il serait souhaitable que dans le cadre de la Belgique on trouve des solutions pour régler ces contributions aux organismes et associations internationaux reconnus.

NL: Het sub-comité vergaderde op 23 juni te Brussel met als belangrijkste doelstelling de Belgische vertegenwoordiging op het International Cartographic Congres te Santiago (Chili), november 2009, te bespreken. De mogelijkheid om verschillende Belgische werken op de

tentoonstelling voor te stellen, i.h.b. de facsimile uitgave van de Ferrariskaart, werd besproken. In Chili waren naast Frank Canters (VUB) en Philippe De Maeyer (UGent), alsook drie medewerkers van het NGI aanwezig.

Op 3-5 juli organiseerde te Gent het sub-comité i.s.m. de UGent de 15th INTERCARTO-INTERGIS. Dit congres ging eerst van 29 juni - 1 juli in Perm (Rusland) door en zette dan begin juli zijn activiteiten in Gent verder. Het congres werd gevolgd door twee workshops (thema's: cartogarphy and sustainable development; production management) op 6 juli.

Het sub-comité stelt vast dat de bijdrage tot de ICA een probleem blijft en slechts kan worden verzekerd dankzij de goodwill van de leden van het sub-comité. Het ware wenselijk dat er binnen België structurele oplossingen en kanalen zijn om dit soort bijdragen aan erkende internationale organisaties en verenigingen te betalen.

1.5.3. Subcomission National Atlas

FR: Le troisième Atlas de Belgique est réalisé grâce au programme 'ATLAS' de la Politique Scientifique Fédérale. Le tome 2, 'Paysages, campagne et agriculture' ainsi qu' 'Habitat' paraîtront au courant du deuxième trimestre de 2010. dans les deux langues. Les autres tomes 'Géographie économique', 'Les Villes', 'Population', pourraient sortir au courant du deuxième trimestre 2010 à condition que le financement par la Politique Scientifique aboutisse.

Parallèlement un autre projet financé par la Politique Fédérale 'ATLAS-Web' est développé par les professeurs J.P.Donnay (ULg) et Ph. De Maeyer (Ug). Ce projet permettra non seulement d'actualiser certaines cartes de la version papier mais également de proposer de nouvelles cartes. La première phase du projet sera présentée medio 2010. La suite du projet sera développée en 2010 et 2011.

NL: Dankzij het programma 'ATLAS' van Federaal Wetenschapsbeleid wordt de Derde Atlas van België gerealiseerd. Deel 2, 'Landschappen, platteland en landbouw' en deel 4 'Wonen' verschijnen in het tweede trimester 2010 in beide landstalen. De overige delen ('Economische geografie', 'Steden' en 'Bevolking' zullen in de tweede jaarhelft van 2010 verschijnen indien de financiering voor het uitgeven ervan door Federaal Wetenschapsbeleid kan geregeld worden.

Parallel loopt er, dankzij een andere financiering van Federaal Wetenschapsbeleid, een eerste fase van een project 'Web-ATLAS' uitgevoerd door de professoren J.P. Donnay (ULg) en P.De Maeyer (Ug). Dankzij dit project zal niet alleen de actualisering mogelijk zijn van sommige kaarten van de papieren versie maar zullen ook andere kaarten kunnen toegevoegd worden. De eerste fase van het project zal voorgesteld worden medio 2010. Het project zal in de loop van 2010 en van 2011 verder uitgewerkt worden.

General Assemblies of the Scientific Union in 2009

 \underline{FR} : C. Vandermotten fait part du succès du second congrès de l'EUGEO 2009 (Bratislava). On constate en général que les géographes belges ne sont pas fortement représentés lors des congrès de géographie européens. Les raisons sont la spécialisation croissante et la participation aux congrès plus spécialisés qui se tiennent aux mêmes dates. Les moyens financiers restreints pour une participation en Europe jouent également un rôle important ainsi qu'une préférence de participation aux assemblées qui offrent l'avantage d'une publication dans des revues A1 (ISI web of knowledge).

On constate en général qu'en Belgique l'intérêt de publier dans des revues A1 (Web of Science) est plus grand qu'à l'étranger et que les normes sont strictement appliquées ce qui désavantage les géographes belges.

<u>NL</u>: C. Vandermotten deelt mee dat het tweede EUGEO congres een succes was (Bratislava). Het is trouwens een algemene vaststelling dat Belgische geografen ondervertegenwoordigd zijn op geografiecongressen. Als oorzaken worden hier de toenemende specialisatie aangehaald, met deelname aan meer gespecialiseerde congressen die dikwijls gelijktijdig lopen. Ook de beperkte financieringsmogelijkheden voor deelname binnen Europa spelen een rol, evenals de voorkeur om deel te nemen aan bijeenkomsten waar publicatie in A1-tijdschriften in het vooruitzicht heeft gesteld (ISI web of knowledge).

Algemeen wordt vastgesteld dat in België het belang van publiceren in A1-tijdschriften (Web of Science) veel groter is dan in het buitenland en als strenge norm wordt toegepast, hetgeen de concurrentiepositie van Belgische geografen benadeelt

Other activities in 2009

(1) Journées Belges des Géographes / Belgische Geografendagen, October, 24-25, ULB Brussels

<u>FR</u>: La publication dans *Belgeo* de sept articles retenus, parmi ca. 80 présentations lors des journées des géographes à Bruxelles en 2009, sortira bientôt. Intéressants contacts entre le monde de la recherche et celui de l'enseignement secondaire.

<u>NL</u>: Binnenkort verschijnt de publicatie in Belgeo van zeven artikels uit de ca. 80 presentaties die gehouden werden op de Belgische Geografendagen in Brussel 2009. De nochtans zeer interessante Ronde Tafel discussie rond de didactiek werd niet opgenomen omwille van het vaste publicatieformaat.

(2) 15th INTERCARTO-INTERGIS, July 3-5, 2009 Gent by sub-commission Carto-GIS, followed by two workshops (cartogarphy and sustainable development; production management).

Future perspectives

- (1) 2012 active participation of members of Committee in the IGU meeting in Köln
- (2) Journées Belges des Géographes / Belgische Geografendagen 2010
- (3) continuation des activités par le biais des sous-comités

11. The National Committee for Geological Sciences

The Comité National des Sciences Géologiques / Nationaal Comité voor Geologische Wetenschappen aims at promoting and co-ordinating the activities of academic and scientific institutions in all fields of geology. It also interacts between these institutions and others actors, especially governmental (federal, regional) agencies. The CNSC/NCGW is the national contact point for the International Union of Geological Sciences.

It co-ordinates the activity of a number of commissions and working groups: the Commission Nationale de Stratigraphie / Nationale Commissie voor Stratigrafie (divided in specific subcommissions) and the Groupe de Travail Géologie Structurale / Werkgroep Structurele Geologie.

Meetings in 2009.

Two ordinary meetings were held: May 5th and November 7th, for which reports are available.

Assembly of the Scientific Union.

Prof. N. Vandenberghe has participated to the statutory meeting of the IUGS in Oslo. Most significant to our commission is the statement by the IUGS that there is a lack of co-operation (and preparative work) between the different subcommissions of stratigraphy so that they are never able to reach an agreement during the meetings.

<u>Annual meeting of the National Committees (10 Sept. 2009)</u> Prof. N. Vandenberghe has presented the activities of the CNSG/NCGW at that meeting, stressing the role of the commission on stratigraphy.

Other activities in 2009.

The committee has continued its support to activities in the frame of the IYPE (International Year Planet Earth) initiated by institutions, universities and other administrations (a.o. touristic activities) (http://anneedelaterre.be). More than 20 events have been organized (of which 11 directly sponsored by the Flemish government). Noteworthy in 2009 was the participation of a Belgian representative and two students (winners of a contest) to the"Planet Earth Lisbon Event 2009" in Lisbon, Portugal 20 - 22 October 2009, which was the closure event of the IYPE (http://www.planetearthlisbon2009.org/).

12. The National Committee for Logic, History and Philosophy of Sciences

According to the mission of the National Committees, as stipulated in the Royal Decree of 2 April 1979, the National Committee aims to promote and coordinate research activities on Logic, History and Philosophy of Science in Belgium, primarily with regard to the international representation of Belgian scholarship in the International Council of Scientific Unions.

The National Committee is the Belgian member of the International Union of History and Philosophy of Science (IUHPS), both of its Division for History of Science and Technology (DHST) and its Division of Logic, Methodology and Philosophy of Science (DLMPS).

In practice the National Committee acts along three axes:

- to represent Belgian scholarship on the international level by being present as a member or spokesperson with international organizations (IUHPS, European Society of History of Science)
- to coordinate Belgian scholarship by setting up collaborations and joint projects with other institutions (National Center for the History of Science [KBR], Gewina [Belgian-Dutch Society for the History of Universities and Science], BSLPS [Belgian Society for Logic and Philosophy of Science])
- to promote the integration of historical and philosophical studies of science

Meetings of the Committee

During 2009, the Committee has organized two general meetings, on 18 February and on 7 October. At these meetings, scientific papers were presented and administrative matters were discussed.

On February 18, Dr Yaël Nazé (FRS-FNRS, Liège) presented a lecture on "The second copernican revolution and the beginning of modern astrophysics." On October 7, lectures were presented by Kenneth Bertrams (ULB), "Comment concilier histoire 'interne' et histoire 'externe' ? Le cas du groupe Solvay." and Pieter Thyssen (K.U.Leuven), "De Problematische Accommodatie van de Zeldzame Aarden in het Periodiek Systeem. Een Historische Analyse van 1869 tot nu."

During these meetings, discussions were held relating to BESTOR and the Belgian representation at the General Assembly of IUHPS/DHST at Bucharest (see below). On October 7, the deceased member Fernand Hallyn and honorary member Paul Bockstaele were commemorated. The Committee also started the organization of the Young Researchers Days II, to be held in 2010.

General Assembly of IUHPS/DHST

The General Assembly of IUHPS/DHST was held at Bucharest, during the XXIIIth International Congress on History of Science and Technology (Bucharest, 28 July-2 August). The Committee was represented by Geert Vanpaemel and Brigitte Van Tiggelen. A report of the General Assembly was presented at the National Committee during its meeting of October 7.

The General Assembly adopted a new system for calculating the dues of members, based on the GDP of countries. Countries are divided in categories according to the contribution they pay. These categories determine the number of votes in financial decisions. For Belgium, the membership contribution of 800 euros was transformed into 1000 US\$ (a decrease). As this amount is higher than what should be paid according to the new rules, Belgium asked for and obtained its integration into a higher category.

At the General Assembly a new board was elected, and the location of the next International Congress in 2013 was chosen (Manchester).

Other Activities in 2009

In 2009, the National Committee obtained subsidies from Federal Science Policy (BELSPO) for its project on Belgian Science and Technology Online Resources (BESTOR). On 1 September, the project could actually take off with the appointment of a scientific collaborator (Alix Badot), who set up office in the KVAB. The project is counseled by a steering group, with delegates from the National Committee (Geert Vanpaemel, Carmélia Opsomer), RASAB (repr. by Sofie Vanthournout), BELSPO (repr. by Bertha Depoorter), universities (Isabelle Rothier [UGent] and Didiere Devriese [ULB]) and other scientific institutions (Brigitte Van Tiggelen [National Center of History of Science, KBR]). The direct supervision of the project is in the hands of Geert Vanpaemel. ICT support is provided by the Faculty of Arts (K.U.Leuven).

The project was presented to the National Committee during its meeting on 7 October. It consists of a biographical database of members of the Class of Science of the Academy since 1816, presented in a Wikipedia format (Mediawiki software). The biographical articles contain links to other biographical articles, to articles on institutions, and to electronic resources found on the internet (e.g. publications). The first months of the project were spent in developing the format and installing the required digital platform. Some twenty articles were ready by the beginning of 2010.

The subsidies accorded by BELSPO for 2008 and 2009 were partially paid during 2009. For this reason the project has been slow to start, in order not to spend money that has not been received yet. As it is now, the financial situation makes it possible to expand the efforts and to foresee that its financial support will take it at least into 2011.

Future Perspectives

On 27 March 2011 the Committee will organize a joint meeting with the National Center for History of Science (KBR) and Gewina, where Belgian scholarship and projects will be presented on a Belgian-Dutch forum.

On 6-7 December 2010 the Committee will organize, in collaboration with the Belgian Society for Logic and Philosophy of Science the second Young Researchers Days. During these days young (doctoral and post-doctoral) researchers will have the opportunity to present their work to the scholarly community. Four invited international speakers will address actual developments in the fields of history and philosophy of science, in particular relating to the opportunities for developing common perspectives and mutual collaboration. The Young Researchers Days respond to the aim of the Committee to restore the connections between historians and philosophers of science, which has been lost in the last decades.

The project BESTOR will be enlarged by the appointment of a second collaborator. A new application for subsidies will be submitted to BELSPO.

During 2011 an election procedure for new members will be organized. Furthermore, the representation of Belgium at the General Assembly of IUHPS/DLMPS in 2012 will be prepared.

13. The National Committee for Mathematics

The National Committee aims at stimulating and coordinating in Belgium research in mathematics, both in *pure mathematics* and *applied mathematics*, including *education in mathematics*. In fact the distinction in pure and applied mathematics is not always easy to make. In pure mathematics we think of algebra, geometry and analysis, but also these areas overlap and do not cover the whole domain. One can think of logic, combinatorics, topology, set theory, etc. Applied mathematics, consisting among others of numerical analysis, statistics, mathematics related to physics, is currently expanding and covers areas such as econometrics and finance, informatics, bio-mathematics, etc. One of the main goals of the committee is to form a bridge between the International Mathematical Union (IMU) and the Belgian scientists who work in the area of Mathematics. As such we choose the delegates that could represent Belgium at the General Assemblies of the IMU and propose their names to both Academies. Together with the Belgian Mathematical Society we take care of informing the Belgian mathematical community by means of the "Newsletter of the Belgian Mathematical Society and the National Committee for Mathematics". We aim at having 16 members, respecting linguistic parity, taking care of a good gender representation and having a well balanced participation of the different universities and important mathematical domains.

Meetings of the Committee in 2009.

The National Committee for Mathematics had two meetings: the first on April 22 in the Palace of the Academies, the second on December 4 at the Katholieke Universiteit Leuven during the "Second Belgian Mathematical Society-London Mathematical Society Conference". The members of the committee have regularly been informed, by e-mail, about initiatives of the IMU or about the proposals of the IMU for which the opinion of the NCM was requested. Decisions have been taken during the meetings or by electronic voting. All decisions have been unanimous.

Main decisions:

- Prof. Dr. S. Caenepeel (VUB) was elected as a new member.
- J. Thas announced his retirement from the committee in 2010. The committee agrees that a new member replacing J. Thas should come from Ghent University. Names will be proposed at the next meeting.
- The National Committee agrees to cooperate in possible initiatives of the academy to produce appropriate reports that are important to society and to the government. Some possible themes are the position of young researchers, future perspectives for scientists, lack of mathematics teachers in high schools, etc. It is clear that such studies and reports are impossible without the help of external experts.
- The National Committee accepts the proposal of the IMU Executive Committee to terminate the Commission on Development and Exchanges and its Developing Countries Strategy Group and to create the Commission for Developing Countries. It also agrees with the proposed mission of this commission.
- The National Committee agrees that Finland moves from Group 2 to Group 3, and that both Thailand and the "African Mathematical Union" get accepted as associate member of the IMU, so that they can join the general assembly without the right to vote.
- The next general assembly of the IMU, takes place on August 16 and 17, 2010 in Bangalore, The committee has the right to be represented by three members with voting right. F. Dumortier will lead the delegation. He has the intention to participate and will ask to be subsidized by RASAB. C.Finet and H. Van Maldeghem are not able to participate. On request of the NCM, F. Bastin and S. Caenepeel will look whether they can find the necessary financial support to join the delegation.
- On Monday September 13, 2010, the third PhD day of the Belgian Mathematical Society takes place in the Palace of the Academies. The National Committee is coorganizer. The president asks everybody to be present. The next meeting of the committee will be held at that day.

Other activities in 2009.

On April 22 the committee organized two lectures around the theme "Mathematical Education": M. Schneider (ULiège, president ICMI–Belgium) lectured on "Which level in Mathematics? And for what kind of pupils? How does research in mathematics education enlighten these questions?". D. Janssens (KULeuven, vice president of ICMI–Belgium) gave a talk entitled "Mathematical education as a "design" science". The goal was to gain more insight into the problems of the Mathematical education, which is a hot topic in view of the constant change of programmes in high school, and the attempts of universities to follow this evolution in their programmes.

Future perspectives.

As mentioned before, we look forward to the joint organization of the PhD day in 2010, and to the general assembly of the IMU preceding the World Congress of Mathematicians. We also look forward to electing a new member, preferably from UGent.

14. The National Committee for Mechanics

The Committee aims to promote the Mechanical Engineering through inter-university Students and Staff exchanges, organisation of a bi-annual NationalCongress of Theoretical and Applied Mechanics, organisation of a Doctoral School (GrasMech), development of relationships with European and International Mechanical Engineering Institutions or Initiatives (ECCOMAS, EURASEM, a.o;)

Meetings of the Committee in 2009

- dates: 16 April 2009, 28-29 May 2009

 main conclusions: successful Congress 2009, lack of PhD candidates for ECCOMAS, continuous evolution of PhD GrasMech School, poor results from EURASEM, successful intervention of NCTAM related to the new statuses of ECCOMAS, free discussion on new KVAB fourth Class, initiation of a GrasMech-Eureka event (November), EURASEM meeting in Brussels (November)

Other activities in 2009

Description: National Congress of NCTAM

- Goal: Research activities information exchange (PhD a.o)
- Attendance: 105 papers

Description : GrasMech courses:

- Goals: education PhD in:
 - Introduction to Computational Fluid Dynamics (J. Vierendeels, E. Dick, B. Merci (UGent)) : September 2009
 Advanced continuum mechanics, (F. Dupret (UCL), J.P. Ponthot (ULg)) : October-November 2009
 Nonlinear _nite elements, (S. Cescotto (ULg)) : November-December 2009
- Attendance: about 10 students /course

Description : GrasMech Environmental Engineering (coupled with Eureka conference ETE'2009)

- Goals: international exchange R&D and testing engineering techniques
- Attendance: 54

Future perspectives

IUTAM: Symposium Analysis and simulation of Human movement will be organized by the KUL in 2010

ECCOMAS 2010: call for Phd candidates **GrasMech course**s 2010:at least:

a) Advanced turbulence modelling, C. Benocci (VKI), D. Carati (ULB), C. Lacor (VUB), B. Merci (UGent), G. Winckelmans (UCL)) : February-March 2010

b) Basic Computational Fluid Dynamics : introductory course { RANS, (C. Lacor (VUB), E. Dick (UG)) : April-May 2010

GrasMech POSTER session 2010

15. The National Committee for Microbiology

The meetings of the NCM were joint meetings with the board of the Belgian Society for Microbiology (BSM), of which some members are also member of NCM and all members of NCM are involved in the advisory board of BSM.

Meetings of the Committee in 2009

- dates: 20th March 2009; at the SCK (H. Debroux avenue 40 Brussel)

<u>Agenda</u>

NCM:

Adaptations NCM committee after retirement of some members. (see above).

BSM & NCM: organisation of 2009 Symposium

Discussion on the proposals for the next BSM symposium in 2009

Mainly two proposals were discussed: (Synthetic biology vstel J. Vanderleyden and a proposal, based on the proposals of Nico Boon: analysing complex microbial communities). The board concluded that 'Synthetic biology' suits better for a shorter event (less than one day, e.g. an afternoon or an evening). Jef Anné will discuss the possibilities with Jos Vanderleyden for a separate organisation in Leuven, with the support of BSM.

The finally selected proposal resulted in the following title for the symposium Analyzing complex microbial communities

Practical organisation:

We need 5 speakers: 3 more general speakers in the morning session (one for virology and two for bacteriology), 2 speakers in the afternoon session (one for virology and one for bacteriology)

a. Tom Coenye will contact Vincent Denef (at this moment in Berkeley Californy) concerning Proteomics (we need a title, available period and a short CV before the 20th March)

b. Jef Anné contacts a possible speaker from Cambridge (Kell Douglas? Or Roy Goodacre) Title, and availability. From additional information after the meeting (see appendix), it appears that Roy Gooacre is most probably best suited.

c. Pierre Cornelis will contact Jeroen Raes (he obtained recently an Odysseus grant in Pierre's laboratory)/ Title (subject: microbiome of the gut) and availability, short CV -> Jef Anné before 20^{th} March

d. Jef Anné will contact Herman Favoreel and Alain Vanderplasschen for suggestions of two speakers in the context of the proposal – one general speaker for virology in the morning and one in the afternoon.

Jef Anné will submit the forms for financial support from the Academy, and FWO while Beata Wolucka (in contact with Jef, for the program etc) will submit the forms for FNRS support. Paul De Vos and Pierre Cornelis need to provide Jef Anné with an updated CV for FNRS/FWO applications.

All members of the board must realize that the preparation for the symposium is very tight (in particular to apply for financial support) and should act to this respect.

<u>Info on the suggested speakers &- subjects as available today</u> Metabolomics Info on the group of Goodacre (Jef) Metabolomic technologies and their application to the study of plants and plant-host interactions

Metabolomics is perhaps the ultimate level of post-genomic analysis as it can reveal changes in metabolite fluxes that are controlled by only minor changes within gene expression measured using transcriptomics and/or by analysing the proteome that elucidates posttranslational control over enzyme activity. Metabolic change is a major feature of plant genetic modification and plant interactions with pathogens, pests, and their environment. In the assessment of genetically modified plant tissues, metabolomics has been used extensively to explore by-products resulting from transgene expression and scenarios of substantial equivalence. Many studies have concentrated on the physiological development of plant tissues as well as on the stress responses involved in heat shock or treatment with stress-eliciting molecules such as methyl jasmonic acid, yeast elicitor or bacterial lipopolysaccharide. Plant-host interactions represent one of the most biochemically complex and challenging scenarios that are currently being assessed by metabolomic approaches. For example, the mixtures of pathogen-colonised and non-challenged plant cells represent an extremely heterogeneous and biochemically rich sample; there is also the further complication of identifying which metabolites are derived from the plant host and which are from the interacting pathogen. This review will present an overview of the analytical instrumentation currently applied to plant metabolomic analysis, literature within the field will be reviewed paying particular regard to studies based on plant-host interactions and finally the future prospects on the metabolomic analysis of plants and plant-host interactions will be discussed.

Metabolomics of a superorganism.

The human can be thought of as a human-microbe hybrid, and the health of this superorganism will be affected by intrinsic properties such as human genetics, diurnal cycles, and age and by extrinsic factors such as lifestyle choices (food and drink, drug intake) and the acquisition of a stable "healthy" gut microflora (the so-called microbiome). Alterations in this superorganism will be manifest in the metabolite complement within its serum and urine samples. The unraveling of this metabolic compartmentalization in this complex ecosystem will certainly be a challenge for systems biology and necessary for defining human health at the molecular level. Within the systems biology framework, functional analyses at the level of gene expression (transcriptomics), protein translation (proteomics), and, more recently, the metabolite network (metabolomics) have become increasingly popular. Metabolomics experiments aim to quantify all metabolites in a cellular system (cell or tissue) under defined states and at different time points so that the dynamics of any biotic, abiotic, or genetic perturbation can be accurately assessed. This article provides an overview of metabolomics and discusses how data are generated and analyzed within a systems biology framework. The role of metabolomics in nutrigenomics is also discussed, as are the concepts of the human being a superorganism and the complexities required to be overcome to understand human health and disease.

Possible aternative speaker for metabolomics (Jef) /Nature/ *455*, 1054-1056 (23 October 2008) | doi:10.1038/4551054a; Published online 22 October 2008 "Systems biology: Metabonomics" Jeremy K. Nicholson^1

<<u>http://www.nature.com/nature/journal/v455/n7216/full/4551054a.html#a1</u>> & John C. Lindon^1 <<u>http://www.nature.com/nature/journal/v455/n7216/full/4551054a.html#a1</u>> Jeremy K. Nicholson and John C. Lindon are in the Department of Biomolecular Medicine, Imperial College London, Sir Alexander Fleming Building, South Kensington, London SW7 2AZ, UK <<u>http://www.nature.com/nature/journal/v455/n7216/full/4551054a.html#a1</u>> It has revealed much about humans' symbiotic relationship with their gut flora. Disruption of gut microbial activity seems to be central to certain diseases in the gut, liver, pancreas and even the brain. But there are thousands of species of microorganism (the microbiome) in the human gut, and it is impossible to study each one in isolation to work out what they do. Large research programmes have therefore been devised to study the combined genetic structure of humans and their microbes — the metagenome. This genetic information is invaluable, but it says nothing about the actual activity of the microbial community, or its interactions with the host at a physiological level. Metabonomic modelling, statistically coupled to metagenomic analysis, has allowed possible communication networks between species to be identified, and has also shown which metabolic pathways are strongly influenced by which members of the microbiome.

Date of the symposium: 4 of 11 December 2009; Jef Anné controls the availability of the accommodation at the Academies.

- Main conclusions: the symposium was a scientific success that was attended by 220 participants.
- A pdf file of the symposium program is included

Future perspectives

- Meeting of $17^{\rm th}$ of February 2010 at the SCK – Brussels H. Dubroux avenue 16.30 , together with the Executive committee of BSM

- A separate NCM meeting will be organised in spring of this year in order to formally adapt the composition of the NCM.

- Aproval of the NCM report: the report will be discussed at the meeting of 17th of February 2010 (comment: the report has been approved as well as the proposed composition of the committee).

16. The National Committee for Oceanology

The Committee deals with all topics related to research and education in the field of Oceanography. It is an interdisciplinary community involving hydrodynamicists, chemists, geologists, biologists working in estuarine and coastal systems as well as in open oceans in cold, temperate and tropical environments.

Meetings of the Committee in 2009

- May 8th, 2009
- See PV of the meeting in attachment

Other activities in 2009

- Preparation meeting for the organization of the Ocean School 2010 Symposium.
- We seek to invite scientists in charge of educational programmes in ocean sciences worldwide to come to Belgium, share their experience, draft a "state of education in ocean sciences" and develop synergies and cooperation. At the same time, this symposium can act as showcase of the offer and initiatives in Belgium. The success of

such event is largely dependent of the input and networks of the members of the Committee, to attract the right people.

Future perspectives

The Committee organizes in cooperation with VLIZ, the Symposium Ocean School 2010 on February 16 & 17 in Oostende.

17. The National Committee for Physics

The Belgian National Committee on Pure and Applied Physics has been created by the Royal Academies for Science and the Arts of Belgium (RASAB). It contributes to the promotion and coordination of Belgian activities concerning Pure and Applied Physics. At the international level it ensures Belgium's representation in IUPAP, the International Union for Pure and Applied Physics. Its activities can be followed on the website http://www.bncphys.be.

2009 Meetings of the Committee

Meetings were held on January 24, April 21 and November 09. The main interest points of these meetings were:

a. Updating of the composition of the NCPAP. Two new members were nominated to and approved by RASAB. They are Prof. Robert Sporken of FUNDP and Prof. Alexander Sevrin of VUB.

b. Preparation and Debriefing of the 2009 Colloquium (see 5).

Representation of Belgian Physics at IUPAP

The last general Assembly of IUPAP took place on October 14-18 2008 in Tsukuba (Japan). The next meeting will be in 2011, and the NCPAP will actively prepare in the coming year the submission of Belgian representatives in the various IUPAP commissions.

The 2009 colloquium of the NCPAP

The NCPAP organises on a bi-annual basis colloquia, aiming to highlight the state of the art in a specific domain of physics. The 2009 colloquium was organised, with the help of RASAB, in the Palace of the Academies on September 19, 2009, was entitled "Light: At the forefront of Physics," and featured the following speakers:

Prof. J. BAUDON (Univ. Paris 13): La lumière: une très longue mais passionnante histoire.

Prof. C. WAELKENS (KULeuven): Licht uit het Universum.

Prof. J.M. RAIMOND (Univ. Paris 6): Seeing photons without destroying them.

Prof. H. THIENPONT (VUB): Photonics: Light to improve the quality of life.

The quality of the presentation was very high and generally applauded by the about 100 participants. In the margin of the colloquium the Belgian research groups working in the thematic area of the event were invited to present their endeavors and ten groups effectively seized this opportunity.

Future perspectives

An important preoccupation in 2010 will be the replacement of Prof. P-H Heenen and Prof. F. Brouillard as members and of the latter also as vice president. The secretariat will also change in 2010, since Prof. Herquet has asked to be replaced in this function. Other significant items will be the preparation of the 2011 NCPAP colloquium on "Cosmology" and the IUPAP 2011 General Assembly (see 4).

18. The National Committee for Physiology and Pharmacology

Prof. Dr. V. Seutin reports on the EPHAR general assembly meeting. The European Pharmacological Society feels that it suffers from a low international visibility and their purpose is to encourage the national societies to participate more to the European meetings. A first step is to encourage the members of the national societies to participate to the next IUPHAR meeting in Copenhagen (Denmark) from 17 to 23 July 2010.

Prof. Dr. J. Van de Voorde attended as the representative of our Society the IUPS general assembly during the 36th IUPS meeting in Kyoto-Japan. More than 4000 physiologists attended this successful congress and the strong collaboration with the Japanese national society was emphasized. IUPS asks the national societies to submit their candidature to organize one or more satellite symposia during the next IUPS meeting and to skip a national meeting in order to increase the attendance at their meeting. Our Society decides not to take this option as it is felt that the main purpose of our Society (to give the opportunity to young and doctoral researchers to present their results) does not interfere with the success of a big international meeting.

Meeting Calendar

March 27 2010	FUNDPNamur	Prof. Dr. B. Flamion
Autumn 2010	ULBruxelles	Prof. Dr. R. Beauwens
Spring 2011	The Netherlands?/Belgium?	Dutch-Belgian Pharmacol. Meeting ?
Autumn 2011	UAntwerpen	Prof. Dr. D. Snyders
Spring 2012	UHasselt	Prof. Dr. J.M. Rigo

International Meetings

12-16 September 2010Brussels (Belgium)13th International Conference on in vivo methods, "Monitoring Molecules in Neurosciences"Contact: e-mail: ymichot@vub.ac.be – sophie.sarre@vub.ac.be

EPHAR meetings: <u>http://www.ephar.org/calendar.html</u> FEPS meetings: <u>http://www.feps.org</u>

July 17-23 2010Copenhagen (Denmark)XVIth IUPHAR World Congress of Basic and Clinical Pharmacologyhttp://www.Worldpharma2010.org- e-mail:worldpharma2010@ics.dk

July 21-26 2013Birmingham (U.K.)IUPS - 37th Congress of the International Union of Physiological Sciencese-mail: info@iups2013.org- website: www.iups2013.org

<u>Miscellaneous</u>

 A delegation of our Society recently met the board of the Dutch Pharmacological Society to discuss the possibility to organize a common meeting. The Assembly agrees with this proposal and the Dutch Society will be informed by our Secretary general. The participation of the clinical pharmacologists of the two countries to this meeting is strongly encouraged (in Holland, they constitute a separate Society and will be contacted soon). The date and the location should be decided as soon a possible. The financial implications will be examined. In case the meeting is organized in Brussels, the RASAB (The Royal Academy of Sciences and Arts of Belgium) should be asked for financial support of the organisation.

- The idea to help the Dutch Pharmacological Society in the organisation of the 2016 EPHAR meeting (in case the Dutch bid is accepted by EPHAR) is also discussed. The agreement is that our Society would be very happy to be a partner in the organisation of this meeting. However, it is felt that our participation should be restricted to the organisation of the scientific programme, as our Society does not have the capacity to take part in the financial aspects of such an event.

19. The National Committee for Psychological Science

Minutes of the meeting of May 9th, 2009

At the meeting : S. Brédart, A. Cleeremans (Deputy Secretary-General), D. Hermans, B. Rimé, G. van Outryve d'Ydewalle (Secretary-General), F. Van Overwalle, L. Verhofstadt-Denève (Vice-President).

Apologies :, G. De Soete , J. Morais (President), M. Richelle, E. Soetens, A. Vandierendonck,.

In the absence of the President, G. van Outryve d'Ydewalle chairs.

1. Approval Minutes of Meeting of December 3rd, 2008

The minutes are approved.

2. Report of the Best Thesis Award jury

The candidates pre-selected by BAPS for the Best Thesis Award were Stefanie Adriansens (UG), Leen Bastiaasen (VUB), Florine De Brouwer (ULB), & Astrid Vermeiren (UG). Frank Van Overwalle, who presides the jury, reports on the deliberations on behalf of its members, Paul de Boeck, Bernard Rimé, and Wim Gevers. The winner of the Best Thesis Award is Astrid Vermeiren for a thesis supervised by André Vandienrendonck at Universiteit Ghent. The committee thanks the jury for their efforts.

3. Membership

In light of the passing away of Paul Bertelson, a new member from ULB has to be identified. It is proposed that the point be postponed to the next meeting.

4. Preparations of the Emotion meeting to be held on October 23rd, 2009

D. Hermans and B. Rimé report on the organisation of the meeting dedicated to "Changing Emotions". A website has been developed and is presented to the committee. The program is discussed. Speakers include personalities from Belgium (Agnès Moors, UG; Vincent Yzerbyt, UCL; Batja Mesquita, KUL) and from abroad (Tim Dalgleish, Cambridge; Linda Levine, UC: Irvine; Niko Frijda, Universiteit Amsterdam; James Pennebaker, University of Texas) who will cover the topic from different perspectives. The committee congratulates the organizers for a truly outstanding selection of speakers. The funding situation is promising, with grants requested from

the FWO, from the F.R.S.-FNRS, from the Academy, and from the Brussels Region. The meeting will take place in the Espace Baudouin in the Royal Stables of the Palace of the Academies, with the poster session taking place in the Atrium. A small fee will be requested from participants. As a new initiative, a poster session will also be organized so as to offer an opportunity for participants to present their work. Information about the meeting will be sent out to different outlets, including the BAPS website and the BAPS meeting, the Federation, and relevant international mailing lists. It is expected that the proceedings of the Meeting will appear in the form of a book, possibly with Psychology Press.

5. Varia

The Secretary-General indicates that the Proceedings on the Meeting about Cognitive Ageing will be ready shortly.

NEXT MEETING :

Friday October 23rd @ 18:30.

Minutes of the meeting of October 23, , 2009

At the meeting : A. Cleeremans (Deputy Secretary-General), D. Hermans, J. Morais (President), B. Rimé, E. Soetens, G. van Outryve d'Ydewalle (Secretary-General)

Apologies :, S. Brédart, R. Bruyère, R. Cluydts, G. De Soete, M. Richelle, , A. Vandierendonck, F. Van Overwalle, L. Verhofstadt-Denève (Vice-President)

1. Approval Minutes of Meeting of May 9th, 2009

The minutes are approved pending the following amendment: R. Cluydts attended the meeting.

2. Best Thesis Award

F. Van Overwalle kindly accepts to preside the jury once more. To avoid conflict of interest and to ensure that the members of the jury are qualified to assess the submissions, the composition of the jury will be determined after the Committee receives the names of the nominees from BAPS.

3. Membership

Two candidates from the Université Libre de Bruxelles are considered to succeed Paul Bertelson on the Committee: Régine Kolinsky and Philippe Peigneux. After a brief discussion, the Committee (in the absence of the president who retired for conflict of interest reasons) chooses to offer the position to Régine Kolinsky.

On this occasion the president announces that he wishes to step down for personal reasons, and raises the issue of his own succession. The Committee notes that the next president should belong to the Dutch-speaking community so as to respect the traditional practice of alternating linguistic roles for the position.

4. Report on Symposium "Changing Emotions"

The Committee expresses its gratitude to D. Hermans and B. Rimé for the highly successful meeting they have organized today. The meeting has enjoyed exceptional attendance (over 130 participants), with a substantial number of international delegates. The presentations by the invited speakers were of excellent quality. A poster session attracted as many as 40 contributions.

5. Varia

None reported.

NEXT MEETING :

Saturday April 17th, 2010 @ 11:00. Best Thesis Award Jury meets @ 10:00.

20. The National Committee for Quaternary Research

<u>Activities</u>

- March 3, 2009 - BELQUA annual workshop

The workshop was organised by N. Mattielli (ULB) in the Palace of the Royal Academies for Science and the Arts of Belgium in Brussels. The program consisted of 15 presentations (see joined program) plus one keynote lecture given by Prof. J. Vandenberghe from the V.U. Amsterdam, on "Fluvial development: external versus internal dynamics". More than 35 scientists attended the workshop.

- **April 2009** – <u>EGU General Assembly</u> in Vienna. Several BELQUA members convened sessions.

CLIMATE Session CL44 - N. Fagel, M-F. Loutre and A. Hubert-Ferrari. "Assessment of climate events in lake sediments: deciphering climate, tectonic or anthropic influence"

- **September 17, 2009** – *Annual BELQUA fieldtrip* organised by Thierry Camelbeeck (Royal Observatory of Belgium).

Subject: *Looking for traces of the 18 September 1692 earthquake*. About 20 persons attended this fieldtrip. Thierry Camelbeeck and Thomas Lecocq (PhD, ROB) guided the fieldtrip with the help of Alain Demoulin and Hervé Degée (ULg). The general background of seismic hazard in Belgium and the record of the 1692 earthquake were given at the first stop in Soiron. The traces of the 1692 earthquake in the architectural heritage were detailed. The following stops presented the morphological expression of faulting along the "Hockay fault zone" at the sites of Wesny and along the Hoëgne River.

Miscellaneous - Financial report

(a) Financial report for 2009

- Workshop	407.23€
 registration of BELQUA website 	21.78€

- convening and minutes of the meetings	20.00 €
- transport for the BELQUA member for the meeting of the committee	76.38 €

<u>Total = 525.39€</u>

(b) Provisional financial budget for 2010

- Convening and minutes of the meeting (mainly transport)	125€
- organization of the annual symposium and field meeting	600€*
- web site managing	25€

* including the invitation of a key-note speaker to our next workshop

Forthcoming activities

- Winter 2010 Annual workshop.
- Autumn 2010 Fieldtrip.

Appendices:

- Minutes of the BELQUA NC meetings (November 2008 and March 2009)
- Program of the BELQUA workshop (3 March 2009)
- Guide of fieldtrip (18 September 2009)

21. The National Committee for Radio-Electricity

During the year 2009, two activities have to be noticed: the Benelux URSI Forum and the meetings of the Belgian URSI Committee.

This year NL has organized the third **Benelux URSI Forum** at TU Delft on June, 8, 2009.There were 18 papers presented, among which 4 from BE. The Board thanks E. VAN LIL for the commitment of KULeuven in this event. He presented a paper entitled "On the effects of large (moving) Objects like Wind Turbines on the Accuracy and Reliability of Radio Frequency Sensors". In order to make the Forum more attractive, a Best Paper Prize has been awarded, the prize for 2009 being the last book of Prof Jean BLADEL. Also, the attendees received a free CD with the book of prof. De Hoop, "Handbook of Radiation and Scattering of Waves".

- The **Belgian URSI Committee** has met three times in the facility of the Academy: on 20 March, 26 May and 13 November.

On 20 March 2009 one minute of silence was observed in memoriam of F. OLYSLAGER. A voting session toke then place for electing a new vice-president and a new effective member N. As keynote speaker of the day, Prof ROGIER (UGent) gave a lecture entitled "Indoor off-body communication based on a textile multi-antenna system integrated in clothing for rescue workers". After his presentation the administrative part of the meeting went on with communications by the Board about the RASAB General Assembly and the coming Benelux URSI Forum organized this year in NL. Administrative tasks was also done (up-dating of URSI/BE website, choice of commissions by some members). The date of the next meeting was scheduled for May, 26, 2009. On 26 May, one minute of silence was observed in memoriam of J. DE PRINS who has passed away on the 15th of May.

As keynote speaker of the day, Prof SCHWEICHER (RMA) gave a lecture entitled "*Laser Safety*". After his presentation, a voting session toke place for electing a new assistant secretary to replace E. VAN LIL. The Board made then some communication about the Benelux URSI Forum in Delft and about a few members who had resigned. Concerning the resignation of G. BRUSSAARD as URSI President, the Committee expressed his full support to Prof LEFEUVRE who was told to have been approached to serve in this function. The date of the next meeting was scheduled for November, 13, 2009.

On 13 November, the keynote speaker was C. DE MOL (ULB) who gave a lecture entitled "*Sparsity: a new paradigm in applied science*". After her presentation the Board made a few communications about the organization of the next Benelux URSI Forum in Belgium and also about the meeting of the national scientific committees at the Academy on the 10th of September.

The prize for the Benelux URSI Best Paper Award was then given by honorary member Prof Jean VAN BLADEL to Xavier RADU & Christophe CRAEYE (UCL) for their paper "Demonstration of wire-media collimation of images in MRI systems".

On the annual Meeting of the national committees, the committee was represented by Prof. Schweicher, Chairman.

22. The National Committee SCOPE - IGBP

SCOPE: Scientific Committee on Problems of the Environment IGBP: International Geosphere-Biosphere Programme

Activities in 2009 included:

-preparation of a concept paper for a BELSPO call for bids on ecosystem services research; the call was published in September 2009;

-first discussion on a possible SCOPE project on "Accidents, crises, disasters: can they play a role in reinforcing environmental protection?"

-inquiry into the effective participation of Belgian scientists in IGBP projects (still on-going)

-routine contacts with the international secretariates of SCOPE and IGBP.

No formal meeting of the committee took place, the work being carried out by internet and/or small informal groups.

23. The National Committee for Soil Sciences

24. The National Committee for Space Research

The main task of the committee is to coordinate the Belgian participation in COSPAR, which will hold its 38th Scientific Assembly in Bremen from 18 to 25 July 2010. Since COSPAR Scientific Assemblies tend to take place during even years, the activities of the committee during uneven years are rather restricted.

Meetings of the Committee in 2009

The President and the secretary met on January 20, 2009, in order to discuss initiatives to revitalize the committee. An email discussion with the members was organized, from which it was concluded that the main reason of being of the committee is the Belgian membership of COSPAR. This organization and the national membership are perceived as very important. However, the NCRO only plays a limited role in the coordination of the Belgian scientific involvement within COSPAR. Since in adition the members of the committee do meet regularly within the framework of their various disciplines, it was not felt necessary to organize additional face-to-face meetings of the committee.

General Assemblies of the Scientific Union

The next COSPAR General Assembly will take place in Bremen, Germany, from 18 till 25 July 2010.

Other activities in 2009

Dr. V. Shevtsova (ULB), Chair of the COSPAR Scientific Commission G on 'Material Sciences in Space' for the period 2008-2012, is Main Scientific Organizer for the session G01 on 'Gravitational Effects on Physico-Chemical Processes' at the Bremen Assembly. C. Waelkens (K.U.Leuven) is Main Scientific Organizer for the session E14 on IR Astronomy, with focus on Herschel and Planck, at the Bremen Assembly.

Future perspectives

As a preparation for a revised composition of the committee, an overview was made of the Belgian attendance of the three most recent COSPAR Scientific Assemblies (SAs):

- Paris 2004. 28 participants, from which 18 were from the SpacePole at Uccle (8 ROB, 5 BISA and 1 RMI), 8 from the universities (4 K.U.Leuven, 3 ULg, and 1 ULB).
- Beijing 2006. 15 participants: 6 from Space Pole (1 ROB, 4 BISA, 1 RIM), 4 from universities, 2 from SCK-CEN, some from industry.
- Montreal 2008. 34 participants, including 21 from the Space Pole (5 ROB, 11 BISA and 5 RIM), 10 from universities, and 3 from SCK-CEN.

The conclusion is that Belgian scientists have a good visibility at the COSPAR SAs. A proposal will be worked out for a revised composition of the committee, also involving scientists from institutions currently not represented in the committee.

3. National Committees Members

Antarctic Research

Decle	ir H. (N),	Chair				Fichefet T. (F)
Van A	utenboe	r T. (N)	, Vic	e-Chai	r	Hecq JH. (F)
De Br	oyer C. (F), Sec	retai	ry		Herman R. (N)
Van	Reusel	(Ms)	Α.	(N),	dep	Lancelot (Ms) C. (F)
secr	etary					Pattyn F. (N)
Berge	er A. (F)					Paulissen E. (N)
Beyer	ns L. (N)					Simon P. (F)
Deha	irs F. (N)					Souchez R. (F)
	G. (F)					
Hono	rary men	nbers:				
Doye	n (Ms) P.	(F)				Hamoir G. (F)
						Tonnard V. (F)

Astronomy

Jorissen A. (F), Chair	Dejonghe H. (N)
Waelkens Ch. (N), Vice-chair	Goossens M. (N)
Lemaître A. (F), Secretary	Gosset E. (F)
Van Hoolst T. (N), depsecretary	Sterken C. (N)
Aerts (Ms) C. (N)	Surdej J. (F)
Alvarez, R. (F)	Van Der Linden R. (N)
Baes, M. (N)	Van Eck (Ms) S. (F)
Dehant (Ms) V. (F) Honorary members:	
De Grève JP. (N)	Sauval J. (F)
Dommanget J. (F)	Smeyers P. (N)
Houziaux L. (F)	Swings JP. (F)
Noels-Grötsch (Ms) A. (F)	Van Dessel E. (N)
Pâquet P (F)	Verheest F. (N)

Biochemistry and Molecular Biology

Engelborghs Y. (N), Chair	Martial J. (F)
Opperdoes F. (F), Secretary	Michiels (Ms) C. (F)
Arnould T. (F)	Robben J. (N)
Belayew (Mevr.) A. (F)	Waelbroeck (Ms) M. (F)
De Ley M. (N)	Wyns L. (N)
Lambeir (Ms) AM. (N)	

Biological Sciences

Meerts P. (F)
Micha JC. (F)
Thys van den Audenaerde D. (N)
Van Cotthem W. (N)
Van Goethem J. (N)
Vanderborght O. (N)
Symoens JJ. (N) Verraes W. (N)

Biomedical Engineering

Flandre D. (F)
Kolh Ph. (F)
Lefevre P. (F)
Lemahieu I. (N)
Van der Perre G. (N)
Vander Sloten J. (N)
Wuyts F. (N)

Honorary members: Bourgain R. (N) Paiva M. (F), Vice-Chair

Veraart Cl.

Biophysics

Matagne A. (F), Chair Devreese B. (N), Vice-Chair Engelborghs Y. (N), Secretary Ameloot M. (N) Brasseur R. (F) Galleni M. (F) Goldbeter A. (F)

Honorary member: Errera M. (F) Goormagtigh E. (F) Lambeir (Ms) A.-M. (N) Martins (Ms) J. (N) Soumillion P. (F) Steyaert J. (N) Voets T. (N)

Chemistry

Baekelmans P. (F), Chair Cornelis (Ms) R. (N), Vice-Chair Engelmann J. (N) dep.-secretary Annys E. (N) Brandt L. (N) Crooy P. (F) de Chaffoy de Courcelles D. (F) Honorary members:

Bloyaert F. (F) Bracke W. (F) Claeys P. (F) Coekelberghs R. (F) Colin R. (F) Crabs L. (F) De Bièvre P. (N) Duyckaerts G. Geuskens G. (F) Hoste J. (N)

Crystallography

Poelman D. (N), Chair Charlier (Ms) P. (F), Vice-Chair Van Meervelt L. (N), Secretary Wouters J. (F), dep.-secretary Blockhuys F. (N) Declercq J.-P. (F) Elsen J. (N) Hadermann J. (N) Jonas A. (F) Honorary members: Danguy L. (F) Dideberg O. (F) Dupont L. (F) Durant F. (F) Fiermans L. (N) Gilles J.-M. (F) Jacobs G. (N) Lambot H. (F) Lefebvre S. (F) Legrand E. (N)

Dewanckele J.-M. (N) Herman M. (F) Moens L. (N) Pirard J.-P. (F) Raatz F. (F) Tourwé D. (N) Vandendriessche J. (N) Huyskens P. L'Homme G. (F) Loutz J.-M. (F) Martens G. (F) Ramioulle J. (F) Van Binst G. (N) Van de Sande C. (N) Vantiggelen P.

Lamoen D. (N) Maes D. (N) Schryvers (Ms) D. (N) Sferraza M. (F) Sporken R. (F) Vincze L. (N) Tinant B. (F) Van den Bossche G. (F)

Michel K. (N) Moreau J. (F) Poortmans F. (N) Reynaers M. (N) Thiry P. (F) Van Beeumen J. (N) Van Landuyt J. (N) Van Tassel R. (N) Vennik J. (N)

Geodesy and Geophysics

De Keyser J. (N), Chair Camelbeeck T. (F), Vice-Chair Pierrard V. (F), Secretary Bruyninx C. (N), dep.-secretary Beckers J.-M. (F) Crucifix M. (F) De Mazière (Ms) M. (N) De Smedt F.-H. (N)

Honorary members: Ackerman M. (F) Berger A. (F), De Muer D. (N) De Troch F. (N) Ducarme B. (F) Kockarts G. (F) Lemaire J. (F) Malcorps H. (N) Nihoul J.-J. (F) Pâquet P. (F)

Geography

Vandermotten C. (F), Chair Govers G. (N), Vice-Chair De Mayer P. (N), Secretary Ozer A. (F), dep.-secretary Charlier J. (F) De Dapper M. (N) Decleir H. (N) Decroly J.-M. (F) Honorary members: Alexandre J. (F) Annaert J. (F) Antrop M. (N) De Moor G. (N) Denis J. (F) Depuydt F. (N) Dehant (Ms) V. (F) Dewitte S. (N) Ernst G. (N) Fichefet T. (F) Huybrechts F. (N) Vandaele (Ms) A. C. (F) Vanneste Kris (N) Verhoest N. (N)

Peters J.-J. (N) Ronday F. (F) Scherer M. (N) Simon P. (F) Smets E. (N) Sneyers R. (F) Sterling A. (F) Van Der Beken A. (N) Van Twembeke U. (N) Verbeiren R. (N)

Donnay J.-P. (F) Kesteloot C. (N) Lambin E. (F) Mérenne B. (F) Thomas I. (Ms) (F) Van Hecke E. (N) Verhasselt Y. (N) Verhetsel A. (N) Goossens M. (N) Gullentops F. (N) Keeris H. (N) Nicolaï H. (F) Pissart A. (F) Van der Haegen H. (N) Vlassenbroeck W. (N)

Geological Sciences

Delmer A. (N) Gullentops F. (N)

Muchez P. (N), Chair	Groessens E. (F)
Vander Auwera (Ms) J. (N), Vice-Chair	Herbosch A. (F)
Lavreau J. (N), Secretary	Laduron D. (F)
Van Den Haute P. (N), depsecretary	Lebbe L. (N)
Boulvain F. (F)	Steurbaut E. (N)
Claeys P. (N)	Vandycke S. (Ms) (F)
Dejonghe L. (F)	Vandenberghe N. (N)
Dreesen R. (N)	Verniers J. (N)
Honorary members:	
Bultynck, P. (N)	Robazynski F. (F)
De Breuck N. (N)	Sartenaer P. (F)
De Paepe P. (N)	Streel M. (F)

Logic, History and Philosophy of Sciences

Roegiers J. (N), Chair	Meskens A. (N)
Opsomer (Ms.) C. (F), Vice-Chair	Missa JN. (F)
Vanpaemel G., Secretary	Radelet-de Grave (Ms) P. (F)
Marage P. (F), depsecretary	Segers D. (N)
Bracke W. (N)	Tihon (Ms) A. (F)
Deelstra H. (N)	Van den Abeele B. (F)
Hallyn F. (N)	Van den Broecke S. (N)
Isaac (Ms) MT. (F)	Van Tiggelen (Ms.) B. (F)
Honorary members:	
Allard A. (F)	Koeckelenbergh A. (F)
Batens D. (N)	Radoux Ch. (F)
De Mey M. (N)	Stengers (Mevr.) I. (F)
Dorikens M. (N)	Van Bendegem JP.
Elkhadem H. (F)	Van Damme F. (N)
Jansen-Sieben (Ms) R. (N)	Vandamme F. (F)

Thorez J. (F)

Mathematics

Dumortier F. (N), Chair	Gijbels (Ms) I. (N)
Finet (Ms) C. (F), Vice-Chair	Gossez JP. (F)
Van Maldeghem H. (N), Secretary	Gutt S. (F)
Bastin (Ms) F. (F), depsecretary	Lemaire L. (F)
Bultheel A. (N)	Schmets J. (F)
Caenepeel S. (N)	Thas J. (N)
Colebunders (Ms.) E. (N)	Verschoren A. (N)
Félix Y. (F)	Willem M. (F)
Honorary members:	
Buekenhout F. (F)	Kuijk W. (N)
Cahen M. (F)	Mawhin J. (F)
De Wilde M. (F)	Teugels J. (N)
Delanghe R. (N)	Vanhecke L. (N)
Hoogewijs A. (N)	

Mechanics

Degrieck J. (N), Chair	Desmet W. (N)
Dupret F. (F), Vice-Chair	Essers JA. (F)
Baudoin Y. (N), Secretary	Fisette P. (F)
Van Hemelrijck D. (N), depsecretary	Lauriks W. (N)
Cescotto S. (F)	Lefeber D. (N)
De Mol (Ms) C. (F)	Legat V. (F)
Degrande G. (N)	Van Keer R. (N)
Degrez G. (F)	Verlinden O. (F)
Honorary members:	
Boulanger Ph. (F)	Lebon G. (F)
Campion G. (F)	Péters J. (N)
Cantrijn F. (N)	Preumont A. (F)
Conti C. (F)	Rouche N. (F)
De Roeck G. (N)	Samin JC. (F)
Dechaene R. (N)	Sarlet W. (N)
Decuypere R., (N)	Sas P. (N)
De Wilde W. P. (N)	Save M. (F)
Dick E. (N)	Van Brussel H. (N)
Géradin M. (F)	Van Der Perre G. (N)
Gorez R. (F)	Van Der Waeteren T. (N)
Hirsch Ch. (N)	Van Moerbeke M. (F)
Hogge M. (F)	Van Overmeire M. (N)
Jaumotte A. (F)	Vandepitte D. (N)
Keunings R. (N)	Warzée G. (F)
Lacor Ch. (N)	

Microbiology

Mahillon J. (F)
Mainil J. (F)
Thiry E. (F)
Vanderleyden J. (N)
Vanderplaschen A. (F)
Verstraete W. (N)
Pastoret PP. (F)
Pohl P. (F)
Thonart Ph. (F)
Van Montagu M. (N)

Oceanology

Baeyens W. (N), Chair	Deleersnijder E. (F
Ronday F. (F), Vice-Chair	Dubois P. (F)
Henriet JP. (N), Secretary	Heip C. (N)
Hecq JH. (F), depsecretary	Lancelot (Ms) Ch.
Berlamont J. (N)	Mees J. (N)
Bouquegneau JM. (F)	Pichot G. (F)
Chou L. (F)	Van Grieken R. (N)
Dehairs F. (N)	Vincx M. (N)
Honorary members:	
Pajot JP. (F)	

Physics

Weynants R. (N), Chair Brouillard F. (F), Vice-Chair Herquet Ph. (N), Secretary Ameloot M. (N) Bruynseraede Y. (N) Durvaux M. (F) Garnir H.-P. (F) Heenen P-H (F) Honorary members: Biémont E. (N) Bouten M. (N) Demortier Guy (F) Grard F. (F)

Deleersnijder E. (F)
Dubois P. (F)
Heip C. (N)
Lancelot (Ms) Ch. (F)
Mees J. (N)
Pichot G. (F)
Van Grieken R. (N)
Vincx M. (N)

Leclercq-Willain (Ms) C. (F) Noels-Grötsch (Mq) A. (F) Raeymaekers H. (N) Ryckbosch D. (N) Sevrin A. (N) Sporken R. (F) Van Dyck D. (N) Wuyts F. (N) Lemonne Jacques (F)

Serneels Roger (N) Vandenplas P. (F) Warocquier M.

Physiology and Pharmacology

Godfraind T. (F), Chair	Feron O. (F)
Lefebvre R. (N), Vice-Chair	Hercheulz A. (F)
Lacroix E. (N), Secretary	Herman A. (N)
Dresse A. (F); depsecretary	Leusen I. (N)
Desmedt JE. (F)	Seutin V. (F)
Eggermont J. (N)	Van de Voorde J. (N)

Honorary member: Bogaert M. (N)

Psychological Sciences

Morais J. (F), Chair	De Keyser (Ms) V. (N)
Verhofstadt-Denève (Ms) L. (N), Vice-	De Soete G. (N)
chairman	Hermans D. (N)
van Outryve d'Ydewalle G. (N),	Richelle M. (F)
Secretary	Rimé B. (F)
Cleeremans A. (F), depsecretary	Seron X. (F)
Brédart S. (F)	Soetens E. (N)
Bruyer R. (F)	Van Overwalle F. (N)
Cluydts R. (N)	Vandierendonck A. (N)
De Boeck P. (N)	

Quaternary Research

Loutre (Ms) MF. (F), Chair	Claeys P. (N)
Baeteman (Ms) C. (N), Vice-Chair	Degryse P. (N)
Fagel (Ms) N. (F), Secretary	Groenen M. (N)
De Batist M. (N), depsecretary	Haesaerts P. (F)
André L. (F)	Heyvaert V. (N)
Camelbeeck T. (F)	Mattielli (Ms) N. (F)
	Verleyen E. (N)
	Verstraeten G. (N)

Radio-Electricity

Schweicher E. (F), Chair	Nauwelaers B. (N)
Van Lil E. (N), Vice-Chair	Pierrard V. (F)
Piette M. (F), Secretary	Prohoroff S. (F)
Stijns E. (N), depsecretary	Rogier H. (N)
Blondel M. (F)	Van Biesen L. (N)
Franchois (Ms) A. (F)	Van de Capelle A. (N)
Huynen (Ms) I. (F)	Verly J. (F)
Lagasse P. (N)	Warnant R. (F)
Honorary members:	
Barel A. (N)	Gonze R. (F)
Charles J. (F)	Van Bladel J. (N)
Delogne P. (F)	Van Eck JL. (F)
Gewillig M. (N)	Vander Vorst A. (F)
	Vloeberghs C. (F)

SCOPE-IGBP

Bourdeau Ph. (F), Chair	Sérusiaux E. (F)
Vanderborght O. (N), Vice-Chair	Souchez R. (F)
Defourny P. (F)	Symoens JJ. (F)
Fussen D. (F)	Van Cleemput O. (N)
Lambin E. (F)	Veroustraete F. (N)
Lemeur R. (N)	Verschuren D. (N)
Poesen J. (N)	Visser F. (N)
	Zaccai E. (F)

Honorary members: Berger A. (F) Kirchmann R.

Soil Science

Van Ranst E. (N), Chair	Goidts (Ms.) E. (F)
Van Wesemael B. (F), Vice-Chair	Halen H. (F)
Deckers J. (N), Secretary	Langohr R. (N)
Chapelle J. (F), depsecretary	Merckx R. (N)
Boeckx P. (N)	Penninckx M. (F)
Colinet G. (F)	Poesen J. (N)
De Neve S. (N)	Swerts (Ms) M. (N)
Engels P. (F)	Vanacker (Ms) V. (F)

Vinckier C.

Honorary members: Bock L. (F) Delvaux B. (F) Dudal R. (N) Dufey J. (F) Geypens M. (N)

Hofman G. (N) Stoops G. (N) Van Cleemput O. (N) Van Meirvenne M. (N)

Space Research

Honorary members:

Legros JC. (F), Chair	Dekeyser J. (N)
Smeyers P. (N), Vice-Chair	Froyen L. (N)
Waelkens Ch. (N), Secretary	Gérard JC. (F)
Hinsenkamp M. (F), Vice-secretary	Jamar C. (F)
Clette F. (F)	Lemaire J. (F)
Dehant (Ms) V. (F)	Malcorps H. (N)
	Simon P. (F)

Ackerman M. (F)	Kockarts G. (N)
De Loore C. (N)	Monfils A. (F)
Deruyttere A. (N)	Quadens (Ms.) O. (N)
Houziaux L. (F)	Zander R. (F)
Jaumotte A. (F)	