



# Rules of International Chemistry Tournament

## Part 1. Basic statements.

1. International Chemistry Tournament (IChTo or Tournament) is a team competition in solving complicated scientific problems, presenting solutions of these problems and defending them in scientific discussions.
2. The aims of IChTo are promoting students' interest in science, popularization of chemistry, teamwork training and development of presentation skills.
3. The working language of IChTo is English. Teams have the right for an interpreter within the set time limits.
4. Each team consists of 4–6 schoolchildren representing one country.
5. Each country may be presented by not more than 2 teams. Hosting country may be presented by 3 teams.
6. If the number of registered teams exceeds 12, organizing committee may arrange additional selection.

## Part 2. Definitions

1. Basic definitions:
  - 1.1. Section – a set of three or four teams, jury members and moderator taking part in the tournament together in the same room.
  - 1.2. Stage – the sequence of challenges in the section, in which each team in turns has a role of the reporter, the opponent and the reviewer.
  - 1.3. Round – the period of time starting from challenge for the reporter team to do the problem, and ending by the announcement of the grades to the reporter, the opponent and the reviewer.
  - 1.4. Grade – a mark, which is given directly by the jury.
  - 1.5. Technical points (TPs) – points serving for more accurate evaluation. If calculated, TPs are a fractional number that is rounded up.
  - 1.6. Rating points (RPs) – final score, which is the result of the conversion of TPs, taking into account the relative positions of teams in the Section.
2. Moderator – a person who:
  - 2.1. Announces every stage in the section;
  - 2.2. Moderates discussion during all the stages;
  - 2.3. Has a right to decline questions of the jury and participants in case of their inconvenience;
  - 2.4. Announces marks of the jury at the end of the round.
3. Reporter – a participant who presents the essence of the solution to the problem.
4. Opponent – a participant, who finds weak spots in the presented solution and criticizes them, pointing out possible inaccuracy and errors in the understanding of the problem and in the solution.
5. Reviewer – a participant who presents a short estimation of the presentations of the Reporter and the Opponent.
6. Observer – a team, that does not participate actively in the round.
7. Captain – a participant who represents the team and solves challenges and performs other actions on the behalf of his/her team.
8. Jury – people who evaluate the reporter, the opponent and the reviewer. There have to be not less than 3 jury members in the section.



## Part 3. The stage regulations.

1. Tournament is held in 4 semifinal stages and 1 final stage.
2. Before the first stage, a team contest is held. As a result of the contest teams are assigned with a number from the 1st to the last, according to the place taken in the contest due to the results. Thereafter, teams are divided into sections as follows:

	Number of teams			
	13	14	15	16
<b>1st section</b>	1,5,9,13	1,5,9,13	1,5,9,13	1,5,9,13
<b>2nd section</b>	2,6,10	2,6,10,14	2,6,10,14	2,6,10,14
<b>3rd section</b>	3,7,11	3,7,11	3,7,11,15	3,7,11,15
<b>4th section</b>	4,8,12	4,8,12	4,8,12	4,8,12,16

If the number of teams is different, the distribution of teams takes place in a similar manner.

3. In each section the best team according to the results of the contest has a chance to define the order of the selection of its role in the first round (reporter, opponent, reviewer, if possible - the observer), next to the places - the second, and so on. After that, other teams choose their roles in the first round.
4. After the first round the teams change their roles according to the schemes:  
For section of 4 teams:

Round number	Team's role			
1	Opponent	Observer	Reviewer	Reporter
2	Observer	Reviewer	Reporter	Opponent
3	Reviewer	Reporter	Opponent	Observer
4	Reporter	Opponent	Observer	Reviewer

For section of 3 teams:

Round number	Team's role		
1	Opponent	Reviewer	Reporter
2	Reviewer	Reporter	Opponent
3	Reporter	Opponent	Reviewer



5. The round regulations:

Part of the round	Maximum time, min.
The opponent team announces the number of problem which they give to the reporter team (challenge)	1
Accepting or declining of the challenge	1
Repeat of the challenge (if necessary; see part 3 p. 6)	2
The reporter's announcement	1
The opponent's announcement	1
Report	8
Preparation to the opponents	1
Opposing	5
Reporter's response	4
Polemic discussion between the reporter and the opponent	5
Reviewing	3
Jury's questions	5
General discussion between active participants and other audience	5
Evaluating by the jury (writing marks to the statement)	2
Announcement of grades	2
Spare time (may be added by the moderator)	4
<b>TOTAL</b>	<b>50</b>

6. Challenge accepting or declining procedure

6.1. After the team is challenged with the problem, the captain of the reporter team decides to accept or to reject the challenge. In case of acceptance the captain of the reporter team have to announce the name of the reporter. In case of rejecting the captain of the reporter team announces, if it's possible to solve this problem in the next rounds . If it's impossible to do so in the future, from this moment such problem is called "strategic refusal" for this team. If the refusal is valid only for the current round, it is called "tactical refusal". If the captain does not indicate that the refusal is strategic, the refusal is considered to be tactical.

6.2. Strategic refusal is possible only once during the stage.

6.3. The total number of rejections in one round can not exceed three.

6.4. If after the third rejection in the tour team refuses to take the problem, the total number of technical points for this user for current round is multiplied by a factor according to the table:

<b>Number of rejections</b>	4	5	6	7	8 and more
<b>Factor</b>	0,8	0,7	0,6	0,5	0,4



7. The opponent team can not challenge the reporter team with the following problems:
  - 7.1. which the reporter team rejected in the current stage;
  - 7.2. which the reporter team rejected in previous stages (“strategic refusal”);
  - 7.3. which was reported in the current stage;
  - 7.4. which the reporter team has reported in previous stages;
  - 7.5. which the opponent team has opposed in previous stages.
8. After the first stage the teams are numbered in sequence, according to the RPs they have received in the first stage. If teams have the same RPs, they are distributed according to their TPs. If teams have the same TPs, the distribution is done according to the number of points earned by them as a reporter. Further grouping and prioritization in the sections is defined in the same way as for part 3 pp. 2 - 4.
9. After the second stage the teams are distributed according to the number obtained after the first stage, prioritization in the sections is defined similarly to part 3 pp. 2 - 4. Scheme of grouping after the second stage:

	Number of teams			
	13	14	15	16
<b>1st section</b>	1,2,3,4	1,2,3,4,	1,2,3,4,	1,2,3,4,
<b>2nd section</b>	5,6,7	5,6,7,8	5,6,7,8	5,6,7,8
<b>3rd section</b>	8,9,10	9,10,11	9,10,11,12	9,10,11,12
<b>4th section</b>	11,12,13	12,13,14	13,14,15	13,14,15,16

If the number of teams is different, the distribution of teams takes place in a similar manner.

10. After the third stage the teams are numbered from the first to the last, according to the sum of the RPs they have recruited in the first three stages. If teams have the same RPs the rules similar to the part 3 p. 8 are applied. For the fourth stage teams are distributed according to the scheme in part 3 p.2.
11. After the fourth stage three teams, having the highest RPs, take part in the Final stage (if teams have the same RPs, see part 3 p.8). Unlike the other stages, in the final stage team chooses itself which problem to report.
12. During the tournament the participants are not allowed to use phones and tablet computers. They are allowed to use one laptop by the team to view and edit their own presentations. It is prohibited to use the Internet.

## Part 4. The rules of grading

1. The grades can be equal 2, 3-, 3, 3+, 4-, 4, 4+, 5-, 5 и 5+. The highest grade is 5+, the lowest is 2.
2. The jury write grades in the statements before every announcement.
3. Reporter is graded separately for scientific and presentational parts.
4. Reference points for grading:  
Reporter – scientific part



Grade	Solution model	Correctness of the solution	Originality of the solution
5	Solution model is correct	Solution is correct	Solution is original
4	2 points of 3		
3	1 point of 3		
2	Solution model is absent or not complies to the problem	Solution is incorrect	Solution is not original

#### Reporter – presentational part

Grade	Understandability of the solution	Quality of the presentation	Oratory
5	Solution is understandable	Presentation is readable for all the audience and presented in a good-looking form	Reporter was interesting to listen to
4	2 points of 3		
3	1 point of 3		
2	Solution was presented in incomprehensible form	Presentation was completely unreadable	Reporter was not interesting to listen to

#### Opponent

Grade	Correctness of the opposing	Scientific nature of the opposing	Credibility of the opposing
5	Opposing was absolutely correct	Opposing was scientifically justified	Opposing was very convincing
4	2 points of 3		
3	1 point of 3		
2	Opposing was absolutely incorrect	Opposing was not scientifically justified	Opposing was not convincing



Reviewer

Grade	Validity of report reviewing	Validity of opposing reviewing	Correctness of conclusion about report and opposing
5	Report reviewing is valid	Opposing reviewing is valid	Conclusion is absolutely correct
4	2 points of 3		
3	1 point of 3		
2	Report reviewing is not valid	Opposing reviewing is not valid	Conclusion is incorrect

- The grade "5 +" given by the jury, in exceptional cases, when all the parameters can be assessed as "great." Other grades with the signs "+" and "-" are set optionally by the jury members and are based on the guidelines in part 4 p.4.
- The grades 2 and 5+ are obligatory to explain by the jury. Also captain of any team can ask the jury to explain any other grade.
- If number of jury members in the section less than 6, total sum includes all grades. If number of jury members in the section is 6, total sum excludes the lowest grade. If number of jury members in the section is more than 6, total sum excludes the lowest and the highest grade.
- After the round grades are recalculated to the TPs following to the scheme:

Grade	2	3-	3	3+	4-	4	4+	5-	5	5+
TPs	2	5	8	12	18	25	33	42	50	60

Then points are summed and divided to the quantity of jury members in the section (taking into account part 4 p.7) rounding up. Finally, TPs for the reporter are multiplied by 2, for the opponent they are also multiplied by 2, for the reviewer they are multiplied by 1. Thus, maximum TPs for the reporter is 240, for the opponent is 120, for the reviewer is 60.

- After the end of the stage RPs of the teams are calculated according to the scheme:

TPs	Place of the team in the section after the stage				
	№1	№2, №3 or №4 if $TPs(№X) \geq TPs(№1) - 10$	№2 if $TPs(№2) < TPs(№1) - 10$	№3 or №4 if $TPs(№X) \geq TPs(№2) - 10$	№3 or №4 if $TPs(№X) < TPs(№2) - 10$
≥300	6	6	5	5	4
230–299	5	5	4	4	3
130–229	4	4	3	3	2
60–129	3	3	2	2	1
<60	2	2	1	1	0

(TPs(№X) is TPs of the team, which took place X in the section)



## **Part 5. The determination of winner and laureates**

1. The teams having the highest sum of RPs are awarded with diplomas of winner and laureates of 1st, 2nd and 3rd degree.
2. Diploma of 1st degree is only given to one team having the highest TPs in the Final stage.
3. Places of teams (from fourth to the last) are determined by the sum of RPs (and TPs if RPs are equal). Places from the first to the third are determined by the Final stage.
4. Maximum quantity of laureates is 45% of the teams.
5. Individual participants can be awarded with personal diplomas based on TPs. Individual participants can also be awarded with special prizes by the decision of organising committee.

## **Part 6. Final statements**

1. Any questions and suggestions for these rules can be sent to [info@ichto.org](mailto:info@ichto.org).
2. Organising committee can change any part of these rules before May 1, 2017.
3. The results of the Tournament have to be published on the official site of the Tournament – [ichto.org](http://ichto.org) – no longer than 3 days after the tournament.