

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 the solutions to 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.
4. Each team consists of 4–6 schoolchildren representing one country.
5. Each country may be represented by 2 teams or less. The hosting country may be represented by 3 teams.
6. If the number of registered teams exceeds 20, the 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 a 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 take turns as the reporter, the opponent and the reviewer.
 - 1.3. Round – the period of time starting from the challenge for the reporter team to present 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 fractional numbers that are 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.
- 1.7. Semifinal stages – stages which lead to selection of 3 teams aspiring to become the winner of IChTo.
- 1.8. Final stage – stage which lead to selection of the winner team of IChTo.
2. Moderator – a person who:
 - 2.1. Announces every stage in the section;
 - 2.2. Moderates discussion during all the stages;
 - 2.3. Has the 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 a solution to the given problem.
4. Opponent – a participant who finds weak spots in the presented solution and criticizes them, pointing out possible inaccuracies and errors in the understanding of the problem and in the solution.
5. Reviewer – a participant who presents a short evaluation of the presentations of both the Reporter and the Opponent.
6. Observer – a team that may only participate in general discussion.
7. Captain – a participant who represents the team, solves challenges and performs other actions on behalf of his/her team.
8. Jury – people who evaluate the reporter, the opponent and the reviewer. There has to be 3 or more jury members in each section.
9. Each team participant may take role of a reporter, opponent and reviewer only once for each role during the semifinals. During the final stage, each team participant may take only one active role. If some team participant breaks this rule, the total number of technical points for additional roles is multiplied by a factor 0,4.

Part 3. The stage regulations.

1. The 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 the following sections:

	Number of teams			
	13	14	15	16
1st section	1,5,9,13	1,5,9,13	1,5,9,13	1,5,9,13
2nd section	2,6,10	2,6,10,14	2,6,10,14	2,6,10,14
3rd section	3,7,11	3,7,11	3,7,11,15	3,7,11,15
4th section	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 teams have the choice to decide their order (i.e. first, second, third or fourth) of the selection of their roles (reporter, opponent, reviewer, if possible - the observer) in the first round, in order of their ranking starting from the best ranked team. After that, the teams choose their roles for the first round based on the order decided.
4. After the first round the teams change their roles according to the schemes:

For a 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 a 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 the problem that they will 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 (strictly monologue)	8
Preparation of the opponents (during this part reporter is not allowed to communicate with his/her team)	1
Opposition (strictly monologue)	5
Reporter's response (strictly monologue)	4
Academic discussion between the reporter and the opponent	5
The reviewer's announcement	1
Reviewing (strictly monologue)	3
Jury's questions	5
General discussion between active participants and other audience	5
Evaluation by the jury (writing grades to the statement)	2

Part of the round	Maximum time, min.
Announcement of grades	2
Spare time (may be added by the moderator)	3
TOTAL	50

6. Captain of every team (including the observer team) may announce a time-out for 60 seconds once in every stage but strictly before jury's questions. During these 60 seconds the reporter, the opponent and the reviewer are allowed to communicate with their teammates. Time-out applies to all teams in this section.

7. Challenge accepting or declining procedure

7.1. After the team is challenged with the problem, the captain of the reporter team decides to accept or reject the challenge. In case of acceptance the captain of the reporter team has 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.

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

7.3. For three or less rejections in a round, the team has no penalty on TPs. If, after the third rejection in the round, the reporter team refuses to accept the next challenge, the total number of technical points for the reporter in the given round is multiplied by a factor according to the following table:

Number of rejections	4	5	6	7	8 and more
Factor	0,8	0,7	0,6	0,5	0,4

7. The opponent team cannot 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” only);
- 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.

If it turns out that the opponent team cannot challenge the reporter team due to the regulations of part 3 pp. 7.1-7.5, then part 3 p.7.4 and part 3 p.7.5 are temporarily cancelled for that stage.

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 p. 2 - 4.

9. After the second stage the teams are distributed according to the numbers obtained after the first stage, prioritization in the sections is defined similarly to part 3 p. 2 - 4. Scheme of grouping after the second stage:

	Number of teams			
	13	14	15	16
1st section	1,2,3,4	1,2,3,4,	1,2,3,4,	1,2,3,4,
2nd section	5,6,7	5,6,7,8	5,6,7,8	5,6,7,8
3rd section	8,9,10	9,10,11	9,10,11,12	9,10,11,12
4th section	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 obtained in the first three stages. If teams have the same RPs, rules similar to 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, with 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, teams choose which problem to report themselves. The only limitation is that during the final stage it is not allowed to report the same problem more than once.

12. During the tournament participants use laptop(-s) with web-cameras and microphones which stay active during all stages for all teams. For them it is prohibited to use earphones in any ways and the Internet other ways than IChTo's conducting needs it.

13. For the team leaders it is strongly prohibited to communicate with their teams during the stages. If there will be such cases then respective team may be fined up to 30% of their TPs for that stage.

Part 4. The rules of grading

1. The possible grades are 2, 3-, 3, 3+, 4-, 4, 4+, 5-, 5 and 5+. The highest grade is 5+, the lowest is 2.

2. The jury write grades in the statements before every announcement.

3. The 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 does not comply 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 opposition	Scientific nature of the opposition	Credibility of the opposition
5	Opposition was correct	Opposition was scientifically justified	Opposition was very convincing
4	2 points of 3		
3	1 point of 3		
2	Opposition was incorrect	Opposition was not scientifically justified	Opposition was not convincing

Reviewer

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

5. The grade "5 +" is 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.

6. The grades 2 and 5+ are obligatory to be explained by the jury. The captain of any team can ask the jury to explain any other grade.

7. After each 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	9	14	20	27	34	42	51	60

8. Then points are summed and divided to the quantity of jury members in the section, then rounded to hundredths. 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.

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

<u>TPs</u>	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. If 2 or 3 teams have the same TPs then organizing committee will take in account, consistently, TPs for report in the final stage, TPs for opposition in the final stage, TPs in semifinal stages, TPs for reports in semifinal stages, TPs for oppositions in semifinal stages, rank in team contest before the first semifinal stage.
3. Places from the first to the third are determined by the final stage as it is written in part 5 p.2. Ranks of the teams (from fourth to the last) are determined by the sum of RPs. If some teams have the same RPs then organizing committee will take in account, consistently, TPs in semifinal stages, TPs for reports, TPs for oppositions, rank in team contest before the first semifinal stage.
4. The maximum quantity of laureates is 45% of the teams but not less than 3.
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 organizing committee.

Part 6. Final statements

1. Any questions and suggestions for these rules can be sent to info@ichto.org.
2. The organizing committee can change any part of these rules before August 11th, 2021. After that day some changes may still apply but only with agreement of all team captains
3. The results of the Tournament have to be published on the official site of the Tournament – ichto.org – no longer than 3 days after the tournament.