

Minutes of IUPAC Analytical Chemistry Division Officers' meeting, November 18/19th 2006, Hélioparc, Pau, France

Present

Professor Ryszard Lobinski (Division President)

Dr Ales Fajgelj (Division Vice President)

Professor Roger M. Smith (Division Secretary)

Professor Kip Powell (Division Past President)

1. Welcome

The Division President welcomed the Officers to Pau

2. Approval of Agenda

The draft agenda was approved

3. Report from Bureau meeting

The Division President reported on the last Bureau meeting

- a. General Assembly meeting in Turin in 2007
A report by Professor De la Gatta was received, preparations were progressing. The theme of the IUPAC Congress would be "Chemistry protecting Health, Environment and Cultural heritage" and the main meeting would consist of 10 sessions each with parallel topics from different areas of chemistry. Each session would have 2 co-chairmen (Italian/ IUPAC officer). The venue and hotel for delegates are adjacent.
- b. Elections TM
Divisions had been asked to increase the transparency of elections, to ensure that more candidates were nominated, and that there was a wider representation of new countries.
- c. It was noted that there should be a translation of bylaws into the rules of Divisions - Div V was a good example as this had been done.
- d. Finances
 - i. IUPAC needs to assure the provision of funding for good and important projects (Divisional Reserve Fund and Project Fund) and be careful not to fall into a pattern of spending more money on meetings. More of the IUPAC budget would be held centrally for big projects - Divisions are not expected to receive more operational money. On the other hand, the use of 30% of the finance of

the Division on meetings was suggested to be only a guideline - more was permissible if worthwhile (ACD has exceeded this figure in the past with speakers to workshops).

- ii. It is necessary that TGC be careful to avoid overspending. TG Chairs can access details of expenditure via Linda Tapp.
- iii. A new Strategic Opportunities Fund of 120K USD (formerly the Division Reserve) for big projects per biennium will be created from Jan 2008. This represents an increase of over 20K USD. The use of it is at the moment unclear.

f. Operation of Manuscript Central

Many of the problems that had been experienced were because of a lack of the understanding of the operation of the system- it is not set up like the interfaces for peer review journals. The status is controlled by the Secretariat - in review and after acceptance - and through publication. The point when ICTNS is involved is unclear. The main problems are with recommendation papers which have numerous reviewers. ICTNS acts as detailed editor and has considerable involvement and demands.

A set of division guidelines approved by John Jost will go to task group chairs.

g. Publicity of IUPAC and divisions

Advice to Fabienne Meyers is needed from Divisions to ensure the circulation of *Chemistry International* to appropriate conferences.

There is a need for an Analytical Chemistry Division brochure (A4 folded) - to be a new project - so that it can be distributed to conferences.

h. IUPAC Sponsored Conferences

Few applications are satisfying the requirements in the rules - to attract support conferences should be novel and in emerging areas - only a few are being accepted

i. Chemical Societies and NAOs

There seems sometimes to be a lack of communication between national chemical societies and NAOs - suggested that Eurochem should be contacted

j. Vice President's resignation

The position of Vice President will left vacant until the end of the biennium. There will be direct elections to Vice-President and President next year.

k. Status of databases

The current position of the Stability Constants database was considered in particular - resources are needed in the Secretariat to support the programme - staffing/organisation - no decisions have yet been made - an ad hoc committee formed

4. Review of Division Finances

Expenditure committed from overall allocation of 17000 USD for projects

ACD Projects

2005-035-2-500	Belli	6000
2005-041-2-500	Mester	5200
2006-010-1-500	Sukhno	2500

Interdivisional projects

2005-048-2-100	Lechers	1250
2005-048-2-100	Renne	2000

Totals so far

Committed projects	16950
Operations	14606
Total	31556 (55.8% of the biennium Division budget)

Some projects had unspent balances which will be lost if they are not spent. The TGCs are advised to use them for publicity/conference presentations. Task groups should as a matter of priority use the entire assigned funding.

5. Review of Project Progress Reports

18 Progress reports had been submitted to the Division Committee (copies of which are on the project folders on the IUPAC websites) and were used to review the current projects

Number	Title	Chairman	Status	ACD Decision and actions
510/31/95	Nomenclature for X-ray emission spectroscopy			Still on Secretariat listing as waiting for final revision after ICTNS - Ryszard Lobinski to contact Secretariat to terminate as abandoned
1999-050-1-500	Chemical Speciation of Environmentally Significant Heavy metals and Inorganic Ligands	Sjöberg	Second part of project is at ICTNS stage. Project completion date (end of 2007) not achievable	Part 3 of project commenced. DP to advise Secretariat of new completion date (end of 2008)
2001-041-2-500	Recommendation for the Use of Countercurrent Chromatography in Analytical Chemistry	Spivakov	No report	Roger Smith to contact. Task Group Chair
2001-063-1-500	Revision of terminology of separation science	Smith	Slow progress	Unspent budget
2001-072-1-500	Low activation materials for fusion technology: State and Prospects	Kolotov	No report	Ryszard Lobinski to follow up - translation still awaited
2002-002-2-500	Recent advances in electroanalytical techniques	Kutner	No report	Ryszard Lobinski to contact
2002-003-2-500	Performance Evaluation Criteria for Preparation and Measurement of Macro and Microfabricated Ion-Selective Electrodes	Umezawa	No report	Ales Fajgelj to contact
2002-009-2-500	Optical spectrochemical analysis using waveguide and optical fibres	Gauglitz	No report	Final version awaited
2002-058-1-500	Definitions and fields of applications of the terms robust and rugged	Thorburn Burns	No report - but revised version submitted shortly before deadline for termination	As final version largely unchanged Kip Powell to request authors to provide detailed response/ rebuttal to reviewers' critical comments
2003-015-2-500	Terminology for radiochemistry	Bonardi	Report - but largely a list of papers from the group - relationship to project unclear	Budget largely unspent
2003-037-1-500	Optical biosensors and bioprobes	Vo Dinh	no reports	Discontinued - Ryszard Lobinski to confirm to Secretariat that project is terminated
2003-056-2-500	Standard definition of terms relating to mass spectrometry	Murray	No report	Completed. With ICTNS - external review completed - undergoing final revision- budget nearly spent

2004-005-2-500	Comparable pH measurements by metrological traceability	Camoës	Report in progress but delayed	
2004-016-2-500	Guidelines for potentiometric measurements in suspensions	Oman		Completed
2004-041-1-500	Uncertainty estimation and figures of merit for multivariate calibration	Oliveri	Completed - ready for external review	To be reviewed [update - Part 3 accepted for PAC Oct 06]
2005-014-1-500	IUPAC Stability constants database - completion of data collection up to 2006	Powell	Report - new participants to be found	No action needed
2005-017-1-500	Glossary of terms related to solubility- updates and revision to Orange book	Shaw	Report	Budget all spent on TG meeting
2005-035-2-500	Trace elements analysis: role of grain size distribution in solid reference materials	Belli	No report	Ales Fajgelj to follow up
2005-41-2-500	Determination of seleomethionine in selenized yeast supplements	Mester	No report	Ales Fajgelj to contact - note needs to be more than a review - industrial involvement
2006-010-1-500	Adjustment estimation and uses of equilibrium reaction constants in aqueous solution	Sukhno	Report - progress being made	No action needed

Interdivisional Projects

Number	Title	Chairman	Status	ACD Decision and Actions
2003-011-3-600 (Division VI)	A critical compendium of pesticide physical data	Wauchope	TGCs reported a decision to cease to work on the project in view of the lack of chance for a successful outcome.	Discontinued - Ryszard Lobinski to write to Secretariat
2003-060-2-400 (Division IV)	Terminology on separation of macromolecules	Chang	No report	
2004-017-1-500 (Division V and Division VI)	Standardization of analytical approaches and analytical building capacity in Africa	Benson	No report	No expenditure ?
2004-021-1-300 (Division III)	Reference methods, standards and applications of photoluminescence	San Roman	Report - completion delayed - expected completion Sept 2007 at last TG meeting	
2004-023-1-700 (Division VII)	Internationally agreed Terminology for observation in scientific communication	Pontet	Report - second draft in preparation - project title changed "observation" replaced by "examinations"	Need to confirm title change to Secretariat
2005-016-1-100 (Division I)	Developments and application in solubility	Letcher	Report - - with book content outline - manuscript is complete and with publisher	
2005-042-1-300 (Division III)	Chemistry for Biology- an inventory of interdivisional and interdisciplinary activities with IUPAC in the field of biological chemistry	Norin	Report - task larger than expected - to appear in PAC as conference plenary lectures plus invited papers	
2005-48-2-100	Solubility and thermodynamic properties related to environmental issues	Letcher	No report	
2006-016-1-200	Recommendations for isotope data in geosciences	Renne	No report No activity	Need to determine progress

Reports from the Interdivisional WPHQA

Number	Title	Chairman	Status	ACD Decision and Actions
2000-033-1-300	Assessment of uncertainty associated with soil sampling in agricultural, semi-urban, urban and contaminated environments (SOILSAMP)	Fajgelj	Two papers published	Project completed
2001-010-3-500	Metrological traceability concept of chemical measurement results	De Bievre	Verbal report	Draft published but problems in coordination with VIM papers - Ales Fajgelj to contact - even if VIM not agreed should proceed to publication as IUPAC document
2005-019-2-500	Selection and use of proficiency testing schemes for limited numbers of participants	Fajgelj	Report- in progress	No action needed
2005-024-2-600	Establishment of guidelines for the validation of qualitative and semi-quantitative (screening) methods by collaborative trial: a harmonised protocol		Report- new Chair Elka Ankram	

Reports from Subcommittee on Solubility and Equilibrium Data

Number	Title	Chairman	Status	ACD Decision and Actions
2002-025-1-500	Solubilities of Inorganic Compounds of Actinides (except carbonates)	Hala	No report	
2002-031-1-500	Solubility data of compounds relevant to mobility of metals in the environment. Alkaline earth metal carbonates	Vanderdeelen	No report	
2002-032-1-500	Solubility data of compounds relevant to mobility of metals in the environment. Metal carbonates (Mn, Fe, Co, Ni, Cu, Zn, Ag, Cd, Hg, Pb)	Gamsjäger	No report	
2002-035-1-500	Solubility data of compounds relevant to human health. Solubility of substances related to urolithiasis	Königsberger	No report	
2002-036-1-500	Solubility data of compounds relevant to human health. Solubility of hydroxybenzoic acids and hydroxybenzoates	Goto and Miyamoto,	No report	
2002-037-1-500	Solubility data of compounds relevant to human health. Solubility of halogenated aromatic hydrocarbons	Makino, Goto and Goto	No report	
2002-043-1-500	Solubility data related to industrial processes Carbon dioxide and the lower alkanes at pressure above 2 bar methane to butane	Mather	No report had been received for over 3 years	Should be considered for termination as inactive
2002-044-1-500	Solubility data related to industrial processes. Carbon dioxide in aqueous non-electrolyte solutions	Scharlin	Report - data now in electronic format	
2002-045-1-500	Solubility data related to industrial processes. Solids and liquids in supercritical carbon dioxide	Knox	No report	
2002-050-1-500	Solubility data related to industrial processes; Acetonitrile: ternary and other multicomponent systems	Sazonov	No report	
2005-006-1-500	Mutual solubility of alcohols and water update of SDS Vol 15)	Maczynski	Report - 5 parts - submitted to JPCRD	
2005-033-1-500	Transition and 12 to 14 main group metals, lanthanides, actinides and ammonium halates	Miyamoto	No report	
2006-032-1-500	Solubility data related to industrial processes. Mutual solubility of ethers and ketones with water	Goral	No -report	

2006-033-1-500	Solubility data related to industrial processes. Rare earth metal chlorides (Sc, Y, lanthanoids) in water and aqueous systems	Guminski	No report	
2006-034-1-500	Solubility data related to industrial processes. The solubility of oxygen in all solvents	Clever	No report	

6. Points arising from Project Reviews

A number of points were raised during the project reviews.

a. Inactive/ dead projects

If no report has been received (or if there has been no measurable output) for three years - the Division Committee should consider termination of a project. *Action:* to discuss at General Assembly meeting - problems if funding unspent and claims not made before project completed and closed - need to warn task group claims will not be met

b. Completed projects

It was unclear at which point the Secretariat considers a project completed and it is removed from the Project list (and the budget is closed). The Division President is asked to approve the PAC report but the work of the Task Group may not be complete, e.g. additional dissemination at meetings may follow) and all accounts may not be settled. It would be desirable for Division President to approve project completion after confirmation from Task Group Chair.

c. SSED

There was concern about the lack of ACD oversight of SSED projects and the large number of missing reports. Ales Fajgelj to write to Heinz Gamsjäger. Dissemination was often limited to *Journal of Physical and Chemical Reference Data* and it was felt the SSED needed to make a greater external impact. Many of the projects were very similar and only involved one participant. The ACD had a lack of oversight and the final report by-passed Division review although the Division was nominally responsible for quality control. It was agreed that there was a need for a general discussion of the SSED work in relation to the ACD at the General Assembly meeting in Turin. The Division Officers should be represented at the SSED meeting in Turin by the Vice President as an observer so that the ACD is better informed.

7. Review of projects under funding process (November/October ballots)

Three projects were circulated for scoring by the ACD members and 9 members cast votes.

2006-022-1 Conversion of Orange Book Chapter 10 to Glossary Format (D. Moore) -
Mean score 4.6/5

2006-037-1 Metal-focussed –omics: guidelines for terminology and critical evaluation of
analytical approaches (R. Lobinski)
Mean score 4.4/5

2006-026-1 Electrochemical DNA-based biosensors: State and prospect (classification
and recommendations (J. Labuda)
Mean score 3.1 / 5

It was agreed that the first two projects TGC (Lobinski 4500 USD and Moore 4000
USD) should be funded.-

Ryszard Lobinski would contact Jan Labuda with suggestions regarding the third
project, which could be resubmitted with a revised budget. It was noted that the budget
had increased sharply since the initial draft.

It was agreed that no Divisional support would be given to an interdivisional
project 2006-036-1 Fedotov Extraction and Fractionation Methods for Risk Assessment
Related to Trace Metals, Metalloids and Hazardous Organic Compounds in Terrestrial
Environments as it was felt to be outside the area of the ACD and was more appropriate
for Division VI.

8. **Proposals in the pipeline and ideas for new projects**

A number of ideas and proposals were still being considered and members were
encouraged to turn these into project proposals

- a. Divisional publicity brochure (see earlier) for circulation at meetings / conferences
- b. Terminology of analytical sample preparation Jan Åke Jönsson - need full
submission (Roger Smith to contact)
- c. Metrological aspects of sample preparation for Neutron activation analysis from
Peter Bode (Netherlands).
- d. Ken Marsh - editor of *Chemical and Engineering Data* - had commented on
inconsistencies in journal usage of equilibria terminology. XML formats reporting
of data for ionic equilibria - is this a potential project ? - Kip Powell to follow up.
- e. Chemometric soft modelling - Brynn Hibbert - possible project with Pentti
Minnkinnen. Ryszard Lobinski to contact re project formulation

- f. Process analytical technology - Ribes and Schoenfisch - no further information,
- g. A project focussing on a “layman’s guide to traceability” was proposed by WPHQA (PDB) - no news for the moment
- h. HG heat capacity project - no news.

9. Division structure and responsibilities

It was proposed that a number of changes in the terms of reference of the ACD and the duties of the Officers were needed. These were agreed and the drafts are attached as Appendices 1 and 2.

The intention was to avoid the confusion/ duplication caused by the inclusion in the existing terms of both technique and application areas. After some discussion it was decided that the terms of reference would only refer to technique areas, which would be expanded by adding mass spectroscopic techniques, and their related applications. The applications areas of bioanalytical and environmental would not be specifically highlighted.

The changes in duties of Officers and Committee members largely reflected changes made at the Rome meeting to no longer have Core and Emerging areas and to make some of the duties more generic.

The use of Teams as the basis of the ACD was confirmed and the functions of teams were seen as generating possible areas of future work, future members, target groups for new proposals and project evaluations, potential outcome/activity and especially external relationships. It is also seen as a route for information circulation.

It was proposed that there should be short (30-60 min) informal Team meetings as part of the General Assembly in Turin.

10. Elections and officers for 2008/2009

The membership of the Nominating Committee for the next elections to the Division Committee has been approved and consists of

Prof. Kip Powell, University of Canterbury, New Zealand. (Convener)
Prof. Gary Christian, University of Washington, Seattle, USA.
Prof. Roger M Smith, Loughborough University, UK
Prof. Hiroki Haraguchi, Nagoya University, Japan.
Dr. Ernst-Heiner Korte, Institute for Analytical Sciences, Dortmund, Germany.

The Nominating Committee is waiting for nominations by NAOs (2/1/07) and will soon call for nominations from the electorate (January).

The subject areas for nominations will partly depend on the subject categories covered by the two new Division Officers. The previous elections had sought nominations for the areas of:

- Quality Assurance/ Chemometrics
- Separations
- Spectrochemistry
- Electrochemical methods
- Nuclear methods
- Bioanalytical methods

It was proposed that Walter Lund be invited to be a candidate for the Vice President position and Brynn Hibbert a candidate for the Division Secretary position. (Both have subsequently accepted the invitations).

There would also be new Chairmen of SSED (to be nominated) and of WPHQA (De Zorci)

The electorate consists of current TM, AM, NRs and Task Group Chairs but not SSED and WPHQA members who are not TG Chairs.

11. Preparations for the Congress in Turin

Analytical chemistry will have 6 half day sessions, combining invited lecturers and submitted papers. It was suggested that the programme could consist of around 3 sessions on health, 2 on environmental and 1-2 on protection of the cultural heritage. The meeting would support one invited speaker with fee/accommodation per session but no travel expenses.

It was suggested that there should be a keynote session on General analytical chemistry to be given by Paul De Brievre - possible half day session. We would be allowed only one invited speaker, rest must be delegates, covering metrological aspects of analytical chemistry - related to broad aspects of analytical chemistry - not on pure metrology, to include pH. It was suggested that opening lecture be given by the Division President and this could include presentations from ACD to long-service retiring members.

Other topics (proposed speakers) included
Proteomics / biomarkers from discovery to clinical (microfluidics) (Marc Madou)
Cultural heritage protection: Rene van Grieken
Environmental speciation: (Joanna Szpunar)

The programme of the lectures will be completed by Italian invited speakers who will not, however, receive any financial support.

Poster and papers at GA/ Congress Task Group chairs to have posters and Division posters - need response from Task Group Chairmen - lecture or poster - needs standard format. Location of posters to be harmonised. No submission dates yet - posters.

11. Status of database

David Black has set up an IUPAC website committee (on which Kip Powell is a member) to look at the provision of interactive access to databases in general. More recently there has been an offer by FIZ-Chemie (Berlin) to host IUPAC files and the IUPAC Stability Constants Database and to provide management of the web interface and software maintenance. This is offered as a commercial system, the income being split with IUPAC - and could host other data bases. IUPAC would hold IP/ copyright of the databank. IUPAC would be responsible for data input, quality control and accuracy and data and ligand structures. Correction procedure will still need Division input.

Kip Powell would go on from the Officer meeting to an initial meeting with FIZ-Chemie.

13. Division diary dates

Teamwork - next issues are programmed for December 06, April 07 and Sept 07.

To include comments on project summaries and reports - to *Chemistry International* (and *Teamwork*) and new projects summaries and products.

14. Visibility and image of the Division: public relations

Revision of the IUPAC website - David Black committee is examining the website and a number of submissions had been made regarding its usability by external users. As yet there has been no feedback, the discussion is likely to take place in Turin.

Ryszard Lobinski to contact Fabienne Meyers to publicise new project summaries in *Chemistry International*. And outcomes from existing projects

Chemistry International articles originating in the Division

- the series on "Emerging needs in developing countries" is nearly complete.
- a new series on "Tools of the trade": two articles have been prepared on Stability Constants and Chemistry data bases. Chemrawn article in preparation and 9 more wide ranging offers have been made.

There is a need to continue having a series in *Chemistry International* as publicity for the Division.

Improved visibility of the SIT project is needed on the IUPAC website.

A book had been produced from the meeting in March in Rome which followed the Division Committee meeting “Combining and Reporting Analytical Results”. The editors needs to ensure publicity material is provided to *Chemistry International*.

It was suggested that the residual funds from projects could be used to make conference presentations on projects after a project report is accepted for *Pure and Applied Chemistry* (after ITCNS approval) and to raise the profile of IUPAC. There is a need to support meetings such as Chemistry Congress. There is therefore a need to ensure that funds are retained for conference presentation after PAC approval and that the accounts are not closed prematurely (see earlier) .

15. Workshop on chemical weapons convention.

An invitation had been received for a Division input into a meeting on “Advances in science and technology “US National Academy, Chemical Weapons Detection - Croatia Zargreb 22-25 April 2007.

16. Next Officers meeting

The next Officers meeting will be held in Turin prior to ACD meeting - after noon of Friday 3rd August 2007.

Appendix 1

Terms of Reference

The goal of the Analytical Chemistry Division is the promotion of the principal branches of analytical chemistry. In many instances this is achieved in collaboration with other Divisions.

This includes the critical and comparative evaluation of established and emerging analytical methods, to enable analytical chemists to choose those best suited for specific applications. These activities include:

harmonisation and proposal of rules for interlaboratory comparisons
recommendations for sample collection, preparation, storage and handling,
the compilation of data used in analytical chemistry and their critical evaluation,
the definition of recommended methods and proper application of QC and QA procedures.

The Division encourages interactions between the basic and applied disciplines. Its work is currently focused on analytical methods and their applications, as follows:

1. General aspects of analytical chemistry. This includes all matters relating to terminology in analytical chemistry, chemometrics, figures of merit, quality assurance, and fundamental data including those for solubility and chemical equilibria.
2. Separation methods. This includes the development of critical guidelines, definition of terms, and recommendations for the operation of analytical separation methods.
3. Spectrochemical methods. This includes the critical assessment of spectrochemical methods of analysis involving electromagnetic radiation and compilation of fundamental data.
4. Mass spectrometric methods for elemental and molecular analysis.
5. Electrochemical methods. This includes the critical assessment of electroanalytical methods. Recommendations for standardisation and measurement procedures, development of critical guidelines, compilation of essential data and assessment of terminology are considered.
6. Nuclear chemistry methods. This includes analytical methods based on the measurement of isotopes and isotope ratios, and radiochemical methods and their applications.

The Division is the home for the Interdivisional Working Party on Harmonisation of Quality Assurance, which is the responsibility of a designated working party (WPHQA). A subcommittee is responsible for solubility data and equilibrium data (Subcommittee for Solubility and Equilibrium Data).

Appendix 2

The duties of the **Analytical Division President** are

External to the ACD

Represent the Division at all IUPAC venues
Submit the annual report of the ACD activities to the IUPAC Bureau and Executive (written and oral)
Report to IUPAC Council (oral)
Liaise with other divisions and the IUPAC Secretariat
Such other duties as prescribed for a TM

Internal to the ACD

Organize and chair the meetings of the Division Committee and Officers
Liaise with, and provide leadership and encouragement for ACD members
Contribute to the work of an ACD Team
Monitor the budget of the Division
Oversee the projects of the Division:
Approve and propose external reviewers for project proposals
Approve projects for funding
Monitor progress reports
Approve project output
Ensure project output is published and distributed according to the dissemination plan
Initiate the election process for new DC members:
Instruct the Nominating Committee regarding the election process and needs of the Division

The duties of the **Analytical Chemistry Division Vice President** are:

External to the ACD

Represent the ACD President on request and/or need
Assist the President
Such other duties as prescribed for a TM

Internal to the ACD

Contribute to the work of Division executive
Assist in the development of ACD strategy and priorities
Initiate, collate and distribute the regular project reports
Improve and maintain contact with ACD members and other Divisions via the newsletter
Teamwork
Contribute to the work of an ACD Team
Ensure continuity of the work of the Division into the next biennium.
Such other duties as prescribed for a TM

The duties of the **Analytical Chemistry Division Secretary** are:

External to the ACD

Liaise with the Secretariat
Assist the president in preparation of annual report
Such other duties as prescribed for a TM

Internal to the ACD

Prepare and distribute meeting agendas
Record and distribute meeting minutes
Contribute to the work of the Division executive
Assist in the development of ACD strategy and priorities.
Contribute to the work of an ACD Team
Maintain records on Division projects
Such other duties as prescribed for a TM

The duties of the **Analytical Chemistry Division Past President** are:

External to the ACD

Represent the ACD President on request and/or need
Assist the President
Such other duties as prescribed for a TM

Internal to the ACD

Contribute to the work of Division executive
Assist in the development of ACD strategy and priorities
Contribute to the work of an ACD Team
Chair the Nominations' Committee
Such other duties as prescribed for a TM.

The duties of the **Analytical Chemistry Division Titular Members** are:

External to the ACD

Promote the activities and aims of the ACD and the IUPAC project system
Monitor current trends and emerging needs in analytical chemistry
Represent the ACD, as appropriate, or requested, at IUPAC-sponsored conferences
Interact with user groups, identify new ones

Internal to the ACD

At the ACD committee level:
Assist in the development of ACD strategy
Contribute to the work of an ACD Team
Assist the Nominations' Committee in identification of potential new ACD members

Projects:

Participate in the project system
Contribute to the formulation and solicitation of new project proposals and identification of Task Groups

Review new project proposals and vote on contestable funding of projects
Contribute to review of outputs from funded projects
Actively promote project dissemination and the implementation of dissemination plans

The duties of the **Analytical Chemistry Division Associate Members** are:

External to the ACD

Promote the activities and aims of the ACD and the IUPAC project system
Monitor current trends and emerging needs in analytical chemistry
Represent ACD, as appropriate, or requested, at IUPAC-sponsored conferences
Interact with user groups, identify new ones

Internal to the ACD

At the ACD committee level:
Assist in the development of ACD strategy
Contribute to the work of an ACD Team
Assist the Nominations' Committee in identification of new ACD members

Projects:

Contribute to the formulation and solicitation of new project proposals and identification of Task Groups
Review new project proposals and vote on contestable funding of projects
Contribute to review of outputs from funded projects
Participate in the project system and actively promote project dissemination and the implementation of dissemination plans

Where appropriate specific responsibilities

To represent and liaise with their specific interest groups, subcommittees, or working parties, e.g.:
WPHQA (liaise with BIPM CCQM and ISO REMCO)
Solubility and Equilibrium Data (liaise with NIST)
ICTNS

The duties of the **Analytical Chemistry Division National Representatives** are:

External to the ACD

Promote the activities and aims of the ACD and the IUPAC project system
Interact with regional groups; identify and communicate regional needs in analytical chemistry
Seek NAO funding to attend ACD meetings

Internal to the ACD

At the ACD committee level:
Contribute to the work of an ACD Team

Projects:

Contribute to solicitation of new project proposals and identification of Task Groups

Review new project proposals and vote on contestable funding of projects

Contribute to review of outputs from funded projects