



2013

ANNUAL REPORTS



Académie royale des Sciences,
des Lettres et des Beaux-Arts
de Belgique



Koninklijke Vlaamse
Academie van België
voor Wetenschappen en Kunsten

The Royal Academies for Science
and the Arts of Belgium

Belgian National Scientific Committees

Belgian Federal Science
Policy Office

BELGIAN NATIONAL SCIENTIFIC COMMITTEES

ANNUAL REPORTS 2013

TABLE OF CONTENTS

Introduction	3
National Committee for Antarctic Research	4
National Committee for Astronomy	9
National Committee BELQUA (Quaternary Research)	11
National Committee for Biochemistry and Molecular Biology	14
National Committee for Biological Sciences	16
National Committee for Biomedical Engineering	19
National Committee for Biophysics	22
National Committee for Chemistry	24
National Committee for Crystallography	27
National Committee for Geodesy and Geophysics	30
National Committee for Geography	35
National Committee for Geological Sciences	33
National Committee for Logic, History and Philosophy of Sciences	40
National Committee for Mathematics	45
National Committee for Microbiology	47
National Committee for Oceanology	50
National Committee for Physics	52
National Committee for Physiology and Pharmacology	54
National Committee for Psychological Sciences	56
National Committee for Radio-Electricity	58
National Committee for Scope-IGBP	60
National Committee for Soil Sciences	61
International Unions	63
List of Members of the National Committees	65
Appendixes	83

INTRODUCTION

The National Scientific Committees' missions are the promotion and coordination of various scientific disciplines in Belgium, mainly seen in an international context. The creation of a national committee is subject to the existence of an international scientific union affiliated to ICSU or a scientific body of ICSU (scientific committees, special committees, etc.) concerning the same scientific discipline.

The National Scientific Committees work under the patronage of the Académie royale des Sciences, des Lettres¹ et des Beaux-Arts de Belgique and the Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten², which are gathered in RASAB.

The committees are subject to regulations adopted by the Belgian Academies of Sciences and Arts.

The list of the members of the Belgian Scientific Committees can be found on the RASAB's website: www.rasab.be.

¹ www.academieroyale.be

² www.kvab.be

NATIONAL COMMITTEE FOR ANTARCTIC RESEARCH

1. Introduction, mission, goals

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

[a] General Terms of Reference:

- Forum to bring members together to share information, identify common problems and to seek collective vision and endeavours 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.

[b] 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 Arctic) within the framework of sustainable development.
- Promote Polar science in general within the Belgian context.

[c] 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.

2. Meetings of the Committee

[a] Plenary meeting of 13 December 2013

Before the official BNCAR meeting, a scientific lecture, *Modelling recent and future sea ice changes*, was given by François Massonet (Georges Lemaître Centre for Earth and Climate Research (TECLIM), Earth and Life Institute, Université catholique de Louvain, Belgium).

The agenda was:

1. Approval of the report of the meeting of 19 November 2012.
2. Reports concerning SCAR activities, SCAR programmes and the Belgian participation.
3. Information about the next SCAR meeting in New Zealand and nomination of delegates.
4. Renewal of the Membership of the Committee: discussion on a proposal to co-opt new associate members to better represent all disciplines.
5. Organisation of the BNCAR meetings.
6. Information about the Antarctic Treaty Meeting in 2013, and the future one in 2014. Call for Belgian participation to the scientific consultations.
7. Varia.

Main conclusions

- 1) The ISMASS Expert group of SCAR has published a review in Nature on the Antarctic Ice Sheet. Its new Steering Committee includes Xavier Fettweis and Frank Pattyn.
- 2) Charlotte Havermans (RBIN) was selected as the only Belgian representative to the SCAR Horizon Scanning.
- 3) Concerning the next SCAR Delegate meeting and SSG meetings in Auckland, the Belgian representatives will include:
 - Frank Pattyn (SSG Geosciences, ISMASS representative and Belgian delegate);
 - Philippe Huybrechts (SSG Physical Sciences);
 - Annick Wilmotte (SSG Biological Sciences);
 - Anton Van de Putte (SCADM, Steering Committee of PAIS).

Other Belgian scientists are encouraged to participate.

- 4) The lack of participation of the BNCAR members to our plenary meetings indicates the need to contact current members and ask if they still want to be involved. The entry of new active Belgian researchers is also needed to cover all the research fields. Other committees

of the Academies have unlimited numbers of Associate Members and we propose to use the same strategy for a better and more active representation.

As in the precedent report, we asked whether ‘non active’ members could envisage to step down, 2 effective members – Prof. Christiane Lancelot (ULB) and Dr Georges Feller (ULg) – have resigned.

- 5) The research projects at the PE station are running well. At the same time, some initiatives raise questions concerning the collaborations between Belgian researchers and newcomers from abroad. Frank Pattyn reminds of his letter to the Minister of the time and Alain Hubert, in order to include a scientist in the Polar Secretariat. BNCAR is worried that much thought is given to the financial questions around the PE station, but that the science is forgotten. One idea for a clarification would be to invite the Director of the Polar Secretariat before one BNCAR meeting.

BNCAR has started to draft a text concerning *Overarching themes and priorities in Belgian Antarctic Research in anticipation for the next BELSPO calls*.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] 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.

[b] 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.

Belgian Antarctic scientists have participated to the new volume of Science Connection n° 41: *Antarctique – Antarctica* (special issue).

[c] SCAR Meetings

The XI SCAR Biology Symposium took place on 15 - 19 July 2013, in Barcelona, Spain. The title was *Life in Antarctica: Boundaries and Gradients in a Changing Environment*. It was also the conclusion of the 5-years Programme EBA (Evolution and Biology in Antarctica). The two new Biology Programmes ANT-ERA and AntEco were presented to the scientific community. Anton Van de Putte (Secretary of the Executive) and Annick Wilmotte (Sector Leader: Impacts, trends and conservation) are members of the Committee of the AntEco programme.

The Belgian representation was made of 6 researchers. Freija Hauquier (UGent) won a Poster Prize, and Charlotte Havermans (RBINS) won a COMNAP fellowship!

[d] Antarctic Treaty Meeting

The XXXVI Antarctic Treaty Consultative Meeting has taken place from 20 till 29 May 2013 in Brussels. Annick Wilmotte was member of the Belgian delegation to the Committee on Environmental Protection of the ATCM and attended this meeting. Anton Van de Putte was present at the session where the web portal *Biodiversity.aq* was presented. The Belgian researchers were invited to the CEP sessions in order to increase their involvement by showing them the reality of the CEP meetings. Finally, Filip Volckaert and Dail Laughinghouse came for half-days.

At the occasion of the ATCM, a Science Fair on Polar research was organised by APECS-Belgium (Association of Polar Early Career Scientists) in the Academy Building, and it was supported by BNCAR.

[e] Collège Belgique

Annick Wilmotte coordinated a course at the Collège Belgique under the academic responsibility of Prof. André Berger on 28 March and 28 May 2013 at the Royal Academy of Belgium: *Le traité sur l'Antarctique : une gouvernance originale pour un continent exceptionnel*. The Speakers were Jean-Arthur Régibeau (Université de Liège; Service public fédéral Affaires étrangères), Prof. Anne

Choquet (Ecole supérieure de commerce Bretagne Brest; France Business School, France) and Dr Yves Frenot (Institut polaire français; Comité pour la protection de l'environnement).

5. Future perspectives

[a] The SCAR Horizon Scanning

Charlotte Havermans (KBIN) was selected by SCAR and will participate to the SCAR Horizon Scanning in New Zealand.

[b] SCAR meetings

The XXXIII SCAR Biennial Meeting will take place in Auckland (New Zealand) in 2014. There will be some satellite meetings, workshops and Scientific Standing Group meetings between 23 and 29 August, and the Open Science Conference will be organised from 25 till 28 August. At the Open Science Conference, Frank Pattyn and Annick Wilmotte will be convener of a Session The Delegate meeting will be organised in Auckland, on 1st-3rd September 2014. The delegate for Belgium will be Frank Pattyn.

NATIONAL COMMITTEE FOR ASTRONOMY

1. Introduction, mission, goals

The formal basic goal of the committee is to coordinate the participation of Belgian astronomers in the activities of the International Astronomical Union (IAU), and in the triennial IAU General Assembly in particular. The committee also serves a role in the dissemination within the Belgian community of developments within other international organisations to which our country participates, such as ESA, ESO, and the journal *Astronomy and Astrophysics*. Finally, the meetings also offer opportunities to reflect together on matters affecting astronomical activities in Belgium.

2. Meetings of the Committee

The Committee gathered twice in 2013: on 29 January and 1st October. Both meetings took place at the Palace of the Royal Academies for Science and the Arts of Belgium in Brussels. Recurrent topics of discussion during these meetings were ESO matters, ESA matters, the Astronomy & Astrophysics Board, and the ARIES telescopes, which are addressed in the sections below.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] *Astronomy and Astrophysics (A & A)*

C. Sterken was the Belgian delegate in the A&A editorial board up to 30 September 2013. The BNCA has elected R. Van der Linden as the new delegate for a period of one year.

[b] ESO matters

S. Van Eck (secretary of the Belgian National ESO Committee, BNEC) provided updates on the European Extremely Large Telescope E-ELT and the Atacama Large Millimeter/submillimeter Array (ALMA) in the January meeting. J. Surdej (BNEC president) presented a summary of the BNEC meeting of 29 May 2013. Comments were regularly added by C. Waelkens, Belgian representative at the ESO Council, and W. Verschueren from BELSPO. ALMA was officially inaugurated on 13 March 2013 in the Chilean Andes. A particular cause of concern in recent years was the critical financial situation of the E-ELT requiring increased contributions from the ESO member states.

Although the E-ELT finally received full approval, its funding is still not fully assured.

[c] ESA matters

W. Verschueren, in charge of ESA matters at BELSPO, reported on decisions from the ESA ministerial Councils (such as budget, missions and their evolution, delays or problems, the Belgian participations, the main political issues...) at each BNCA meeting. Gaia, ESA's spacecraft that will make a three-dimensional map of our galaxy, was successfully launched from Europe's Spaceport in Kourou, French Guiana, on 19 December 2013.

[d] ARIES telescopes

The construction of the dome of the 3.6m Devasthal telescope started in 2013. In relation with the ARIES telescopes, two Indian scientists received a BELSPO postdoctoral position and started working at UGent and ULiège.

[d] New members

At the meeting of 1st October, two new effective BNCA members were elected: Prof. dr. J. Blommaert and Prof. dr. S. Poedts.

5. Future perspectives

The fifth Automated Transfer Vehicle (ATV-5), called *Georges Lemaître*, is scheduled for launch in 2014. Three main events will be organised in Belgium: a live broadcast of the launch in the Planetarium, an exhibition in Charleroi, Lemaître's birth place, and a one-day symposium aimed at the informed public on 7 May 2014 in Leuven on the person of Lemaître and his scientific work.

NATIONAL COMMITTEE BELQUA (QUATERNARY RESEARCH)

1. Introduction, missions, goals

The purpose of BELQUA is to encourage the Belgian research on various aspects of the Quaternary period, either research conducted in Belgium or by Belgian scientists abroad. It aims to encourage young researchers and to promote scientific communication. All fields related to Quaternary research are welcome, e.g. geology, climate, archaeology, etc.

2. Meetings of the Committee

Dates: 6 March and 3 December, both in Brussels.

Main conclusions:

[1] Evaluation of Workshop 2013 and fieldtrip 2013.

[2] Discussion concerning:

- The forthcoming BELQUA activities – workshop and fieldtrip planning;
- The modification in the member list and election of two new members;
- The annual report.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] BELQUA annual workshop

Description: The 2013 BELQUA Workshop of 6 March 2013 was a one-day workshop in Brussels. Thierry Camelbeeck and Garcia Moreno (ROB) convened the BELQUA Workshop. Prof. S. Gupta (Imperial College London, UK) has been invited as keynote speaker on the topic of *Catastrophic megafloods in the English Channel*. His lecture has been programmed just after the lunch break as an attraction point to stimulate the participants to remain present during both the morning and afternoon session. In addition to the keynote lecture, abstracts were submitted for 10 oral presentations, covering a very wide range of topics and disciplines. Many of this year's presenters are again new faces, and predominantly of younger scientists. This is in line with the observations

made during previous years, i.e. that there is a dynamic community working in Quaternary sciences in Belgium.

Goal: The workshop is an opportunity to meet colleagues working in Quaternary Sciences in Belgium and Belgians working abroad. It is also an opportunity for students to present their PhD research.

Attendance: The attendance remains stable with ± 40 participants.

[b] Annual BELQUA fieldtrip

Description: The BELQUA Field meeting took place at Dudzele (Zeebrugge) where an archaeological excavation was undertaken by Raakvlak (Intergemeentelijke Dienst Archeologie Brugge & Ommeland). On the basis of previous fieldwork it was assumed to find peat excavation pits from the Roman period for salt production. The participants took advantage of this particular occasion to see the shallow outcrops showing the Pleistocene sandy subsoil, basal peat and post-peat deposits of which the timing of deposition is still not exactly known. Since for many of the participants it was the first time to see this Holocene geological and archaeological record, many questions were asked and an interesting discussion took place.

Goal: In the field Cecile Baeteman gave a general introduction about the particular geological context of that part of the coastal plain, followed by an explanation about the excavation by Dieter Verwerft, responsible archaeologist. Unfortunately and despite further work with the spade, the peat excavation pits remained hidden that day at the excavated location (a week later they became exposed!). However, the participants could see and feel the many artifacts associated with salt production.

Attendance: 15 participants.

(c) Participation in international meetings and conference

BELQUA members took part and convened sessions in several international meetings:

- Marie-France Loutre and Nathalie Fagel convened a session in the climate symposium at the EGU2013 meeting;
- Kris VANNESTE (ROB) was co-convenor of session *TS8.1/SM2.6 Active tectonics and the earthquake cycle* at the EGU 2013 meeting.

[e] INQUA relationships

BELQUA is the Belgian contact for INQUA. Cécile Baeteman is the Belgian representative at the

International Council. Marie-France Loutre is the treasurer of INQUA. Information from INQUA is distributed amongst the Belgian Quaternary Community through the Belgian representative and BELQUA. It is for example the case for the newsletter that the INQUA Executive Committee edited, for the calls for INQUA projects and medals, and for the table of content of the INQUA journal.

5. Future perspectives

[a] BELQUA annual workshop – 5 March 2014: It is decided to repeat the initiative again next year, with V. Heyvaert and E. Verleyen as conveners. Dr. E. Wolff (British Antarctic Survey and University of Cambridge, UK), a specialist in paleoclimate reconstructions based on Antarctic ice cores, will give the keynote lecture.

[b] BELQUA annual Fieldtrip: not determined yet.

[c] EGU 2014: BELQUA members will propose several sessions.

[d] International open PAGES Focus 4 workshop *Towards a more accurate quantification of human-environment interactions in the past* will be held in Leuven, Belgium, from 3-7 February 2014. The aim of this workshop is to provide a forum where scientists from both environmental sciences and humanities can meet and share their data and ideas on how to quantify past human environment interactions. Gert Verstraeten, as member of BELQUA NC, was the initiator and main organizer of the workshop.

[e] Palaeoclimate Modeling Intercomparison Project (PMIP) General Assembly in Namur (Belgium), 25-30 May 2014.

NATIONAL COMMITTEE FOR BIOCHEMISTRY AND MOLECULAR BIOLOGY

1. Introduction, mission, goals

The goal of the National Committee is to promote research in the field of Biochemistry and Molecular Biology, by organizing meetings and inviting outstanding internationally renowned scientists. Because of the increasingly interdisciplinary nature of the biological sciences, often symposia are organised together with other societies and National Committees.

Because of the common goals, 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 of all the activities of this Society.

2. Meetings of the committee

The National Committee meets together with the board of the Belgian Society for Biochemistry and Molecular Biology. The meeting took place on Saturday 16 February 2013, from 10:00 - 12:00 in the meeting room of the Unité de Biologie et Biochimie Cellulaire, Facultés Universitaires Notre-Dame de la Paix, Namur, and was organised by Prof. Thierry Arnould. In this board meeting the planning for 2013 was made. Further organisation was done by email. The actual organisation of symposia is left to the local organisers. Prof. Anne-Marie Lambeir was elected as the new president of the society.

3. General Assembly of the Scientific Union

No assembly of the Scientific Union in 2013.

4. Other activities

The Society/National Committee has organised in 2012 the following two scientific meetings:

[a] 208th meeting of the Society³ entitled *Membrane transport proteins* was organised together with the Belgian Society for Cell Biology and Development, at the UCL (Louvain-la-Neuve) on the 26th of April by Prof. F. Chaumont and P. Dumont. The meeting was attended by 82 participants.

³ See program on page 86.

[b] 209th meeting of the Society⁴ was organised at the Royal Academies in Brussels together with the Belgian Society for Biochemistry and Molecular Biology on 9 December 2013. This symposium entitled *How cells deal with stress?* was attended by well over 136 scientists. It was organised by Prof. Joris Messens (VUB), Jean-Francois Collet (UCL) and Rudy Wattiez (UMons), with the support of Fred Opperdoes and Yves Engelborghs.

[c] Other meetings

Prof. Jason Perret attended the FEBS Council meeting in St. Petersburg on 12 July.

Prof. Anne-Marie Lambeir attended the RASAB Annual meeting of the Belgian National Scientific Committees on 30 October.

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

⁴ See program on page 87.

NATIONAL COMMITTEE FOR BIOLOGICAL SCIENCES

1. Introduction, mission, goals

The national Committee of Biological Sciences is representing the Royal Academies (RASAB) towards the International Union of Biological Sciences (IUBS) and brings representatives of the Belgian biological research and research groups together. The Committee organizes contact fora and develops in collaboration with other organisations research projects towards the larger public.

2. Meetings of the Committee

[a] The Committee has been preparing a symposium in collaboration with the Royal Academy of overseas Sciences: Nutrition and Food production in the Congo basin. It was held in Brussels at the Palace of the Academies on 30 September and 1st October.

The rationale behind the conference is the fact that the world population is steadily growing, having an impact on climate, land use and biological resources, whereas the right to food is a universal human right. The aim was to bring as much as possible scientists together with a different background in order to stimulate discussion and exchange of views. The Congo basin has been chosen because of the expertise in Belgium on the one hand and because Africa is one of the continents where the problems are very numerous, because of a number of reasons.

The activities of the National committee of biological sciences have all been centred on the organisation of the symposium. Given the number of preparatory meetings it has been decided to distinguish between the meetings dealing with the scientific part, the programme, on the one hand, and with the organisational affairs on the other hand.

For meetings concerning the programme, all members of the National committee have been invited together with the members of the Committee for environment and development of the Royal Academy, the permanent secretary of the Academy and a member of its secretariat. The president and the secretary of the National Committee attended the meetings concerning the practical organisation of the symposium. In order to facilitate the organisation, most meetings took place at the secretariat of the royal Academy of overseas Sciences, Avenue Louise 231, Brussels.

Meetings of the scientific and the organising committee of the conference were held on: 23 January, 5 February, 27 February, 6 March, 7 March, 29 March, 17 April, 21 June, 8 July, 28 August, 4 September, 15 November.

[b] During the annual Meeting of the National Scientific Committees (Academies Palace, 30 October), the committee Biological sciences and its activities have been presented by the President, with a special emphasis on the conclusions of the symposium on *Nutrition and food production in the Congo basin*.

3. General Assembly of the Scientific Union

No assembly of the Scientific Union in 2013.

4. Other Activities

[a] Symposium *Nutrition and Food production in the Congo basin*⁵

Attendance of the symposium: The symposium has been very well attended. Each day had slightly more than 100 participants. As the participants of both days were different, it is estimated that about 150 different persons have been reached. The attendance of diaspora from central Africa was good. Furthermore funding has been found to invite people living in the region.

Proceedings: Papers are submitted and will be published in one of the series of the Royal Academy, after peer review.

Financial aspects: The demand to get funding, as a contact forum, was not honoured. Funding was obtained from the FNRS and the Royal academies. In kind funding was obtained by putting the auditorium and the marble room (poster presentations, coffee room and dining room) in the Palace of Academies at the disposal of the organisation, without a financial contribution. Without the in kind support closing the books would have been impossible.

Overall appreciation: The level of contributions was very high and the discussions vivid. The fact that authors of posters got the possibility to present their work during a three minutes slot at the plenary contributed strongly the contacts between participants and created a positive atmosphere as to new and future scientific collaborations.

⁵ See program on page 88.

5.Future perspectives

[a] For 2014 it is planned to continue to develop a programme to monitor, as a project for the larger public, a selected number of lichens, which are indicators for air pollution. We will contact Natagora and Natuurpunt in order to get their collaboration and to develop the project for the whole of the Belgian territory. The collaboration is mandatory to realise the programme.

[b] In 2014 we will monitor the activity of the members and their attendance to the Committee meetings as a basis to “rejuvenate” on the one hand and to get a better representation of biological disciplines, which have developed the last decennia on the other hand.

[c]In 2014 we will publish the proceedings of the conference on Nutrition and food production in the Congo basin.

NATIONAL COMMITTEE FOR BIOMEDICAL ENGINEERING

1. Introduction, missions, goals

Biomedical Engineering is the multidisciplinary field concerning engineering research, developments and applications 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 organisations and societies in the field of biomedical engineering;
- Representation of the Belgian academic point of view;
- Setting up a research and valorisation forum for interested students and professionals.

2. Meetings of the committee

Dates: The Committee met on: 31 January, 16 March, 5 September, 12 November and 6 December.

Main conclusions:

- Continuing efforts for a yearly Contact Forum.
- Involving young scientists and professionals, alumni of our master programs.
- Streamlining communications (updated informative website).
- Contacts with industry: mostly via the association UNAMEC.
- Continuing liaison efforts with European, worldwide associations.
- Need for continuing efforts in promoting research and development and an awareness of the community.

3. General Assembly of the Scientific Union

No assembly of the Scientific Union in 2013. The International Union IUPESM held its General Assembly in May 2012 during the World Congress on Biomedical Engineering and Medical Physics

in Beijing (25 May – 2nd June 2012), during which event the Federation's officers were, M. Nyssen became Treasurer of IFMBE.

4. Other activities

[a] Belgian Day on Biomedical Engineering (6 December)

Description: Contact Forum with 5 invited speakers, a poster session presenting new research results and prizes for 3 posters by young researchers; Collaboration with the IEEE Benelux Chapter and with European projects concerning Biomedical Education. This year's theme is: *Robots in medicine*.

Goals:

- Bring Belgian researchers in contact with internationally recognized speakers (this year's theme is: *Bridging the gap between Engineering and Medecine*) and allow them to present their work in a short presentation and poster (Belgian Day).
- Evaluate the future activities of EAMBES.

Attendance: 270 participants attended.

[b] Collaboration with UNAMEC

Thanks to the collaboration with UNAMEC, an evaluation of the complete biomedical engineering sectorial presence: in education, in research, and in the professional context has been realized in 2013.

Major contributions were made to the UNAMEC report concerning medical devices (in final stage): *Medical technology in Belgium*.

[c] Liaison with worldwide societies/activities

- Contacts between the National Committee, the World Federation IFMBE, the Union (IUPESM) and ICSU via Marc Nyssen.
- Contacts between the National Committee and EAMBES (European Level umbrella organisation) via Jos Vander Sloten.
- Contacts between the National Committee and ESEM (the European Scientific Society) via Pascal Verdonck.
- Contacts between the National Committee and UNAMEC (the professional umbrella association), with industry members of biomedical sector.

5. Future perspectives

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

[b] 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”.

[C] Keeping in contact with the alumni and stimulating activities that bridge the gap between R&D and products. A “Youngsters Board” was set up successfully in 2010 and was fully operational in 2012.

[d] Contacts with the professional field, amongst others through UNAMEC will be further consolidated.

[f] The preparations for the next Contactforum have already started.

6. Clarification of abbreviations

- IFMBE: International Federation for Biomedical Engineering: the “World Federation”
- IUPESM “International Union for Physics and Engineering Sciences in Medicine”, the UNION of which the IFMBE is 1 of the 2 components.
- EAMBES: European umbrella association, regrouping societies and teaching/research departments.
- ESEM: European Society for Biomedical Engineering.

NATIONAL COMMITTEE FOR BIOPHYSICS

1. Introduction, mission, goals

The goal of the National Committee is to promote research in the field of Biophysics, by organizing meetings and inviting outstanding internationally renowned scientists. Because of the increasingly interdisciplinary nature of the biological sciences, often symposia are organised together with other societies and National Committees. Because of the common goals, the members of the National Committee on Biophysics are also member of the board of the Belgian Biophysical Society and as such are involved in the preparation and organisation of all the activities of this Society.

2. Meetings of the Committee

Non-specified

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] Protein oligomer formation in vitro and in the living cell⁶

On Wednesday 29th of May: a one-day workshop on *Protein oligomer formation in vitro and in the living cell* at the KULeuven, organised by Prof. Yves Engelborghs.

[b] 11th one-day symposium on Protein Folding and Stability⁷

On the 30th of August, the 11th one-day symposium on *Protein Folding and Stability*, organised by Prof. André Matagne, University of Liège.

[c] Contactforum on Molecular crowding, in vitro and in the living cell

Prof. André Matagne and Prof. Yves Engelborghs attended the 9th EBSA (European Biophysics Society Association) meeting in Lisbon from 13-17th of July. Prof. Yves Engelborghs withdrew from the board while Prof. André Matagne was elected as new member of the EBSA board.

⁶ See program on page 94.

⁷ See program on page 95.

5. Future perspectives

- Spring meeting on *Biophysical applications of Mass Spectrometry*, planned by Prof. Bart Devreese.
- A Biophysics Summerschool on *Optogenetics and Neurophotonics* organised by Prof. Carmen Bartic and Prof. Yves Engelborghs.
- A Biophysics conference in the Academies on *Calorimetry and Biophysical techniques* co-organised by Prof. Andre Matagne and Prof. Yves Engelborghs.

NATIONAL COMMITTEE FOR CHEMISTRY

1. Introduction, mission, goals

- Federate the messages of chemistry (Universities, Technical Colleges, Essenscia, CEFIC, SRC, KVCV, JSC, etc.).
- Stimulate the public and improve the image of chemistry in Belgium in all the aspects.
- Make the bridgehead on IUPAC in Belgium (input and output).
- Make the promotion of chemistry and sciences to the young generations at the early age, high schools.

2. Meetings of the committee

As planned to “Reconciliate the people and Chemistry” in a New Contract between Chemistry and the Society, we focused our action(s) on the education. It has been agreed to ask to each of the Committee member to inform the Committee about their specific actions in order to have one action reported, or one project presented at the Committee meetings. As one example of this Essenscia reported their promotion and communication actions planned for 2013.

At the 2013 February meeting a promotion action (XperiLab⁸) resulting from the initiative of the Musée des Sciences Naturelles et and la Société Solvay is being developed (Fondation Entreprise Institut). The February 12, 2013 meeting took place at the Institut des Sciences Naturelles/Museum voor Natuurwetenschappen where the project was explained and a visit of the XperiLab was organised for the Committee Members. Xperilab is a *mobile* lab installed in a truck (16m/32 tons) Ovisiting “primary” schools in Belgium and inviting the children to participate actually in the experimentation (Physics, Chemistry and Biology, IT.XperiLab visited 233 schools in 2012 and 10336 “young visitors” attended (500 schools and 23300 visitors since 2010 when the project was started).

3. General Assembly of the Scientific Union

International Union for Pure and Applied chemistry (IUPAC) - 47th General Assembly (Istambul, 8-15 Aug 2013).

Participants: Paul De Bièvre, Rita Cornelis, Paul Baekelmans.

⁸ www.xperilab.be

[a] Attendance at the Science Committee Meetings and COCI (Industry)

[b] The World Chemistry Leadership Meeting: an opportunity for YOUNG leaders from chemistry to set new priorities for the science. The Theme *Future of Chemistry* at the Istanbul 47th General Assembly – IUPAC's role is an opportunity for young leaders to voice their ideas about *where will chemistry be in 25 years?* and how shall IUPAC approach these future times.

This year, IUPAC builds on this debate focusing on bringing the voice of younger chemists to the fore.

[c] Role of the National Committee Members at the IUPAC/General Assembly Decisions

- Paul De Bièvre: Designation as National Representative of the Analytical Chemistry Division (2014/2015)
- Rita Cornelis: Elected as Vice-President of the "Chemistry and Human Health" Division
- Paul Baekelmans: COCI representing Belgium.

[d] Specific Items related to Belgium at the IUPAC

- *Chemistry International*: (News magazine of IUPAC) emphasizes (November-December issue) the importance of Belgium in the history of Chemical Industry through articles dedicated to Ernest Solvay and to the celebration of the 150th anniversary of Solvay.
- IUPAC-Solvay International Award for Young Chemists. The prize awarding "to most outstanding Theses" is intended to be given to young PhD's encouraging them at the beginning of their career. This prize will be awarded up to five annually by the IUPAC. In agreement with the status of IUPAC as a global organisation there will be a fair geographic distribution of prizes. This award has been reshaped and now sponsored by Solvay. It reinforces the connection of Belgium with IUPAC.

4. Other activities[a] International meeting of the Chemistry and human health IUPAC division VII at the Academies

Initiated by Rita Cornelis (Vice-President of the National Committee), the meeting will take place in Brussels at the Palace of the Academies from 26 May to 28 May 2014.

1. Medicinal Chemistry/ Division of Chemistry and Human Health
2. Toxicology/ Division of Chemistry and Human Health.

This meeting is organised in the scope of the IUPAC/NCS collaboration. This initiative is reinforcing the relationship and will emphasize the role of Belgium at the IUPAC

NATIONAL COMMITTEE FOR CRYSTALLOGRAPHY

1. Introduction, mission, goals

Crystallography is the study of the atomic and molecular structure of diverse substances using microscopy and diffraction techniques in order to understand the relationship between atomic structure and properties of these materials.

The objectives of the National Committee of Crystallography are to promote cooperation in crystallography, to contribute to all aspects of crystallographic research, to catalyze the relations of crystallography to other sciences, to promote crystallography for the general public, and to represent Belgian crystallographers in international associations.

The committee has its own web site⁹, which is administered by Johan Wouters, and organizes a yearly crystal growing competition for pupils at secondary schools.

In connection with the International Year of Crystallography (IYCr) in 2014, the National Committee of Crystallography has also set up a web site - www.iycr2014.be - to announce the activities organised in Belgium on this occasion.

2. Meetings of the Committee

[a] The meeting took place on 20 March 2013. During this meeting the Seventh Belgian Crystallography Symposium BCS-6 (Brussels, 10 October 2012) has been evaluated. A list of planned activities in Belgium related to the International Year of Crystallography IYCr2014 was discussed. Furthermore an overview of the inscriptions and preparations of the Belgian Crystal Growing Competition was given and the date of the prize awarding ceremony in the Academy Palace was fixed at 8 May 2013. Finally, the Belgian representation for the Council Meeting of the European Crystallographic Association (ECA) in Warwick has been discussed

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

⁹ www.sites.google.com/site/xallobe

4. Other activities

[a] Crystal Growing Competition

The National Committee of Crystallography has organised in 2013 with support of both academies and sponsor Acros Organics a successful thirteenth edition of the Crystal Growing Competition for pupils of the secondary schools. For this edition alum has been chosen as crystallizing compound. The judging of the submitted crystals took place on 20 April 2013 in Namur. During the proclamation on 8 May 2013 in the Academies Palace in Brussels, Dr. Denis Vande Putte (Tiense Suikerraffinaderij) has given a lecture on the application of crystallization in sugar production.

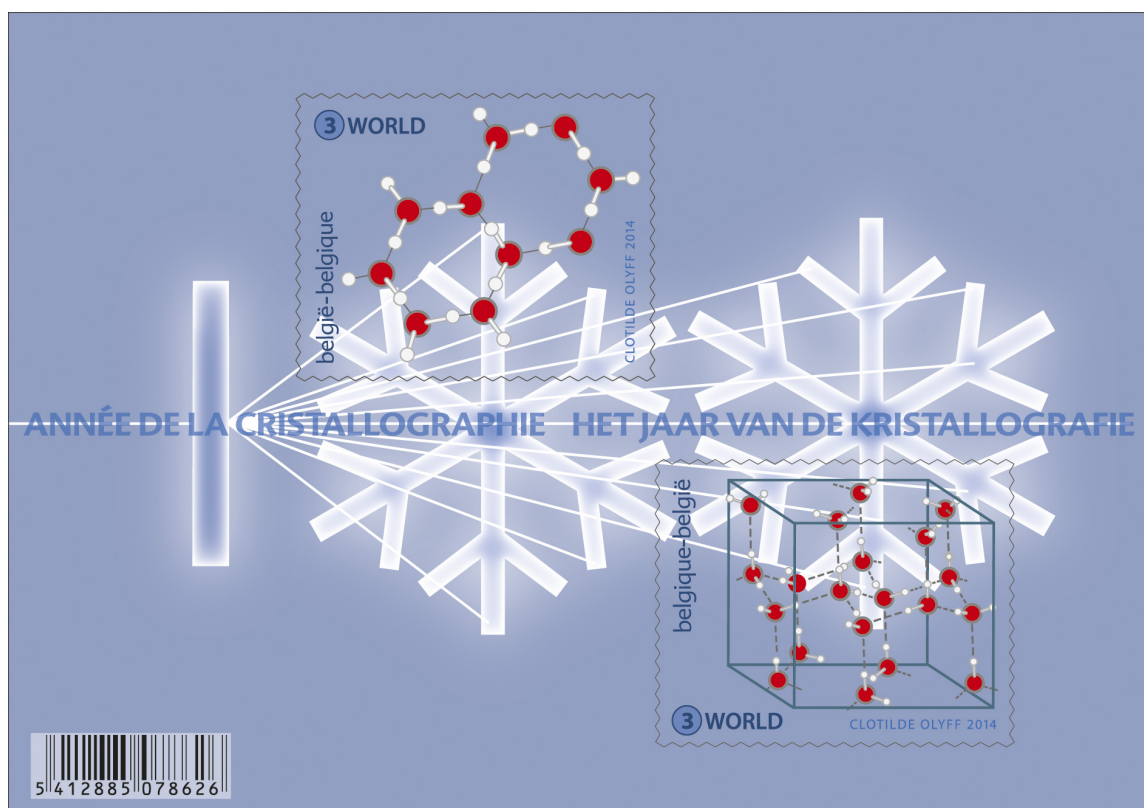
[b] International relations

Yaroslav Filinchuk has represented the Committee at the Council Meetings of the European Crystallographic Association ECA in Warwick. Joke Hadermann has also participated as member of the Executive Committee of the European Crystallographic Association to these meetings. Frederic Hatert is co-chair of the Special Interest Group on Mineral and Inorganic Crystallography. Yaroslav Filinchuk is secretary of the Special Interest Group on Crystallography under Extreme Conditions.

Frederic Hatert and Joke Hadermann are active members of respectively the IUCr Commission Inorganic and Mineral Structures and the IUCr Commissions Aperiodic crystals and Electron Crystallography. L. Van Meervelt has participated as General Secretary and Treasurer to the meetings of the IUCr Finance Committee in Leuven and IUCr Executive Committee in Leuven. As councillor D. Maes has participated to the meetings of the International Organisation for Crystal Growth.

[c] International Year of Crystallography

Luc Van Meervelt has initiated the issue of two special postage stamps and a souvenir sheet by bpost on the occasion of the International Year of Crystallography and did the scientific follow-up of the design by Clotilde Olyff. The postage stamps will be available on 10 June 2014 and show snowflakes, a diffraction experiment and the arrangement of water molecules in ice crystals. The stamps and souvenir sheet will be self-adhesive and transparent, which is a premiere for the Belgian post.



5. Future perspectives

[a] Organisation of the fourteenth Belgian Crystal Growing Competition in 2014 (see chem.kuleuven.be/bcc)

[b] Organisation of the Eighth Belgian Crystallography Symposium BCS-8 (15 October 2014, Brussels)

[c] Participation in the International Year of Crystallography IYCr in 2014 (see www.iycr2014.be for overview of initiatives) - planned activities: exhibitions in Gent and Leuven, Invite a crystallographer - lecture for secondary schools, workshop on symmetry in Liège, lectures in Leuven, Louvain-la-Neuve, Gent, Antwerpen and Liège...

NATIONAL COMMITTEE FOR GEODESY AND GEOPHYSICS

1. Introduction, mission, goals

The BNCGG serves as a link between IUGG and the Belgian scientists working in the fields of Geodesy and Geophysics. This activity reaches a climax every four years at the IUGG general assembly. The BNCGG is then charged to propose to the Academy the national delegates to IUGG and to its eight Associations:

- 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).

In the meantime the BNCGG organises regularly conferences by known Belgian or foreign scientists.

The BNCGG tries also to encourage the participation of young scientists to the IUGG General Assemblies by attributing grants.

Belgium was among the 9 countries that established the International Union of Geodesy and Geophysics (IUGG) 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 the "Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten" and the "Académie royale des Sciences, des Lettres et des Beaux-Arts de Belgique".

In parallel with the BNCGG, exists since 1955 an "Association sans buts lucratifs de droit belge" called "Comité National Belge de Géodésie et de Géophysique, Bruxelles". It is charged to administrate the finances of the Committee.

2. Meetings of the Committee

The traditional annual BNCGG General Assembly has been held on January 24 in the Meridian room of the Royal Observatory of Belgium. Pr. Jean-Louis Tison (ULB) gave the introductory conference.

It has been necessary to organize a second General Assembly on May 3 to discuss the proposal done by the IUGG General Secretary to organize a celebration event of the IUGG centenary in Brussels in 2019. This second GA was held in the meeting room of the Royal Observatory of Belgium.

Another BNCGG meeting was organised on 10 October at the Royal Observatory of Belgium with two conferences by Pr. Pierre Ozer (ULg) and Dr. David Dehenauw (KMI/IRM).

The summary of the three talks that were given to the Committee follows:

[a] Ice-Ocean interactions under the Roi Baudouin Ice Shelf, East Antarctica: controls on sea level rise

By Pr. Jean-Louis Tison, Université Libre de Bruxelles, on January 24, 2013 at ROB

One of the major uncertainties in the context of the surmised Global Climate Change is the future behaviour of the global sea level, with potentially severe impacts on human society, especially in coastal areas. One direct driver of expected future sea level rise is the contribution of melting/calving ice sheets, given the large amounts of frozen water stored in these large natural ice masses.

This talk will present recent results from glaciological and oceanographic measurements in the coastal vicinity (Princess Ragnhild Coast) of the new Belgian Antarctic Base Princess Elisabeth, aiming at quantifying the potential contribution of this part of East-Antarctica to accelerated ice discharges to the Southern Ocean. Indeed, until now, it has been considered that it is mainly some regions of West-Antarctica (e.g. Pine Island Glacier in the Amundsen Sea) that show clear signs of "destabilization" due to the fact that most of its ice-bedrock lies well below present-day sea level. Little is known, however, of its east Antarctic counterpart, generally reported as quite stable (or even in slight growth) in terms of mass balance. We will review the processes at stake, and see how these might be at work (or not) in the vicinity of the old "base Roi Baudouin" location (actually a floating ice shelf).

[b] *Communication and catastrophe: “everything’s under control”*

By Pr. Pierre Ozer, Department of Environmental Sciences and Management, University of Liège, Arlon, on October 10, 2013 at ROB

There are multiple ways to communicate when disaster strikes. But the common denominator is to run the signal that “everything is under control”. Yet, people ‘love’ that. However, it sometimes –very often– happens that disasters are handled so as to serve its own interests at the expense of the public interest. In the context of this paper, we focus on natural disasters. We will travel across three continents to show the multitude of possible manipulations, the objectives of the latter and two common points between these three examples: the defense of some interests (financial or political) and the further impoverishment of the most vulnerable populations. The first example takes us to Vietnam where we will see how the country is affected by climate change. Then, in Benin, we will see how flooding can be whipped up in an election campaign. Finally, a Belgian example (floods in Tubize) will show that sometimes an improvised too reassuring communication can be disastrous on a political level.

[c] *Communication aspects of high impact weather: the Pukkelpop storm case*

By Dr. David Dehenauw (KMI/IRM), on October 10, 2013 at ROB

August 18, 2011, the biggest death toll in Belgium due to severe weather occurred since 1953 during the Pukkelpop festival in Kiewiet, near Hasselt. Was this forecast? Was this thunderstorm truly exceptional or not? Which warnings were issued? Did they reach the organisers of Pukkelpop ? Why or why not? Are there lessons to be learned? If yes, has action been taken already by all partners? Was the disaster an accident waiting to happen? I will try to answer these questions.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] Representation at Scientific Assemblies

- F. Collin represented the BNCGG at the IAHS-IAPSO-IASPEI Scientific Assembly in Gothenburg, Sweden, 2013-07-22 to 2013-07-26
- Ph. Huybrecht represented the BNCGG at the IACS-IAMAS Assembly in Davos, Switzerland, 2013-07-08 to 2013-07-12
- F. Darrouzet represented the BNCGG at the IAGA Scientific Assembly in Merida, Mexico, 2013-08-26 to 2013-08-31
- C. Bruyninx represented the BNCGG at the IAG Scientific Assembly in Potsdam, Germany, 2013-09-01 to 2013-09-06
- A. Bernard represented the BNCGG at the IAVCEI Scientific Assembly in Kagoshima, Japan, 2013-07-20 to 2013-07-24

[b] Organisation of a splinter meeting of Belgian scientists involved in IAVCEI

The BNCGG President invited Belgian scientists working in the field of volcanology at the Royal Observatory of Belgium on Wednesday 19 June “to discuss about the role of the BNCGG with the purpose of involving more volcanologists in its activities.

[c] Possible organisation of a IUGG GA or Celebration Event in 2019 in Brussels

On 26 March, the BNCGG Bureau met the Secretary General of the International Union of Geodesy and Geophysics (IUGG), in the presence of the Director General of the Royal Observatory of Belgium. The object of his visit in Brussels was the following: In 2019 IUGG will turn to be 100. IUGG was born in Brussels and the executives of IUGG thought that perhaps it would be a good idea to celebrate this wonderful event in Brussels on or around 28 July 2019 (the date of the birth of the Union). He was asked by the IUGG Bureau to negotiate with us about any potential actions.

He presented two options and asked us whether we would be interested to invest in one of the two options. There is a third option, which is to do nothing!

Option 1: To organize in Brussels the 2019 IUGG general Assembly [More or less 5000 participants during two weeks].

Of course we will then be in competition with other candidatures and will have to introduce a formal bid by Nov. 2014.

Option 2: To organize in Brussels a special event of 2 to 3 days, inviting dedicated speakers [more or less 500 participants]. In this case, the IUGG bureau will have to be informed of our intention by Sept. 2013. After a vote amongst the effective BNCGG members, the BNCGG decided not to go for option 2 (organisation of a small meeting). Concerning the organisation of an IUGG General Assembly: it will be a challenge to organize it in Brussels, because the SQUARE, in the centre of Brussels, has not enough rooms. Of course, there are two alternatives in Brussels: the Heyzel Plateau, or the VUB campus. The Heyzel plateau was disregarded by the BNCGG. Presently the VUB seems to be the only option left.

5. Future perspectives

[a] The next BNCGG General Assembly is planned on Thursday January 23, 2014.

[b] The next IUGG General Assembly will be held in Prague, Czech Republic in 2015.

[c] The mandates of our effective and associated members have to be renewed every 4 years. The last time was in 2012, so it will be the case again in 2016. Letters for renewal will be sent in November 2015.

NATIONAL COMMITTEE FOR GEOGRAPHY

1. Introduction, mission, goals

The National Committee for Geography represents Belgian scientists working in the field of Geography in the work of IGU. This Committee is a forum for exchanging views on the landscape of Geography in Belgium.

2. Meetings of the committee

The National Committee for Geography met three times in 2013: 2 February, 4 May and 19 October.

Themes discussed at the meetings:

[a] Organisation of the *Belgian Geography Days*

The Belgian Geography Days is an initiative of the CNG, organised in turn by the different Belgian universities. The activity 2013 - the 5th - was co-organised by the UCL on 24 May and was an opportunity for Belgian geographers to present their research and exchange ideas and results¹⁰.

The initiative will be continued and the next Belgian Geography Days will be organised by the VUB in 2015.

[b] Teaching of geography in secondary schools

In continuation of the special meeting held on the topic in 2012, the issue was raised during the meetings in 2013. In continuation of the special meeting held on the topic in 2012, the issue was raised during the meetings in 2013.

Flemish colleagues have presented the GEOMOBIEL project, which introduces techniques of SIG in Flemish secondary schools and in which are involving the three Flemish universities teaching geography.

[c] EUROGEO 2013

In 2013 (from May 9 to 11) was held in Bruges the EUROGEO Congress. The conference was organised locally by Luc Zwartjes (VLA) and the President of the CNG gave a keynote.

¹⁰ Papers presented are available on <http://www.uclouvain.be/438297.html>.

[d] Lack of visibility of geography in the list of research disciplines used by the FNRS, the FWO and universities.

Geography doesn't appear anywhere as a science in itself in the current nomenclature of research disciplines used by the FNRS, the FWO and universities. Some broad aspects of the discipline don't even appear at all and others appear under the heading of other disciplines ; some aspects of geography can be identified, but only as sub-divisions other disciplines. It is the case of human/social geography which are cataloged in sociology.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] Subcommittee National Atlas

The third Atlas of Belgium is made through the 'ATLAS' program of the Belgian Science Policy. The volumes *Economic Geography* and *Population* will be published late, in the first half of 2014, due to difficulties with the authors and the publisher. The last book that has to be published, about *Urban geography*, will be available at the earliest in the fall of 2014.

Through the project assigned by the Belgian Science Policy to Professor Donnay, the Digital Atlas has become a reality. However, it must be supplemented with other cards and existing maps have to be updated. Subsidies allocated to the committees of the Academies by Science Policy should allow, if necessary, to allocate small amounts to departments of geography that provide new documents as well as to the cartography department of the ULg, which bring these documents and data online. The atlas can be accessed on the website www.atlas-belgique.be

A part of the subsidy was also used for digitizing maps of the first and second Atlas of Belgium with all their reviews (separated in French and Dutch for the first atlas and available in 4 languages on the back of the cards for the second).

All these documents will be posted on the website of the Atlas in 2014 by the cartography department of the ULg.

[b] Subcommittee for Cartography and SIG

Belgium was represented in 2013 at the International Congress of Cartography organised by the International Cartographic Association (ICA), from 25 to 30 August 2013. There were

representatives from different universities, from IGN, from public administrations and private enterprises.

Belgium has participated to the Barbara Petchenik 2013 contest (primary school children up to 16 years). This participation was organised by the subcommittee.

Belgium has participated to the Cartography International Exhibition with maps and atlases produced in Belgium between 2011 and 2013. Participation was organised by the subcommittee. The first prize in the category “Atlas” awarded Belgium for Atlas De Wit (marked "fantastic facsimile of a famous sparkling hand-colored atlas city made in 1698").

[c] Subcommittee for Geomorphology

For the activities of this committee, please consult the report of the Belgian Association of Geomorphologists.

NATIONAL COMMITTEE FOR GEOLOGICAL SCIENCES

1. Introduction, mission, goals

The National Committee of Geological Sciences forms part of the "Classe des Sciences de l'Académie Royale de Belgique" and the "Klasse der Wetenschappen van de Koninklijke Academie van België". The mission of the committee is to promote geology and to co-ordinate at a national and international level, the activities of the geological departments that are present in the different Belgian academic and scientific institutions. Members of the committee also act as representatives of Belgium in the International Council of Scientific Unions (ICSU). At present, the national committee co-ordinates the activity of a number of commissions and working groups such as the National Commission on Stratigraphy (sub-divided in specific sub commissions) and the Working group on Structural Geology. The National Committee of Geological Sciences of Belgium has close relationships with the International Union of Geological Sciences (IUGS), which is also a member of ICSU. The IUGS is a non-governmental organisation that promotes and encourages the study of geological problems, especially those of worldwide significance.

2. Meetings of the committee

The committee held its annual meeting on 2 May.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] National Commission for Stratigraphy

The main objective of the National Commission for Stratigraphy is to promote stratigraphic research and to standardize stratigraphic in accordance with international standards. This commission has assembled on 19 June 2013 in view to modernize and restructure the website in order to include all types of stratigraphy and a side lithostratigraphy¹¹. The website is transferred to Royal Institute of Natural of Sciences at Brussels. The National Commission of Stratigraphy had in charge the organisation of the TS-Creator Spring 2014 School in Leuven in co-organisation with

¹¹ <http://natstratcommbelgium.drupalgardens.com/>

the Laboratory of Stratigraphy of the KU Leuven and the Arenberg Doctoral School of the KU Leuven.

[b] The webpage of NCGW/CNGS¹² is linked to the IUGS webpage. It contains more detailed information on the NCGS objectives and activities.

¹² <http://www.ncgw-cnsg.ugent.be>

NATIONAL COMMITTEE FOR LOGIC, HISTORY AND PHILOSOPHY OF SCIENCES

1. Introduction, mission, goals

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:

1. To represent Belgian scholarship on the international level by being present as a member or spokesperson with international organisations (IUHPS, European Society of History of Science).
2. To coordinate Belgian scholarship by setting up collaborations and joint projects with other institutions (National Centre 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]).
3. To promote the integration of historical and philosophical studies of science.

2. Meetings of the Committee

During 2013, the Committee held two general meetings, on April 17 and on December 6.

Apart from deliberations on administrative matters and correspondence, several scientific papers were presented.

[a] On 17 April, presentations were held by:

- Ad Meskens, *Geschiedenis, wiskunde, onderwijs en Trojaanse Paarden*.
- Luc Dhaeze-Van Ryssel, *Geschiedenis van de tuinbouwcultuur in Gent*.
- Robert De Bauw, *Les Verschaffelt, une dynastie d'entrepreneurs, horticulteurs à Gand au XIX^e siècle*.

[b] On 6 December, two scientific papers were read:

- Sophie Glansdorff (CNHS), *Le projet Scientifical Iconographiae Compendium*.
- Geert Vanpaemel (KU Leuven), *Andreas Vesalius 1964-2014*.

3. General Assembly of the Scientific Union

The General Assembly of IUHPS/DHST was held during the 24th International Congress of History of Science, Technology and Medicine, organised in Manchester from July 22-28, 2013 and attended by some 1750 participants. The National Committee was represented by Sven Dupré and Brigitte Van Tiggelen, who reported to the Committee on December 6.

At the General Assembly a new board was elected. Efthymios Nicolaidis will be president and Catherine Jami secretary-general. The Assembly also approved a Vade Mecum, which is the internal code of the DHST. Also the 'Manchester Manifesto', which called on official and private bodies to support the history of science, in particular in the context of education, was approved. The minutes of the General Assembly have been posted on the website of the DHST.

The 25th International Congress will take place in Rio de Janeiro on July 23-31, 2017.

4. Other activities

[a] Bestor:

Bestor (www.bestor.be) is an online database on Belgian science and technology developed both for consultation by the general public and as a research instrument for the specialist scholar. It contains several hundreds of records on Belgian scientists (since 1800), scientific institutions and scientific societies, both in French and in Dutch. The different items are interconnected through links, which enable the visitor to follow up on the network of relations between people and institutions. In many cases, historical information is supported by direct links to online available sources. The items also provide references to secondary sources and recent publications.

The information presented in Bestor is supplied and assessed by a small team of collaborators, under the direction of the National Committee of Logic, History and Philosophy of Science. Administrative support and housing facilities are provided by RASAB. The Bestor database is physically located on the server of the Faculty of Arts of KU Leuven, where all matters of technical maintenance are taken care of.

Bestor is supported by an annual subsidy of Belspo, which has been generously accorded to the

Committee since 2008. The subsidy for 2013 has again been confirmed.

Staff and management

During 2013 Bestor employed two scientific collaborators for 1.5 FTE. Lyvia Diser (1 FTE) is manager of the project, dividing her time between writing new records, making translations and assuring the maintenance of the website. Walter Leclercq held a six-month employment (15 January-14 July), which he used to start collaboration with the Royal Museums for Art and History.

The National Centre for the History of Science (KBR) contributed to Bestor by producing records on scientific societies. Apart from this, members of the National Committee have volunteered to read and correct some records of Bestor.

Supervision of the project is done by Prof. Geert Vanpaemel, secretary of the National Committee. A steering committee consisting of representatives of the National Committee, Belspo, and the university archives, meets annually to discuss the progress and policies of Bestor. The Steering Committee met on 31 January 2013.

Progress 2013

As of January 2014, Bestor contains 961 French (F) and 898 Dutch (N) records. There is still no strict equality between French and Dutch records. It remains the ambition of Bestor to have two equivalent sets of records in both languages, but this is not a short-term priority, as it would take away too much volume of the workload of the collaborators.

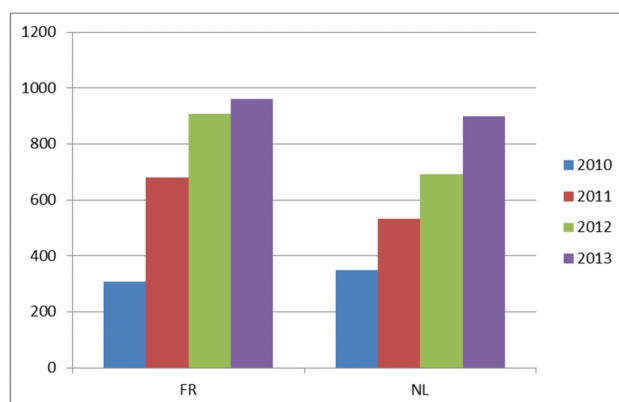


Fig. 1 - Number of records

Most of the records are biographical. Bestor includes 679 French and 546 Dutch biographies. Obviously, most of them are about scientists: 592 (F) and 544 (N), among them only 5 women. Furthermore, there are 115 (F) and 62 (N) records on scientific societies, 32 (F) and 82 (N) on

scientific institutions and 15 (F) and 39 (N) on scientific journals.

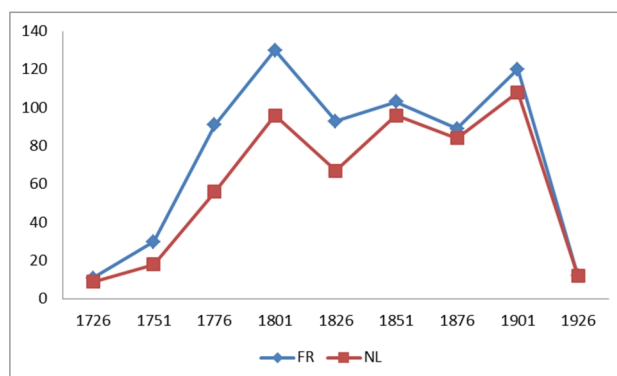


Fig. 2 - Biographies

Translations and new records have been planned on the basis of “most wanted” and “most popular” pages, as listed by the software of Bestor. Furthermore, Diser has continued her work on scientists in government service and has set up collaboration with Denis Diagre (Botanical Garden, Meise) with respect to the biographical records of Belgian botanists. Leclercq has collaborated with the Royal Museums to produce records of archeologists and paleontologists.

Promotion and visibility

The Bestor homepage has been completely renewed to make it more users friendly. It contains news items and related short notices, e.g. on George Sarton and the hundredth anniversary of Isis or the Nobel Prize awarded to François Englert.

Bestor has gained in visibility. The statistics tool now lists over 1 million views for the French site and over 400,000 for the Dutch site. There have been some problems with hackers but these seem to have been solved. The French site contains some 300 spam pages, which in most cases, however, have only been viewed less than 10 times. Apart from the home page, the page most often viewed was the Category of Scientists: 35,181 (F) and 11,533 (N). At the French site 217 pages have received more than 1,000 views and another 759 pages had more than 100 views (respectively 42 and 677 for the Dutch site).

During 2013, a publicity folder was made for distribution among historians of science and all interested. The folder was distributed at conferences in Manchester, Brussels and Leiden.

Lyvia Diser has given a presentation of Bestor on November 13, during a workshop of the National Committee at the Academy.

[b] Workshop *George Sarton and the history of science in Belgium* (13 November)

The workshop offered eleven papers, two on Sarton, six on Sarton's contemporaries and three on more recent developments. In particular the role of the First World War in promoting a humanist picture of science, the changing institutional context of the early history of science organisations and the diversity of approaches and methodologies among historians of science, stimulated a lively discussion.

The workshop was a huge success, bringing together researchers from different universities.

The workshop was attended by some 40 participants, among whom Prof. Floris Cohen, the new editor of *Isis*. Prof. Cohen also commented on his editorial policy for the next five years.

5. Future perspectives

As before, the National Committee will hold two annual meetings. In addition it will participate in the organisation of several workshops: *Early Eighteenth-century Experimental Philosophy in the Dutch Republic* (July 7), *Science en guerre et guerre des savants: politique et réseaux scientifiques internationaux durant la Première Guerre mondiale* (November 13 and 14, Collège Belgique), and the Young Researchers' Days (September). Furthermore, it will continue its involvement in Bestor.

The National Committee is fully aware of several challenges in the years to come. First, there is still a need for a sustained collaboration between historians and philosophers of science. Second, the changing methodological frameworks in the history of science call for a more explicit theoretical debate on the various approaches. Third, the history of science has not yet realized its full potential in public debates on science and culture.

The first challenge is addressed by the organisation of the Young Researchers Days, of which the fourth edition will take place in 2014. The National Committee will seek to expand its relations to philosophers of science, sociologists etc. through interaction with the Belgian Society for Logic and Philosophy of Science or the Belgian Network for Science and Technology in Society Studies.

The second challenge will be addressed by setting up a working party on historiographical issues in the history of science, as a continuation of the successful workshop on Sarton. The National Committee will also explore the possibilities to collaborate with other societies and organisations in creating public forums for thematic and methodological discussions.

The third challenge is at present being met by Bestor, but will be further expanded through connections with other organisations such as Mémosciences, the National Centre for History of Science or heritage organisations.

NATIONAL COMMITTEE FOR MATHEMATICS

1. Introduction, mission, goals

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 econometry and finance, informatics, biomathematics, 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.

2. Meetings of the Committee

During 2013 the National Committee for Mathematics only had electronic meetings. 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. All members and honorary members of the NCM received the Electronic IMU-Newsletter and the IMU-Bulletin. They received all final documents concerning the IMU General Assembly of 2012.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] A PhD day was organised at the Academies on September 9, 2013. It was in collaboration with the BMS. Many PhD students took part in this meeting.

[b] The Newsletter appeared five times in 2013 and was distributed both electronically and in a paper version. F. Bastin (secretary of the NCM) is in charge of the Newsletter.

5. Future perspectives

[a] A meeting of the NCM committee will be organised on March 12, 2014. There will be a talk of Thomas Brihaye (UMons). After that, the committee will discuss on the International Congress of Mathematicians in Seoul and on the IMU General Assembly in Gyeongju.

[b] The Belgian Mathematical Society intends to organize one day meeting around the Fields medal on November 12, 2014. We will discuss about the participation of the NCM for this meeting. This could take place at the Academies.

NATIONAL COMMITTEE FOR MICROBIOLOGY

1. Introduction, mission goals

The Committee for Microbiology represents Belgian scientists conducting research in the field of biological sciences in the work of the International Union of Microbiological Societies (IUMS).

2. Meetings of the Committee

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.

Two administrative meetings were organised in 2012 on: 17 January and 9 July.

Main discussions:

1. Evaluation of the Symposium 2012;
2. Organisation of the Two-days Symposium 2013 together with the BSM (Belgium Society for Microbiology) and BCCM (Belgian Coordinated): *Microbial Diversity for Science and Industry*;
3. Set up of a new Belgian Society for Virology:
A meeting was organised to discuss if it could be under the umbrella of BSM or not, it was a positive meeting and the possibility to combine it to BSM seems to exist, e.g. 'a virology section' under BSM, but there is currently not a concrete solution yet, but discussion will be continued:
 - a. Perhaps a first step is to associate more virology experts in the BSM board to help to find the correct solution for this issue, and to make BSM as such more interesting for the virologist community, e.g. from Leuven, from Liège, etc.
 - b. Perhaps an example can be taken from the other societies in the Netherlands, UK, ... on how the combination of different disciplines in microbiology is successfully combined. To start with virology, and maybe why not in the future similar issues for parasitology, mycology, yeast, etc.
4. Iranian Society of Microbiology: The organizer Prof. M Feizabadi (Professor in Microbiology School of Medicine Tehran University of Medical Science, President of the Iranian Society of Microbiology asked via J. Anné if BSM would support (not

sponsor) their meeting (in Theran, Iran), Meeting takes place 28-30th August 2013, ca. 1000 persons (mostly from Iran) are expected to attend. According d M Feizabadi support from external organisations will help them to get some supports from the Health Department. This is one of the criteria for the Health Department to give more credit to the congresses [Background: Jef Anné was invited last year to the Iranian Society of Microbiology symposium (a former PhD student of JA granted by KU Leuven) had asked to attend the meeting). Iran scientists are seeking contact with scientists of Western countries. On request to M. Feizabadi which organisations are supporting the meeting, he mentioned i.a. The German Academic Exchange Service (DAAD) and EKMUD (Turkish Society of Clinical Microbiology and Infectious Disease)]

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] Symposium: *Microbial Diversity for Science and Industry*¹³

Date: 26 and 27 November 2013;

Attendance: First day: 140; Second day: 140; Present on both days: 70. Total number of posters: 54. The abstract book was distributed on an USB stick to the participants.

Scientific content:

This back-to-back meeting was jointly organised by the Belgian Society for Microbiology (in collaboration with the National Committee for Microbiology) and the Belgian Coordinated Collections of Micro-organisms (BCCM). Whereas the first day was focused on the celebration of BCCM's 30th anniversary with several speakers including Science Journalist Dirk Draulants, who gave an overview of the evolutionary history of Microbiology from the oldest fossils found in north-west Australia's Pilbara region thought to be nearly 3.5billion years old and caused by bacteria which existed just one billion years after the Earth formed until most recent ones and their impact on evolution and their impact on our daily life for health and all kind of applications. In the afternoon, highlights were discussed how BCCM could be actively involved in different types of microbial research with an emphasis on applications.

¹³ See program on page 96.

The second day, programmed under the responsibility of BSM and NaCoMicrobio, was devoted to different aspects of Microbiological Sciences with emphasis on Microbial Diversity in health and applications, both from aspects of bacteriology and virology.

Speakers discussed the microbial diversity from various angles: i) the phenomenon of the plasticity of the bacterial genome as revealed by lateral genome transfer; ii) the uncultivability as strategy for survival; iii) importance of accessibility of the microbial diversity for the various stakeholders (scientists and biotech companies); iv) how does microbial evolution influence the virulence of the organism and v) how can microbial communities function under varying conditions.

The meeting was positively accepted by the participants, both for the scientific content as well as for the organisation. Ten young scientists, selected on the basis of their submitted abstracts, were invited to present their work via a short oral communication. Six poster awards were granted – see below.

The meeting really served as a forum for microbiologists of different disciplines, and of which were many PhD students.

NATIONAL COMMITTEE FOR OCEANOLOGY

1. Introduction, mission, goals

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, and biologists working in estuarine and coastal systems as well as in open oceans in cold, temperate and tropical environments.

2. Meetings of the Committee

Non-specified.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] - The international workshop *Ocean School 0103 "Education at sea - Education for the sea"* jointly organised by the Committee of Oceanology of the Royal Belgian Academy and VLIZ in Ostend had a lasting impact. Its outcome had been presented at the IOC50 - International Conference 50 Years of Education and Awareness Raising for Shaping the Future of the Oceans and Coasts, IOC-UNESCO, St. Petersburg 27-30 April 2010 and in an invited keynote at the EurOcean 2010 "Grand Challenges for Marine Research in the Next Decade", Ostend, Belgium, 12-13 October 2010. In 2011, Prof. J.P. Henriët, Secretary, was invited to prepare a contribution on Ocean education for the "Navigating the Future IV" (NFIV) document of the Marine Board: "Forging marine and maritime careers". In September 2012, he was appointed as Lead Author of the NFIV Chapter 5.2 "Training and skill needs, Research careers" (Chapter 5 - Cross-cutting Issues). The "Navigating the Future IV" (NFIV) document of the European Marine Board was released June 2013. Prof. J.P. Henriët is co-author of Chapter 5.2 "Training and skill needs, Research careers" (Cross-cutting Issues).

[b] The ocean science community in Belgium was strongly involved in the networks created by Belspo (Marine Science Research Programme). Unfortunately in 2011 the on-going projects came to their end and the Marine Science Research Programme was stopped. This is very bad news for

the Belgian marine science community, especially because in all our surrounding countries marine research stations and marine research programmes exist.

5. Future perspectives

Since national funding for marine research is no more available, Belgian marine scientists have to shift their focus. For strengthening its involvement in ocean research and education, the Belgian community of researchers in oceanology needs to keep abreast of major developments in European Ocean Governance and Science Policy, and of opportunities offered by Horizon 2020. Two major and not unrelated developments may heavily impact on research and education in the forthcoming decade: (1) at the level of ocean governance, the implementation of the Integrated maritime policy for the EU and of the Marine Strategy Framework Directive, which should lead to the achievement of good environmental status, and (2) the implementation of Horizon 2020 and the Joint Programming Initiative *Healthy and Productive Seas and Oceans* (JPI Oceans). A study day in 2012 had been considered to imply stakeholders and allow the Committee of Oceanology to contribute to communication and information about these initiatives in the Belgian research community, involved in ocean science and education. At the 2012 *VLIZ Young Scientists Day* in Ostend, several science officers committed to contribute. Information about the implementation of Horizon 2020, of relevance to scientists (e.g. tools for implementation) however remained unclear. EC Officers openly addressed about this question in a session of the DSF3 Conferences in Sitges 2012 (Deep Sea Frontier) confirmed these were still open issues. The Proposal for a Council Decision establishing the Specific Programme implementing Horizon 2020 (yet still in terms of “Partial general approach”) got but issued 12 December 2012. In 2012, J.P. Henriët was invited by ESF (LESC) to take the editorial lead of a collective vision book *Science on Rough Seas - Ocean and Polar Life and Environmental Sciences on a Warming Planet*.

Upon advise of ESF expressed in October 2013, “Science on Rough Seas - Ocean and Polar Life and Environmental Sciences on a Warming Planet” has been re-focused into a position paper. This position paper has been submitted to ESF end of December 2013, and is presently under evaluation by ESF. By its timing, this position paper could maximally exploit the information released at the opening of the calls of Horizon 2020. It will directly feed into the 2014 meeting of the Committee of Oceanology, scheduled April/May¹⁴

¹⁴ See page 97 for more details

NATIONAL COMMITTEE FOR PHYSICS

1. Introduction, mission, goals

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 its website¹⁵.

2. Meetings of the Committee

Meetings were held on 15 March and 3 October. The main interest points of these meetings were:

- Colloquium 2013.
- Updating of the publication *Research in Physics in Belgium*.
- Preparation of the Colloquium 2015.
- Preparation of the 28th General Assembly of IUPAP.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] The 2013 colloquium of the NCPAP

The NCPAP organised its bi-annual colloquium on April 20, 2013 in the Palace of the Academies, with the title *Physics and the Energy Challenge*. The six contributions were

1. Prof. Em. J. HERMANS, Universiteit Leiden: *The energy challenge: status and outlook*.
2. Prof. J. POORTMANS, IMEC, Leuven: *New developments in Photovoltaics*.
3. Dr. C. ZIEBERT, Karlsruher Institut für Technologie (KIT): *Energy storage techniques*.
4. Dr. J. SCOYER, Umicore: *Physics of recycling materials in a renewable context*.

¹⁵ www.bncphys.be

5. Prof. Em. E. MUND, Université Libre de Bruxelles: *Physics of next-generation nuclear reactors*.
6. Prof. H. AÏT ABDERRAHIM, SCK-CEN: *MYRRHA, a new flexible Belgian research reactor*.

The colloquium was attended by 120 participants. The extended abstracts of the presentations were made available to them.

Sponsoring by RASAB, FNRS, International Solvay Institutes, Belgian Physical Society, SCK-CEN, VITO and Umicore is warmly acknowledged.

[b] Update of Research in Physics in Belgium:

The NCPAP initiated for the first time in 2005 the compilation of short reports on the main physical research topics in Belgium, both theoretical and experimental. Fifteen of these were written by prominent Belgian researchers, actively involved in the IUPAP Commissions, and were published in 2006 in *Physicalia Magazine* and posted on the websites of the NCPAP and of the Belgian Physical Society¹⁶.

The NCPAP considered that a regular updating is in order and has, between 2011 and 2013, revised 13 of the original contributions. These were published on-line in *BPhy Magazine*, the successor of *Physicalia Magazine*, and are incorporated with the remaining reports¹⁷.

[c] Preparation of the 28th General Assembly of IUPAP

The next General Assembly of IUPAP will take place on 5-7 November 2014 in Singapore. The NCPAP has started the process of finding Belgian candidates to be proposed to the GA as possible members to one of the 18 IUPAP Scientific Commissions for the period 2014-2016. The Belgian share in the IUPAP financing in principle entitles to 4 Commission members.

5. Future perspectives

[a] Colloquium 2015 of the NCPAP

The awarding of the 2013 Nobel Prize in Physics has prompted NCPAP to organize its 2015 Colloquium around the BEH-boson and what to expect in Particle Physics beyond it.

¹⁶ <http://sites.google.com/site/belgianphysicsociety/>

¹⁷ <https://sites.google.com/site/physbel/Physics-in-Belgium>

NATIONAL COMMITTEE FOR PHYSIOLOGY AND PHARMACOLOGY

1. Introduction, mission, goals

The goal of the Committee is to organize national and international scientific meetings in which Belgian Physiologists and Pharmacologists (and eventually their guests) can present and bring up for discussion the results of their recent research in the fields of Physiology and Pharmacology.

Because of the common goals, the members of the National Committee for Physiology and Pharmacology are also member of Physiology and Pharmacology and as such are involved in the preparation and organisation of all the activities of this Society.

2. Meetings of the Committee

18 October: General Assembly held in Brussels (Palace of the Academies).

3. General Assembly of the Scientific Union

Prof. Dr. J. Van de Voorde attended the IUPS Council Meeting during the IUPS World Congress in Birmingham (UK). He commented the efforts of this Society to include Societies of developing countries. Candidatures of Bangladesh, Malta and Nepal for IUPS membership were approved. IUPS World Congress 2017 will take place in Brazil and in 2021 in China.

A FEPS council meeting was also organised during de IUPS World Congress in Birmingham. One of the goals of FEPS is to find out if it would be possible to organize a joint meeting with pharmacologists, biochemists, pathologists etc. similar to the “Experimental Biology” meetings in the United States. The candidatures of Armenia and Malta to become FEPS members were approved.

4. Other Activities

[a] Organisation of the National Spring meeting of the Belgian Society of Physiology and Pharmacology, April 19th in Brussels (Palace of the Academies), aiming to bring together the physiologists and pharmacologists from Belgian laboratories. About 60 scientists attended the meeting¹⁸.

¹⁸ http://users.ugent.be/~jvdvoord/physiology&pharmacology/april_19_2013.htm

[b] Organisation of the National Autumn meeting of the Belgian Society of Physiology and Pharmacology, October 18th in Brussels (Palace of the Academies,) aiming to bring together the physiologists and pharmacologists from Belgian laboratories. About 60 scientists attended the meeting¹⁹.

5. Future perspectives

- Organisation of the Spring and Autumn meetings of the committee
- Co-organisation of the Second Benelux Congress on Physiology and Pharmacology in Maastricht in (April 4- 2014)

¹⁹ http://users.ugent.be/~jvdvoord/physiology&pharmacology/october_18,_2013.htm

NATIONAL COMMITTEE FOR PSYCHOLOGICAL SCIENCES

1. Introduction, mission, goals

The goal of the Committee being to undertake, promote and coordinate psychological scientific research, focusing in particular on long term, intercollegiate or interdisciplinary projects and to serve psychological scientific interests in Belgium from a national as well as an international point of view.

2. Meetings of the Committee

The Committee held two meetings in 2012: 4 May & 22 November.

Main points:

- BAPS Best Thesis Award.
- IUPsyS Delegate.
- Organisation of the Symposium 2013.
- Initiative to establish closer links between Psychology Faculties.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] The committee organizes bi-annual symposia. The last symposium was organised by Committee member Pr. Serge Brédart and was titled *Person Perception from face and voice*²⁰. The event took place on November 22nd, 2013, at the Academies. It attracted about 80 participants and was generally considered to be a success.

[b] Additionally, the committee also assists, every year, the Belgian Association for Psychological Science in selecting the recipient of its “Best Thesis Award”. The 2013 competition is currently underway. A jury composed of committee members and once again presided by E. Soetens will make the final selection during the month of March.

[c] On October 30th, 2013, our Deputy Secretary General Pr. Frank Van Overwalle presented the work of the committee at the RASAB General Meeting organised at the Academies.

²⁰ See <https://w3.fapse.ulg.ac.be/conferences/symposiumfacevoice>.

[d] Finally, this year the committee was also involved in suggesting Belgian personalities as speakers for the forthcoming IUPsyS meeting, to take place in 2016 in Yokohama (JP).

5. Futur activities

The next symposium will take place in 2015 and is currently in the planning stages.

NATIONAL COMMITTEE FOR RADIO-ELECTRICITY (URSI)

1. Introduction, mission, goals

The activities of the Belgian URSI Committee are related to the domain of radio-electricity. The main goal of the committee is to promote and in some extend to coordinate for Belgium the scientific activities of its members in this field of interest. The committee meets regularly at the Academy and organizes yearly, in collaboration with the URSI committee of Netherlands a 'URSI Forum' where young doctorandi have the opportunity to present their researches and to exchange their scientific and technical experience. Effective members of the committee are representing Belgium in the different scientific commissions of URSI.

2. Meetings of the Committee

The Belgian URSI Committee has met four times in the facility of the Academy: on 12 February, 21 May and 10 October.

[a] 12 February 2013

Stan Stankov gave a presentation entitled *Ionospheric monitoring and research at the Royal Meteorological Institute*. After his presentation the administrative part of the meeting went on with the debriefing of the BENELUX URSI forum 2012.

[b] 21 May 2013

Sofie Pollin gave a presentation on her wireless communication and networking research.

After his presentation the administrative part of the meeting went on with the debriefing of the BENELUX URSI forum 2013. Emmanuel Van Lil gave a short information about this forum. There were about 50 participants and only a few posters (10 posters in total (1 from Belgium)) mainly due to a late announcement. The 3 winners are all from TU Eindhoven.

Sophie Pollin was elected unanimously as an associate member.

[c] 10 October 2012

Claude Oestges gave a presentation on his wireless communication research. A minute of silence was observed in memory of one of our honorary members, Prof. Jean Charles who passed away. The next year, the BENELUX URSI forum will be organised by the Belgian URSI committee. It was

suggested to ask a university from the French part of the country to organize the BENELUX forum in 2014. There are new rules for financial supports because of budget restrictions. The Flemish academy can provide up to 2500 euro support to a French speaking university if there will be two Flemish co-organizers. The request for support should be submitted by 1 October or 1 April. Taking into account these dates, a suitable period for the forum is September 2014. Emmanuel Van Lil has already contacted ULg and ULB whether they were able to lead the organisation of the future forum but they have declined the offer. He has passed the flame to UCL. Peter Van Daele informed about problems in the organisation of the General Assembly URSI forum 2014 in Beijing linked to the financial crisis.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] The Royal Meteorological Institute (RMI) of Belgium celebrated his 100 year existence. Different events were organised at the RMI Geophysical Center at Dourbes on the 29 and 30 June. Stan Stankov informed the URSI members about this activity.

[b] The Dutch committee participated in AFRICON 2013. The Belgian committee has supported this initiative, but was not able to participate in 2013.

[c] The seventh edition of the Benelux URSI forum was organised by the Dutch team in Eindhoven.

[d] All contact addresses of the Belgian URSI commission chairs were checked on request of URSI international by Emmanuel Van Lil.

5. Future perspectives

The BENELUX URSI forum in 2014 will be organised by the Belgian URSI committee, and more in particular by UCL. Emmanuel Van Lil has been nominated to represent Belgium at the next General Assembly in Beijing (by unanimity of the 12 responses by E-mail).

NATIONAL COMMITTEE SCOPE-IGBP

1. Introduction, mission, goals

The committee represents Belgium in SCOPE (Scientific Committee on Problems of the Environment) and IGBP (International Geosphere/Biosphere Program of ICSU). General information on these international programs is annexed. The national committee stimulates the participation of Belgian scientists in SCOPE and IGBP projects. It also organizes activities (workshops, conferences, preparation of research plans, etc.) in Belgium in the domains covered by these programs.

2. Meetings of the Committee

No formal meeting but several e-mail consultations of the membership.

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] Contacts with the ICSU and IGBP secretariats regarding the new “Future Earth” program, which is intended to absorb IGBP.

5. Future perspectives

[a] Prospects for 2014: A new national committee, with a broader disciplinary representation (eg social and natural sciences) should be established to serve as the interface for RASAB with the incipient “Future Earth Program” of ICSU.

NATIONAL COMMITTEE FOR SOIL SCIENCES

1. Introduction, mission, goals

The NCSS was set up in 2002, following long lasting activities of the Soil Science Society of Belgium (started in 1924) and with the purpose to bring soil science to the attention of the broader public with particular focus on the young people. This original mission of SSSB/NCSS is more relevant now than it has even been - soil and soil suitability comes daily in the media and in the public debate: trade-offs between food production versus agro-fuels, the preservation of our pristine soils, the conservation of our soil heritage, the rehabilitation of marginal lands and the remediation of polluted soils. The NCSS is the representative organisation for all soil scientists active in Belgium and is the official Belgian representative into the International Union of Soil Sciences (IUSS).

2. Meetings of the committee

Dates: 20 February, 6 November.

Main conclusions: the NCSS organizes 5 activities per year:

- Day of the Young Scientists in February;
- A field excursion in May or September;
- A Thematic Day in December
- Two boards (one in February, together with the Day of the Young Scientists, one in November, together with the Thematic Day).

3. General Assembly of the Scientific Union

No Assembly of the Scientific Union in 2013.

4. Other activities

[a] *Day of the Young Soil Scientists* at the Palace of the Academies, 20 February, attended by 63 people.

[b] Excursion to the Kampine area: De Lieberman and Hamont Achel (Organisation: Karen Vancampenhout and Stefaan Dondeyne), 5 June.

[c] BAG excursion *Direct and indirect anthropogenic impact on the geomorphology of Eastern Belgium* to La Préalles – Petite Bacnure coal tip, Roosberg (Zichen-Zussen-Bolder): Kattenroth (Voeren/Fourons), Berwinne Valley, Retinne, Hasard spoil heap Dalhem and Thier des Vignes (Organisation: Jan Nyssen), 15 June.

[d] Thematic Day: *50 years of sharing knowledge in soil science for world-wide development*, at the Palace of the Academies, 5 December, Chair: Erik Van Ranst, Ghent, attended by 127 people.

[e] Participation to the EGU 2013 at Vienna, Austria from 07/04/2013 – 12/04/2013

5. Future perspectives

As each year, NCSS will organize 5 core activities:

- 2 board meetings (February & December).
- Day of the Young Scientists (26 February 2014).
- International excursion (end of May – beginning of June 2014)
- Thematic Day: theme to be determined at the board in February.

In addition, other activities will be under the NCSS umbrella:

- Global Soil Partnership: initiative by FAO to harmonize global soil data: E. Van Ranst will be the official contact point.
- EGU conference, Vienna, April 2014: will be attended by many SSSB/NCSS members.

INTERNATIONAL UNIONS

The existence of a national committee is subject to the existence of an International Scientific Union or scientific body affiliated to International Council for Science — ICSU²¹ (scientific committees, special committees, etc.) concerning the same scientific subject.

- | | |
|--|--|
| ▪ Committee on Space Research (COSPAR) | www.cosparhq.cnes.fr |
| ▪ International Astronomical Union (IAU) | www.iau.org |
| ▪ International Geographical Union (IGU) | www.igu-net.org |
| ▪ International Geosphere-Biosphere Programme (IGBP) | www.igbp.net |
| ▪ International Federation for Medical and Biological Engineering (IFMBE) | www.ifmbe.org |
| ▪ International Mathematical Union (IMU) | www.mathunion.org |
| ▪ International Union for Physical and Engineering Sciences in Medicine (IUPESM) | www.iupesm.org |
| ▪ International Union for Quaternary Research (INQUA) | www.inqua.org |
| ▪ International Union of Biochemistry and Molecular Biology (IUBMB) | www.iubmb.org |
| ▪ International Union of Biological Sciences (IUBS) | www.iubs.org |
| ▪ International Union of Crystallography (IUCr): | www.iucr.org |
| ▪ International Union of Geodesy and Geophysics (IUGG) | www.iugg.org |
| ▪ International Union of Geological Sciences (IUGS) | www.iugs.org |
| ▪ International Union of History and Philosophy of Science (IUHPS), <ul style="list-style-type: none"> ○ Division of History of Science and Technology (IUHPS-DHST) ○ Division of Logic, Methodology and Philosophy of Science (IUHPS-DLMPS) | www.dlmps.org |
| ▪ International Union of Microbiological Societies (IUMS) | www.iums.org |
| ▪ International Union of Pharmacology (IUPHAR) | www.iuphar.org |
| ▪ International Union of Physiological Sciences (IUPS) | www.iups.org |
| ▪ International Union of Psychological Science (IUPsyS) | www.iupsys.net |
| ▪ International Union of Pure and Applied Biophysics (IUPAB) | www.iupab.org |
| ▪ International Union of Pure and Applied Chemistry (IUPAC) | www.iupac.org |
| ▪ International Union of Pure and Applied Physics (IUPAP) | www.iupap.org |

²¹ www.icsu.org

- International Union of Radio Science (URSI) www.ursi.org
- International Union of Soil Sciences (IUSS) www.iuss.org
- International Union of Theoretical and Applied Mechanics (IUTAM) www.iutam.net
- Scientific Committee on Oceanic Research (SCOR) www.scor-int.org
- Scientific Committee on Problems of the Environment (SCOPE) www.scopenvironment.org
- Scientific Committee on Solar-Terrestrial Physics www.yorku.ca/scostep
- World Climate Research Programme www.wcrp-climate.org

LISTS OF MEMBERS OF THE NATIONAL COMMITTEES²²

ANTARCTIC RESEARCH

Pattyn, Franck	President
Van Autenboer, Tony	Vice-President
Wilmotte, Annick	Secretary
Vanreusel, Ann	Assistant Secretary
Berger, André	Member FR
Beyens, Louis	Member NL
De Broyer, Claude	Member FR
Decleir, Hugo	Member NL
Dehairs, Franck	Member NL
Fichefet, Thierry	Member FR
Hecq Jean-Henri	Member FR
Herman, Rudy	Member NL
Huybrechts, Philippe	Member NL
Souchez, Roland	Member FR
Dauby, Patrick	Associate Member
De Batist, Marc	Associate Member
Dellile, Bruno	Associate Member
Fonteyn, Dominique	Associate Member
Goosse Hugues	Associate Member
Mangold, Alexander	Associate Member
Rasson, Jean L.	Associate Member
Tison, Jean-Louis	Associate Member
Van De Vijver, Bart	Associate Member
van Lipzig, Nicole	Associate Member
Van Roozendaal, Michel	Associate Member
van Ypersele, Jean-Pascal	Associate Member
Doyen, Paulette	Honorary Member
Gerday, Charles	Honorary Member

²² Last update : 5 May 2014. See also the lists on www.rasab.be.

ASTRONOMY

Waelkans, Christoffel	President
Surdej, Jean	Vice-President
Van Hoolst, Tim	Secretary
Frémat, Yves	Assistant Secretary
Aerts, Conny	Member NL
Alvarez, Rodriguo	Member FR
Base, Maarten	Member NL
Blommaert, J.	Member NL
Dehant, Véronique	Member FR
Dejonghe, Herwig	Member NL
Gosset, Éric	Member FR
Jorissen, Alain	Member FR
Lemaître, Anne	Member FR
Poedts, S.	Member NL
Van der Linden, Ronald	Member NL
Van Eck, Sophie	Member FR
David, M.	Associate Member
Pireaux, S.	Associate Member
Verschueren, W.	Associate Member
Arnould, Marcel	Honorary Member
De Grève, Jean-Pierre	Honorary Member
Dommangeat, Jean	Honorary Member
Goossens, Marcel	Honorary Member
Houziaux, Léo	Honorary Member
Noels-Grötsch, Arlette	Honorary Member
Pâquet, paul	Honorary Member
Sauval, Jacques	Honorary Member
Smeyers, Paul	Honorary Member
Sterken, Chris	Honorary Member
Swings, Jean-Pierre	Honorary Member
Van Dessel, Edwin	Honorary Member
Verheest, Franck	Honorary Member

BELQUA

Verstraeten, Gert	President
Fagel, Nathalie	Vice-President

Verleyen, Elie	Secretary
Loutre, Marie-France	Assistant Secretary
André, Luc	Member FR
Camelbeeck, Thierry	Member FR
Claeys, Philippe	Member NL
Degryse, Patrick	Member NL
Heyvaerts, Vanessa	Member NL
Hubert-Ferrari, Aurélia	Member FR
Huybrechts, Philippe	Member NL
Jusseret, Simon	Member FR
Mattielli, Nadine	Member FR
Verheyden, Sophie	Member NL
Vermeersch, Pierre	Honorary Member

BIOCHEMISTRY AND BIOMOLECULAR BIOLOGY

Engelborghs, Yves	President
Opperdoes, Fred	Secretary
Ampe, Christophe	Member NL
Arnould, Thierry	Member FR
Lambeir, Anne-Marie	Member NL
Michiels, Carine	Member FR
Perret, Jacques	Member FR
Piette, Jacques	Member FR
Robben, Johan	Member NL
Somers, Veerle	Member NL
Wattiez, Rudy	Member FR

BIOLOGICAL SCIENCES

Rammeloo, Jan	President
Van De Vijver, Bart	Secretary
Baguet, F.	Member FR
Bouharmont, Jules	Member FR
Godderis, Boudewijn	Member NL
Haubruge, Éric	Member FR
Lambinon, Jacques	Member FR
Meerts, Pierre	Member FR
Micha, Jean-Claude	Member FR

Thys van den Audenaerde, Dirk	Member NL
Van Cotthem, Willem	Member NL
Van Goethem, Jackie	Member NL
Vandenborgh, Oscar	Member NL
Bouquegneau, J.-M.	Associate Member
De Vree, F.	Associate Member
Francis, F.	Associate Member
Pasteels, J.	Associate Member
Verheyen, R. F.	Associate Member
Vincx, M.	Associate Member
Leclercq, Jean	Honorary Member
Maton, Jacques	Honorary Member
Symoens, J.-J.	Honorary Member
Verraes, Walter	Honorary Member
Wouters, Karel	Honorary Member

BIOMEDICAL ENGINEERING

Verdonck, Pascal	President
Delbeke, Jean	Vice-President
Nyssen, Marc	Vice-President
Brimioulle, Serge	Member FR
Cornelis, Jan	Member NL
Francis, Laurent	Member FR
Kolh, Philippe	Member FR
Lefèvre, Philippe	Member FR
Lemahieu, Ignace	Member NL
Nonclercq, Antoine	Member FR
Van Huffel, Sabine	Member NL
Vander Sloten, Jos	Member NL
Wuyts, Floris	Member NL
Bourgain, Renaat	Honorary Member
Veraart, Claude	Honorary Member
Paiva, Manuel	Honorary Member
Van der Perre, Georges	Honorary Member

BIOPHYSICS

Matagne, André	President
----------------	-----------

Devreese, Bart	Vice-President
Engelborghs, Yves	Secretary
Raussens, Vincent	Assistant Secretary
Ameloot, Thomas	Member NL
Charlier, Paulette	Member FR
De Maeyer, Marc	Member NL
Dumoulin, Mireille	Member FR
Goldbeter, Albert	Member FR
Goormagtigh, Éric	Member FR
Lambeir, Annemie	Member NL
Martins, Jose	Member NL
Soumillion, Patrice	Member FR
Voets, Thomas	Member NL

CHEMISTRY

Baekelmans, Paul	President
Cornelis, Paul	Vice-President
Beljonne, David	Member FR
Braekman, Jean-Claude	Member FR
Dysseleer, Patrick	Member FR
Engelmann, Jacques	Member NL
Herman, Michel	Member FR
Meynen, Vera	Member NL
Peeters, Daniel	Member FR
Petry, Corinne	Member NL
Schoonheydt, Robert	Member NL
Van Meervelt, Luc	Member NL
Van Tiggelen, Brigitte	Member FR
Vandercammen, Christian	Member FR
Vanderzande, Dirk	Member NL
Brandt, Ludo	Honorary Member
de Bièvre, Paul	Honorary Member
Martens, Guy	Honorary Member

CRYSTALLOGRAPHY

Tinant, Bernard	President
Maes, Dominique	Vice-President

Van Meervelt, Luc	Secretary
Wouters, Johan	Assistant Secretary
Blochuys, Franck	Member NL
Elsen, Jan	Member NL
Filichuk, Yaroslav	Member FR
Hadermann, Joke	Member NL
Hatert, Frédéric	Member FR
Henrard, Luc	Member FR
Lamoen, Dirk	Member NL
Poelman, Dirk	Member NL
Sferrazza, Michele	Member FR
Van Bael, Marlies	Member NL
Vertruyen, Béatrice	Member FR
Charlier, P.	Honorary Member
Danguy, L.	Honorary Member
Dideberg, O.	Honorary Member
Dupont, L.	Honorary Member
Durant, F.	Honorary Member
Fiermans, L.	Honorary Member
Gilles, J.-M.	Honorary Member
Jacobs, G.	Honorary Member
Lambot, H.	Honorary Member
Lefebvre, S.	Honorary Member
Legrand, E.	Honorary Member
Michel, K.	Honorary Member
Moreau, J.	Honorary Member
Poortmans, F.	Honorary Member
Reynaers, H.	Honorary Member
Schryvers, D.	Honorary Member
Sporken, R.	Honorary Member
Thiry, P.	Honorary Member
Van Beeumen, J.	Honorary Member
Van Den Bossche, G.	Honorary Member
Van Landuyt, J.	Honorary Member
Van Tassel, R.	Honorary Member
Vennik, J.	Honorary Member

GEODESY AND GEOPHYSICS

Camelbeeck, Thierry	President
Dewitte Steven	Vice-President
Bruyninx, Carine	Secretary
Pierrard, Viviane	Assistant Secretary
Beckers, Jean-Marie	Member FR
Crucifix, Michel	Member FR
De Keyser, Johan	Member NL
Dehant, Véronique	Member FR
Ernst, Gerald	Member NL
Fichefet, Thierry	Member FR
Huybrechts, Philippe	Member NL
Mazière, Martine	Member NL
Vandaele, Ann Carine	Member FR
Vanneste, Kris	Member NL
Verhoest, Niko	Member NL
Alvera-Azcárate, A.	Associate Member
Amelynck, C.	Associate Member
Barth, A.	Associate Member
Batelaan, O.	Associate Member
Bergeot, N.	Associate Member
Bernard, A.	Associate Member
Bingen, Chr.	Associate Member
Chabrilat, S.	Associate Member
Collin, F.	Associate Member
Crommelynck, D.	Associate Member
Crosby, N.B.	Associate Member
Darrouzet, F.	Associate Member
Dassargues, A.	Associate Member
De Backer, H.	Associate Member
Decleir, Hugo	Associate Member
Defraigne, P.	Associate Member
Deleersnijder, E.	Associate Member
Delmelle, P.	Associate Member
Delobbe, L.	Associate Member
Errera, Q.	Associate Member
Everaerts, M.	Associate Member
Fussen, D.	Associate Member
Gérard, J.-C	Associate Member

Joukoff, A.	Associate Member
Karatekin, Ö.	Associate Member
Kruglanski, M.	Associate Member
Lamy, H.	Associate Member
Legrand, J.	Associate Member
Loutre, Marie-France	Associate Member
Muller, C.	Associate Member
Müller, J.-F.	Associate Member
Muls, A.	Associate Member
Pattyn, Franck	Associate Member
Pauwels, V.	Associate Member
Pottiaux, E.	Associate Member
Rasson, J.	Associate Member
Roosbeek, F.	Associate Member
Rosenblatt, Pascal	Associate Member
Roth, Michel	Associate Member
Rouvas-Nicolis, C.	Associate Member
Schayes, G.	Associate Member
Schoon, N.	Associate Member
Van Camp, M.	Associate Member
Van Hoolst, Tim	Associate Member
Van Roozendaal, M.	Associate Member
van Ruymbeke, M.	Associate Member
Vanclooster, M.	Associate Member
Vanhellemont, Ph.	Associate Member
Vannitsem, St.	Associate Member
Wilquet, V.	Associate Member
Warnant, R.	Associate Member
Yseboodt, Marie	Associate Member
Ackerman, Marcel	Honorary Member
Berger, André	Honorary Member
De Muer, Dirk	Honorary Member
De Smedt, F. Hilaire	Honorary Member
De Troch, François	Honorary Member
Ducarme, Bertrand	Honorary Member
Kockarts, Gaston	Honorary Member
Lemaire, Joseph	Honorary Member
Malcorps, Henri	Honorary Member
Nihoul, Jacques	Honorary Member
Paquet, Paul	Honorary Member

Peters, Jean-Jacques	Honorary Member
Ronday, François	Honorary Member
Scherer, Marc	Honorary Member
Simon, Paul	Honorary Member
Sneyers, R.	Honorary Member
Sterling, André	Honorary Member
Van Der Beken, André	Honorary Member
Van Twembeke, Urbain	Honorary Member
Verbeiren, Roland	Honorary Member

GEOGRAPHY

De Maeyer, Philippe	President
Vandermotten, Christian	Vice-President
Kesteloot, Christian	Secretary
Ozer, André	Assistant Secretary
Canters, Frank	Member NL
Charlier, Jacques	Member FR
Decroly, Jean-Michel	Member FR
Donnay, Jean-Paul	Member FR
Govers, Gerard	Member NL
Lambin, Éric	Member FR
Mérenne, Bernadette	Member FR
Nyssen, Jan	Member NL
Thomas, Isabelle	Member FR
Van Hecke, Etienne	Member NL
Verhasselt, Yola	Member NL
Verhetsel, Ann	Member NL
Erpicum, Michel	Associate Member
Petit, François	Associate Member
Van Molle, Marc	Associate Member
Annaert, Jean	Honorary Member
Antrop, Marc	Honorary Member
De Dapper, Morgan	Honorary Member
De Moor, Guy	Honorary Member
Decleir, Hugo	Honorary Member
Denis, Jacques	Honorary Member
Depuydt, Frans	Honorary Member
Goossens, Marcel	Honorary Member

Gullentops, Frans	Honorary Member
Keeris, Hendrik	Honorary Member
Nicolaï, Henri	Honorary Member
Pissart, Albert	Honorary Member
Van Der Haegen, Herman	Honorary Member
Vlassenbroeck, Walter	Honorary Member

GEOLOGICAL SCIENCES

Vandenberghe, Noel	President
Lavreau, Jonathan	Vice-President
Vandycke, Sara	Secretary
Lebbe, Luc	Assistant Secretary
Boulvain, Frédéric	Member FR
Claeys, Philippe	Member NL
Dejonghe, Léon	Member FR
Dreesen, Roland	Member NL
Herbosch, Alain	Member FR
Muchez, Philippe,	Member NL
Steurbaut, Etienne	Member NL
Tourneur, Francis	Member FR
Van Den Haute, Peter	Member NL
Vander Auwera, Jacqueline	Member FR
Verniers, Jacques	Member NL
Yans, Johan	Member NL
Bultynck, Pierre	Honorary Member
De Breuck, William	Honorary Member
De Paepe, Paul	Honorary Member
Delmer, André	Honorary Member
Groessens, Eric	Honorary Member
Gullentops, Frans	Honorary Member
Laduron, Dominique	Honorary Member
Robaszyński, Francis	Honorary Member
Sartenaer, Paul	Honorary Member
Streel, Maurice	Honorary Member
Thorez, Jacques	Honorary Member

LOGIC, HISTORY AND PHILOSOPHY OF SCIENCES

Opsomer, Carmélia	Vice-President
Vanpaemel, Geert	Secretary
Bertrams, Kenneth	Assistant Secretary
Bracke, Wouter	Member NL
Deelstra, Hendrik	Member NL
Dupré, Sven	Member NL
Marage, Pierre	Member FR
Meskens, Ad	Member NL
Missa, Jean-Noël	Member FR
Radelet, Patricia	Member FR
Segers, Danny	Member NL
Van den Abeele, Baudoin	Member FR
Van Den Broecke, Steven	Member NL
Van Tiggelen, Brigitte	Member FR
Allard, André	Honorary Member
Batens, Diderik	Honorary Member
De Mey, Marc	Honorary Member
Dorikens, Maurice	Honorary Member
Elkhadem, Hossam	Honorary Member
Jansen-Sieben, Ria	Honorary Member
Koeckelenbergh, André	Honorary Member
Radoux, Christian	Honorary Member
Stengers, Isabelle	Honorary Member
Van Bendegem, Jean-Paul	Honorary Member
Van Damme, Jacques	Honorary Member
Vandamme, Fernand	Honorary Member

MATHEMATICS

Finet, Catherine	President
Van Maldeghem, Hendrik	Vice-President
Bastin, Françoise	Secretary
Caenepeel, Stefan	Assistant Secretary
Bultheel, Adhemar	Member NL
Colebunders, Eva	Member NL
De Schepper, Hennie	Member NL
Dumortier, Freddy	Member NL
Félix, Yves	Member FR

Gijbels, Irene	Member NL
Gutt, Simone	Member FR
Lemaire, Luc	Member FR
Verschoren, Alain	Member NL
Willem, Michel	Member FR
Janssens, Dirk	Associate Member
Schneider, Maggy	Associate Member
Buekenhout, Francis	Honorary Member
Cahen, Michel	Honorary Member
De Wilde, Marc	Honorary Member
Delanghe, Richard	Honorary Member
Gosseze, Jean-Pierre	Honorary Member
Hoogewijs, Albert	Honorary Member
Kuijk, Willem	Honorary Member
Mawhin, Jean	Honorary Member
Schmets, Jean	Honorary Member
Teugels, Jef	Honorary Member
Thas, Joseph	Honorary Member
Vanhecke, Lieven	Honorary Member

MICROBIOLOGY

De Vos, Paul	Secretary
Mergeay, Max	Assistant Secretary
Carlier, Yves	Member FR
Mahillon, Jacques	Member FR
Mainil, Jacques	Member FR
Thiry, Etienne	Member FR
Spiros, Agathos	Member FR
Wilmotte, Annick	Member FR
Anné, Jozef	Member NL
Cornelis, Pierre	Member NL
Verstraete, Willy	Member NL
Vanderleyden, Jozef	Member NL
Favoreel, Herman	Member NL
Greet, Iven	Member NL
Hennebert, Grégoire	Honorary Member
Leunen, Jos	Honorary Member
Pohl, Pierre	Honorary Member

Pastoret, Paul-Pierre	Honorary Member
Billiau, Alfons	Honorary Member
Couturier, Martine	Honorary Member
Van Montagu, Marc	Honorary Member

OCEANOLOGY

Baeyens, Willy	President
Henriet, Jean-Pierre	Secretary
Berlamont, Jean	Member NL
Bouqueneau, Jean-Marie	Member FR
Chou, Lei	Member FR
Dehairs, Franck	Member NL
Deleersnijder, Eric	Member FR
Djenidi, Salim	Member FR
Dubois, Philippe	Member FR
Hecq, Jean-Henri	Member FR
Heip, Carlo	Member NL
Lancelot, Christiane	Member FR
Meez, Jan	Member NL
Pichot, Georges	Member FR
Van Grieken, René	Member NL
Vincx, Magda	Member NL
Beckers, Jean-Marie	Associate Member
Blust, Ronny	Associate Member
Daro, Nanette	Associate Member
Dauby, Patrick	Associate Member
De Pauw, Niels	Associate Member
Elskens, Marc	Associate Member
Goffart, Anne	Associate Member
Jangoux, Michel	Associate Member
Joiris, Claude	Associate Member
Malherbe, Bernard	Associate Member
Schockaert, Ernest	Associate Member
Sorgeloos, Patrick	Associate Member
Wartel, Stanislas	Associate Member
Pajot, Jean-Pierre	Honorary Member

PHYSICS

Weynants, Roger	President
Herquet, Philippe	Vice-President
Defrance, Pierre	Secretary
Ameloot, Marcel	Member NL
Bruynseraede, Yvan	Member NL
Durvaux, Marc	Member FR
Gonze, Xavier	Member FR
Krekels, Tom	Member NL
Metens, Thierry	Member FR
Noels, Arlette	Member FR
Ryckbosch, Dirk	Member NL
Sevrin, Alexander	Member NL
Sporken, Robert	Member FR
Tytgat, Michel	Member FR
Van Dyck, Dirk	Member NL
Wuyts, Floris	Member NL
De Lendecker, Gilles	Associate Member
Ongena, Jef	Associate Member
Biemont, Émile	Honorary Member
Bouten, Marc	Honorary Member
Demortier, Guy	Honorary Member
Grard, Fernand	Honorary Member
Leclercq-Willain, Christiane	Honorary Member
Lemonne, Jacques	Honorary Member
Serneels, Roger	Honorary Member
Vandenplas, Paul	Honorary Member
Waroquier, Michel	Honorary Member

PHYSIOLOGY AND PHARMACOLOGY

Godfraind, Théophile	President
Lefebvre, Romain	Vice-President
Lacroix, Éric	Secretary
Dresse, Albert	Assistant Secretary
Eggermont, Jan	Member NL
Feron, Olivier	Member FR
Gailly, Philippe	Member FR
Herchuelz, André	Member FR

Herman, Arnold	Member NL
Lebrun, Philippe	Member FR
Seutin, Vincent	Member FR
Smolders, Ilse	Member NL
Snyders, Dirk	Member NL
Van de Voorde, Johan	Member NL
Bogaert, Marc	Honorary Member

PSYCHOLOGICAL SCIENCES

Verhofstadt-Denève, Leni	President
Rimé, Bernard	Vice-President
Cleeremans, Axel	Secretary
Van Overwalle, Frank	Assistant Secretary
Brédart, Serge	Member FR
Bruyer, Raymond	Member FR
Cluydts, Raymond	Member NL
De Boeck, Paul	Member NL
De Keyser, Véronique	Member FR
De Soete, Geert	Member NL
Hermans, Dirk	Member NL
Kolinsky, Régine	Member FR
Peigneux, Philippe	Member FR
Richelle, Marc	Member FR
Seron, Xavier	Member FR
Soetens, Eric	Member NL
van Outryve d'Ydewalle, Géry	Member NL
Vandierendonck, André	Member NL
Brysbaert, Marc	Associate Member
Majerus, Steve	Associate Member

RADIO-ELECTRICITY

Van Lil, Emmanuel	President
De Mol, Christine	Vice-President
Vandenbosch, Guy	Secretary
Pierrard, Viviane	Assistant Secretary
Blondel, Michel	Member FR
Franchois, Ann	Member NL

Huynen, Isabelle	Member FR
Lagasse, Paul	Member NL
Nauwelaers, Bart	Member NL
Rogier, Hendrik	Member NL
Rolain, Yves	Member NL
Schweicher, Emile	Member FR
Sobiecki, O.	Member FR
Van Biesen, Leo	Member NL
Verly, Jacques	Member FR
Warnant, René	Member FR
Clette, Frédéric	Associate Member
Craeye, Christophe	Associate Member
De Wagter, Carlos	Associate Member
De Zutter, Daniël	Associate Member
Delobbe, Laurent	Associate Member
Engelen, Jan	Associate Member
Engels, Marc	Associate Member
François, Guido	Associate Member
Grenez, Francis	Associate Member
Jodogne, Jean-Claude	Associate Member
Legros, Willy	Associate Member
Megret, Patrick	Associate Member
Meys, René	Associate Member
Moenecleay, Mark	Associate Member
Neyt, Xavier	Associate Member
Oestges, Claude	Associate Member
Paquet, Paul	Associate Member
Pollin, Sofie	Associate Member
Preneel, Bart	Associate Member
Prohoroff, Serge	Associate Member
Scherer, Marc	Associate Member
Schreurs, Dominique	Associate Member
Stankov, Stan	Associate Member
Van Daele, Peter	Associate Member
Van Troyen, Dirk	Associate Member
Vandendorpe, Luc	Associate Member
Veretenicoff, Irina	Associate Member
Volski, Vladimir	Associate Member
Barel, Alain	Honorary Member
Charles, Jean	Honorary Member

Delogne, Paul	Honorary Member
Gewillig, M.	Honorary Member
Gonze, Roger	Honorary Member
Lemaire, Jos	Honorary Member
Stijns, Eric	Honorary Member
Van Bladel, Jean	Honorary Member
Van Bladel, Jean	Honorary Member
Van de Capelle, Antoine	Honorary Member
Van Eck, Jean-Louis	Honorary Member
Vander Vorst, André	Honorary Member
Vloeberghs, Claude	Honorary Member

SCOPE-IGBP

Bourdeau, Philippe	President
Vanderborght, Oscar	Vice-President
Defourny, Pierre	Member FR
Fussen, Didier	Member FR
Lambin, Eric	Member FR
Lemur, Raoul	Member NL
Poesen, Jean	Member NL
Sérusiaux, Emmanuel	Member FR
Souchez, Roland	Member FR
Symoens, Jean-Jacques	Member NL
Van Cleemput, Oswald	Member NL
Veroustraete, Frank	Member NL
Verschuren, Dirk	Member NL
Visser, Frans	Member NL
Zaccai, Edwin	Member FR
Berger, André	Honorary Member
Vinckier, Chris	Honorary Member

SOIL SCIENCES

Swerts, Martien	Président
Delvaux, B.	Vice-Président
Vancampenhout, Karen	Secrétaire
Colinet, Gilles	Secrétaire adjoint
Baert, G.	Membre NL

Boeckx, P.	Membre NL
Cornelis, J.-T.	Membre FR
De Neve, S.	Membre NL
Deckers, J.	Membre NL
Engels, P.	Membre FR
Goidts, E.	Membre FR
Langohr, R.	Membre NL
Legrain, X.	Membre FR
Marx, S.	Membre FR
Merckx, R.	Membre NL
Poesen, J.	Membre NL
Vanacker, V.	Membre FR
Verdoodt, A.	Membre NL
Bock, L.	Membre honoraire
Chapelle, J.	Membre honoraire
Deckers, S.	Membre honoraire
Dudal, R.	Membre honoraire
Dufey, J.	Membre honoraire
Geypens, M.	Membre honoraire
Hofman, G.	Membre honoraire
Stoops, G.	Membre honoraire
Van Cleemput, O.	Membre honoraire
Van Meirvenne, M.	Membre honoraire
Van Ranst, E.	Membre honoraire
van Wesemael, B.	Membre honoraire

APPENDIXES

**The Belgian Society of Biochemistry and Molecular Biology and the Belgian Society of
Cell Biology and Development**

Membrane transport proteins

Louvain-la-Neuve, April 26, 2013, UCL

Program

- 09:00-9:25: *Arrival and registration*
- 09:25-9:30: *Welcome by F. Chaumont (UCL, B)*
- 09:30-10:15: **Dirk Slotboom** (*Biochemistry, University of Groningen, NL*)
Bacterial vitamin transport
- 10:15-11:00: **Koen Van de Wetering** (*The Netherlands Cancer Institute, Amsterdam, NL*)
Metabolomic approaches to study the substrate spectrum of ABC transporters
- 11:00-11:30: *Coffee break and posters*
- 11:30-12:00: **Thomas Voets** (*Department of Cellular and Molecular Medicine, KUL, B*)
TRP channels as universal sensors
- 12:00-12:45: **Short talks**
- 12:00-12:15: **Parveen Goyal** (*VIB, VUB, B*)
Translocating pro-amyloidogenic proteins across the bacterial outer membrane
- 12:15-12:30: **Eva-Maria Krammer** (*SFMB, ULB, B*)
Molecular origin of VDAC selectivity towards inorganic ions
- 12:30-12:45: **Mélanie Carquin** (*de Duve Institute, UCL, B*)
Micrometric segregation of membrane lipids in erythrocytes
- 12:45-14:00: *Lunch and posters + meeting of the societies*
- 14:00-14:45: **Edmund Kunji** (*Medical Research Council, Cambridge, UK*)
The transport mechanism of mitochondrial carriers
- 14:45-15:30: **Mike Blatt** (*Laboratory of Plant Physiology and Biophysics, University of Glasgow, UK*)
Traffic and transport - an expanding problem
- 15:30-16:00: *Coffee break and posters*
- 16:00-16:30: **Bruno André** (*Institute of Molecular Biology and Medicine, ULB, B*)
Regulation of yeast amino acid transporters: a story of ubiquitin
- 16:30-17:00: **Short talks**
- 16:30-16:45: **Marta Rubio-Teixeira** (*VIB, KUL, B*)
Uncoupling of transport, signaling, oligo-ubiquitination and endocytosis in Gap1 tranceptor
- 16:45-17:00: **Didier Demaegd** (*ISV, UCL, B*)
Characterization of Gdt1p, a yeast protein involved in calcium homeostasis
- 17:00-17:10: *Closing remarks by P. Dumont (UCL, B)*
- 17:10- 18:30: *Networking drink*



The National Committee for Biochemistry and Molecular Biology, as part of the Royal Academies for Science and the Arts of Belgium (RASAB), further supported by the FWO contact group "Protein structure, folding and dynamics", the FRS-FNRS contact group "Structural Biology" and the Belgian Society for Biochemistry and Molecular Biology invite you to participate to the Contact forum on:

How cells deal with STRESS

On Monday the **9th of December 2013** in the "Paleis der Academiën/Palais des Academies", Hertogsstraat 1, rue Ducale, 1000 Brussels

- 09.00 Arrival and coffee
 09.50 - 10.00 *Introduction:*
Jean-François Collet (UCL-WELBIO)/Joris Messens (VIB-VUB)
 10.00 - 10.35 *Mechanisms of H₂O₂ signaling*
Tobias Dick (DKFZ Heidelberg)
 10.35 - 11.10 *Oxidative stress and Redox regulation*
Ursula Jakob (University of Michigan)
 11.10 - 11.45 *Oxidative stress responses in Bacillus subtilis*
John Helmann (Cornell University)
 11.45 - 12.20 *Immune signalling by redox-based, post-translational protein modifications*
Steven Spoel (Edinburgh University)
 12.20 - 13.30 *Sandwich lunch*
 13.30 - 14.05 *Stress sensing and bacterial pathogenicity*
Eduardo Groisman (Yale University)
 14.05 - 14.40 *How Enterobacteria adapt to stress*
Frederic Barras (Aix Marseille Université)
 14.40 - 15.15 *Offense and defense: microbial membrane vesicles play both ways*
Meta Kuehn (Duke University)
 15.15 - 15.45 *Coffee break*
 15.45 - 16.20 *Stressing caveolae new role in cell mechanics*
Pierre Nassoy (Université P. et M. Curie, France)
 16.20 - 16.55 *Bacterial response to UV radiation*
S. Matallana surget (CNRS, UMR7621 Microbial Oceanography Laboratory, Banyuls/mer, France
 16.55: *Concluding remarks:*
Ruddy Wattiez (UMons)
 17.00: **Reception**

Registration is obligatory at www.biochemistry.be preferably by the 1st of November 2013. Participation fee is 25 Eur for paid members of the Biochem. Soc. and 50 Eur for nonmembers, **to be paid to the account of Bel. Biochem. Soc.** Celestijnenlaan 200 G box2403, 3001 Leuven (IBAN=BE60 2300 0183 8370 ; BIC = GEBABEBB) **Message: STRESS**



Symposium

Nutrition and Food production in the Congo basin

Programme

Monday, 30 September, 2013, morning session

CHAIRS: Jan RAMMELOO, president of the “Environment and Development” Commission, RAOS;
president of the National Committee for Biological Sciences

Eric VAN RANST, professor, Universiteit Gent (Belgium); member RAOS

9:00 *Welcome Address*

Dirk HUYGE, president of the Royal Academy for Overseas Sciences

9:10 Jan Rammeloo, Is the world facing a global food crisis? And Africa? Introductory remarks on the conference.

9:30 Discussion

HUMAN ASPECTS

9:40 *Demographic Data from Conflict-affected Regions of the Congo Basin: Potential from the AfriPop and CEDAT Databases*

Catherine LINARD, post-doctoral fellow, Université Libre de Bruxelles (Belgium)

Chiara ALTARE, research fellow, Université catholique de Louvain (Belgium)

Debarati GUHA-SAPIR, professor, Université catholique de Louvain (Belgium)

10:00 Discussion and coffee break

10:40 *Role of Women in Health and Nutrition*

Marleen TEMMERMAN, director of the Department Reproductive Health & Research, World Health Organisation, Geneva (Switzerland); member RAOS

11:00 Discussion

PHYSICAL ASPECTS

- 11:10 *Les sols du Bassin du Congo: leurs propriétés et contraintes pour la production alimentaire*
Michel NGONGO LUHEMBWE, professor and dean of the Faculty of Agricultural Sciences,
Université de Lubumbashi (Democratic Republic of the Congo)
- 11:30 Poster presentations
- *Legacy Soil Survey Data of DR Congo*, Geert BAERT, lecturer, Hogeschool Gent (Belgium); member RAOS
 - *Design of a Soil Information System for DR Congo*, Ann VERDOODT, professor, Universiteit Gent (Belgium)
 - *Pedotransfer Functions: an Answer to the Lack of Hydrophysical Soil Properties for Sustainable Land Management in the South-western Part of the Congo Basin*, Yves-Dady BOTULA, PhD student, Universiteit Gent (Belgium)
- 11:40 Discussion, poster session and lunch

Afternoon Session

CHAIRS: André OZER, professor, Université de Liège (Belgium); member RAOS
Jozef VERCRUYSE, professor, Universiteit Gent (Belgium); member RAOS

- 2:00 *Remote Sensing as a Tool for monitoring Food Production in an Era of Climate Change*
Els DUCHEYNE, scientific director, Avia-GIS (Belgium)
- 2:20 Discussion

AGRICULTURAL ECONOMICS

- 2:30 *Challenges for a Better Food Security Situation in the DR Congo*
Luc D'HAESE, member of the the Royal Academy for Overseas Sciences
- 2:50 Poster presentations
- *Mapping Livelihoods in the DR Congo (2004-5)*, Wim MARIVOET, research assistant, Universiteit Antwerpen (Belgium)
 - *Understanding Major Determinants for Fertilizer Use in South Kivu, DR Congo*, Janvier MULUMUNA-WA-LOLA, PhD student, Universiteit Gent (Belgium)

3:00 Discussion, poster session and coffee break

CHAIRS: Bart VAN DE VLIJVER, professor, Universiteit Antwerpen (Belgium); member RAOS

Steven DESSEIN, director of the National Botanic Garden of Belgium; member RAOS

BIOLOGICAL ASPECTS

3:40 *Conservation and Utilization of Wildlife in the Congo Basin: How to tackle the Protein Gap?*

Robert NASI, director of the CGIAR Research Programme on Forests, Trees and Agroforestry, Center for International Forestry Research (CIFOR), Bogor (Indonesia)

4:00 Discussion

4:10 Poster presentations

- *Edible Mushrooms of Kimvula City in Lower Congo (DR Congo)*, Simon DIBALUKA MPULUSU, PhD teacher, Université de Kinshasa (DR Congo)
- *Safeguarding Ancestral Knowledge of Pygmies on Wild Edible Plants and Mushrooms in the Republic of Congo*, Sydney Thony NDOLO EBIKA, principal investigator, Initiative for Mushrooms and Plants of Congo, Brazzaville (Republic of Congo)
- *Wild Edible Plant Use in Tshopo District, DR Congo*, Céline TERMOTE, research support officer, Bioversity International, Rome (Italy)
- *Valorisation des connaissances indigènes des plantes mellifères dans les environs du Parc national des Virunga (RD Congo) en vue de contribuer à l'amélioration de sa conservation*, Muhashyi Innocent HABUMUGISHA HITIMANA, assistant, Institut Supérieur de Développement Rural en Région des Grands Lacs, Goma (DR Congo)
- *Birds as Food in Africa: Some Reflections*, Michel LOUETTE, member of the Royal Academy for Overseas Sciences
- *Bushmeat Consumption in Households from Brazzaville, Congo*, R. MBETE, Université de Liège (Belgium)

4:40 Discussion

4:50 End

Tuesday, 1 October, 2013, morning session

CHAIRS: Patrick VAN DAMME, professor, Universiteit Gent (Belgium); member RAOS

Jean-Pierre DESCY, professor, Facultés Universitaires Notre-Dame de la Paix, Namur (Belgium); member RAOS

9:00 *Agricultural Biodiversity: a Crucial Asset for Food and Nutrition Security*, Emile FRISON, former director general of Bioversity International, Rome (Italy)

9:20 Discussion

9:30 *Food Production and Genetic Engineering in Developing Countries*, Nathalie VERBRUGGEN, professor, Université Libre de Bruxelles (Belgium)

9:50 Discussion, poster session and coffee break

AGRICULTURAL PRACTICES

10:30 *Production of Animal Protein in the Congo Basin, a Challenge for the Future of People and Wildlife*, Pascal LEROY, professor and dean of the Faculty of Veterinary Medicine, Université de Liège (Belgium); member RAOS.

10:50 Poster presentations

- *Biodiversité des insectes alimentaires du Bas-Congo en RD Congo*, Séverin TCHIBOZO, manager and researcher, Centre de Recherche pour la Gestion de la Biodiversité, Cotonou (Benin)
- *The Status of Indigenous Village Chicken Production in the Democratic Republic of the Congo*, N. Moula, Université de Liège (Belgium)
- *Rotenoid Content and in vitro Acaricidal Activity of Tephrosia vogelii Leaf Extract on the Tick Rhipicephalus appendiculatus*, Moïse KASEREKA KALUME, dean, Faculty Veterinary Medicine, Université catholique du Graben, Butembo (DR Congo)
- *Epidemiological Follow-up of Bovine Theileriosis to Theileria parva in North Kivu Province, DR Congo*, Moïse KASEREKA KALUME, dean, Faculty Veterinary Medicine, Université catholique du Graben, Butembo (DR Congo)

11:05 Discussion

11:15 *Fish Farming in the Congo Basin: Past, Present and Future*

Jean-Claude MICHA, member of the Royal Academy for Overseas Sciences

11:35 Poster presentation

- *Human Health Risk by the Consumption of Metal and POP Contaminated Fish in the Congo River Basin*, Vera VERHAERT, PhD student, Universiteit Antwerpen (Belgium)

11:40 Discussion

11:50 *Pre- and Post-Harvest Losses in the Congo Basin. The Dark Side of Biodiversity?*

Herwig LEIRS, professor and dean of the Faculty of Sciences, Universiteit Antwerpen (Belgium); member RAOS.

12:10 Discussion

12:20 Poster presentations

- *Evaluation des dégâts des rongeurs sur les cultures (riz et maïs) dans la région de Kisangani (RD Congo)*, Nicaise AMUNDALA DRAZO, chef de travaux, Université de Kisangani (DR Congo)
- *Spatial Variability of Fruit Fly Agricultural Pests (Diptera: Tephritidae) in Rural Areas and Tropical Forests of Central Congo*, Massimiliano VIRGILIO, post-doctoral researcher, Royal Museum for Central Africa, Tervuren (Belgium)
- *Variation in Physico-chemical Characteristics of Pulp and Oil from Safou (Dacryodes edulis (G. Don) H.J. Lam) Fruits: Classification and Relationship with Morphological Traits*, Alain Serges ONDO-AZI, lecturer-researcher, Université des Sciences et Techniques de Masuku, Franceville (Gabon)

12:30 Discussion, poster session and lunch

Afternoon Session

CHAIRS: Charles NTAMPAKA, professor, Faculté Universitaire Notre-Dame de la Paix, Namur (Belgium); member RAOS

Philippe GOYENS, University Children's Hospital Queen Fabiola ULB (Belgium); permanent secretary RAOS

2:00 *The Right to Food: Practical Implications for Food Production and Trade*

Koen DE FEYTER, professor, Research Group Law and Development, Chair of International Law, Faculty of Law, Universiteit Antwerpen (Belgium)

2:20 Discussion

MALNUTRITION

2:30 *Nutritional Status of the Populations of the Congo Basin, Today and Tomorrow*

Jean-Lambert Paluku BAHWERE, paediatrician, Ecole de Santé Publique, Université Libre de Bruxelles (Belgium); consultant, Valid International

Philippe DONNEN, professor, Université Libre de Bruxelles (Belgium); member RAOS

2:50 Poster presentations

- *Persisting High Level of Child Malnutrition associated with Anemia but Low Malaria Infection in a Rural Community of the South Kivu Province, in the Eastern Part of the DR Congo*, Kanigula MUBAGWA, professor, Katholieke Universiteit Leuven (Belgium)
- *Reducing Malnutrition in Urban Areas in Sub-Saharan Africa: a Model for identifying Cost-effective and Sustainable Value Chain Interventions*, Albertien VAN DER VEEN, senior advisor, Koninklijk Instituut voor de Tropen, Amsterdam (the Netherlands)
- *Body Composition in Malnourished Children in Bukavu (DR Congo). Can Electrical Impedance be used for Edema Evaluation and Monitoring?* Serge ZIGABE MUSHAMUKA, medical doctor, Université catholique de Bukavu (DRC)

3:00 Discussion

3:10 *Closing Remarks*

Jan RAMMELOO, president of the “Environment and Development” Commission, RAOS; president of the National Committee for Biological Sciences .

3:20 End



**THE BELGIAN BIOPHYSICAL SOCIETY
and the FWO contactgroup on Protein Structure, folding and dynamics
invite you to a *ONE-DAY SYMPOSIUM* on**

Protein oligomerization *in vitro* and in the living cell

Wednesday the 29th of May, at the KU Leuven, Auditorium B (01.17)
Celestijnenlaan 200C, 3001 Heverlee- Leuven (*map see www.biophysics.be*)

09:30-10:00 Registration and coffee

10:00-11:00 Structure, dynamics, allostery and evolution of protein complex assembly
Joseph Marsh (European Bioinformatics Institute, Cambridge, England)

11:00-12:00 What is new in actin nucleation?
Marie-France Carlier (CNRS, Gif-sur-Yvette, France)

12:00-13:30 Sandwich lunch at “de Moete”

13:30-14:30 Macromolecular interactions of bacterial division FtsZ protein: From quantitative biochemistry to reconstructing minimal divisomes in the test tube.
German Rivas (CSIC, Madrid, Spain)

14:30-15:30 Oligomerization and allostery in GPCR proteins,
Julie Kniazeff (Université de Montpellier, France)

15:30-16:00 coffee break

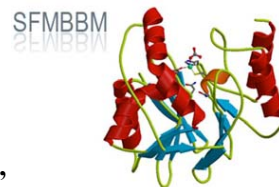
16:00-17:00 FRET and optical super-resolution methods to study protein oligomerization *in vitro* and in the cell,
Clemens Kaminski (University of Cambridge)

17:00-18:00 Closing remarks- Reception

Registration is obligatory at www.biophysics.be preferably by the 15th of May 2013. **Cost of participation is 20 Eur including the 2013- membership fee of the Belgian Biophysical Society, to be paid to the account BE73 0000 1463 3660 (BIC = BPOTBEB1) of Bel. Biophys. Soc.** Celestijnenlaan 200 G box2403, 3001 Leuven .



The BELGIAN BIOPHYSICAL SOCIETY
Further supported by the Doctoral School
“Structure and Function of Biological
Macromolecules, Bioinformatics and Modelling”
ORGANIZES THE 11th ONE-DAY SYMPOSIUM ON
PROTEIN FOLDING AND STABILITY



ON FRIDAY THE 30th OF AUGUST 2013

AT THE UNIVERSITY OF LIEGE
AMPHITHEATRE 204, “Amphithéâtres de l’Europe”
DOMAINE UNIVERSITAIRE DU SART TILMAN
BATIMENT B4



09:45-10:00 Welcome

Chair : Kerensa Broersen (University of Twente, [The Netherlands](#))

10:00-10:50 **Ineke Braakman** (Fac. Sci., Utrecht University, [The Netherlands](#))

“Folding of newly synthesized proteins in the endoplasmic reticulum”

10:50-11:20 COFFEE BREAK

11:20-12:10 **Natàlia Carulla** (Inst. for Research in Biomedicine, Barcelona, [Spain](#))

“Chemical and structural features responsible for amyloid- β ($A\beta$) oligomer neurotoxicity”

12:10-13:00 **Mireille Dumoulin** (C.I.P., University of Liège, [Belgium](#))

“Investigation of the mechanism of aggregation of polyglutamine proteins which are associated with neurodegenerative amyloidoses”

13:00-14:00 LUNCH

14:00 –14:50 **Birthe Kragelund** (Dept. Biol., Univ. of Copenhagen, [Denmark](#))

“Regulatory phosphorylations of IDPs”

14:50-15:40 **Catherine Michaux** (Dept. Chem., University of Namur, [Belgium](#))

“Design of an original method for protein refolding”

15:45 General assembly of the BBS and RECEPTION

Contact: Prof André Matagne (amatagne@ulg.ac.be). **Registration is required** via www.biophysics.be. Admission is free for members, non-members of the Biophysical Society should pay the membership fee (10 EUR to the account of the Belgian Biophysical Society, IBAN BE73 0000 1463 3660, BIC BPOTBE1, P/A Yves Engelborghs, Celestijnenlaan 200 G-box2403, B3001 Leuven).



Microbial Diversity for Science and Industry

Brussels, 26 – 27 November 2013

Academy Palace, Brussels

Meeting jointly organized by NCM, BCCM and BSM



26 th November		27 th November
<p>organized by the BELGIAN CO-ORDINATED COLLECTIONS OF MICRO-ORGANISMS (BCCM) on the occasion of BCCM's 30th anniversary</p> <p>10.00 h Registration desk open – Poster mounting</p> <p>10.45 h Welcome address</p> <p>11.00 h Philippe Courard, State Secretary for Social Affairs, Families, Disabled, in charge of Professional Risks and Science Policy</p> <p>11.15 h Emile Frison, (Director general, Bioversity International) Microbial diversity for research and industry</p> <p>11.45 h BCCM new house style, mission & vision, services</p> <p>12.30 h NETWORKING LUNCH Sandwich lunch and sweets offered by BCCM</p> <p>13.30 h Dick Draulans, Science journalist and writer TBA</p> <p>14.00 h Examples of collaboration between Industry and the BCCM collections*</p>		<p>Annual meeting organized by the Belgian Society for Microbiology and National committee for Microbiology</p> <p>08.30 h Registration – Poster mounting</p> <p>09.00 h Welcome address</p> <p>09.10 h Tal Dagan, Christian-Albrechts-University, Kiel, DE Trends and barriers to lateral gene transfer in prokaryotes</p> <p>09.55 h Ron Fouchier, Viruscience Lab, Erasmus MC, Rotterdam, NL Transmission studies resume for avian flu</p> <p>10.40 h Coffee break</p> <p>11.20 h Slava Epstein, Northeastern University, Boston, USA Why does the Great Plate Count Anomaly still exist</p> <p>12.05 h Peter Vandamme, UGent & BCCM culture collections, BE Bacterial taxonomy</p> <p>13.00 h Lunch – Poster viewing & poster discussion groups</p>
<p>15.45 h BCCM – Cepheid B. De Jong – A. Adema Xpert MTB/Rif: a major milestone for Unravelling the antimicrobial potential of oleylphosphocholine (OPC) strains contributed to its development.</p> <p>16.00 h Frank Montseny, Director Research Programmes at Belgian Science Policy Office Closing remarks</p>		<p>Parallel sessions</p> <p>Bacteriology</p> <p>14.30 h Michael Wagner, University of Vienna, AT Measuring the Function of Microbial Cells in Environmental and Medical Samples by Single Cell Stable Isotope Probing</p> <p>BCCM – Patent attorney Arnold + Siedema (TBA)BCCM - I. Kuster Conservation of consortia and possibility for deposition in patent collection</p> <p>BCCM – Dufra Pharma A. Packiau – T. Boscchiarts Unravelling the antimicrobial potential of oleylphosphocholine (OPC) strains contributed to its development.</p> <p>Virology</p> <p>Philippe Lemey, KU Leuven, BE Integrating ecology and evolution to infer infectious disease dynamics</p> <p>15.00 h Short lectures (5) of selected abstracts</p> <p>16.30 h General conclusions and presentation of awards for best posters</p>

*In parallel: 4 booths (per sector) and possibility for partnering discussions

** Registration via BSM website: <http://www.belsocmicrobio.be>. Registered BSM and BCCM members free entrance; online registration 30 € (for both days)

Ocean Sciences and Horizon 2020: Opportunities and Concerns

December 12th, 2013, the European Commission opened the first calls of Horizon 2020. Opportunities to develop cross-boundary, collaborative research in ocean science are found under “Tackling Societal Challenges” mainly in the area “Climate action, environment, resource efficiency and raw materials” and in the calls for the focus area “Blue Growth: unlocking the potential of Seas and Oceans”. Some opportunities for collaborative research further show up under “Excellent Science”, in particular in the area of “European research infrastructures”. Both the Marie Skłodowska-Curie and the ERC schemes, providers of high-level individual research grants, have been consolidated by increased budgets.

Quite a few scientists, both newcomers and veterans of earlier Framework Programmes, may have discovered in the Horizon 2020 Work Programme 2014-2015 tackling Societal Challenges a new language, a different culture and some unfamiliar rationale. Some programme instruments may look familiar, while other ones, like the new ERA-NET Cofund, may contribute to profound changes in the tissue of European research and society. In the focus area ‘Blue Growth’, a couple of calls have been opened in 2014 for industry-driven exploitation of marine derived biomolecules and biomaterials (BG3 and BG4-2014), and two calls relate to technologies essential to the study of deep-sea ecosystems (BG6 and BG9-2014). On the Atlantic, two large integrative calls blend scientific and technological challenges to develop in-situ Atlantic Ocean Observations for a better management and exploitation of the marine resources (BG8-2014) and to build an Atlantic Ocean Cooperation Research Alliance (BG14-2014). Remarkably, vast thematic areas are left unaddressed, and the Mediterranean, Black Sea, Baltic and Arctic seas remain largely out of the picture.

To what extent does Horizon 2020 meet the expectations of the scientific research community, in particular university research centres, who have the mandate to deliver year after year the brainpower needed for shaping an innovative society?

This question will be central in a study day organised by the Belgian National Committee of Oceanology of RASAB in April-May 2014. Based on the conclusions of this study day, a more cross-boundary event is envisaged in fall 2014, bringing together European scientists and

stakeholders with the objective to phrase constructive recommendations towards the shaping of the second Work Programme of Horizon 2020 (2016-2017).

Call for interventions: scientists and stakeholders are invited to propose interventions which relate to the topic of this study day. Keynote speakers will be addressed by the organizers.