

Table of Contents

1. About this Document	2
1.1. Purpose.....	2
1.2. Timeline	2
1.3. Revision Notes	2
1.4. Revisions	2
2. CTOC Topics & Operating Manual.....	3
2.1. CTOC monthly meetings.....	3
2.2. Task forces	3
2.3. CTOC EC	3
2.4. CTOC Directors	4
2.5. CTOC Liaisons to D/F	4
2.6. Cross OC-meetings	4
2.7. AICHe BOD report	4
2.8. AICHe Strategic Plan & Initiatives	5
2.9. AICHe Foundation Grants	5
2.10. New Directors.....	5
3. Appendices	7
3.1. AICHe Staff	7
3.2. Useful Links.....	7
3.3. Abbreviations.....	7
3.4. Sample Agenda.....	7
3.5. Prior / Current Task Forces.....	8
3.6. Liaison Assignments Sample.....	9
3.7. Divisions and Forums.....	10
3.8. RACI Description	11

1. About this Document

1.1. Purpose

This operating manual is intended to be used by all CTOC directors in order to reduce the on-boarding duration for new members of CTOC as well as a reference for most frequent tasks of the operating council. A separate RACI document is being prepared for various activities across AIChE and can be used as a supplementary to this document.

1.2. Timeline

Date	Task
5/15/2023	Kick off meeting
8/7/2023	2 ND meeting
8/31/2023	Initial reviews, edits, and changes
Early September	Review the collaborative edits and propose an updated version for review
End of September	Complete 2 nd round of review
Mid October	Final reviews
End of October	Share operating manual before the annual in-person meeting

1.3. Revision Notes

The first attempt of this document was a list of actions for each role. In this version various topics are discussed and for each the responsible party is identified. It's formatted like bylaws.

NOTES:

- 1- Several sections are added that could be reordered.
- 2- Search for XXX in text and replace with correct wordings.
- 3- Version 0.04 9/15/2023: all prior revisions accepted for the final review.
- 4- Instead of XXX, comments are used.

1.4. Revisions

Date	Revision	Comments
8/1/2023	0.00	Create subjects and add text
8/7/2023	0.01	Added Jessica's comments to the text
8/8/2023	0.02	Inserted some additional information
9/12/2023	0.03	Numbered titles, added Laura's suggestion
9/15/2023	0.04	Reviewed/Edited by J. Winter, L. Dietsche, I. Glasgow, C. Hirashima, R. Mostofi
9/16/2023	0.05	Added JoAnn's comments, EC role

2. CTOC Topics & Operating Manual

2.1. CTOC monthly meetings

CTOC members meet every month, to exchange information about:

- AIChE board decisions/feedback,
- division and forums news, issues and feedback,
- task force activities and progress
- CTOC Executive Committee (EC) decisions
- other Operating Councils (OCs) & Young Professional Community (YPC)

The CTOC chair shall run the meeting. In the absence of chair, chair-elect would do the same, or the past chair if the chair-elect is unavailable.

After establishing the quorum, the minutes of the last meeting should be approved. This is done by asking a member to move the motion to approve, a second to confirm the motion and eventually a verbal vote.

The agenda is reviewed and each liaison or task force will report to the group. Time for questions is given at the end of each report. It is expected that each representative has met with the entities with which they liaise and are prepared for this discussion.

The agenda for this meeting is set at the Executive Committee (EC) meeting prior to it. A typical agenda is provided in appendix 1. There is no time keeping at the meetings, but we normally run out of time at the face-to-face meetings.

Meeting notes are recorded by AIChE staff and will be approved at the next meeting. Past meeting notes are stored in BOX.

2.2. Task forces

At the beginning of the year (Dec-Jan), different task forces are created, continued from prior year, or terminated. This normally depends on the AIChE board vision, roadmap, and strategic plan. A list of various task forces and a summary of their outcomes and duration is given in Appendix 2.

Creation/sunsetting task forces are part of the general CTOC decision-making process. CTOC EC should discuss that at their meeting and prepare a proposal for general CTOC members to approve the task forces.

Ideally, the task forces should be approved and ready to operate by the beginning of the year. Suggested to have the task forces defined for the upcoming year at the annual meeting, so that work can begin in January.

A task force leader should be identified (either by members of the task force or by CTOC leadership) to set up the meetings and report back to CTOC at the monthly meetings. At each CTOC meeting, the task force's report is included in the agenda.

The leader of the task force is responsible to provide the annual report back to CTOC for inclusion in the annual report.

2.3. CTOC EC

CTOC EC consists of chair, chair-elect, past-chair and staff liaisons. They meet monthly to:

- 1- establish the general CTOC meeting agenda.
 - 2- review foundation grant proposals.
 - 3- decide on task forces formation.
 - 4- assign liaison roles.
 - 5- approve new directors' slate.
-

2.4. CTOC Members

All members of CTOC are called members. Members are expected to serve for three years with the option to be extended.

Members are expected to attend monthly meetings and two face-to-face meetings on Saturday after lunch with other OCs) at annual and spring meetings.

Members will be assigned as liaisons to several D/F and serve on a task force.

2.5. CTOC Liaisons to D/F

Once the new directors are selected and approved by the AIChE board (Sep-Oct), an initial liaising assignment is set by CTOC EC based on each individual background and feedback is obtained from the directors. A sample of liaisons assignments is given in Appendix 3.

Liaisons will be assigned based on the past experiences, director preferences and the vacancies. Normally, each director will be liaising with 2-3 different D/F.

Liaisons are supposed to individually communicate with their respective divisions/forums/entities. The main tasks are:

- 1- Self-introduction as a new (or continued) liaison to the respective D/F at the beginning of each calendar year and describe their role as CTOC liaison.
 - 2- Communicate with the previous CTOC liaison to D/F for historical and background information.
 - 3- Inform the Division/Forum (D/F) officers about anything that is of their interest, i.e. survey, finance options, IDEAL that required D/F attention.
 - 4- Report back to CTOC any issues D/F are facing, i.e. membership, communication, awards, elections.
 - 5- Attend D/F EC meetings (at least 4 per year, if offered) and keep them up to date regarding all things AIChE, including initiatives of the board of directors or the Institute.
 - 6- Inform D/F about items of general or specific interest to the respective D/F; e.g. CDFO webinar/meetings.
 - 7- In case of time sensitive information, communicate with the D/F via electronic means.
 - 8- Find ways to encourage D.F to consider and apply for foundation grants
-

2.6. Cross OC-meetings

As of 2023, the OC-OC liaisons are no longer active. Currently AIChE staff liaisons to OCs attend all OC meetings and provide updates.

Additionally, there are quarterly cross-OC meetings that ECs of all OCs attend to exchange ideas, identify overlaps and assign actions.

2.7. AIChE BOD report

At the annual meeting in Fall, a report from CTOC is provided by CTOC chair and chair-elect to the AIChE board that should include all the activities, including task forces achievements and their alignment with the Institute's strategic plan and goals. The report also includes CTOC's future plans and goals for the year after.

This is due about 2 weeks before the meeting and it is presented to the board, usually the Friday before the start of the annual meeting. A template is provided by AIChE for this presentation.

The Friday meeting is only attended by chair and chair-elect and the Saturday meeting is attended by all OC members.

On the Saturday of the annual meeting, there is also a joint OC meeting starting in the morning through lunch. This meeting is attended by all CTOC directors (members).

The expectation from the board is to also present ideas at the morning meeting regarding the AIChE new vision. -

The task forces leaders are expected to provide their report to CTOC EC 3-4 weeks in advance of the annual meeting.

It's best to coordinate with staff and the BOD liaisons to assure the expectations are met.

2.8. AIChE Strategic Plan & Initiatives

It is the duty of CTOC chair to assure CTOC tasks are aligned with AIChE strategic plan and new initiatives, and, if necessary, new task forces shall be formed for that purpose.

CTOC chair and chair-elect will summarize the Friday and Saturday meetings with AIChE board and report back to CTOC at the Saturday afternoon meeting.

CTOC EC shall engage CTOC directors to achieve those goals, by forming small workgroups or other means.

2.9. AIChE Foundation Grants

There are three levels of grants that CTOC can sponsor. If the amount is less than \$10k, CTOC EC can approve the proposal directly. If the amount is less than \$25k but more than \$10k, CTOC shall provide a support letter for the entity that is putting the proposal together. For proposals more than \$25k, AIChE foundation should be engaged, requiring contact several months in advance.

All D/F and other AIChE entities are eligible to send their proposal to CTOC for support or approval. CTOC has an annual budget of \$10k. The requester should provide a report at the end of the year for any funded proposals. The foundation grants are reviewed twice a year, and the requests to CTOC shall be received 2-3 weeks in advance of the deadline.

Cycle	CTOC deadline	Open	Close	Decision
Spring	Early March	March 30	May 17	Early July
Fall	Early September	October 1	December 1	Early February

Please see the link in the [Appendix for more information](#).

2.10. New Directors

Each year, some of the director's terms will end and new directors shall be selected. Directors terms of service can be extended at the discretion of EC and approval of the AIChE board.

The new directors should ideally:

- 1- Have some years of active service at D/F or other entities
- 2- Be able to attend the monthly meetings as well as 2 face-to-face meetings
- 3- Be able to attend their respective D/F EC meetings
- 4- Serve on task forces

The new directors slate shall be sent to the AIChE BOD by end of August by a staff member of CTOC.

All current directors are encouraged to nominate new members and it is best to keep a rolling list of names for future years. Normally, we need 4 new directors each year.

Each year a new chair-elect is selected from the current directors by the current CTOC EC.

It is the duty of the past chair to create and maintain the list of candidates and pass it on to the next person.

Currently, identifying the new directors is done with the help of staff. Nominations could be members of D/F or other OCs as well as EBPC, CCPS, RAPID and other entities.

Ideally, the CTOC members shall be of diverse backgrounds, i.e. academics and industry, different industry sectors, etc, to maintain a. Also, a good practice is having the CTOC chair alternate between academia and industry.

3. Appendices

3.1. AIChE Staff

Cody Hirashima	codyh@aiche.org
Gina Gatto	ginag@aiche.org

3.2. Useful Links

EBPC	Executive Board of the Program Committee	https://www.aiche.org/community/sites/committees/program-committee/executive-board
AIChE Engage	AIChE Engage connects AIChE members with each other and their chemical engineering communities	https://engage.aiche.org/
IDEAL	I (Inclusion) D (Diversity) E (Equity) A (Anti-Racism) L (Learning)	https://www.aiche.org/equity-diversity-inclusion/statement
Grant Proposal	Foundation grant information	https://www.aiche.org/giving/impact/funds/annual-fund
BOX	Stored documents	https://aiche.box.com/s/kfufimvxxc37j30p2ljn710gte4lrrnn
CTOC	CTOC website	https://www.aiche.org/community/sites/ctoc-chemical-engineering-technology-operating-council

3.3. Abbreviations

CTOC	Chemical Engineering Technology Operating Council	SIOC	Societal Impact Operating Council
CEOC	Career and Education Operating Council	MAC	Minority Affairs Committee
D&F	Divisions & Forums D&F abbreviations are provided in Appendix 6	WIC	Women in Chemical Engineering
DORIC	Disabilities Outreach & Inclusion Community	LGBTQ+	Lesbian, gay, bisexual, transgender and queer or questioning and others
ILI	Institute for Learning & Innovation	D&I	Diversity & Inclusion
EC	Executive Committee	YPC	Young Professionals Community
RACI	Responsible, Accountable, Consulted, and Informed		

3.4. Sample Agenda

1. Call to Order, Agenda Review, June Notes Approval (JoAnn)
2. CTOC Executive Committee Updates (JoAnn)

3. Updates (Feel free to upload any updates here to be referenced on call: <https://aiche.box.com/s/kfufimvxxc37j30p2ljn710gte4lrrnn>)
 - a. BoD (David/Lola)
 - b. SIOC & CEOC (AIChE Staff)
 - c. YPC (Kanjakha)
4. Open discussion on D&F liaisons and emerging issues. Questions for future agendas. (All)
 - a. Division & Forums Activities Survey
5. 2023 Annual Meeting
 - a. [Letter from the CEO](#)
 - b. [FAQ](#)
6. Operating Council RACI Progress
7. 2023 Task Forces
 - a. By-Laws (Julie)
 - b. IDEAL Task Force (Austin)
 - c. CTOC Operating Manual Task Force (Reza)
 - d. Annual Reports
8. CTOC Succession Planning
9. Other Questions & Comments

3.5. Prior / Current Task Forces

Name	Active Period	Outcome
Survey	-2022	In 2022, reached a set of questions for annual survey. Decided to use the same questions, unless change is necessary. Future tasks consist of comparison between recent years.
Bylaws	2020-present	Provide guidelines for D/F bylaws. Set a revolving calendar for review. Review CTOC bylaws.
IDEAL	2020-present	Part of all OCs task force, establish guidelines for IDEAL and ways to implement across AIChE.

3.6. Liaison Assignments Sample

2023 CTOC liaisons			Bylaws, IDEAL, Manual Task Force Assignment(s)	2022 Assignments		
First	Last	CTOC term		liaising		
Saadet Ulas	Acikgoz	through 2025		F&PD		
Mary	Am Ende	through 2024		PDD	YP	
Bryan	Boudouris	through 2025	Bylaws?			
Paul	Collins	through 2023		PD2M	SEP	ISWS
David	Dixon	through 2023	BoD	-	-	-
Lola	Eniola-Adefeso	through 2024	BoD	-	-	-
Eric	Freiburger	through 2023		S&H	DIERS	CCPS
Ben	Freireich	through 2024	Bylaws	NAMF	PubC	
Ian	Glasgow	2023 Chair-elect		UE & FA	EBPC	ILI
Zach	Hilt	through 2023	Bylaws	FBP	FP&BE	CEI
JoAnn	Lighty	2023 Chair	Operating Manual	RANTC		
Austin	Lin	through 2024		MGT		
Julie	Liu	through 2023	Bylaws*	MESD	SBE	The RES
Reza	Mostofi-Ashtiani	2023 Past Chair	Operating Manual	TEP	ChE&L	
Kanjakha	Pal	2023 YP Rep				
Alissa	Park	through 2023		CRE	PTF	
Bob	Parker	through 2024	Bylaws	CAST	CoMSE F	
Reginald	Rogers	through 2025	Bylaws?	EDU	NSEF	
Raymond	Rooks	through 2025	Bylaws?			
Fengqi	You	through 2024	Bylaws	SEF	IFS	NED

3.7. Divisions and Forums

Divisions

•Catalysis and Reaction Engineering Division	CRE
•Computing & Systems Technology Division	CAST
•Education Division	EDU
•Environmental Division	ENV
•Food, Pharmaceutical & Bioengineering Division	FP & BE
•Forest Bioproducts Division	FBP
•Fuels & Petrochemicals Division	F&PD
•Management Division	MGT
•Materials Engineering & Sciences Division	MESD
•Nuclear Engineering Division	NED
•Process Development Division	PDD
•Safety & Health Division	S&H
•Separations Division	SEP
•Transport and Energy Processes Division	TEP

Forums

•Chemical Engineering & the Law Forum	ChE&L
•Computational Molecular Science & Engineering Forum	CoMSEF
•Nanoscale Science & Engineering Forum	NSEF
•North American Mixing Forum	NAMF
•Particle Technology Forum	PTF
•Pharmaceutical Discovery, Development and Manufacturing Forum	PD2M
•Sustainable Engineering Forum	SEF
•Upstream Engineering & Flow Assurance Forum	UE & FA

Technological Communities/Industry Technology Alliances (not reporting - just liaison)

– Center for Chemical Process Safety	CCPS
– Center for Energy Initiatives	CEI
– Design Institute for Physical Properties	DIPPR
– Design Institute for Emergency Relief Systems	DIERS
– Institute for Sustainability	IFS
– International Society for Water Solutions	ISWS
– The Regenerative Engineering Society	The RES
– Society for Biological Engineering	SBE
– Safety and Chemical Engineering Education (no CTOC liaison)	SACHe

AIChE Committees with CTOC liaison

• Equipment Testing Procedures	ETP
• International (not reporting - just liaison)	International
• Executive Board of the Programming Committee	EBPC
• Public Affairs and Information (not reporting - just liaison)	PAIC
• Publications	PubC
• Research & New Technology	RANTC

Other OCs and committees

Societal Impact OC	SIOC
Continuing Education OC	CEOC
Early Career Professionals Committee	YP

3.8. RACI Description

Role	Description	Required Number of People
Responsible	Does the work to complete the task	At least 1 per task
Accountable	Delegates work and is the last one to review the task or deliverable before it's deemed complete	Limit to 1 per task
Consulted	Provides input based on how it will impact their project work or their domain of expertise on the deliverable itself	No minimum or maximum
Informed	Needs to be kept in the loop on project progress, rather than roped into details of every deliverable	No minimum or maximum