European Crystallographic Association

Draft Minutes of the Council Meeting to be held in Rovinj, Croatia

Day 1 1pm  Monday 24 August
Day 2 1pm  Wednesday 26 August
Reserve meeting  Thursday 27 August

Reports can be obtained from the following folder on Dropbox:
https://www.dropbox.com/sh/q717hs61lvtx6ha/AAD-WjVHNiZCbxXhM19GuPla?dl=0

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Agenda 1st day

1. **Opening**
   1.1. Welcome to Council members and Guests
   1.2. Applications for ECA membership
   1.3. Review of former e-mail decisions

2. **Annual Reports by the President and the Treasurer**
   2.1. Report by the President Andreas Roodt
   2.2. Report by the Treasurer Christian Lehmann
   2.3. Proposal of a change in statutes 1.4
   1.4 A quorum of the Council shall be the first whole number equal to or greater than one half of the total number of the Councilors.
   Change from one half to one quarter.

3. **Approval by the Council of the submitted accounts**
   3.1. Report of the Auditors for the financial year of 2014

4. **Annual Reports by the Executive Committee and preliminary progress reports**
   4.1. Report by the Vice-President Alessia Bacchi also on the Perutz, Bertaut and poster prizes
   4.2. Report by the Past-President Santiago Garcia Granda
   4.3. Report by the Secretary Georgina Rosair on summary of the work of the Executive Committee
   4.4. Report by Olga Yakubovich on ECA links and National Councils
   4.5. Report by Udo Heinemann on SIG/GIG organisation
   4.6. Report by Joke Hadermann on sponsorship of meetings and schools and CAM liaison
   4.7. Report by Fermin Otalora on education and the website related activities

5. **Elections**
   5.1. IM election
   5.2. Election of Executive Committee

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<tr>
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<th>2012-2015</th>
<th>nomination for 2015-2018</th>
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<tbody>
<tr>
<td>President</td>
<td>Andreas Roodt, SA, FA4</td>
<td>Alessia Bacchi, It, FA4</td>
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<td>Past-President</td>
<td>S. Garcia-Granda, Sp, FA4, 5</td>
<td>Andreas Roodt, SA, FA4</td>
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<td>Vice-President</td>
<td>Alessia Bacchi, It, FA4</td>
<td>Udo Heinemann, Ge, FA1</td>
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<td>Position</td>
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<td>President</td>
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<td>Treasurer</td>
<td>Christian Lehmann</td>
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<td>Officer 1</td>
<td>Joke Hadermann</td>
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<td>Officer 2</td>
<td>Udo Heinemann</td>
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<td>Officer 3</td>
<td>Olga Yakubovich</td>
<td>Ru</td>
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<tr>
<td>Education Coordinator</td>
<td>Fermin Otalora</td>
<td>Sp</td>
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* may be re-elected

**Focus Areas:**

- FA1: Biological and Macromolecular Crystallography (SIG 1)
- FA2: Materials and Minerals (SIGs 5, 11, 12)
- FA3: Physical Including Fundamental Crystallography (SIGs 2, 3, 4)
- FA4: Chemical Crystallography (SIGs 7, 13)
- FA5: Experimental and Computational Techniques (SIGs 6, 8, 9, 10)

6. **Reports regarding ECMs**

   6.1. ECM Guidelines
   6.4. ECM31 (2018) Oviedo progress in organisation Santiago Granda Garcia Travel,
   6.5. ECM32 (2019 Vienna) progress in organisation (K Hradil)

7. **European Crystallography School**

   7.1. Progress Report on ECS2 (Mieres, Asturias, Spain)
   7.2. Progress report on ECS3 (Croatia)
   7.3. Applications for ECS4

*Planned end of the first day of the Council Meeting European Crystallographic Association Agenda of the Council Meeting Rovinj 2015*
Agenda 1st day

1. Opening

1.1. Welcome to Council members and Guests

1.2. Applications for ECA membership

No new applications received

1.3. Review of former e-mail decisions

There were no formal decisions requiring ratification by email.

There has been discussion about satellite meeting eligibility, in summary it should not compete with ECM and should arise from the organisation of the ECM rather than be completely independent.

The winter ECA Exec meeting was held in Basel, meeting room and accommodation in St Louis Bale on the cheaper French side of the border. Thanks to Katharina Fromm for organising this to be as cost effective as possible. The dates for the weekend had to be fixed in the previous August. Basel is a beautiful city with good travel connections.

A joint ECM-EPIDC-16 was considered for 2018. There was a very successful joint ECM-EPDIC meeting in Darmstadt in 2010.

The Senior crystallographers interest group has compiled guidelines to make meetings more accessible to older and disabled attendees which will be added to the ECM guidelines and have been sent to ECM organisers.

Irish crystallographers and PCO have been in contact regarding the organising of an ECM in the Republic of Ireland.

Since Turkey became a full member of the IUCr, the ECA regional association committee will need to be reconstituted. Members of the EC are in discussion with crystallographers from the Middle East/north Africa regions.

SIGs and GIGs have been asked to provide representative for the Scientific Committee of European crystallography school, ECS2. Our CAMS have also been invited to contribute to the school.

A call was made for fourth European Crystallography School (ECS4) to be held in 2017 and this call will be made again in the absence of applications.

2. Annual Reports by the President and the Treasurer

2.1. Report by the President Andreas Roodt (see compiled reports)

My term as president of the ECA has come to an end. I had the honour, privilege and unique opportunity during this period as President of the ECA to experience the International Year of Crystallography during 2014, which by nature is a highlight. It resulted in a rejuvenation of many aspects of crystallography in the community, and the aware making of our beautiful discipline to the non crystallographic folk out there. Unnecessary to say, this period included also many specific highlights, of which I list some briefly further below.
The ECA Exec worked very hard as always, to oversee the different aspects of focus in the broad field of Crystallography. There were six ECA Exec meetings over the period of 2012 to 2015 and three ECA Council meetings [one each during the summers of 2013 (Warwick), 2014 (Montreal) and 2015 (Rovinj)]

The two ECMs held during this period have been very successful, i.e. ECM28 in Warwick and ECM29 in Rovinj. Warwick has also seen the special focus on the Braggs and accompanying exhibition, and a special word of recognition to Sandy Blake, Elspeth Garmin, Mike Glazer and colleagues for overseeing this once-in-a-lifetime experience. The current meeting in Rovinj is a testimonial of the dynamics of the leadership of ECM29, and in particular the enthusiasm of Aleksandar Višnjevac and Marijana Dacovic, and the vibrant Croatian crystallographic community.

The ECA community was very active throughout IYCr2014, and listing all the activities will be virtually impossible. Suffice to say that our regional affiliate really endorsed IYCr2014 and significant initiatives, too many to mention, flowed in abundance throughout the year.

Special events which I could attend in person and be part of during 2014 were the following:

- 21-22 January: Formal opening of IYCr2014 in Paris, organised by the IUCr in collaboration with UNESCO.
- 11 April: Laue Symposium: Unveiling of the special plaque to honour Max von Laue: Poznan, Poland; organised by Mariusz Jaskólski and colleagues;
- 10-15 May: Hot Topics in Contemporary Crystallography, Šibenik, Croatia; organised by Aleksandar Višnjevac, Jasminka Propović and Marijana Dacović;
- 10-11 July: Crystallography and Society, Conference on IYCr2014 in Santander, Spain; organised by Santiago García Granda and Fermin Otálora;
- 5-12 August: 23rd Congress and General Assembly of the IUCr; Montreal, Canada;
- 25-29 August: BloemCrystSchool2: Bloemfontein, South Africa; organised by Massimo Nespolo, Mois Aroyo and Andreas Roodt;
- 28 August - 6 September: 1st European School on Crystallography, Pavia, Italy; organised by Michele Zema and colleagues;
- 13-17 October: Summit of the IUCr: IYCr2014Africa: Crystallography as vehicle to promote science in Africa and beyond, Bloemfontein, South Africa; organised by Andreas Roodt and colleagues;
- 10-12 December: Scientific and social challenges around Crystallography, Gijon, Spain; organised by Santiago García Granda and colleagues.

I would like to mention three events from the above list which has especially been a highlight to me. These were firstly the unveiling of the Von Laue plaque in Poznan, honouring his ground-breaking experiments. Next was ECS1 in Pavia, the long-term dream of the ECA which came into being, and thirdly, IYCr2014Africa and the establishment of a preliminary Steering Committee for AfCA [African Crystallographic Association].

At the latter event, a declaration appealing to decision makers across the spectrum for support for crystallography as discipline was signed by all delegates. The preliminary steering committee for a future AfCA as established, now has crystallography representatives/ interested parties in some 13 new African countries [as well as from the already established members of the ECA: South Africa, Morocco, Algeria, Tunisia and Egypt]. Although many still in their infant shoes, others such as Ghana, Cameroon, DRC and Cote d'Ivore are making significant progress to become full-fledged members of the international
crystallographic community. I wish to encourage all colleagues who can and are willing to assist to take this effort further. In particular, Prof Claude Lecomte is recognised for all his efforts.

The ECA has the challenge to expand its interests in the African, Middle-Eastern and Baltic regions and assist colleagues to become a more integral part of the crystallographic community. Both national members and individual members joining the ECA are critically important to achieve this.

A special word of thanks goes to the president of the IUCr, the IUCr Exec Comm and IUCr officials for the support that they have provided to the ECA as a regional affiliate. In particular, Michele Zema is acknowledged for his efforts and seemingly infinite energy regarding IYCr2014 and the many activities supported and organised in the ECA region, to ensure that 'Crystallography matters more'! My wish and vision are that the ECA moves even closer to the IUCr and that an almost unified focus is taken to further expand crystallography globally.

Promoting crystallography from 2015 onwards will be built upon, and it is important that the momentum which has been achieved continues. For that I call in particular on the 'younger generation' of crystallographers to pro-actively maintain the dynamics as far as possible. The energy gathered with the IYCr2014 should be maintained to even further build the enthusiasm for crystallography in the ECA region and globally.

Some activities during 2015/6, which I will be/ was part of, includes:

- January: Successful application via the IUCr to ICSU for expansion of Science in Africa via Crystallography;
- February: visit site of ECM30 in Basel in Aug 2016; organised by Katharina Fromm;
- 22-24 April: Crystallography for the next generation: the Legacy of the IYCr, Rabat, Morocco; organised by Michele Zema (IUCr) and Abdelmalek Thalal (Moroccan Crystallographic Association);
- 16-21 August 2015: Indaba 8, Kruger National Park, South Africa; organised by Andreas Roodt and Peter Comba;
- 23-28 August: ECM29: Rovinj, Croatia; organised by Aleksandar Višnjevac, Marijana Dacović and colleagues;
- 31 August - 5 September: 2nd European Crystallographic School, Mieres, Asturias, Spain; organised by Santiago García Granda and colleagues;
- 2-5 November: 2nd North African Crystallographic Conference, Nabeul, Tunisia; organised by North African crystallographic associations, IUCr and ECA;
- September 2016: Cameroon: Workshop on fundamentals of crystallography; organised by Claude Lecomte.

As president of the ECA, together with immediate past president Santiago García Granda, I could also attend meetings of the Initiative for Science in Europe (ISE) which is an overarching organisation working for the expansion of science in Europe and engaging with politicians and other decision makers to influence policy affecting science such as funding and strategies. The ISE represent more than 300,000 individual scientists in the European region from 20 member organisations and 15 observer organisations. I support the continued membership of the ECA to the ISE to further influence decision makers to pro-actively support science.

I would also like to give sincere thanks to the Special Interest Groups (SIGs) and the General Interest Groups (GIGs) of the ECA, and in particular the management committees therein. The SIGs and GIGs are
the life blood of the ECA and must be continued and expanded. All the activities and initiatives associated therewith are highly appreciated and commended.

I also acknowledge the close collaboration between the ECA and the corporate associated members (CAMs) and the support from all of them. Crystallography can only be successful if the synergy between the CAMs and other sponsors the community is nurtured and expanded.

Finally, I would like to acknowledge the unselfish and hard work of the ECA Exec, but in particular that of Georgina Rosair, Secretary. Our association depends critically on the voluntary efforts of colleagues, but actually 'mis-use' it on many occasions. Moreover, the members of the Exec spend mostly their own funds to attend Exec meetings and continue their activities, Council meetings and other occasions, in the name of the ECA. For this, I, and we as the ECA, should be really thankful and appreciative.

I thank the European Crystallographic Association for their trust and the opportunity as a South African from outside the 'classic European community' to have had the privilege to be president for this term.

Moreover, I wish the ECA all the very best with its future endeavours under the guidance of the new Exec and in particular the new president. Another milestone has been reached with the election of our first female president!

Andreas Roodt.

ECA President: 2012-2015.

The President thanked Council for their support

2.2. Report by the Treasurer (see compiled reports)

Report of the Treasurer

Following the proposal of the Executive Committee and the confirmation by Council, the accounting period of the ECA has been brought in line with the calendar year. This makes it much easier for the Treasurer and Auditors to present figures for the ECM. In 2014 ECA income consisted of membership fees and a final ECM surplus from Bergen (4700 Euro).

Since there was no ECM last year, ECA business meetings took place during the 23\textsuperscript{rd} IUCr congress in Montreal as well as during the winter meeting in Rovinj. Expenses for these meetings are higher than usual because of the too expensive catering in Montreal. Against the total expenses a reimbursement from the Hotel hosting the winter meeting (shown under the heading of ECA Exec income) must be balanced. Other expenses were the support of the Laue-Symposium in Poland during the Int. Year of Crystallography, ECA membership in the Initiative for Science in Europe (ISE) and of course the SIGs.

The financial year 2014 finished with a small surplus of € 2,778.12.
The overall situation of the ECA assets is developing positively. Following the suggestions of the auditors a savings account was opened at the beginning of 2015 which now holds € 30,000 of the ECA assets. The Perutz-Bertaut-Foundation has increased its value and the interest paid will be used towards future Perutz and Bertaut prize moneys.

### ABN Amro

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<td>1.723,90 €</td>
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### Expenditure

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<th>Czech</th>
<th>Sums</th>
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<td>Bank charges</td>
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<td>Total Expenditure</td>
<td>-15.983,78 €</td>
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### Total Result

2.778,12 €

Membership fees will be payable using PayPal in the near future. The Treasurer recommends using SEPA, Single Euro Payments Area (SEPA) is a payment-integration initiative of the European Union for simplification of bank transfers denominated in euro. This is also possible in the UK. Currently
Membership payments are through the Czech credit card system managed by Radek Kuzel. The Treasurer thanked Radek for this valuable contribution to ECA administration.

There were no questions on the Treasurer’s report.

2.3. Proposal of a change in statutes 1.4

1.4 A quorum of the Council shall be the first whole number equal to or greater than one half of the total number of the Councillors.

Change from one half to one quarter.

On the first day of the Council meeting there were insufficient members present. When this vote was taken on Wednesday the proposal of a reduced quorum was rejected by Council. Concern was expressed that a small group could push through a decision that the majority of Councillors do not agree with. There needs to be some discussion about why some countries don’t come. Of the Councillors present 12 were against, 7 for and 4 abstained.

3.

3.1. Report of the Auditors for the financial year of 2014

We have audited the accompanying balance sheet of the ECA for the period July 2014 – June 2015 and the related statements of income, retained surplus and cash flows. The audit is based on the report of the ECA Treasurer, Prof. Dr. Christian W. Lehmann, delivered to us in June 2015, the report of the Executive Committee and e-mail communication with members of Executive Committee. No primary documents were checked.

The financial statements present the financial position of the Association as of June 30, 2015, and the results of its operations and its cash flows for the reference fiscal year.

July 31, 2015 Jindřich Hašek Carlo Mealli

Current status of the ECA accounts to June 30 2015

The ECA has now only one basic bank account for current money needs at the ABN-AMRO Bank in the Netherlands.

The larger ECA assets are at the FUD foundation in Darmstadt (DE) on a bound deposit, which is normally used to strike prizes to outstanding scientists. In this manner, the ECA has a sufficient cash flow for current expenses, while it keeps its assets in the Foundation, which ensures the legal benefits of the Foundation, especially in terms of tax exemptions.

**Funds in the ABN-AMRO Bank**

In the past year, the residual sum of 2006.40 € has been transferred from the previously used Czech account to the ABN-AMRO one. This account has name “European Crystallographic Association” (IBAN: NL88ABNA0483400319, BIC-SWIFT: ABNANL2A), the responsible person being Christian Lehmann (Germany), Treasurer of the ECA.

The other person authorized to sign or co-sign money transfers is Joke Haderman, member of the ECA Executive Committee.

**Total sum available at this date: 47 586.04 €**

**Assets in Darmstadt** – these are held at the hosting foundation named "Friends of the University of Darmstadt" under the responsibility of Professor Harmut Fuess, Germany

**Total value: 83 620.66 €**
With respect to the 2014 balance, the ECA capital in FUD has increased by 5030.84 €, a sum which corresponds to the value of the Max Perutz Prize (5 000 €), not assigned in 2014, year -of the IUCr congress.

The overall capital of the ECA at this time amounts 131 206.70 € with an increase of about 17 826 € with respect to the previous financial year. Once again, we underline that the funds at the FUD foundation cannot be directly managed by the ECA, hence the monetary liquidity is limited to that deposited at the ABN-AMRO Bank, which is at the moment 47 586.04 €.

INCOMES

Part of the total financial year income, which corresponds to 18 761.90 €, derives from the fees paid by the Individual, National and Corporate Members of the ECA. The total amount of the fees has increased with respect to the average of the last five years (12 338 vs. ~5 200 €), while a surplus of 4 700 € has been provided from the organizers of the 2012 ECM27 in Bergen. An additional 1 723.90 € appears as an income in the financial statement, but it is the returned sum erroneously dispensed twice as the expenses of the ECA Executive Committee in the preparation of the ECM 29 in Rovinj.

EXPENDITURES

The total spent sum is 18 983.78 € of which 7 159 € to support various initiatives of the SIG, mainly those having educational purposes (schools, prizes and more), especially during the International Year of Crystallography. In addition, some direct support was given to the IYCr 2014, while in some cases it was necessary to cover some catering expenses related to the mentioned initiatives. Finally, the ECA pays more than 1000 € for its participations fees in international institutions.

RECOMMENDATIONS FROM THE AUDITORS

The auditors are grateful to the Treasurer Christian Lehman for his detail answers to the various remarks made by these auditors in the reports of the past years, and especially in 2014. In particular, the recommendations concerned some of the following issues.

1) Policy of financial support given by the ECA for the organization of future European Congresses (ECM), satellite Meetings and European Crystallographic Schools (ECSs)

The system of bids for the assignment of European Congresses and Schools (ECM and ECS) is normally and correctly adopted by the ECA. However, we recommend that the ECA executive makes a preliminary evaluation of the proposal not only for its scientific value but also from the financial viewpoint, before the bid is brought to the ECA Council for approval. Importantly, it must be clear what is the role of any professional company proposed by the organizers to be in charge of the event. It should be avoided that a particular location with exorbitant costs is approved.

Concerning the organization of a future ECS schools, the organizers should demonstrate their capability of raising funds from a number of dedicated institutions such as for instance ERASMUS. These have already proved to be extremely useful in the past school editions.

The school organizers should ensure wide participation, and in particular, the attendance of at least one student from each member country of the ECA, from where the applications are available.
2) Administration burdens

- It is recommendable that the treasurer renews his effort to open the possibility of card-payments via the ABN AMRO bank. The present state where the payments are collected in the old account in the Czech Republic and transferred to Holland is not effective nor rationale. Banks usually offer the credit-card-processing only to the long-term clients with sufficient capital deposits in their bank. Therefore, it would be reasonable to increase the deposit in the accounts in AMRO bank in the following years.

- The auditors would like to have more details on the ECA contributions to the International Year of Crystallography, given that exceptionality of the latter event really deserved some extra financial effort from the ECA.

CONCLUSIONS

**Both auditors authorize the bookkeeping the ECA in the fiscal period 2014-2015.**

The financial status of the ECA continues to be excellent with a steady trend to increase the financial availabilities year after year. Thus, the auditors recommend to invest more money in good initiatives aimed to support crystallographic activities and to support students and/or still active retired scientists (e.g., scholarships, secondments abroad, etc.).

However, two thirds of the ECA capital is fixed in the FUD, and only profit can be used for prizes. One third only, i.e. less than 50 thousands € can be used for financial transactions of the ECA. It would be reasonable to increase capital deposited in the AMRO bank accounts and keep the amount in the FUD approximately on the same level during few following years.

July 31, 2015  Jindřich Hašek  Carlo Mealli
(see compiled reports folder)

Council thanked the Auditors for their work

CL replied that expenses are mainly meeting support. Although The reserves of approx 130,000 euros seem high, this is insurance against bankruptcy. Usually the total income from an ECM is 15-20% of the budget.

The two prizes are covered by the FUD Foundation. We expect 1500 a year from the fund.

AR commented that 5,6 years ago ECA was struggling to pay prize money but now, unless interest rates go negative

**ACTION CL give auditors a copy of the statutes of the Foundation**

On the future of credit card payments CL stated that the bank is unlikely to issue a credit card until ECA has built up reliable customer credit history. Credit card collection expenses are as much as 200 a month as it is geared to commercial activity such as a web-shop. PayPal is much cheaper to administer 0.5 – 1.5 euro per transaction.

The interest gained (140)on the 30,000 in the AMBRO account covers bank charges

CL and AR both said the insurance risk for ECMs lies with the organisers as ECA does not enter the contract and is not liable for the meeting but ECA will support as best we can, the bid guidelines do have recommendations on decisions to be taken if it does have to be cancelled or moving the conference if possible.
4.

4.1. **Report by the Vice-President Alessia Bacchi also on the Perutz, Bertaut and poster prizes** (see compiled reports folder)

13 companies supported a range of poster prizes. The Vice President thanked the organisers of the poster prizes. There were no questions on the report.

4.2. **Report by the Past-President Santiago Garcia Granda** (see compiled reports folder)

**4.2 Past President Report – 2015**

Since our last ECA Council Meeting at IUCr23 Montreal (Canada) I continued serving the association as Immediate Past President, dedicated to my specific tasks i.e. Keep the memory and control the outgoing tasks and ECM related business.

In the last year I attended all Executive Committee and Council meetings at IUCr23 Montreal (Canada), in August 2014, and the Basel (Switzerland) Executive Committee winter meeting in February 2015. During these events, and also regularly by email in between, I have tried to provide a variety of inputs e.g. on details relevant to ECM29, ECM30 and ECM31 or IUCr24. Specifically, as member of the ECM29 and ECM30 Program Committees, I was deeply involved in the scientific programs in particular for the current year meeting, ECM29. I have been involved in the elaboration of the ECA Leaflets version for 2015, the ECA Wiki entry in the Spanish version, and in the design and transition of the old to the new ECA web Page. Regarding the ECA activities within the IUCr International Year of Crystallography (IYCr2014), as appointed coordinator my main activity was to group all current initiatives within the ECA through a dedicated webpage for the ECA-International Year of Crystallography. We attended, with the President of ECA, the IYCr2014 Legacy Ceremony in Rabat (Morocco), April 22nd to 25th, closing the official activities of the International Year and establishing the IYCr Legacy fund. I shall attend the ECM29 in Rovinj to participate in both ECA and IUCr Executive Committees meetings. After ECM29 my duties at the ECA executive committee will end after nine years working with and for wonderful colleagues. Thank you very much to all the European Crystallographic Association family for giving me all responsibilities and allowing me to participate in the recent development of our Association.

Prof. Santiago García-Granda

There were no questions on this report.

4.3. **Report by the Secretary Georgina Rosair on summary of the work of the Executive Committee**

The Executive committee met in February 2015 in Basel and we are very grateful for our hosts Katharina Fromm and Juerg Schafer for arranging this. We discussed progress with the ECMs for Rovinj, Basel and Oviedo. Progress reports on these ECMs are included in this document.

Santiago Granda Garcia brought us 2015 IYCr Calendars compiled from the winning photos of last year’s competition. We discussed how to continue the momentum of the International year of Crystallography 2014 (see Presidents report).

A European Crystallography School in 2015 to be held in Spain is being organized by Santiago Granda Garcia and Fermin Otalora is on the organizing board for this. The crystallography school after Spain, ECS3 will be held in Croatia. We are asking for bids for the fourth European crystallography school.

We are always looking for ways to increase Individual membership of ECA and so we encourage Council members to promote Individual Membership in their national crystallographic societies.

There were no questions on this report.

ECA links

- IUCr-ECA link

Contacts have been established between Olga Yakubovich (ECA) and Radomir Kuzel (IUCr).

- ECA-ACA-AsCA-LACA link

During the reporting period there were no new contacts between ECA-ACA-AsCA-LACA representatives.

Adhering Bodies

- Former Union of the Regional Committee of Cryst. (Algeria, Latvia, Morocco, Tunisia, Turkey, Ukraine)

In the year 2014 three Regional Associations of Crystallographers, namely that of Turkey, Algeria and Morocco became full members (Adhering Bodies) of the IUCr. At the moment, only two National Members, i.e. Cryst. Associations of Ukraine and of Latvia have remained as members of the Union of the Regional Committee of Crystallographers. As we discussed during the ECA EC meeting in Basel in February 2015, the activity of this group need some additional motivation and promotion, perhaps an incorporation of new members, and establishing a new leader of the Union.

Prof. S. Garcia-Granda has sent a letter to Roman Gladyshevskii in order to see the position of Ukraine in this purpose. I have not received any answer. There is a question if this collective IUCr membership of the ECA National Members is still relevant.

- Observer Adhering Bodies (Armenia, Belarus, Estonia)

I could not establish contacts with crystallographers from Armenia and Estonia. No new information was received from Dr. Lyakhov regarding perspectives to create the national Crystallographic Association in Belarus.

- Non-member Adhering Bodies (Moldova, Romania, Lithuania, Bosnia-Herzegovina, Iran, Albania, Azerbaijan)

No news from crystallographers of Moldova, Romania, Lithuania, Iran, Albania and Bosnia-Herzegovina has been received in the reporting period.

Prof. U. Heinemann has addressed to Garib Murshudov from Azerbaijan regarding crystallography in this country. It was an answer from Garib that after his long absence in Azerbaijan he would try to clarify the situation. I have not got additional information until now.

- Malta

It was a request of scientists from Malta regarding membership of the ECA. At the ECA EC meeting in Basel in February 2015 we have discussed a possibility to adopt Malta as Adhering Body to the ECA. I wrote a letter to L.Vella-Zarb and to U. Baisch indicating possible ways for them to participate in the ECA.

- Russian Federation

No news from the Russian National Committee of Crystallography is available.
OY had contacted many people during her term but unfortunately no new members arose from the contacts. It has been tough economic times for most of us. She thanked Council for their cooperation. She was also thanked by Council.

4.5. **Report by Udo Heinemann on SIG/GIG organisation**
See compiled SIG reports

UH is delighted to see the active engagement of SIGs in driving our science and shaping our meetings. AR added that the Executive committee will change the time SIGs meet with them as Sunday afternoon is problematic so will adjust the programme as general SIG issues are important

4.6. **Report by Joke Hadermann on sponsorship of meetings and schools and CAM liaison**
Relationship between ECA, the ECM’s and the CAM’s

See compiled reports folder

JH was thanked in her absence for her efforts

4.7. **Report by Fermin Otalora on education and the website related activities**

Website
The new website is much better defined now. The functionality is getting much harder to implement than the look and feel. It is expected to be finished during the last quarter of this year and thoroughly discussed and implemented at the next winter meeting.

**Current Architecture**

Features implemented up to now are:

**Collaborative content posting**
In addition to public site access, authenticated access for ECA members is implemented. When authenticated via login/password, members have access to their profile and to private contents. The user profile includes information of the role the user have in ECA and the actions he can perform. Executive Committee members have write access to the site so they can post new content as required. This makes easier the contribution of new content without having to send it to the webmaster in advance. In addition, the site content is expected to be more up to date and more frequently updated by this feature. In addition
Better SIG/GIG integration
A social network layer is implemented using the BuddyPress plug-in. This is mainly used to handle SIG/GIG pages as BuddyPress groups. Each SIG/GIG has a separate page featuring some basic information along with a blog where the IG administrator can post news. Registered members can comment on these posts.

Registered members can freely join or leave any public group (i.e. enter and leave a SIG/GIG) and get access to the posts. This basic functionality should cover the web site requirements of most SIG/GIGS that could eventually stop using external servers. All posts and comments can be sent to registered users by email. There are 5 levels of email subscription options: No Email, Weekly Summary, Daily Digest, New Topics Email and All. Group admins can choose one of the 5 subscription levels as a default that gets applied when new members join. This feature largely supersedes the need for SIG/GIG mailing lists with the advantages of maintenance-free distribution lists and user-configurable notifications.

Administration Area
BuddyPress groups can also be private and only visible to members of the group. Only the administrator of the group can invite users to become members of the group. This feature is used to implement a private area for the Executive Committee, were private discussions and documents are accessible for the authorized members. Email distribution of the contents posted in this area works like in SIG/GIG pages. Other such private areas can be created for the Council or any other group of members if required.

Groups can also be created as public but accessible only by invitation. None such groups are used currently, but they can be used to implement areas for CAMs, National Members...

Multisite hosting
Multisite hosting is implemented. Sites within the ecanews.org domain (for example ECM or ECS sites and eventually SIG/GIG sites) can be hosted in the ecanews server. This can be an appreciable contribution to ECMs and ECSs, since hosting costs can account for several hundred euros per year, but the available hosting space is restricted by the availability of the ecanews server. Currently ecanews is hosted free of charge in the server of a collaborating company and the space limitations are quite short. Generalizing this hosting scheme could require going for paid hosting for ecanews.org, which should be considered carefully.

A test case for this use of hosting has been the ECS2 website, that is actually hosted at the ecanews server. The experience is being very satisfactory. A remarkable side effect of this hosting will be the automatic archiving of ECM/ECS sites.

Contact forms
Some of the activities of the Executive Committee are suitable for online handling. Currently, a form is implemented to collect applications for financial support for courses and forwarding these applications to the person in charge, Other such applications will be defined in the near future.

Social networking
The site can automatically export posts to different social networks. Currently ECA accounts have been created in twitter, Facebook and LinkedIn. These accounts are currently inactive and will be automatically feed with the website posts when deployed.

The convenience of being present in specialized social network like ResearchGate and the procedures for this presence should be addressed by the Executive Council. Because of the nature of these networks, this presence can be best handled by the SIGs, but probably under an unified ECA account to avoid spreading the visibility of the association.

Membership handling
The new site involves a database of users that must be keep in sync with the list of ECA members. This is possible but painful and error prone. The optimum setup would be to handle membership directly from the website. Solutions to implement this are readily available (see for example the Paid Membership plugin at http://www.paidmembershipspro.com/), but two issues must be considered before implementation:

- Compatibility of the payment system implemented with the ECA treasurer procedures.
- Flexibility of the payment scheme (i.e. how to handle CAM and NM payments since these plug-ins are mainly designed for IM accounts)

Collaboration with the ECA treasurer is expected to define this yet unimplemented feature.

Import/Export feeds
RSS/Atom feeds are supported by the site in its current implementation. This feature allows for automatic import/export of content. Foreseen (unimplemented yet) uses of this mechanism in the ECA site include:

- Importing job announcements from IUCr and other associations
- Exporting ecanews content to increase their visibility in other sites
- Keeping in site the contents of SIG/GIGs by importing their posts in external sites.

ECA Leaflet
A new version of the ECA leaflet has been prepared, printed and published in the web site. It will be distributed by the exhibition booth at ECM29. Printed copies will also be distributed to the members of the Executive Committee. A lightweight version is available to download it from the ECA website.

AR asked that SIGs be contacted by email on how their website can be incorporated into the new ECA site

FO replies that there are 3 choices
1) Within the ECA site with basic info on the SIG and a file repository
2) A site within a site which has to be maintained by the SIG but backup and hosting is provided by the main site
3) As an external site where the ECA website link for that SIG is redirected to this external site

CL added a comment relating to social media, a request for translations of the English ECA Wikipedia page into other languages
ACTION COUNCILLORS to contact CL to offer translation services

Council thanked FO for his work on the webpage

5. **Elections**

5.1. **IM election**
A call for nominations was given by email, more nominations were invited at the Council meeting. One nomination has been received. AR asked for Council to publicise and work on getting at least another two IM reps nominated. These need to be supported by six IMs. He asked for nominations with names to be passed on to GMR by email by next Wednesday. Voting on the IM representatives will be by email.

AR reminded Council that it is Council who elects the Executive committee, if there are any more nominations please can these be given to GMR before Wednesday coffee time to allow appears to be prepared. The nomination are open for President, Vice President and two Officers

6. **Reports regarding ECMs**

6.1. **ECM Guidelines**
Any suggestions for improvements to guidelines?
These are on the website to aid planning of future ECMs

6.2 ECM29 (2015) Rovinj

Progress Report on ECM29 A. Višnjevac, M Dakovic
(see compiled reports folder)

Marijana Dakovic said there were in excess of 1000 participants, with 11 satellites 50 microsymposia. Sponsors have given positive feedback. One satellite had to be moved at the last minute. Harry Powell expressed his heartfelt thanks for all the effort the Croatians put in to make the relocation successful.

6.3 ECM30 (2016) Basel – progress in organisation Katharina Fromm
(see compiled reports folder)

SIGs had expressed concern about the list of MS. KF described the brainstorming to arrive at a list of MS. List was sent to Programme committee for discussion, some titles were combined, then sent to SIG and GIG for feedback, shortlists were made by Doodle polls.

There will be a committee meeting where SIGs can raise any concerns. There were technical problems which meant that some SIG feedback was late.

KF said concerns had also been raised about the exhibitor space but she said attendees had to go through the exhibition to lectures and the food will be served in the exhibition.

A science slam session is planned with 3 min poster presentation in front of an audience, this will be before the Plenary.

The website is live. The Swiss PCO, Congrex personnel will meet with exhibitors in Rovinj.

Fixed Exchange rate between euro and CHF has now ended, fees need to be adapted to this event. This also happened in Warwick.

KF asked for satellite meeting ideas to be submitted to ECM30 organising committee.

Tony Savill said that the exhibition layout was not the same that the exhibitors were shown. KF replied that it is possible to setup booths, that posters are on the floor above and lectures are around the exhibition.

He was also concerned about the cost, it is a considerable mark up compared to this meeting, (20%). PCO said they had not seen ECA exhibition guidelines where the posters and exhibition are integrated. TS suggested:

1) Split the exhibition
2) Have a specific evening event in the exhibition

When the exhibition was in a separate building, the exhibitors marked on mass to organisers to do something. In the end the exhibitors paid for beer to be made available at 5pm every evening.

TS said Rovinj was working very well and was a fantastic meeting for exhibitors and hoped the same would be for Basel.

Karen Friese said she could not find the MS her SIG had proposed and she asked that the list of MS be made available before tomorrow’s meeting.

6.4 ECM31 (2018) Oviedo

ECM31 – Progress Report

The organization of the 31st European Crystallographic Meeting was assigned to the Spanish Crystallographic Association in the Council meeting celebrated in Montreal in 2014 on occasion of the 23rd Congress and General Assembly. The meeting will take place in Oviedo, Spain 22(Wed)-27(Mon) August
2018. The Conference Hall will be the Palace of Exhibitions and Congresses of Oviedo a new building inaugurated in 2011, located in central Oviedo, near of most of the hotels and all city facilities. Student accommodation will be 35euro a night. Sponsorship rates are: gold 15K euro, silver 8K euro and bronze 4K euro.

AR asked about travelling to Oviedo. David Billing said connections had to be easy from major international airports, as Rovinj was difficult to get to, involving many connections.

SGG said there were Easyjet and Ryanair flights to Santander and Bilbao and also fast train travel from Madrid and Barcelona. Emirates fly to Madrid from South Africa.

DB also commented that transit visas could be complicated for students though if it was all in Schengen countries it was OK.

Prof. Santiago García-Granda

### 6.5 ECM32 (2019) Vienna (Klaudia Hradil)

The University conference management is the PCO which is less expensive than other PCOs and the venue is the University of Vienna buildings. The contract is with two universities. The exhibition is planned to be in a large 1100m2 covered open air area, a roof garden. TS asked about air conditioning but KH said the area was not sunlit and should cope with large numbers of delegates.

AR asked KH to be in constant contact with TS and the exhibitors.

### 6.6 Bid for ECM33 (2021)

7. European Crystallography School

#### 7.1. Progress Report on ECS2 (Mieres, Asturias, Spain)

ECS2 – Progress Report (Prof. Santiago García-Granda)

The Second European Crystallography School is going to take place in Spain, Mieres (Asturias) from 30th August to 5th September 2015. This is close to the dates of the Pavia school but clashes with Aperiodic school.

Under the title, Crystallography: Fundamentals, Online Tools and Applications, the School will gather contributions of outstanding crystallographers, including Nobel Prize Awardees in Crystallography, to discuss and give answers to the current new and challenging requirements of the crystallography in science, technology, education and advanced training during the 2nd century of modern crystallography.

The ECS2 program aims to answer the new and challenging requirements of the crystallography education and training during the 2nd century of modern crystallography. It is divided into four different modules: one day Preschool, three days Fundamental Crystallography, two days Specific Subjects and one day Hot Topics.

Updated information is shown at the ECS2 Web page: http://ecs2.ecanews.org/

University accommodation is available since the school is before the start of term, so far 17 lecturers, 32 students, 27 posters from students, 3 sponsors (CCDC, Nanomegas and Rigaku) 12 grants with students coming from Latin America and Africa as well as Europe. SGG hoped for more input from SIGs, Laura Roces in the main local organiser dealing with administration. Hot topics include electron diffraction and synchrotron serial crystallography. Materials are online for students prior to the school starting. Th campus has sports facilities and an excursion is planned to Lagos de Covadonga. Since there is a slight surplus lecturers only need to pay for their travel but not accommodation.
AR said students were struggling to go and asked the ECA exec to support the school more, SGG replied that the school required more promotion as it seemed less attractive to local and European students. The cheapest air tickets are 1000 Euro from Nigeria.

Juerg Schaefer suggested local organisers contact Councillors of national crystallographic societies.

AR said the school was every year so our Councillors could promote it every year. Pavia expected 80 students but got 120, Croatia expects 80. There seems to be a wide range of student numbers.

ACTION Peter Wood from GIG1 to gather feedback from GIG1 members as to why students choose to attend a school or not.

Lee Brammer said that there were regular schools in the UK and USA with the same lecturers and programme which requires less preparation than completely new schools.

AR said that there were a variety of issues and a need to spread crystallographic teaching had been identified.

Tony Savill asked how the school was promoted and advertised? (It is promoted through the ECA website, annual meetings and SIGs.) TS said we must approach students more directly and he said they could promote the school at their exhibition booth.

7.2. ECS3 Croatia (see compiled reports folder)

To be held outside the high season 25-August to 2 September in Bol, Brac, Croatia. There are both Facebook and webpage. It is the largest conference centre in the region (Central Dalmatia). Accommodation 3star 35 euro; shared 46 euro; 4 star 46 single; 69 shared.; 245 euro for 7 nights. The registration is 350 euro which includes the conference dinner and reading materials which is about 85 Euro a day (ESC1 82€/day; ECS2 95€/day)

Lee Brammer asked why such a large venue was being used, replies that it can be subdivided and that was what was available. There is a three week gap between Basel and the ECS3. Lee Brammer said the BCA and the Durham BCA school were often back to back

Anders Madsen said in Denmark their outreach was to students who were not in crystallographic groups but those who do synthesis and solve their own structures. UH added that Biological crystallographers work in a wet lab until they get crystals so really need a crystallography school. David Billings said there is a definite role for ECS as crystallography is missing from the curricula of many universities.

7.3. ESC4 bids

AR mentioned that some Polish crystallographers had expressed an interest in hosting a crystallography school. David Billing said that Cape Town, with two substantial crystallography groups in South Africa could host an ECS with 5-6 lecturers to SA rather than sending 50 students north and all fields could be covered.

Agenda 2nd day

8. IUCr-ECA link, (Radek Kuzel)

Radek visited the Chester office where there are 25-28 staff. The IUCr is looking for ways to sustain IYCr2014 activities. The financial committee of the IUCr is meeting now, the support from IUCr to schools is going down because income from journals is decreasing. There is some discussion about individual paid membership of the IUCr but individuals already pay regional and national membership fees. SGG is involved with the LACA (Latin American region). AR said that ECA wishes to work more closely with the IUCr.

9. Initiative for Science in Europe (ISE),
Joined 2 years ago, bringing scientific orgs in Europe for funding raised apologies no report this time, AR attending meeting next 5 week in Cologne Biology, Physics and chemistry. Member organisations have a compiled number of 30K members. There is a website, and there have been some successes on scientific policy, AR will forward details in due course in few months, 1000 Euro a year fee. AR feels we should be part of this.

ACTION AR to forward information on ISE
No questions

10. **International Year of Crystallography 2014** – outcomes and continuing initiatives

Very special year for crystallography 50% projects from euro region

11. **National Crystallographic Associations**

11.1 Grouping ECA member and IUCr non-member countries to IUCr Adhering Body

11.2 Observer Countries (Armenia, Belarus, Estonia), non-member countries

(See item 4.4 OY report)

11.3 African and Middle-East-East Crystallographic Region

Activities in Africa have been described in the Presidents report. One IYCr initiative in Africa has been the establishment of a steering committee for African crystallographic committee which currently covers 15 African countries, currently, only 5 ECA African members, and another 2 are members of the IUCr.

IUCr website has information on this, Africa is world responsibility not just South Africa’s.

AR wrote an ICSU proposal to support delegates from Africa via the IUCr to attend Indaba 8 as part of the initiative "Building Science Capacity in Africa via Crystallography". There will be a workshop in central Africa (flyers available) and a Pan Africa conference in Cameroon, Oct 2015. Additionally a North African conference in Nov 2016 Michele Zema is the responsible person with close collaboration with IUCr efforts in Africa

Pance Naumov asked if N Africa and middle east could work together, more but AR said despite the common language, N Africa not yet activating middle east region. C Lecomte has contact with SESAME

12. **ECA membership**

12.1 Enlarging the number of IMs and CAMs of the ECA, relationship between ECA, the ECM's and the CAM's

AR hope for increased cooperation and activity, what can exec do to support more, we appreciate every support from

Added 2 CAMs; Anton Paar and Excillum

Comment from TS?

12.2 CAM Applications for ECA membership

12.3 Report of the Individual Members Representatives

Bill Clegg and Kamil Dziubek two of the 3 reps for IMs no correspondence last year

The IM identification on badges is a good idea because it generates interested and comments more publicity first tried at Warwick but here the IM mark is easily lost, at the meeting it raises the profile as to what IM means, Changes to ECA website create new opportunities, IM area could feature a discussion forum, to which IM can contribute, emails are not popular, visible to anyone but only IM can contribute, put info in programme booklets, people won’t do it unless some benefit for them.

Influence of IM on ECA activities, personal suggestion where one officer charged with specific responsibilities for interaction with IM's

BC asked when New website will be launched, reminder for IM payment needed as well

FO tools discussion available for SIGs software is there and in 2 months the website will be ready

Membership not yet implemented working with CL
Proposed Change in Bylaws regarding membership

Our present By-Laws say:
6.3 Members of the Association pay fees as follows.
a) National Members pay 1 unit per member of the Adhering Body rounded or per number of
practicing Crystallographers which it represents but a minimum of 50 units.
Affiliate Members pay such number of units as decided by the Executive Committee.
Individual Members pay 10 units.

The Members of the Association shall pay the annual fees before the first of April of that year.

Suggested change to
(a) National Members pay 1 unit per audited member of the Adhering Body otherwise for
each practising crystallographer which it represents according to the World Directory of
Crystallographers (WDC), whichever number is bigger. Numbers are rounded to the nearest 25
but a minimum of 50 units has to be paid.

CL clarified that the adhering body referred to in the National member fee, is the one that is audited and
the membership numbers come from the annual meeting report of the adhering body.
In cases where there is no audited crystallography organisation, the number in the WDC is taken on 1
April each year.
Whichever is the larger number is the one used to calculate the charge
Numbers will be rounded to the nearest 25 and the payment will be in Euros. AR said to be clear if its 90
members in the WDC then its rounded to 100; if its 85 members then its rounded down to 75. Cases of
hardship will be decided on an individual level. National societies are urged to check those registered
in the WDC under the country as many WDC members no longer active.
Sweden suggested a flat rate AR said the proposed system seems most fair; it is very difficult to
simplify. Poland said the National society would not be happy to pay for every member in the WDC.
There are Chemical, Physics or Materials societies which may join ECA, would fees be taken also from
the National society?
Klaudia Hradil said it is a struggle to find the number of active members in Austria, in the WDC there
are many emails which are no longer correct. KS said that the Swiss academy who would pay the fee
will not accept the email list from the WDC. Richard Cooper asked if any country had more members in
t heir national society compared to the WDC. CL said only Germany came close with 1:1 membership in
WDC compared to National society
CL said the list of members needs to be provided by the country otherwise the WDC is used

With more than 50% councillors present we can change the Bylaw. Support for the proposed change 23
none against

Annual Reports regarding SIGs / GIGs activity

13.1  SIG.1 Macromolecular Crystallography (Keith Wilson)
13.2  SIG.2 Charge, Spin & Momentum Density (Birger Dittrich)
13.3  SIG.3 Aperiodic Crystallography (Artem M. Abakumov)
13.4  SIG.4 Electron Crystallography (Holger Klein)
13.5  SIG.5 Mineralogical Crystallography (Sergey Krivovichev)
13.6  SIG.6 Instrumentation and Experimental Techniques (IET) (Robert Cernik)
13.7  SIG.7 Molecular Interaction and Recognition (MIR) (Carl Henrik Görbitz)
13.8  SIG.8 Powder Diffraction (SIGPD) (Paolo Scardi)
13.9  SIG.9 Crystallographic Computing (CCSIG) (Harry Powell)
13.10 SIG.11 Extreme Conditions (Leonid Dubrovinsky)
13.11 SIG.12 Materials Science (Julien Haines)
13.12 SIG.13 Molecular Structures and Chemical Properties (Marijana Djakovic)
13.13 GIG.1 Young Crystallographers (Andrew Mahoney)
14. Progress in the European Graduate School of Crystallography

Progress in the European Graduate School of Crystallography

European Crystallography Master

The activities for the definition of the European Master in Crystallography have been stopped for long time due to a complete restructuration of the Postgraduate Department of my institution (National Research Council, CSIC). All people working on this project were reassigned to new duties and most progress was lost. Currently I have new contacts in the department and trying to recover for the next call for applications (spring 2016). A call will be issued right after ECCM29 to collect partnership offers from ECA members.

This program will be based on four semesters (120 credits). On the basis of our experience with the Spanish national master, we know that registered students come from widely different fields and have equally different scopes for their future work. For this reason the structure of the master will include four different modules:

Module 1. The master must start with an unified introduction to the fundamental crystallographic concepts, Core Subjects, so that all students end up “fluently speaking crystallography” and being able to communicate with their colleagues, independently of their specialty. This is crucial if we want to keep "Crystallography" as a knowledge field in its own, despite the many fields using crystallographic knowledge and methods. Four courses will be included in this module:

- Mathematical, physical and chemical basis of Crystallography
- Fundamentals of crystallization
- Fundamentals of diffraction and imaging methods
- Introduction to crystal structure solution and refinement

Module 2. In the second (specialized) module, students take the fundamental knowledge to application in their field of interest. It is unpractical to teach the same courses to a “macromolecular” crystallographer, a “chemical” crystallographer and a “materials science” crystallographer. Even if all of them need to know how to solve a structure, produce and handle crystalline samples, collect data, define and perform a diffraction experiment, use phasing methods, refine structures... the practical aspects of these tasks change as a function of the files; not to talk about specialized topics like purification of proteins or solving modulated structures.

Consequently, the first module on “Core subjects” will run with all enrolled students, probably in Spain, and followed by the modules on “Chemical Crystallography”, “Macromolecular Crystallography” and “Materials and Mineralogical Crystallography”, each of them in a university having a well recognized experience in the field. The students should select one of these three options. The list below contains a minimum set of contents to be taught within the module. Additional topics can be discussed. Each university teaching one of these modules should provide lecturers to cover the whole program or most of it. Some of the topics can be covered by lecturers from other universities within the Erasmus mobility framework.

- Chemical Crystallography
- Molecular Interaction in Crystals
- Crystallization methods
- Data Collection and Processing
- Phasing methods
- Refinement
- Structure validation
- Data Bases and online services
• Crystallography of Functional Materials
• Crystallography in non-ambient Conditions
• Electronic Densities, Charge Density
• Rietveld Methods
• Instrumentation and Large Facilities

• Macromolecular Crystallography
• Sample preparation (expression, purification, crystallization)
• Data Collection and Processing
• Phasing methods
• Model Building
• Refinement
• Structure Validation
• Data Bases and on-line services
• SAX Methods
• Electron Microscopy
• Automated structure solution: Software Pipelines
• Instrumentation and Large Facilities

• Materials and Mineralogical Crystallography
• Physics of Condensed Systems
• Thermodynamics (Stability, Phase Diagrams, Phase Transitions, Solid Solutions)
• Anisotropic Physical Properties
• Polymorphism
• Surfaces and Thin Films
• Crystal Morphology
• Data Collection and Processing
• Phasing methods
• Refinement
• Non-ambient diffraction
• Powder Diffraction (characterization)
• Rietveld Methods (structure)
• Electron Microscopy and Diffraction
• Neutron Diffraction
• Soft Materials
• Bio-mineralization
• Defects Structure
• Aperiodic Structures
• Instrumentation and Large Facilities
• Spectroscopic Methods complementary to Crystallography

Module 3. Research Stage. After the second module, students will go for a stage in agreed laboratories where they will do real laboratory work on a specific problem, under the supervision of a researcher from that lab; this will be the topic of their Master Thesis. These stage labs can be in one of the universities teaching modules 1 or 2 or elsewhere. Companies and Large Research Facilities should also be eligible for these stages.

Module 4. Master Thesis. During the last semester students must work on the preparation of their master thesis using the results obtained during the practical stage (module 3) to prepare
• a written report in the form of an article manuscript ready to be sent to journal of the field and
• a 20 minutes presentation of the same results ready for a scientific conference
On-line courses on transversal skills like scientific writing, oral communication, data analysis and presentation, etc. will also be included in this module.
A number of European universities have been contacted as potential members of the consortium teaching this program: Università di Padova (Italy), Praha University (Czech Republic), University of Lübeck (Germany), University of Oxford (United Kingdom) and Trinity College Dublin (Ireland).

15. Schools, Conferences and Workshops
15.1 Request for support from ECA to schools and workshops (Joke Hadermann)

16. Prizes of ECA: Perutz Prize, Bertaut Prize, Poster prizes and fund raising
AB said there will be many poster prizes at the closing ceremony

17. Votes
17.1 Exec committee elections
The proposed members of the Executive committee were elected by secret ballot which took place on day 3

17.2 IM member reps
5 nominations (Harry Powell, Andrej Grzechnik, Serena Tarantino, Kamil Dziubek, Julien Haines) vote on email list for 3
Radek Kuzel has anonymous email voting procedure from previous election.
AR suggest of the 3 IM reps, one could be the contact person. Bill Clegg asked why since we need more contact with IMs and said the forum will deal with this contact. AR said we Look forward to 3 IM reps

17.3 Vote on ECS4
There was no proposal so far to vote on

18. The ECA: what to do - where to go Discussion regarding rules and future proceedings
18.1 Written contributions from the Councillors as well as from Individual Members are welcome!

19. Any other business

20. Close

List of attendees:

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<th>Alternate</th>
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**Observers**

- **IUCr**
  - No: Radomír Kuzel
  - Yes: y
- **Armenia**
  - No: Hakob Bezirganyan
  - Yes: Siranush Bezirganyan
- **Belarus**
  - No: Alexander Lyakhov
- **Estonia**
  - No: Hugo Mandar

**SIG’s representatives**
| SIG 1 | No | Keith Wilson |
| SIG 2 | No | Birger Dittrich |
| SIG 3 | No | Artem M. Abakumov |
| SIG 4 | No | Holger Klein |
| SIG 5 | No | Sergey V. Krivovich | Olga Yacubovich | y |
| SIG 6 | No | Robert Cernik |
| SIG 7 | No | Carl Henrik Gorbitz | Paola Gilli | y | y |
| SIG 8 | No | Paolo Scardi | A. Guagliara | y |
| SIG 9 | No | Harry Powell |
| SIG 10 | No | closed |
| SIG 11 | No | Leonid Dubrovinsky | Karen Friese | y | y | y |
| SIG 12 | No | Julien Haines |
| SIG 13 | No | Alexandra Crispini | y |
| GIG1 | No | Andrew Maloney | y | y | y |
| GIG2 | No | Svend Erik Rasmussen | Carlo Mealli | y |

**Auditors**

| Auditor (2013-14) | No | Jindrich Hasek | -- | y |
| Auditor (2013-14) | No | Carlo Mealli | -- | y |

**ECM's representatives**

| ECM28-2015 | No | Alexandar Visnjevac, Marijana Djakovic | y | y | y |
| ECM28-2016 | No | Katharina Fromm, Juerg Schefer | y | y | y |
| ECM-2018 | No | Santiago Garcia-Granda | y | y | y |

**Executive Committee**

| President | No | Andreas Roodt | y | y | y |
| Vice-president | No | Alessia Bacchi | y | y | y |
| Past-president | No | Santiago Garcia-Granda | y | y | y |
| Secretary | No | Georgina Rosair | y | y | y |
| Treasurer | No | Christian Lehmann | y | y | y |
| Member | No | Joke Hadermann |
| Member | No | Udo Heinemann | y | y | y |
| Member | No | Olga Yakubovich | y | y | y |
| Educ coord, ecanews | No | Fermin Otalora | y | y | y |

**CAMs**

<p>| Bruker | No | Eric Hovestreydt |</p>
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