

南韓慶州第卅八屆2006國際化學奧林匹亞指導委員會會議

-台灣報告主辦37th IchO 2005的成果-

方泰山

37th IchO 2005 計畫主持人

國立台灣師範大學化學系教授

摘要

第38屆國際化學奧林匹亞指導委員會會議，在12月8-11日在韓國慶州市(Gyeongju), Hyundai五星級旅館舉行，本人(37屆IchO主持人)及我國新當選SC委員張一知教授(2005-2007二年任期)連袂出席此項一年一度的盛會，報告37屆2005 IchO的執行成果。攜去了精美的150頁與100頁活動照片與快報英文總報告及60分鐘活動光碟紀錄片，並做30分鐘報告。

討論例行事務性工作，幾項新申請事項：(1)同意日本主辦42nd IchO 2010 (2)婉拒香港申請成為觀察員，但同意因故未能來台觀摩的摩達維亞(Moldova) 加入新會員。確認38屆IchO有資格參賽的61國，加上已完成連續兩年觀察的6個國家，共67國。會中對於考試的(1)過度訓練(2)試題的難度(3)作弊的問題，經過激烈的辯論，多所著墨。將提明年 IchO的大會討論並建議修正會章。

38th IchO 2006主辦國，各組織委員會報告會目前的籌備進度，並安排參訪38屆IchO競賽場地，包括(1)開閉幕的會場：慶州市民活動中心(上下樓，可容納780人)；(2)實驗場地，嶺南大學的化學實驗室；(3)2人一房的學生宿舍和寬敞食堂；(4)老師就住本次指導委員會會議會場，Hyundai旅館，每國將簽收主辦國所發放二個PC notebooks與USB儲存體，作為翻譯考題之準備。

指導委員會會議主要討論題綱 (Gyeongju Dec. 8-11, 2005)

這些建議討論題綱主要來自以下教授的意見：Carlos Castro-Acuna (Mexico), Alexander Gladilin (Russian Fed.), Wolfgang Hampe (Germany), Yuriy Kholin (Ukraine), Gábor Magyarfalvi (Hungary), Anton Sirota (Slovakia). 此外，所有參加國家都將收到以下的呼籲：

親愛的同事們

- 1.指導委員會會議將於12月8號~11號在Gyeongju (韓國)舉行。而為了之後的會議能進行的更順利，我希望大家能夠將自己對於國際評審會、指導委員會及下一屆icho的意見寄過來。
- 2.此外，我希望大家將自己國家化奧的網站一併寄過來，我們會集結並在網站上做連結。在此先謝謝大家的合作

Dr. Anton Sirota

IChO 國際資訊中心主管

請寄出你的訊息到：anton.sirota@stuba.sk

結果有 14 個回應寄信給 ChO 國際資訊中心，但沒有一個提議能想的比評審委員會更加久遠。所有的提議大致可以分類成以下的主題：

1. 指導方針及規章
2. 國際審查會議
3. 評審委員會會議
4. 對參賽國人數限制
5. 在競賽中能夠公平
6. 比賽特性及過度訓練
7. 實作題
8. "讀—寫—翻" 步驟
9. 學生答案的傳遞及仲裁
10. 現今規章的改變
11. 翻譯問題
12. 閉幕儀式

內容	討論項目
1) 指導方針和規章	a) G. 和 R. 之間的關係 b) 規章應該被維持，沒有任何例外 c) 破壞規章的例子
2) 評審委員會會議	a) 為參加國家的座位貼標記 b) 科學觀察員和賓客出席是不符合規則的 c) 重大投票檢查員 d) 製作備忘錄 e) 進行事務會議 f) 指導委員會的運作資訊
3) 指導委員會會議	a) 指導委員會不能討論休閒娛樂，要指導 IChO b) 對主辦國的建議 c) 提出對主辦國的要求 d) 會議需記錄並出版 e) 組成指導委員會-政策、選舉都要認真準備
4) 提出參加人數限制增加一人	a) 這個問題已經在過去的 IChO 被討論過二次，但都被拒絕
5) 公平的進行比賽	a) 所有的委任成員都必需簽署這個宣言 b) 在關鍵時刻，學生輔導員的角色 c) 賓客的住處需和教練們分開
6) 競賽工作(準備題)的	a) 準備工件(準備題)的本質所引起的過度訓練

特色和過度訓練	<ul style="list-style-type: none"> b) 誰是發起者 c) IChO 不是一個競爭發起者 d) 特定的發起者不應該被自動合併到競爭工作中. e) 主辦者不應該口述工作的特色
7) 實際工作	<ul style="list-style-type: none"> a) 合成化學最多只有佔 10%的總成績. b) 這個工作如果是按步驟而做的，應該被排除 c) 主辦國應該排除來自實際工作步驟的評量(例如：乾燥產物、產量的重、熔點測量、旋光度等等) d) 這個工作的程序是按步驟做的話，要避免這樣的工作

8) "閱讀-討論-翻譯" 程序	<ul style="list-style-type: none"> a) 這個不是永久不變的 b) NEW 此工作可以依指導委員會判斷及當時不用討論，他們可以傳送給教練翻譯(這個規則的改變是必需的) c) NEW 在第一次也是唯一一次的評審委員會，工作可以依英語國家的教練的判斷。這個提案可由 Anton Sirota 進行更詳細的說明。當評審委員會可組成工作小組時，這個規則的改變是不必要的。((§7, part 3) d) 結果、答案紙和成績不可以在這個工作一起被傳送的。
9) 學生答案的傳送和仲裁	<ul style="list-style-type: none"> a) 何時傳送學生答案? b) 仲裁時修正 c) 誰能參加仲裁?
10) 更改現行規章	<ul style="list-style-type: none"> d) 在最近一年的比賽中證實第三部份、§10 的第二條是無益有害的。如果有足夠的背景資料包含在題目的敘述(例如：分子式，圖表，結構，方程式)，被分配到等級三的主題可以被歸類到等級二。因此，這類型的題目不應該出現在準備工作中。順便說明，這個條文並非在第一次規則計畫中的一部份，它是在第四年時才被加入。 e) 下個提案的改變：IChO 國際資訊中心的主任應該是指導委員會的成員之一。這個部份是包含在指導委員會的首任主席 Dr. Reed (1994)所提出的規則中。然而，這個部份在現存的規則中已消失
11) 翻譯	<ul style="list-style-type: none"> a) 評審委員會議是連續不斷的在進行的 b) 誰能出席 c) 發起者在那段時間的角色 d) 電腦和其使用規則 e) 手機、網路是不允許在翻譯其間使用 f) 限制教練的活動範圍 g) 如何避免學生和某些人接觸 h) 在評審委員會議其間，電腦中心需切斷對外的連絡
12) 閉幕	<ul style="list-style-type: none"> a) 參加證書需可以分辨得獎者和沒得獎者 b) 列出所有得獎者在"觸媒"快報中 d) 得獎者的名字需被念對,且正確拼出

國際化學奧林匹亞指導委員會會議成果與討論 (中文)

2005年12月8日至11日
Hotel Hyundai, Gyeongsan, 韓國

出席成員：

Kurt B. Nielsen (丹麥, 主席)
Carlos Castro-Acuna (墨西哥, 美洲代表)
Geoff Salem (澳大利亞, 環太平洋代表)
I-Jy Chang (臺灣, 亞洲代表)
Alexander K. Gladilin (俄國, 歐洲代表)
Tai-San Fang (臺灣, 37th 執行秘書)
Duckhwan Lee (韓國, 38th 執行秘書)
V.adim Eremin (俄國, V. Lunin之代理人, 39th 執行秘書)
Gabor Magyarfalvi (匈牙利, 40th 執行秘書)
Anton Sirota (斯洛伐克, 資訊中心主任)
Manfred Kerschbaumer (澳大利亞, 學者)
(為節省空間, 牽涉的人名, 只以名稱呼)

缺席成員：

James Praic (愛爾蘭, 歐洲代表)
Peter Wothers (英國, 41th 執行秘書)

議程：

- (1) 09:00-11:00, 12月9日, 2005 (一般性討論)
- (2) 11:00-15:30, 12月9日, 2005 (參訪 嶺南(Yeungnam)大學和 慶山市(Gyeongsan))
- (3) 20:20-22:40, 12月9日, 2005 (一般性討論, 37th總報告, 提出 39th和 40th的計畫)
- (4) 09:00-13:00, 12月10日, 2005 (38th 籌備報告, 一般性討論)

結論與建議：

1. 國際化學奧林匹亞 (IChO) 的準則和規章必須被適當地尊重, 並且主辦國能確實並加強執行。
2. 審查委員會之運作
 - a. 每個參賽國至多出席三位教練。

- b. 來賓不被允許參加審查會議。
- c. 提供印有國家名稱的投票卡（領隊教練和教練分別持有紅色和綠色）。
- d. 以上規則必須在第一次審查會議時詳細說明。
- e. 宣佈出席會議的國家數目（應超過參賽國的 75%）
- f. 清楚宣佈只有領隊教練和教練(不含觀察員)可在審查會議中發表意見。
- g. 執行秘書應設置工作人員，該人員具有流暢英語能力、足夠的化學知識和電腦使用技巧。
- h. 審查會議的主席應和指導委員會的代表密切合作。

3. 規章修正的提案

- a. §3(3)：加上下列句子：“.....觀察員可出席審查會議，但他(她)不可參與討論。”
- b. §5(4)：提大會修改規章條文如下“後二年的主辦國,各可派遣觀察員二名,當地費用由主辦國負擔。

4. 指導委員會 (38th IChO)

- a. 必須在3rd（事務）審查會議中選出美洲(1)和歐洲(2)代表。
- b. 執行秘書必須在3rd（事務）審查會議之後馬上召開附加的會議，來遴選指導委員會的新主席。
- c. 在閉幕典禮上宣佈新的主席，並開始進行他/她的職務，以準備夏天舉行的比賽。

5. 重複參賽以及公平的競賽

- a. 在同一位學生重複參賽上的意見分歧：
 - 應該儘可能給其他學生參賽機會。
 - 應該尊重每一個國家選擇代表學生的權利。
- b. 發放調查表給領隊教練(Anton和指導委員會的其他成員將會準備相關文件)。
- c. 有足夠的理由讓我們相信近來的IChO有作弊的情形發生。任何經審查委員會證實的作弊行為，將根據大會規章”公開地”處罰。執行秘書必須盡其所能預防透過個人與陌生人的接觸、網際網路、行動電話等方式進行的作弊行為。執行秘書必須密切注意一些國家。
- d. 取得所有參賽者，包含學生和來賓的“公平承諾”。
- e. 預先清楚公佈，並進行隨機查驗翻譯的公平性。針對此查驗動作進行官方公告，但不提及國名。
- f. 輔導員應在IChO競賽期間隨時陪伴他們的學生，並且必須了解他們肩負流利語言溝通的責任。執行秘書必須清楚指導輔導員。
- g. 來賓不應被允許參加任何教練和觀察員的工作，包括審查委員會和試題翻譯。沒有藉口不參加已安排的行程。

6. 試題

- a. 試題的字數應明白包含在試題中。(不應超過25,000個字母§13(4))
- b. §10(3)之解釋與執行:贊同準備題應包含競賽試題中,屬於競試綱要“層級3”的觀念(連接上述§13(4)之範圍)。IChO的競賽試題不應包含有誘發過度訓練的超綱概念。
- c. 指導委員會應查看過去五年的IChO準備題,檢視其中有多少概念屬層級3與超出層級3。
- d. Manfred 和 Geoff 將在Sasha 和 Vadim 的幫助下進入此範疇(其中的12個屬層級3的領域)。
- e. 試題應以高中學生易懂的簡單明瞭語言來表達。
- f. 命題者應在1st(實作)及2nd(理論)審查委員會開始時簡單介紹每個試題。
- g. 在討論期間設立每個試題的佈告版是有助益的。教練應寫出他們關切的問題,避免其他教練重複提問。
- h. IChO不是命題者的競賽。..
- i. 合成題不應在試題中佔太多比重。
- j. 試題的步驟描述不應過份清楚。要留點空間讓學生去想像。
- k. 執行秘書(實作與理論命題者)必須針對評分標準與方法提出充分的說明和理由。(例如,查驗產率和純度。)
- l. 試題應儘早發給教練。(例如,在(檢視實驗室)/(旅遊)的回程車上發放,但還是優先於試題安全考量。)
- m. 給予計算過程部份彈性的分數。

7. 翻譯

- a. 來賓不得進入翻譯的場所與參與試題的翻譯。
- b. 必須有一位試題委員會的代表在翻譯場所待命。

8. 閱讀-討論-翻譯 流程

- a. Sasha和Anton的必須詳細閱讀提案已撤回,因為以上SC的結論與建議,主辦國如果能採納且認真執行過去數十年國際審查會的”閱讀-討論-翻譯”優良運作模式。
- b. 執行秘書(實作與理論命題者)應儘可能以夠好的英文撰寫試題。

9. 其他

- a. 為今天的行程準備一個大的佈告或電子看版。
- b. 國際指導委員會的會議紀錄應公佈在官方網站,並製作成為獨立的附錄,附於準備題中。
- c. 教練和觀察員應有預先指定的車輛。(根據母語語言而非字母順序)
- d. 應頒發官方獎牌證書和公文文件。
- e. 全部的觀點應公佈在官方網站上。
- f. 領隊教練應在獎牌排序前再次確認成績仲裁後的各參賽選手成績結果。
- g. 閉幕典禮中,並不一定要公佈詳細的試題競賽結果。

h. 將要主辦競賽的國家爲了做好主辦的準備，可派遣較多的觀察員。(應修改規章條文)

10. 未來的主辦國及參與國

- a. 42nd 化奧2009由日本主辦的申辦：Jury強烈推薦，無議異通過此案。(往後五年主辦國分別爲：2006 (38th 南韓)，2007 (39th 俄羅斯)，2008 (40th 匈牙利)，2009 (41st 英國)，及2010 (42nd 日本))
- b. 香港的參與：
香港目前應視爲中國大陸中的一部份(Kurt將會就此點寫信給香港，婉拒此項申請)
- c. 在ISC會議後38th IChO 2006 不再接受新的觀察國報名。

11. 方泰山教授(2005 IChO執行祕書) 對37th IChO 提出報告

- a. 比賽日期於2005年7月16號~25號
- b. 共有59國，225位學生，117位教授，37位觀察員，34位訪客參與比賽
- c. 地點：台灣大學、台灣師範大學、國家教育研究院籌備處及圓山飯店
- d. 組織單位：行政組、試務組、場地組、接待組、與資源組。
- e. 一共將試題轉譯成34種語言：使用語文前十名爲：英語33人、俄語21人、西班牙語20人、德語11人、阿拉伯語8人、希臘語8人、葡萄牙語8人、土耳其語8人、荷蘭語7人、法語5人以及其它24種語言1-4人。
- f. 一共頒發25面金牌、48面銀牌、80面銅牌、6張榮譽獎狀及3項特殊獎(個人第一名、最佳實作與最佳理論)
- g. 準備題：於2005年一月寄出
- h. Catalyzer快報：12期(由2004年7月26號 ~ 2005年8月31號)
- i. 預算：2002-2004年 美金120,000
2004-2005年 美金1百萬 另有企業補助8萬美金及參賽國報名費156,293美金(不包括所收到兩張面值100美元的偽鈔)。
- j. 首頁：<http://icho.chem.ntnu.edu.tw>
- k. 國際審查會議(International Jury Meeting)：選出ISC的新成員(歐洲—James Praic、亞洲—I-Chy Chang、泛太平洋—Geoff Salem)

12. 張一知教授對37th IChO任務所提出的報告

- a. 學術委員會：李遠哲院長及陳長謙院士領導的20人委員會與工作小組。
- b. 分爲7部份獨立工作：任務之間彼此不相關(此方法有待改進)
- c. 理論題：從2003年開始每位出題者提議二個題目，最後在2005年五月定案。
- d. 實驗題：從2003年開始每位出題者提議一個題目，並在2005年3月定稿。並於2005年4月訂購玻璃及相關設備(太晚了)。在2005年五月完成試題最後文案編輯。

13. Vadim對39th IChO準備工作的報告(代表Prof. Lunin)

- a. 由莫斯科大學化學系主辦(莫斯科大學在1755年建校於蘇聯，擁有28個系及

40000名學生，而化學系於1929年成立，現今擁有1000位學生及40位教授)

- b. 莫斯科大學的優點：大學團隊有1996年IChO的經驗並有企業支持
- c. 協辦組織：教育科學部及其它團體
- d. 將於2007年7月15~24日於莫斯科大學舉辦
- e. 指導委員會會議：2006年12月7~10日
- f. 表決提議出來的logo

14. Gábor對40th IchO的報告

- a. 由成立於1634年在布達佩斯的Eötvös大學主辦
- b. 舉辦時間：2008年七月
- c. 協辦組織：教育部、醫藥界及觀光局。

15. Duckhwan Lee 教授(2006 IChO執行祕書)與 H. Kim (學術委員會) 對38th IchO的報告

- a. 時間：2006年7月2~11日
- b. 地點：釜山的嶺南(Yeungnam, Gyeongsan)大學(學生)及慶州的現代大飯店(Hotel Hyundai ,Gyeongju)(教師)
- c. 官方機場：釜山 (Busan)(PUS) (由仁川國際機場進入南韓, 會安排到金浦機場轉釜山)
- d. 主題：化學是爲了更美好的生活
- e. 除了Moldova之外不再接受其它觀察國, 也就是將有67國及一個可能的觀察國(Moldova) 參賽
- f. 首頁：<http://IChO.kcsnet.or.kr>
- g. 到釜山的與會者, 會先到慶山(Gyeongsan), 再到慶州(Gyeongju). (老師及學生需簽署公正競賽的誓言)
- h. 準備題將有二種形式：1.印列完成的文件 2.檔案以e-mail傳出，其中電腦列印檔將有二份，而含解答的電子檔將直接寄往各國首席教練e-mail中。

附錄：(power point presentation of 37th IChO 2005、活動剪影與

[Minute of Steering Committee Meeting 38th IChO 2006 \(English 英文版本會議紀錄\)](#)

Gyeongju Dec. 8-11, 2005

Suggestions for Discussions

These suggestions are based on the contributions of Carlos Castro-Acuna (Mexico), Alexander Gladilin (Russian Fed.), Wolfgang Hampe (Germany), Yuriy Kholin (Ukraine), Gábor Magyarfalvi (Hungary), Anton Sirota (Slovakia).

Besides that all countries received the following appeal:

Dear colleagues,

- 1. The Steering Committee meeting will be held in Gyeongju (Korea) from 8th to 11th Dec. 2005 and the preparations for the meeting are in course. In this connection I would like to

ask you to send any of your constructive proposals that would help to improve the work of the International Jury / Steering Committee / Organiser of the next IChO in Korea.

2. Moreover, I would like to ask you to send the website address of your National Chemistry Olympiad that would be published as a link on the website of the IChO International Centre.

Thank you in advance for your co-operation.

Dr. Anton Sirota

director

IChO International Information Centre

Please send your message to the e-mail address: anton.sirota@stuba.sk

14 responses came to the IChO Intern. Centre till now. None of them contained any proposals that would overreach those given by the Steering Committee members and Y. Kholin.

All the proposals can be divided into some separate items that are contained in the following contents:

1. Guidelines and Regulations
2. International Jury meetings
3. Steering Committee meetings
4. Proposal to limit the number of more participations of one student
5. Fair play in competition
6. Character of competition tasks and overtraining
7. Practical Tasks
8. "Read-discuss-translate" procedure
9. Delivery of students' solutions and arbitration
10. Change of the current regulations
11. Translations
12. Closing Ceremony

Content	Items for discussion
1) Guidelines and Regulations	d) Relation between G. and R. e) Regulations should be kept without any exceptions f) Example of breaking of regulations
2) Jury meetings	g) Places for particular countries with labels h) Presence of scientific observers and guests is not in accordance with the regulations i) Scrutiniser, serious voting j) Somebody who is making minutes k) Program of business meetings l) Information on activity of the Steering Committee
3) Steering Committee	f) Steering Committee cannot be a discussion club, it must

meetings	<p>steer IChO.</p> <p>g) Recommendations for the organiser</p> <p>h) Requests addressed to the organiser</p> <p>i) Minutes of the meetings and where it must be published.</p> <p>j) The composition of the Steering Committee – policy, elections must be prepared seriously.</p>
4) Proposal to limit the number of more participations of one student	a) The problem was discussed already twice in the history of IChO and refused.
5) Fair play in the competition	<p>d) All members of the delegation must sign a declaration</p> <p>e) The role of the students' guide in the critical time.</p> <p>f) Accommodation of guests must be located separately from that of mentors.</p>
6) Character of competition task and overtraining	<p>f) Character of preparatory tasks causes overtraining.</p> <p>g) Who are the authors.</p> <p>h) IChO is not a competition of authors.</p> <p>i) Specialisation of the authors should not be automatically incorporated into competition tasks.</p> <p>j) Sponsors should not dictate the character of tasks</p>
7) Practical tasks	<p>e) A maximum of 10 % of points for synthesis.</p> <p>f) The tasks in which the procedure is given step by step, should be excluded.</p> <p>g) Organisers should be excluded from the process of evaluation of practical tasks (drying the products, weighing the yields, melting points measurements, optical rotation, etc.)</p> <p>h) The task with a procedure given step by step Avoid the task</p>
8) "Read-discuss-translate" procedure	<p>e) It is not for ever, it can be changed</p> <p>f) NEW Tasks can be judged by the Steering Committee and then without discussion they can be delivered to mentors for translation (the change of regulations is necessary)</p> <p>g) NEW Tasks can be judged by the mentors of English speaking countries at first and only then by the Jury. This proposal will be explained more in detail by Anton Sirota. The change of regulations is not necessary, since the Jury can compose working groups (§7, part 3)</p> <p>h) Solutions, answer sheets and grading are not delivered altogether with the tasks.</p>
9) Delivery of students' solutions and arbitration	<p>f) When to deliver the students' solutions?</p> <p>g) Corrections at arbitration</p> <p>h) Who can attend the arbitration?</p>

<p>10) Change of the current regulations</p>	<p>i) Competitions in the last years prove that the second sentence of part 3, §10 is harmful. "Subjects assigned to level 3 can be classified as level 2 if sufficient background is included in the formulation of the problem (e. g. formulas, graphs, structures, equations)." Consequently, this kind of problems should not appear in the preparatory tasks. By the way, this sentence was not a part of the first proposal of regulations and was added four years later.</p> <p>j) Next proposal for a change: the head of the IChO International Information Centre should be a member of the Steering Committee. This part was contained in the regulations proposed by Dr. Reed (1994) – the first chairman of the Steering Committee. However, it disappeared in the present regulations.</p>
<p>11) Translations</p>	<p>i) It is an continuing activity of the Jury session.</p> <p>j) Who can be present</p> <p>k) The role of authors in that time</p> <p>l) Computers and their use – rules for it</p> <p>m) Mobile phones, internet – not allowed during the translations</p> <p>n) Restricted area for mentors</p> <p>o) How to avoid contact between students and some persons</p> <p>p) Computer centre must be closed during the Jury session.</p>
<p>12) Closing ceremony</p>	<p>c) Diplomas of participation for medallist and non-medallists should be different</p> <p>d) List of medallists with points in the Catalyzer</p> <p>d) The names of medallists should be read correctly</p>

Minutes of The IChO Steering Committee (English英文)

December 8 –11th, 2005

Hotel Hyundai, Gyeongsan, Korea

Prepared and reviewed by Duckhwan and Anton

Members Present:

Kurt B. Nielsen (Denmark, Chairman)
Carlos Castro-Acuna (Mexico, Representative of Americas)
Geoff Salem (Australia, Representative of Pacific Rim)
I-Jy Chang (Taiwan, Representative of Asia)
Alexander K. Gladilin (Russia, Representative of Europe)
Tai-San Fang (Taiwan, Organizer of the 37th IChO)
Duckhwan Lee (Korea, Organizer of the 38th IChO)
Vadim Eremin (Russia, substitute for V. Lunin, Organizer of the 39th IChO)
Gabor Magyarfalvi (Hungary, Organizer of the 40th IChO)
Anton Sirota (Slovakia, Director of the IChO International Information Center)
Manfred Kerschbaumer (Austria, Expert)

(Only the first names are used in the minutes.)

Members absent

James Praic (Ireland, Representative of Europe)
Peter Wothers (UK, Organizer of the 41st IChO)

Discussion Sessions

- (1) 09:00-11:00, December 9, 2005 (General Discussion)
- (2) 11:00-15:30, December 9, 2005 (Inspection of Yeungnam Univ. and Gyeongsan)
- (3) 20:20-22:40, December 9., 2005 (General Discussion; Report on the 37th IChO; Plans for the 39th and the 40th IChOs).
- (4) 09:00-13:00, December 10, 2005 (Report on the 38th IChO°; General Discussion)\

The following recommendations and conclusions have been approved:

1. The guidelines and regulations of the IChO should be duly respected and strictly enforced by the organizer of the IChO.

2. Operation of Jury Meeting:

- a. provide 3 seats at the most for each country,
- b. no guests should be allowed at the Meeting,
- c. provide 2 sets of voting cards (one red and one green for each country) with the name of the country printed,
- d. **the above should be clearly explained at the beginning of the 1st Jury Meeting,**
- e. announce the number of countries present at the Meeting (at least 75% of the participating countries are required to be present for voting purposes),
- f. clearly announce that only head mentors and mentors (not scientific observers) can express their opinions at the Meeting,
- g. the Organizer should provide a staff member, fluent in English, knowledgeable in Chemistry and possessing good computer skills,
- h. the chair of the Jury should work in close cooperation with the representatives of the Steering Committee.

3. Proposal for the revisions of the Regulations:

- a. §3(3) : add the following sentence: “ ... The scientific observer may be present at the Jury Meeting but he/she cannot take part in the discussion.”
- b. §5(4): The following change of the section is proposed:

"The organizers of the next two consecutive Olympiads may send two observers to the current IChO with their expenses covered by the host as mentioned in the preceding section 3."

4. Steering Committee:

- a. need to elect new representatives for America (1) and Europe (2) at the 3rd (business) Jury Meeting,
- b. the Organizer should prepare an additional Meeting of the SC right after the 3rd (business) Jury Meeting to elect a new Chair of the Steering Committee,
- c. the new Chair should be announced at the Closing Ceremony and begins his/her duty after the summer event.

5. Multiple Participation and Fair Competition:

- a. Split opinions on multiple participation of the same students:
 - i. the opportunity to compete chances should be given to as many students as possible,

- ii. the right of each country for choosing students should be respected.
- b. The questionnaire on the above issue will be send out to the head mentors (with the text which will be prepared by Anton in cooperation with other members of the Steering Committee),
- c. There are pretty good reasons to believe that actual cheating took place in the recent IChO's. When proved any cheating should be punished "spectacularly" through the International Jury according to the Regulations. The Organizer should do his/her best to block cheating through personal contacts with strangers, internet, mobile phones, etc.
- d. Get the "Pledge of Fairness" from all participants including students and guests..
- e. Perform the random checks on the fairness of translations with the clear announcement in advance. Make an official announcement of the check without mentioning the names of the countries.
- f. The guides with fluent language skills should accompany their students all the time during the period of the IChO and should understand their responsibility clearly. The Organizer should give clear instructions to the guides.
- g. The guests should not be allowed to participate in any part of the job of mentors and scientific observers including the Jury Meetings and translations. No excuse from the prepared programs.

6. Tasks:

- a. The total number of characters should be clearly indicated at the end of each exam paper. (It should be no greater than 25,000 characters §13(4).)
- b. Interpretation and enforcement of §10(3): It concerns the competition tasks of "level 3" which is not in the fields of the syllabus covered by the preparatory problems (in connection with the length of the tasks above §13(4)). The IChO tasks should not induce overtraining.
- c. The Steering Committee intends to go over the preparatory problems of the last five IChO's to see how many fields have been given at the level 3.
- d. Manfred and Geoff will come up with the "fields" (12 of them) with the help of Sasha and Vadim.
- e. The tasks should be expressed in plain language of the high-school pupils.
- f. The authors should present very brief introduction for each task at the beginning of the 1st and 2nd Jury Meetings.
- g. A sign-board for each task may be helpful for the consultation session with the authors. In order to avoid duplicate questions, mentors and authors should write their concerns on the board so they can be checked by other mentors.
- h. IChO is not a competition of authors.
- i. Synthesis should not constitute too large a proportion of the experimental tasks.
- j. The procedures given in the Task should not be too explicit. There should be some scope for the students to use their own initiative.
- k. The Organizer should provide sufficient justification for the parts of the evaluation which are done by the Organizer (e.g. to check yield and purity, etc.).
- l. The tasks should be distributed to the mentors as early as possible. (e.g. in a bus returning from

the excursions, but not earlier for security reason.)

- m. The flexible partial points should be allowed for those answers with the calculation shown.

7. Translation

- a. No guests are allowed to be in the translation room or involved in the translation activity.
- b. **A representative of the Scientific Committee should be on stand by in the translation room**

8. Read-Discuss-Translation Procedure:

- a. Sasha and Anton have withdrawn their proposals that would influence Read-Discuss-Translation Procedure. If the above conclusions and recommendations of the SC will be taken into consideration the International Jury can still work within the conventional format.
- b. The Organizer should try their best to have their tasks written in good English.

9. Other

- a. Prepare a BIG signboard for announcement of each days schedule and other important issues..
- b. The Minutes of the Steering Committee Meeting should be posted at the official web-page and be included as a separate Appendix in the Preparatory Problems.
- c. Mentors and observers should have a pre-assigned bus (based on language rather than in alphabetic order).
- d. The Award Diploma and the Participation Certificates should be given to the students.
- e. The complete list of results with points should be posted at the official homepage.
- f. **The head mentors must be allowed to check and sign the final result sheets of their students (including changes made at arbitration) before the medal allocation.**
- g. The detailed information on the results of tasks may not be necessary at the Closing Ceremony.
- h. The future hosts can send more observers for their own preparation. (Should revise the Regulation)

10. Future Host and Participation

- a. Host of Japan for the 41st IChO: Japan is strongly recommended to the Jury.
- b. Participation of Hong Kong:
 - i. Hong Kong is currently participating in the National Chemistry Olympiad of China as an integrated part of China. (Kurt will write a letter to Hong Kong.)
- c. No more new observing countries should be accepted after the SC Meeting.

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11. Report on the 37th IChO by Organizer Tai-Shan Fang

- a. July 16 – 25th, 2005.
- b. 225 students, 117 mentors, 37 observers, 34 guests from 59 countries.
- c. Venues: NTU and NTNU with accommodation at NAER and the Grand Hotel.

- d. Organization: Administration Operation, Sites and Facility, Social Activities, Academic, Social Resources.
- e. Tasks were translated to in 34 languages: English (33), Russian (21), Spanish (20), German (11), Arabic (8), Greek (8), Portugal (8), Turkish (8), Dutch (7), French (5), etc.
- f. 26 Golds, 48 Silvers, 80 Bronzes, 6 Honorable Mentions, and 3 Special Awards.
- g. Preparatory Problems: sent out at the end of January, 2005.
- h. Catalyzer: 12 issues (July 26, 2004 through August 31, 2005)
- i. Budget: Expences: 120,000 USD in 2002-2004, 1 million USD in 2004-2005. Received: 80,000 USD from Industries, 156,293 USD from the participation fees.
- j. Homepage: <http://icho.chem.ntnu.edu.tw>
- k. International Jury Meeting: Election of new members of the SC (James Paraic for Europe, I-Chy Chang for Asia, Geoff Salem for Pacific Rim).

12. Reports on the Tasks of the 37th IChO by I-Jy Chang

- a. Academic Committee: Y.-T. Lee with Sunny Chang.
- b. 7 separate sections working independently: No inter-related tasks.
- c. Theoretical Tasks: Started with two tasks proposed by each author in 2003 and reached the final form in May, 2005.
- d. Practical Tasks: Started with one tasks from each author in 2003 and reached the final form in March, 2005. Ordering glasswares and equipment from April of 2005 (TOO LATE). The final tasks were ready and in the written-edited form by May, 2005.
- e. Practical Tasks: Started with one task from each author in 2003 and reached the final form in March, 2005. Ordering glassware and equipment from April of 2005 (TOO LATE). The final tasks were ready and in the written-edited form by May, 2005.

13. Report on the 39th IChO by Vadim (substituting for Prof. Lunin)

- a. It will be hosted by the Chemistry Department of the Moscow State University. (The University was founded in 1755, the first in Russia, with 28 Departments and 40,000 undergraduates. The Department was established in 1929. It currently has 1,000 undergraduates and 400 professors and staff.)
- b. Advantages of MSU: experience of 28th IChO (1996), strong academic staff; support from industries.
- c. Supporting Organizations: Ministry of Education and Science, etc...
- d. July 15 – 24th, 2007 at MSU
- e. Steering Committee: Dec. 7 – 10th, 2006.
- f. Voting on the proposed logos.

14. Reports on the 40th IChO by Gábor

- a. It will be hosted by the Eötvös University in Budapest (founded in 1634).
- b. In July, 2008
- c. Support from the Ministry of Education, Pharmaceutical Industries, and Tourist Bureau.

15. Reports on the 38th IChO by Duckhwan along with H. Kim (Scientific Committee)

- a. Period: July 2 – 11th, 2006.
- b. Venues: Yeungnam University (students) and Hotel Hyundai Gyeongju (Mentors)
- c. Official Airport: Busan (PUS).
- d. Theme: “Chemistry for Life, Chemistry for Better Life”
- e. No more observers allowed except Moldova who was not able to attend the 2nd time observer for obvious reason. There are expected 67 countries and 1 possible observer (Moldova).
- f. Homepage: <http://IChO.kcsnet.or.kr>
- g. The participants go to Gyeongsan first, and then continue on to Gyeongju. (Need to get the Pledge of Fairness in the presence of students and mentors).,
- h. The Preparatory Problems should be sent in both printed and electronic forms (including MS-WORD type). Two hard copies should be sent to each country. The file containing solutions should be sent to the head mentors by e-mail.

Appendix :(1)power point presentation of 37th IChO 2005 (2)Photos , and (3)
[Minute of Steering Committee Meeting 38th IChO 2006 \(English\)](#)