



American Institute of Chemical Engineers
Financial Statements
(Together with Independent Auditors' Report)
Years Ended December 31, 2022 and 2021



AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

**FINANCIAL STATEMENTS
(Together with Independent Auditors' Report)**

YEARS ENDED DECEMBER 31, 2022 AND 2021

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors of
American Institute of Chemical Engineers

Opinion

We have audited the financial statements of American Institute of Chemical Engineers ("AIChE"), which comprise the statements of financial position as of December 31, 2022 and 2021 and the related statements of activities, functional expenses and cash flows for the years then ended, and the related notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of AIChE as of December 31, 2022 and 2021, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America ("GAAS"). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of AIChE and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Change in Accounting Principle

As discussed in Note 7 to the financial statements, AIChE changed its method of accounting for leases as a result of the adoption of Accounting Standards Codification Topic 842, *Leases*, effective January 1, 2022, under the modified retrospective transition method. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about AIChE's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

Mayer Hoffman McCann CPAs

The New York Practice of Mayer Hoffman McCann P.C.
An Independent CPA Firm



In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of AICHE's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about AICHE's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Mayer Hoffman McCann CPAs

New York, NY
May 31, 2023

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2022 AND 2021**

	2022	2021
ASSETS		
Cash and cash equivalents (Notes 2D and 16)	\$ 2,410,337	\$ 5,210,514
Investments, at fair value (Notes 2E, 4, 7, 11B and 15)	33,256,974	39,521,555
Accounts receivable, net (Notes 2F, 2H and 18)	6,986,857	7,602,177
Contributions receivable, net (Notes 2C and 5)	16,928,937	12,332,569
Prepaid expenses and other (Note 13)	1,163,352	1,415,689
Property and equipment, net (Notes 2G and 6)	1,977,816	2,492,520
Right of use asset (Notes 2L and 7)	3,198,199	-
TOTAL ASSETS	\$ 65,922,472	\$ 68,575,024
LIABILITIES		
Accounts payable	\$ 1,832,970	\$ 1,758,300
Accounts payable to subrecipients (Note 18)	2,830,484	4,483,986
Deferred revenue - dues, subscriptions and other (Note 2H)	4,135,100	3,869,258
Lease liability (Notes 2L and 7)	3,649,274	-
Accrued expenses:		
Employee vacation and other benefits	699,736	711,939
Pension and other postretirement benefit costs (Notes 8 and 9)	2,841,906	2,826,701
Other (Notes 2I)	1,152,418	1,721,812
TOTAL LIABILITIES	17,141,888	15,371,996
COMMITMENTS AND CONTINGENCIES (Note 11)		
NET ASSETS (Note 2B)		
Without donor restrictions	19,338,296	29,746,069
With donor restrictions:		
Purpose and time-restricted for future periods (Notes 10 and 15)	24,340,553	18,672,133
Perpetual in nature (Notes 10 and 15)	5,101,735	4,784,826
	29,442,288	23,456,959
TOTAL NET ASSETS	48,780,584	53,203,028
TOTAL LIABILITIES AND NET ASSETS	\$ 65,922,472	\$ 68,575,024

The accompanying notes are an integral part of these financial statements.

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
STATEMENTS OF ACTIVITIES
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021**

	For the Year Ended December 31, 2022			For the Year Ended December 31, 2021		
	Without Donor Restrictions	With Donor Restrictions	Total 2022	Total 2021	Without Donor Restrictions	With Donor Restrictions
OPERATING ACTIVITY:						
REVENUE AND SUPPORT:						
Individual membership (Note 2H)	\$ 4,055,544	\$ -	\$ 4,055,544	\$ 3,118,675	\$ 3,118,675	\$ -
Publications sales and subscriptions	2,427,826	-	2,427,826	2,844,046	2,844,046	-
Center for Chemical Process Safety (Note 17A)	5,655,312	-	5,655,312	4,590,522	4,590,522	-
Consortium	3,124,905	-	3,124,905	2,224,590	2,224,590	-
RAPID Manufacturing Institute (Note 18)	12,206,667	-	12,206,667	14,697,681	14,697,681	-
Meetings and technical programming	7,750,305	-	7,750,305	5,656,939	5,656,939	-
Education services (Note 17B)	2,906,022	-	2,906,022	2,667,905	2,667,905	-
AIChE Foundation - contributions (Notes 1 and 2C)	420,698	11,401,637	11,822,335	8,918,830	347,280	8,571,550
Other revenue	3,598,492	-	3,598,492	1,758,694	1,758,694	-
SBA PPP loan forgiveness	-	-	-	2,497,800	2,497,800	-
Net assets released from restrictions (Note 10)	4,393,146	(4,393,146)	-	-	2,360,459	(2,360,459)
TOTAL OPERATING REVENUE AND SUPPORT	46,538,917	7,008,491	53,547,408	48,975,682	42,764,591	6,211,091
EXPENSES:						
Program Services:						
Membership	2,978,151	-	2,978,151	3,071,086	3,071,086	-
Publications	2,067,283	-	2,067,283	2,194,715	2,194,715	-
Center for Chemical Processing Safety	4,751,848	-	4,751,848	3,909,360	3,909,360	-
Consortium	2,150,831	-	2,150,831	1,929,431	1,929,431	-
RAPID Manufacturing Institute	9,953,916	-	9,953,916	11,775,501	11,775,501	-
Meetings and technical programming	8,010,154	-	8,010,154	5,711,928	5,711,928	-
Education services	3,883,104	-	3,883,104	2,828,923	2,828,923	-
Other program expenses (Note 12)	4,559,928	-	4,559,928	2,795,985	2,795,985	-
	<u>38,355,215</u>	<u>-</u>	<u>38,355,215</u>	<u>34,216,929</u>	<u>34,216,929</u>	<u>-</u>
Supporting Services:						
General and administration	6,199,661	-	6,199,661	5,196,467	5,196,467	-
Fundraising	6,287,747	-	6,287,747	4,312,639	4,312,639	-
	<u>12,487,408</u>	<u>-</u>	<u>12,487,408</u>	<u>9,509,106</u>	<u>9,509,106</u>	<u>-</u>
TOTAL OPERATING EXPENSES	50,842,623	-	50,842,623	43,726,035	43,726,035	-
Change In Net Assets From Operations	(4,303,706)	7,008,491	2,704,785	5,249,647	(961,444)	6,211,091
NON-OPERATING ACTIVITY:						
Investment activity, net (Notes 2E, 4 and 15)	(6,147,269)	(1,023,162)	(7,170,431)	3,951,094	3,524,304	426,790
Pension related changes other than net periodic pension cost (Note 8)	(97,989)	-	(97,989)	1,255,051	1,255,051	-
Other components of net periodic pension costs (Note 8)	(6,388)	-	(6,388)	(247,210)	(247,210)	-
Postretirement related changes other than net periodic postretirement cost (Note 9)	93,955	-	93,955	(40,314)	(40,314)	-
Other components related to net periodic postretirement cost (Note 9)	53,624	-	53,624	68,044	68,044	-
TOTAL NON-OPERATING ACTIVITY	(6,104,067)	(1,023,162)	(7,127,229)	4,986,665	4,559,875	426,790
CHANGE IN NET ASSETS	(10,407,773)	5,985,329	(4,422,444)	10,236,312	3,598,431	6,637,881
Net assets - beginning of year	29,746,069	23,456,959	53,203,028	42,966,716	26,147,638	16,819,078
NET ASSETS - END OF YEAR	\$ 19,338,296	\$ 29,442,288	\$ 48,780,584	\$ 53,203,028	\$ 29,746,069	\$ 23,456,959

The accompanying notes are an integral part of these financial statements.

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
STATEMENT OF FUNCTIONAL EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2022
(WITH COMPARATIVE TOTALS FOR DECEMBER 31, 2021)

	For the Year Ended December 31, 2022													
	Program Services								Supporting Services					
	Membership	Publications	CCPS	Consortium	RAPID	Meetings and Technical Programming	Education Services	Other Program Expenses	Total Program Services	General and Administration	Fundraising	Total Supporting Services	Total 2022	Total 2021
Salaries	\$ 1,154,357	\$ 820,182	\$ 2,118,063	\$ 509,376	\$ 1,044,108	\$ 2,725,473	\$ 1,876,084	\$ 586,335	\$ 10,833,978	\$ 2,941,955	\$ 847,809	\$ 3,789,764	\$ 14,623,742	\$ 14,130,388
Payroll taxes and employee benefits (Notes 8 and 9)	387,243	258,737	691,219	141,730	345,041	888,494	608,100	169,751	3,490,315	901,547	182,527	1,084,074	4,574,389	4,495,979
Total Salaries and Related Costs	1,541,600	1,078,919	2,809,282	651,106	1,389,149	3,613,967	2,484,184	756,086	14,324,293	3,843,502	1,030,336	4,873,838	19,198,131	18,626,367
FOSSI scholarship program	-	-	-	-	-	-	-	2,195,000	2,195,000	-	-	-	2,195,000	755,000
Grants and other assistance	82,517	6,005	72	546	13,586	3,677	6,971	186,005	299,379	875	164,519	165,394	464,773	466,799
Program support	-	-	-	-	-	-	-	-	-	-	4,041,676	4,041,676	4,041,676	2,318,373
Legal fees	519	1,370	5,861	2,933	597	1,842	3,018	450	16,590	41,500	287	41,787	58,387	86,122
Professional fundraising services	-	-	-	-	-	-	-	-	-	-	65,700	65,700	65,700	58,000
Other professional fees	141,444	440,533	594,366	1,164,285	458,326	691,189	615,546	378,835	4,484,524	884,987	337,100	1,222,087	5,706,611	4,701,970
Advertising and promotion	113,532	60,000	10,329	5,197	7,664	74,581	71,189	50,894	393,386	-	7,470	400,856	338,668	338,668
Office expenses	79,240	171,940	26,514	5,648	6,563	33,239	42,616	30,889	396,649	49,662	16,260	65,922	462,571	400,722
Information technology	114,269	38	-	26,000	49	100	860	193,647	334,963	3,520	5,195	8,715	343,678	421,683
Royalty	-	-	-	24,639	-	55,924	13,308	5,000	98,871	-	-	-	98,871	22,895
Occupancy (Note 7)	19,795	13,449	40,770	11,628	11,158	37,033	33,764	9,086	176,683	497,419	9,534	506,953	683,636	698,151
Travel	92,027	22,965	205,761	21,854	107,651	260,488	131,998	136,306	979,050	65,207	37,007	102,214	1,081,264	351,467
Conferences, conventions and meetings	308,596	2,225	460,991	70,872	62,694	1,629,514	22,353	345,932	2,903,177	39,934	151,825	191,759	3,094,936	807,828
Insurance	-	-	-	-	-	-	-	-	-	159,169	-	159,169	159,169	145,741
Depreciation and amortization (Note 6)	38,819	25,034	410,974	70,331	-	44,081	133,562	23,332	746,133	139,410	32,496	171,906	918,039	987,764
Payments to subrecipients	-	-	-	-	7,741,192	-	-	-	7,741,192	-	-	-	7,741,192	9,660,441
Equipment rental and maintenance	280,860	57,716	152,662	76,706	34,732	1,050,998	224,050	128,196	2,005,920	169,315	102,825	272,140	2,278,060	1,399,194
Printing and publications	56,406	64,867	10,845	3,033	18,100	72,522	31,460	25,057	282,290	244	26,779	27,023	309,313	186,876
Telephone	10,010	4,864	16,326	7,357	4,766	73,714	15,664	13,033	145,734	77,180	6,537	83,717	229,451	212,376
Bank charges/credit card fees	98,517	6,121	7,095	2,440	3,190	250,008	36,810	28	404,209	81,943	8,164	90,107	494,316	370,977
Miscellaneous and dues	-	111,237	-	6,256	94,499	117,277	15,751	82,152	427,172	145,794	244,027	389,821	816,993	708,621
Total Other than Personal Services	1,436,551	988,364	1,942,566	1,499,725	8,564,767	4,396,187	1,398,920	3,803,842	24,030,922	2,356,159	5,257,411	7,613,570	31,644,492	25,099,868
TOTAL EXPENSES	\$ 2,978,151	\$ 2,067,283	\$ 4,751,848	\$ 2,150,831	\$ 9,953,916	\$ 8,010,154	\$ 3,883,104	\$ 4,559,928	\$ 38,355,215	\$ 6,199,661	\$ 6,287,747	\$ 12,487,408	\$ 50,842,623	\$ 43,726,035

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
STATEMENT OF FUNCTIONAL EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2021**

	Program Services							Supporting Services				Total 2021	
	Membership	Publications	CCPS	Consortium	RAPID	Meetings and Technical Programming	Education Services	Other Program Expenses	Total Program Services	General and Administration	Fundraising		Total Supporting Services
Salaries	\$ 1,269,661	\$ 998,850	\$ 2,032,690	\$ 531,977	\$ 1,148,448	\$ 2,369,896	\$ 1,370,200	\$ 706,585	\$ 10,428,307	\$ 2,872,974	\$ 829,107	\$ 3,702,081	\$ 14,130,388
Payroll taxes and employee benefits (Notes 8 and 9)	442,173	341,018	717,218	172,028	424,376	784,959	460,071	231,608	3,573,451	748,656	173,872	922,528	4,495,979
Total Salaries and Related Costs	1,711,834	1,339,868	2,749,908	704,005	1,572,824	3,154,855	1,830,271	938,193	14,001,758	3,621,630	1,002,979	4,624,609	18,626,367
FOSSI scholarship program	-	-	-	-	-	-	-	755,000	755,000	-	-	-	755,000
Grants and other assistance	106,498	3,391	89	54	3,000	93,220	91	190,474	396,817	1,593	68,389	69,982	466,799
Legal fees	-	-	178	23,826	26,302	675	-	-	50,981	35,141	-	35,141	86,122
Program support	-	-	-	-	-	-	-	-	-	-	2,318,373	2,318,373	2,318,373
Professional fundraising services	-	-	-	-	-	-	-	-	-	-	58,000	58,000	58,000
Other professional fees	371,648	417,058	554,319	948,607	308,617	776,093	556,960	124,266	4,057,568	326,630	317,772	644,402	4,701,970
Advertising and promotion	55,794	28,157	7,437	20,530	6,324	108,645	46,057	58,885	331,829	-	6,839	6,839	338,668
Office expenses	56,472	130,153	17,121	3,689	16,625	23,498	24,310	44,525	316,393	53,714	30,615	84,329	400,722
Information technology	110,940	-	-	26,000	199	-	-	276,499	413,638	-	8,045	8,045	421,683
Royalty	-	-	-	15,789	-	-	7,106	-	22,895	-	-	-	22,895
Occupancy (Note 7)	23,352	15,876	43,038	8,930	13,971	51,015	23,922	9,550	189,654	498,840	9,657	508,497	698,151
Travel	29,603	10,624	8,294	2,274	37,007	109,118	48,841	57,236	302,997	30,708	17,762	48,470	351,467
Conferences, conventions and meetings	215,955	10	12,764	157	23,665	321,637	478	111,094	685,760	660	121,408	122,068	807,828
Insurance	-	-	-	-	-	-	-	-	-	145,741	-	145,741	145,741
Depreciation and amortization (Note 6)	53,270	27,098	462,416	63,694	-	88,843	103,822	28,962	828,105	133,838	25,821	159,659	987,764
Payments to subrecipients	-	-	-	-	9,660,441	-	-	-	9,660,441	-	-	-	9,660,441
Equipment rental and maintenance	202,250	39,216	34,752	51,105	18,102	669,683	114,516	88,548	1,218,172	138,827	42,195	181,022	1,399,194
Printing and publications	49,028	56,260	2,526	3	11,727	31,496	8,851	11,396	171,287	80	15,509	15,589	186,876
Telephone	16,787	7,289	10,390	8,973	6,630	70,189	16,278	13,379	149,915	51,351	11,110	62,461	212,376
Bank charges/credit card fees	67,655	4,370	6,128	1,888	4,606	175,052	25,637	608	285,944	79,489	5,544	85,033	370,977
Miscellaneous and dues	-	115,345	-	49,907	65,461	37,909	21,783	87,370	377,775	78,225	252,621	330,846	708,621
Total Other than Personal Services	1,359,252	854,847	1,159,452	1,225,426	10,202,677	2,557,073	998,652	1,857,792	20,215,171	1,574,837	3,309,660	4,884,497	25,099,668
TOTAL EXPENSES	\$ 3,071,086	\$ 2,194,715	\$ 3,909,360	\$ 1,929,431	\$ 11,775,501	\$ 5,711,928	\$ 2,828,923	\$ 2,795,985	\$ 34,216,929	\$ 5,196,467	\$ 4,312,639	\$ 9,509,106	\$ 43,726,035

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021**

	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES:		
Change in net assets	\$ (4,422,444)	\$ 10,236,312
Adjustments to reconcile change in net assets to net cash (used in) provided by operating activities:		
Realized and unrealized loss (gain) on investments	8,027,328	(3,362,627)
Depreciation and amortization	918,039	987,764
Endowment contributions	(316,908)	(782,072)
SBA PPP loan forgiveness	-	(2,497,800)
Non-cash adjustment on operating leases	482,965	-
Bad debt expense	57,620	29,920
Subtotal	4,746,600	4,611,497
Changes in operating assets and liabilities:		
Decrease or (increase) in assets:		
Accounts receivable	615,320	5,570,228
Contributions receivable	(4,653,988)	(2,532,776)
Prepaid expenses and other	252,337	(848,605)
Increase (decrease) in liabilities:		
Accounts payable	74,670	754,542
Accounts payable to subrecipients	(1,653,502)	(2,052,472)
Deferred revenue	265,842	39,527
Lease liability	(504,085)	-
Accrued expenses:		
Employee vacation and other benefits	(12,203)	(45,053)
Pension and other postretirement benefit costs	15,205	(1,056,148)
Other	(97,199)	(514,842)
Net Cash (Used in) Provided by Operating Activities	(951,003)	3,925,898
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of investments	(46,808,827)	(4,680,075)
Proceeds from the sale of investments	45,046,080	2,920,554
Purchases of property and equipment	(403,335)	(564,238)
Net Cash Used in Investing Activities	(2,166,082)	(2,323,759)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Endowment contributions	316,908	782,072
Net Cash Provided by Financing Activities	316,908	782,072
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(2,800,177)	2,384,211
Cash and cash equivalents - beginning of year	5,210,514	2,826,303
CASH AND CASH EQUIVALENTS - END OF YEAR	\$ 2,410,337	\$ 5,210,514
Supplemental Disclosure of Cash Flow Information:		
Noncash Financing Activity:		
SBA PPP loan forgiveness	\$ -	\$ 2,497,800

The accompanying notes are an integral part of these financial statements.

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2022 AND 2021**

NOTE 1 – ORGANIZATION AND NATURE OF ACTIVITIES

American Institute of Chemical Engineers (“AIChE”) is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code (“IRC”). AIChE serves chemical engineers throughout the world. AIChE fosters and disseminates chemical engineering knowledge, supports professional and personal growth of its members, and applies the expertise of its members to address societal needs throughout the world. AIChE offers its members publications, meetings and technical programming. These products and services promote excellence in chemical engineering education and global practice, advance the development and exchange of relevant knowledge, and enhance the lifelong career development of chemical engineers. Through its industry technology groups, AIChE stimulates collaborative efforts among industry, universities, government and professional societies.

In 2016, AIChE was selected by the U.S. Department of Energy to establish a manufacturing institute on *Modular Chemical Process Intensification*. The RAPID Manufacturing Institute (“RAPID” – Rapid Advancement in Process Intensification Deployment) is part of a federal government initiative on advanced manufacturing, established to enhance the competitiveness of U.S. manufacturing, while improving energy efficiency of the sector as a whole. See Note 18.

The AIChE Foundation is not a separate entity. It seeks to solicit additional financial support for AIChE’s programs.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. *Basis of Accounting and Use of Estimates*

The accompanying financial statements have been prepared on the accrual basis of accounting. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

B. *Net Assets - Basis of Presentation*

Net assets, revenues, gains, and losses are classified based on the existence or absence of donor or grantor-imposed restrictions. Accordingly, net assets and changes therein are classified and reported as follows:

- *Net Assets Without Donor Restrictions* – Resources available for support of AIChE’s operations over which the Board of Directors has discretionary control.
- *Net Assets With Donor Restrictions* – Net assets subject to donor- (or certain grantor) imposed restrictions. Some donor-imposed restrictions are temporary in nature, such as those that will be met by the passage of time or other events specified by the donor. Other donor-imposed restrictions are perpetual in nature, where the donor stipulates that resources be maintained in perpetuity. Donor-imposed restrictions are released when a restriction expires, that is, when the stipulated time has elapsed, when the stipulated purpose for which the resource was restricted has been fulfilled, or both.

C. *Contributions and Pledges Receivable*

Unconditional contributions and pledges that are expected to be collected within one year are recorded at net realizable value. Unconditional contributions and pledges that are expected to be collected in future years are recorded at the present value of their estimated future cash flows, less a 1% reserve allowance for bad debt as of December 31, 2022 and 2021, respectively. The reserve allowance for bad debt amounted to approximately \$183,000 and \$125,000 as of December 31, 2022 and 2021, respectively. The discounts on those amounts are computed using risk-adjusted interest rates applicable to the years in which the promises are received. Amortization of the discounts is included in contribution revenue. Conditional contributions, including government and other grants and pledges, are nonexchange transactions and accounted for under Financial Accounting Standards Board (“FASB”) Accounting Standards Update (“ASU”) 2018-08. Conditional contributions, grants and pledges are recognized as revenue when barriers within the contracts are overcome, and there is no right of return. AIChE did not receive advances from governmental or other sources as of December 31, 2022 and 2021.

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NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

As of December 31, 2022 and 2021, AIChE received conditional grants from governmental and other agencies in the aggregate amount of approximately \$10,900,000 and \$20,600,000, respectively, that have not been recognized in the accompanying financial statements as they have not been earned.

D. *Cash Equivalents*

AIChE considers highly liquid debt instruments with a maturity of three months or less when acquired to be cash equivalents, with the exception of cash and those short-term investments managed by AIChE's investment managers for long-term investment purposes.

E. *Investments and Fair Value Measurements*

Investments are reported at fair value based upon quoted market value. Securities transactions are recorded on a trade-date basis. Realized gains and losses on sales of investments are determined on a specific identification basis and are included in investment activity in the statements of activities along with unrealized gains and losses, interest income and management and custodial fees. Interest income is recognized when earned and dividends are recorded on the ex-dividend date.

Fair value measurements are based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In order to increase consistency and comparability in fair value measurements, a fair value hierarchy prioritizes observable and unobservable inputs used to measure fair value into three levels, as described in Note 4.

F. *Allowance for Uncollectible Accounts Receivable*

As of December 31, 2022 and 2021, AIChE determined that an allowance of approximately \$25,000 and \$73,000, respectively, should be provided for accounts receivable. Such estimates are based on management's assessment of the aged basis of its funding sources, customers, current economic conditions and historical information.

G. *Property and Equipment*

Property and equipment is stated at cost less accumulated depreciation and amortization and depreciated using the straight-line basis over their estimated useful lives. Leasehold improvements are amortized over the lesser of their useful lives or the term of the lease. AIChE capitalizes all assets with a cost of \$5,000 or more and a useful life of more than one year.

H. *Revenue Recognition*

AIChE recognizes revenue through the five step model described by FASB in the Accounting Standards Codification ("ASC") Topic 606, *Revenue from Contracts with Customers*: (1) identification of the contract with a customer; (2) identification of the performance obligations in the contracts; (3) determination of the transaction price; (4) allocation of the transaction price to the performance obligations in the contracts; and (5) recognition of revenue when a performance obligation is met.

Corporate and Professional Membership dues and licenses are recognized as revenue over the period to which they apply and are billed in the year prior to which they apply. Membership dues and licenses collected in the year of billing, represent revenue for the following year and therefore are recorded as deferred revenue. Revenue from publication sales and subscriptions, including royalties is recognized based on the issue date frequency of monthly, quarterly, or bi-monthly. Publication sales and subscriptions billed and collected in the year prior to which they apply, represent revenue for the following year and therefore are recorded as deferred revenue. Meetings and technical programming services, including registrations, sponsorships and exhibits are recognized as revenue based on the end date of the meeting event. Education services revenue are recognized mainly upon the end date of the event or upon invoice.

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2022 AND 2021**

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Accounts receivable for all revenue sources are not recorded until the year in which the revenues are earned. All payments collected in the year subsequent to billing are recognized as revenue in that specific year.

The timing of billings, cash collections and revenue recognition results in accounts receivable and deferred revenue on the accompanying statements of financial position. Deferred revenue amounted to approximately \$4,135,000, \$3,869,000 as of December 31, 2022 and 2021 and \$3,830,000 as of January 1, 2021, respectively. Accounts receivable amounted to approximately \$2,165,000, \$1,318,000 as of December 31, 2022 and 2021 and \$1,090,000 as of January 1, 2021, respectively.

Government contracts and grants are recorded as revenues to the extent that expenses have been incurred for the purposes specified by the grantors and funding sources. The excess of contract and grant expenditures over receipts is recognized as accounts receivable, while the excess of contract and grant receipts over expenditures is reported as deferred revenue. Dues and subscriptions are billed in the year prior to which they apply. Dues and subscriptions collected in the year of billing represents revenue for the following year and therefore are recorded as deferred revenue. Accounts receivable for dues and subscriptions are not recorded until the year in which they become due. Dues payments collected in the year subsequent to billing are recognized as revenue in that specific year.

AIChE recognizes revenue from the RAPID grant when the contractual obligations are met. Cost recovery occurs when the grants awarded provide for reimbursement of budgeted expenditures incurred within the grant period. The funds are received in increments based on expenditures or milestones for the period.

I. *Straight-Lining of Rent Expense*

Through December 31, 2021, rent expense was recognized using the straight-line method over the term of the leases. The difference between rent expense incurred and the amount paid, which is attributable to scheduled rent increases, is reported as a liability in the accompanying statements of financial position.

J. *Functional Allocation of Expenses*

The costs of program and supporting services activities have been summarized on a functional basis in the statements of activities. The statements of functional expenses present the natural classification detail of expenses by function. Accordingly, certain costs have been allocated among the programs and supporting services benefited.

The financial statements report certain categories of expenses that are attributed to more than one program or supporting function. Therefore, expenses require allocation on a reasonable basis that is consistently applied. The expenses that are allocated include occupancy, which is allocated based on headcount, as well as salaries, wages and benefits, payroll taxes, insurance, professional services, office expenses, information technology, and other expenses, which are allocated mainly on the basis of estimates of time and effort. Expenses that can be identified with a specific program or support service are charged directly to that program or support service.

K. *Reclassification*

Certain line items of the December 31, 2021 statement of activities and statement of functional expenses have been reclassified to conform to the December 31, 2022 presentation. Industry Technology Group (ITG) previously reported as one category is now broken out to Center for Chemical Process Safety (CCPS), Consortium, RAPID Manufacturing Institute and Meetings and Technical Programming. Financial Services that was previously reported in Other Programs is now reported under Individual Membership. Such reclassifications have no effect on previously reported net assets.

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2022 AND 2021**

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

L. *Recent Accounting Pronouncement*

FASB Accounting Standards Update (“ASU”) 2016-02, *Leases* (Topic 842), which supersedes existing guidance for accounting for leases under *Topic 840, Leases* was adopted during the year ended December 31, 2022. The most significant change in the new leasing guidance is the requirement to recognize right-of-use (“ROU”) assets and lease liabilities for operating leases on the statement of financial position.

AIChE elected to adopt Topic 842 effective January 1, 2022 and utilized all of the available practical expedients. The adoption had a material impact on AIChE’s statements of financial position but did not have a material impact on the statements of activities. The most significant impact was the recognition of Right-of-Use (“ROU”) assets and lease liabilities for operating leases. Adoption of the standard required AIChE to record an increase in operating lease ROU assets of approximately \$3,689,000 and lease liabilities \$4,161,000 as of January 1, 2022.

NOTE 3 – LIQUIDITY AND AVAILABILITY

AIChE regularly monitors liquidity required to meet its operating needs and other contractual commitments, while also striving to maximize the investment of its available funds. AIChE has various sources of liquidity at its disposal, including cash and cash equivalents and marketable debt and equity securities.

Financial assets available for general expenditure, that is, without donor or other restrictions limiting their use, within one year of the statements of financial position date, comprise the following as of December 31:

	2022	2021
Cash and cash equivalents	\$ 2,410,337	\$ 5,210,514
Accounts receivable	4,156,374	3,118,191
Contributions receivable due in less than one year	5,114,753	4,206,098
Operating investments	3,525,813	15,775,741
	\$ 15,207,277	\$ 28,310,544

In addition, AIChE has a line of credit totaling \$2.8 million with a financial institution, which can be drawn upon if needed (see Note 11B).

AIChE’s endowment funds consist of donor-restricted endowments. Income from donor-restricted endowments is restricted for specific purposes, except for the amounts available for general use. Donor-restricted endowment funds are not available for general expenditure.

NOTE 4 – INVESTMENTS AND FAIR VALUE MEASUREMENTS

Investments consisted of the following at December 31 and were classified as Level 1 in the fair value hierarchy (as defined below):

	2022	2021
Mutual Funds	\$ 30,854,694	\$ 38,650,466
Money Market Mutual Funds	2,368,785	857,771
Equity securities – domestic	33,495	13,318
Total investments	\$ 33,256,974	\$ 39,521,555

Investments are subject to market volatility that could change their carrying value in the near term.

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
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NOTE 4 – INVESTMENTS AND FAIR VALUE MEASUREMENTS

Investment activity consisted of the following for the years ended December 31:

	<u>2022</u>	<u>2021</u>
Interest and dividends	\$ 928,247	\$ 686,056
Net realized and unrealized (loss) gain	(8,027,328)	3,362,627
Investment fees	<u>(71,350)</u>	<u>(97,589)</u>
Total investments	<u>\$ (7,170,431)</u>	<u>\$ 3,951,094</u>

In determining fair value, AIChE utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible in its assessment of fair value.

The fair value hierarchy defines three levels as follows:

Level 1: Valuations based on quoted prices (unadjusted) in an active market that are accessible at the measurement date for identical assets or liabilities. The fair value hierarchy gives the highest priority to Level 1 inputs. Level 1 valuations are obtained from real-time quotes for transactions in active exchange markets involving identical assets.

Level 2: Valuations based on observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in inactive markets; or model-derived valuations in which all significant inputs are observable or can be derived principally from or corroborated with observable market data.

Level 3: Valuations based on unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

In determining fair value, AIChE utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible in its assessment of fair value.

NOTE 5 – CONTRIBUTIONS RECEIVABLE

Contributions receivable consisted of the following as of December 31:

	<u>2022</u>	<u>2021</u>
Amounts due in:		
Less than one year	\$ 5,114,753	\$ 4,206,098
One to five years	<u>13,162,577</u>	<u>8,309,228</u>
Gross contributions receivable	18,277,330	12,515,326
Less: allowance for uncollectible contributions	(182,773)	(125,153)
Less: discount to present value at 4.73% and .38%	<u>(1,165,620)</u>	<u>(57,604)</u>
	<u>\$ 16,928,937</u>	<u>\$ 12,332,569</u>

NOTE 6 – PROPERTY AND EQUIPMENT

Property and equipment consisted of the following as of December 31:

	<u>2022</u>	<u>2021</u>	<u>Estimated Useful Lives</u>
Furniture and fixtures	\$ 489,655	\$ 489,655	3-5 Years
Computer and office equipment	7,700,863	7,297,528	3-10 Years
Leasehold improvements	<u>192,454</u>	<u>192,454</u>	15 Years
Total cost	8,382,972	7,979,637	
Less: accumulated depreciation/amortization	<u>(6,405,156)</u>	<u>(5,487,117)</u>	
Net book value	<u>\$ 1,977,816</u>	<u>\$ 2,492,520</u>	

Depreciation and amortization expense amounted to \$918,039 and \$987,764 for the years ended December 31, 2022 and 2021, respectively.

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2022 AND 2021**

NOTE 7 – LEASES

AIChE has a lease agreement for the rental of office space in New York City for a term of fifteen years that commenced in August 2013. There is a one-time renewal option to extend the term of the lease for an additional five years. The lease agreement also provides for a free rental period commencing on the commencement date. In addition, tax abatements reduce the base rents by approximately \$82,000 per year. In addition to the base monthly rent, AIChE is required to pay additional rent for its share of operating expense escalations. As disclosed in Note 2L, AIChE adopted FASB ASC 842 as of January 1, 2022 as an operating lease that had no impact to the prior year statement of financial position or its change in net assets. Comparative information provided in the following paragraphs was determined using the accounting principles in effect as of and the for the year ended December 31, 2021 (i.e. ASC 840). No comparative information is provided for the amounts reported on the statement of financial position as of December 31, 2021 since AIChE used the modified retrospective method of transition that does not require restating the prior period.

As of December 31, 2022, the right-of-use (“ROU”) asset and lease liability had a balance of \$3,198,199 and \$3,649,274, respectively, as shown in the statements of financial position. The ROU asset and liability were calculated utilizing AIChE’s incremental borrowing rate of (2.125%), according to AIChE’s elected policy. There is an option to renew the lease, which is not considered when assessing the value of the ROU asset because AIChE is not reasonably certain that it will exercise its option to renew the lease.

As of December 31, 2019, AIChE substituted an irrevocable standby letter of credit in the amount of \$288,855 in lieu of a security deposit for its office lease in New York. The letter of credit expires in April 2029 and is secured by mutual funds and money market funds owned by AIChE and held at the financial institution that issued the letter of credit.

AIChE also has a lease agreement for the rental of office space in Connecticut which expires on December 31, 2025 and has annual base rental charges of approximately \$34,000 over the lease term with no escalations.

The operating lease costs for the years ended December 31, 2022 and 2021, amounted to approximately \$554,000 and \$531,000, respectively. The cash paid by AIChE in the determination of lease liability as of December 31, 2022 amounted to approximately \$504,000. The weighted average of the remaining lease term is approximately 6 years and the weighted average discount rate is 2.125%.

Approximate future lease payments are as follows for the five years ending after December 31, 2022 and thereafter:

2023	\$ 588,000
2024	632,000
2025	651,000
2026	617,000
2027	617,000
Thereafter	<u>798,000</u>
Total lease payments	3,903,000
Less: Present value discount	<u>(254,000)</u>
Present value of lease liabilities	<u>\$ 3,649,000</u>

NOTE 8 – PENSION PLANS

Through December 31, 2005, AIChE had an active noncontributory, defined benefit pension plan covering all full-time employees, unless the employee was covered by another retirement plan, via a collective bargaining agreement. As of December 31, 2005, AIChE froze this plan. AIChE continues to maintain this plan for all plan participants; however, further benefits and new participants have not been provided since December 31, 2005. The benefits are based on years of service through December 31, 2005 and the employee’s average pay. Average pay is defined as the highest average of basic annual pay including any overall incentive program compensation during any 36 consecutive months within the 120-month period prior to December 31, 2005. AIChE’s funding policy is to contribute such amounts as are necessary on an actuarial basis to provide the plan with assets sufficient to provide benefits to plan participants.

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2022 AND 2021**

NOTE 8 – PENSION PLANS (CONTINUED)

AIChE also maintains a qualified contributory defined contribution retirement plan pursuant to IRS Section 403(b) for its employees. Employees, who have attained the age of 21, are eligible to participate in employer contributions after completing 500 hours of service within the 6-month time period following their date of hire. Under the terms of the plan, employees are entitled to defer a portion of their annual compensation within limitations established by the IRC. AIChE matches each employee's contribution, up to a maximum of 3% of base annual compensation. Contributions are deemed to be vested upon completion of two years of employment. AIChE's contributions under the plan amounted to \$303,614 and \$305,319 for the years ended December 31, 2022 and 2021, respectively.

As a substitute for the defined benefit plan, which was frozen on December 31, 2005, AIChE added, effective January 1, 2006, a noncontributory element to the defined contribution retirement plan, whereby AIChE contributes an amount based on the employee's total compensation. AIChE's discretionary contributions to the 403(b) plan amounted to \$980,167 and \$995,896 for the years ended December 31, 2022 and 2021, respectively.

The funded status of the defined benefit plan as of December 31 was as follows:

	<u>2022</u>	<u>2021</u>
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 11,929,142	\$ 12,983,177
Interest cost	337,537	334,309
Actuarial gain	(1,846,733)	(282,312)
Settlements	(377,360)	(753,971)
Benefits paid	<u>(357,776)</u>	<u>(352,061)</u>
Benefit obligation at end of year	9,684,810	11,929,142
Fair value of plan assets	<u>7,422,132</u>	<u>9,854,045</u>
Funded status	<u>\$ (2,262,678)</u>	<u>\$ (2,075,097)</u>

Amounts recognized in accumulated change in net assets without donor restrictions consisted of the following as of December 31:

	<u>2022</u>	<u>2021</u>
Net loss	<u>\$ (2,312,757)</u>	<u>\$ (2,214,768)</u>

The components of net periodic benefit cost for the pension plan for the years ended December 31 were as follows:

	<u>2022</u>	<u>2021</u>
Interest cost	\$ 337,537	\$ 334,309
Expected return on plan assets	(572,505)	(579,348)
Amortization of net loss	<u>241,356</u>	<u>492,249</u>
	<u>\$ 6,388</u>	<u>\$ 247,210</u>

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2022 AND 2021**

NOTE 8 – PENSION PLANS (CONTINUED)

Other changes in plan assets and benefit obligations recognized in the change in net assets without donor restrictions for the years ended December 31 were as follows:

	<u>2022</u>	<u>2021</u>
Net loss (gain)	\$ 429,460	\$ (622,819)
Effect of settlement on loss	(90,115)	(139,983)
Amortization of net loss	<u>(241,356)</u>	<u>(492,249)</u>
Total recognized in change in net assets without donor restrictions	<u>\$ (97,989)</u>	<u>\$ (1,255,051)</u>
Total recognized in net periodic pension cost and change in net assets without donor restrictions	<u>\$ (194,492)</u>	<u>\$ (867,858)</u>

An accounting event occurred which resulted in a settlement as of December 31, 2022 and 2021 resulting from the lump sum payments distributed during the year.

The weighted-average assumptions used to determine the benefit obligation and net periodic benefit cost for the pension plan as of and for the years ended December 31 were as follows:

	<u>2022</u>	<u>2021</u>
Discount rate used for net periodic benefit cost	3.15%	3.15%
Discount rate used for pension obligation	5.50%	3.15%
Expected return on plan assets	6.70%	6.70%

The defined benefit plan's expected rate of return on plan assets is determined by the plan assets' historical long-term investment performance, current asset allocation, and estimates of future long-term returns by asset class.

AIChE does not expect to contribute to the pension plan in fiscal year 2023.

The following schedule of benefit payments for the pension plan, which reflects expected future services, as appropriate, are expected to be paid in each of the next five years and in the aggregate for the five years thereafter:

2023	\$ 848,242
2024	422,267
2025	904,540
2026	672,670
2027	390,650
5 years thereafter	3,762,765

The assets (expressed in percentages) for the pension plan consisted of the following as of December 31:

	<u>2022</u>	<u>2021</u>
Equity securities	59%	61%
Debt securities	34%	37%
Cash equivalents	<u>7%</u>	<u>2%</u>
	<u>100%</u>	<u>100%</u>

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2022 AND 2021**

NOTE 8 – PENSION PLANS (CONTINUED)

The fair value hierarchy defines three levels, as further described in Note 4. Pension assets carried at fair value at December 31 are classified in the table as Level 1 as follows:

	<u>2022</u>		<u>2021</u>
Investments:			
Mutual Funds	\$ 6,906,551	\$	9,648,129
Money Market Mutual Funds	515,581		205,916
Total assets at fair value	\$ 7,422,132	\$	9,854,045

The composition of AIChE’s plan assets is a target asset mix allocated 60% to equities, 38% to fixed-income securities and 2% to cash and cash equivalents. Since the primary purpose of the plan is to provide benefits at normal retirement age, the primary goal of the investment of funds in the plan is to provide a long-term annualized investment return equivalent or superior to the plan’s current discount rate, and consistently above the median performance of an appropriate peer manager universe.

In pursuing these objectives, the risk tolerance of the plan should be viewed as moderate. Volatility of annual returns, including losses in value, may be tolerated provided they are consistent with current benchmark volatility and there are reasonable expectations the plan can achieve its long-term return objectives. Volatility will be reduced by assuring that the plan assets remain diversified by asset class, economic sector, industry, and/or market capitalization. The target asset mix is developed and periodically reviewed based on rolling three to seven-year strategic investment horizons. Assets are generally rebalanced back to their respective targets to ensure the actual asset allocations remain an accurate reflection of the desired risk profile.

NOTE 9 – POSTRETIREMENT OTHER THAN PENSIONS

AIChE has a contributory postretirement medical and life insurance plan for all eligible employees. As of February 1, 2007, each participant was eligible to receive benefits at age 55 with the completion of five years of service, or attainment of age 62 or age 60 in the case of a position elimination. Prior to February 1, 2007, each participant was eligible to receive benefits at age 55 and 10 years of service, or age 62 or age 60 if the position was eliminated. Employees hired after February 1, 2007 were eligible to purchase coverage under the postretirement medical plan, but were not eligible for any subsidy from AIChE. In addition, employees hired after February 1, 2007 were not eligible to receive postretirement life insurance benefits. Coverage for both the retiree and the spouse continued for their lifetimes, so long as required contributions were made. AIChE contributed an amount equal to the difference between the medical plan cost and the retiree’s contributions for medical coverage, up to a limit of two times AIChE’s contribution paid in 1995 for such coverage.

Effective December 1, 2016, the postretirement medical plan was amended to change coverage for current retirees to a Health Reimbursement Account (“HRA”) funded by annual contributions from AIChE. Such change decreased the benefit obligation by approximately \$336,000 in 2016.

During 2017, AIChE further reduced the benefit obligation by providing future retirees with a one-time payment of \$10,000 into a second HRA account. Upon retirement, AIChE will fund the HRA for future retirees with a Normal Retirement Date (NRD) between December 1, 2016 and December 1, 2023. As of December 31, 2022 and 2021, the accumulated postretirement benefit obligation related to the HRAs was \$108,765 and \$129,743, respectively.

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
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NOTE 9 – POSTRETIREMENT OTHER THAN PENSIONS (CONTINUED)

The funded status of the plan as of December 31 was as follows:

	<u>2022</u>	<u>2021</u>
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 751,604	\$ 806,142
Service cost	1,090	1,133
Interest cost	22,746	21,272
Actuarial gain	(170,325)	(49,002)
Benefits paid	<u>(25,887)</u>	<u>(27,941)</u>
Benefit obligation at end of year	<u>579,228</u>	<u>751,604</u>
Funded status	<u>\$ (579,228)</u>	<u>\$ (751,604)</u>

Amounts recognized in net assets without donor restrictions for the plan consisted of the following as of December 31:

	<u>2022</u>	<u>2021</u>
Prior service credit	\$ -	\$ 51,307
Gain	<u>341,427</u>	<u>196,165</u>
	<u>\$ 341,427</u>	<u>\$ 247,472</u>

The components of net periodic benefit income for the years ended December 31 were as follows:

	<u>2022</u>	<u>2021</u>
Interest cost	\$ 22,746	\$ 21,272
Amortization of prior service credit	(51,307)	(73,163)
Amortization of net gain	<u>(25,063)</u>	<u>(16,153)</u>
Net periodic benefit income	<u>\$ (53,624)</u>	<u>\$ (68,044)</u>

Other changes in plan assets and benefit obligations recognized in the change in net assets without donor restrictions for the years ended December 31 were as follows:

	<u>2022</u>	<u>2021</u>
Actuarial gain	\$ (170,325)	\$ (49,002)
Amortization of prior service credit	51,307	73,163
Amortization of net gain	<u>25,063</u>	<u>16,153</u>
Total recognized in change in net assets without donor restrictions	<u>\$ (93,955)</u>	<u>\$ 40,314</u>
Total recognized in net periodic pension cost and change in net assets without donor restrictions	<u>\$ (146,489)</u>	<u>\$ (26,597)</u>

The estimated net gain and prior service credit for the plan that will be amortized from the net asset without restrictions balance into net periodic benefit cost over the next fiscal year is \$77,000 and \$0, respectively.

**AMERICAN INSTITUTE OF CHEMICAL ENGINEERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2022 AND 2021**

NOTE 9 – POSTRETIREMENT OTHER THAN PENSIONS (CONTINUED)

The weighted-average assumptions to determine the benefit obligation and net periodic benefit cost as of and for the years ended December 31 were as follows:

	<u>2022</u>	<u>2021</u>
Discount rate used for net periodic benefit cost	3.15%	2.75%
Discount rate used for benefit obligations	5.50%	3.15%

The following schedule of benefit payments (net of expected participant contributions), which reflects expected future services, as appropriate, are expected to be paid in each of the next five years and in the aggregate for the five years thereafter:

2023	\$	57,416
2024		77,759
2025		46,366
2026		45,024
2027		43,723
5 years thereafter		203,209

NOTE 10 – NET ASSETS WITH DONOR RESTRICTIONS

Net assets with donor restrictions as of December 31 were available for the following purposes:

	<u>2022</u>	<u>2021</u>
Subject to expenditures for specific purpose and the passage of time		
Award programs for scholastic achievements	\$ 98,765	\$ 383,644
Educational and professional development	24,168,927	18,055,013
Public and government outreach and other	<u>72,861</u>	<u>233,476</u>
Subtotal	<u>24,340,553</u>	<u>18,672,133</u>
Subject to endowment spending policy and appropriation of income		
Award programs for scholastic achievements	3,000,633	2,792,349
Educational and professional development	920,305	852,138
Public and government outreach and other	<u>1,180,797</u>	<u>1,140,339</u>
Subtotal	<u>5,101,735</u>	<u>4,784,826</u>
Total net assets with donor restrictions	<u>\$ 29,442,288</u>	<u>\$ 23,456,959</u>

Net assets were released from donor restrictions by incurring expenses satisfying the restricted purposes or by the occurrence of other events specified by donors during the years ended December 31 as follows:

	<u>2022</u>	<u>2021</u>
Award programs for scholastic achievements	\$ 149,176	\$ 38,814
Educational and professional development	4,226,754	2,293,599
Public and government outreach and other	<u>17,216</u>	<u>28,046</u>
	<u>\$ 4,393,146</u>	<u>\$ 2,360,459</u>

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NOTE 11 – COMMITMENTS AND CONTINGENCIES

A. *Meeting Commitments*

In the ordinary course of business, AIChE has entered into contracts with hotels for meetings scheduled to occur beyond December 31, 2022 and 2021. In connection with the contracts, AIChE commits to a block of hotel rooms. AIChE is subject to cancellation penalties, which increase as the meeting dates approach. Cancellation penalties due to catastrophic events for significant meetings scheduled for the year following the statement of financial position date are covered under AIChE's insurance policies. In the very unlikely event AIChE had to cancel all the meetings scheduled beyond 2022 and 2021 that are under contract, it would incur approximately \$9.8 million and \$8.7 million, respectively, in cancellation charges. AIChE is subject to negotiable penalties in the event meeting attendees do not utilize the rooms.

B. *Line of Credit*

AIChE has a line of credit with a financial institution. The line of credit has a maximum borrowing amount of \$2,800,000 and expires on October 5, 2023. Borrowings are secured by mutual funds and money market funds owned by AIChE and held at the same financial institution. Interest is at the daily Simple Secured Overnight Financing Rate ("SOFR") plus 2%. This line of credit has no loan covenants. As of December 31, 2022 and 2021 and May 31, 2023, there were no borrowings.

C. *Uncertainty in Income Taxes*

AIChE believes it had no uncertain tax positions as of December 31, 2022 and 2021 in accordance with FASB ASC Topic 740, "Income Taxes," which provides standards for establishing and classifying any tax provisions for uncertain tax positions.

NOTE 12 – OTHER PROGRAM EXPENSES

Other program expenses reflect the decision by the Board of Directors that certain operations should be supported from surpluses from self-supporting operations, other operating revenues, and a portion of investment return. Certain other amounts, as approved by the Board of Directors, are also available for operating purposes. The supported programs include the following for the years ended December 31:

	<u>2022</u>	<u>2021</u>
Subsidized activities include the governance of AIChE, public and governmental outreach programs, and support for the chemical engineering profession	<u>\$ 4,559,928</u>	<u>\$ 2,795,985</u>

NOTE 13 – CHARITABLE REMAINDER TRUSTS

AIChE is the beneficiary of remainder interests in certain charitable trusts. Upon the expiration of the trust terms (defined as the death of the surviving beneficiaries), AIChE shall receive the trusts' assets, which consists of certain fixed income and equity securities. As of December 31, 2022 and 2021, the value of the interest in the charitable remainder trusts was determined by estimating the future value of the trusts' assets as of the expiration of the trusts' terms and calculating the present value of those amounts at a discount rate of 3%, respectively, per annum. As of December 31, 2022 and 2021, the present value of AIChE's share of the trusts was \$143,066 and \$141,101, respectively, and is included in prepaid expenses and other assets in the accompanying financial statements. The fair value of the trusts' assets amounted to approximately \$239,000 and \$241,000, respectively, as of December 31, 2022 and 2021.

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NOTE 14 – PUBLISHING AGREEMENTS

- A. In May 2016, AIChE renewed its publishing agreement (the “Publishing Agreement”) with Wiley, a commercial publisher (the “Publisher”) with respect to the five journals (the “Journals”) now currently owned by AIChE. The renewal occurred two years before the prior agreement was set to expire, and extends 12 years. Under the terms of the Publishing Agreement, the Publisher has the exclusive right and sole responsibility for the marketing, sales, print, and electronic distribution of the Journals. AIChE remains solely responsible for providing and paying editors and, in consultation with the Publisher, establishing editorial policy. Under the terms of the contract, AIChE has been guaranteed a minimum annual royalty plus increased additional royalties through 2021, with further increases in royalties from 2022 through the life of the contract, which escalate when the Publisher’s gross revenues exceed certain predetermined levels.
- B. In February 2005, AIChE entered into a four-yearbook publishing agreement (the “Book Publishing Agreement”) with the Publisher to co-develop approximately 8-15 new works each year. The Book Publishing Agreement is automatically renewed for additional three-year terms unless either party gives notice of intent to terminate the agreement at least six months prior to the expiration of the then current term. Under the terms of the Publishing Agreement, beginning in February 2005, the Publisher has the exclusive right and sole responsibility for the marketing, sales, print and electronic distribution of the works. AIChE remains solely responsible for providing and paying editors and, in consultation with the Publisher, establishing editorial policy. Under the terms of the contract, AIChE received a nonrefundable non-recoupable advance. In addition, AIChE has been guaranteed a minimum annual royalty plus additional royalties if the Publisher’s revenues exceed predetermined levels. The minimum annual royalty is paid at the beginning of each additional year of the term provided that at least six works were published in the preceding year.

In November 2010, the Book Publishing Agreement was amended, revising language on co-development of books to allow, when both parties agree, for the Publisher to enter into author agreements even when AIChE is the submitting party. A new royalty category was created for such titles.

NOTE 15 – ENDOWMENTS

The Board of AIChE follows the New York State law called the New York Prudent Management of Institutional Funds Act (“NYPMIFA”). NYPMIFA includes a rebuttable presumption of imprudence if an organization appropriates more than 7% of a donor-restricted permanent endowment fund’s fair value (averaged over a period of not less than the preceding five years) in any year. Any unappropriated earnings that would otherwise be considered without restrictions by the donor are reflected as net assets with donor restrictions until appropriated.

AIChE’s Board has interpreted NYPMIFA as allowing AIChE to appropriate for expenditure or accumulate so much of an endowment fund as AIChE determines is prudent for the uses, benefits, purposes and duration for which the endowment fund was established, subject to the intent of the donor as expressed in the gift instrument. Unless stated otherwise, the assets in a donor-restricted endowment fund shall be donor-restricted assets until appropriated for expenditure by the Board.

As a result of this interpretation, AIChE has not changed the way net assets restricted in perpetuity are classified. The remaining portion of the donor-restricted endowment fund that is not classified as restricted in perpetuity is classified as net assets with donor restrictions (purpose and time-restricted for future periods), until those amounts are appropriated for expenditure in a manner consistent with the standard of prudence prescribed by NYPMIFA.

The policy for valuing AIChE’s investments is described in Note 2E. In accordance with U.S. GAAP, any deterioration of the fair value of assets associated with donor-restricted endowment funds that falls below the level the donor requires AIChE to retain in perpetuity is to be reported in net assets with donor restrictions. The fair value of assets associated with individual donor-restricted endowment funds are \$516,100 below historic dollar value as of December 31, 2022 and all were above historic dollar value as of December 31, 2021.

AIChE’s endowment funds are invested in a portfolio with a target asset mix allocated 32% to fixed-income securities, 65% to equity securities, and 3% to cash and cash equivalents, based on an asset allocation with the objective of capital appreciation.

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NOTE 15 – ENDOWMENTS (CONTINUED)

AIChE had the following donor restricted endowments composition by type of fund as of December 31:

	<u>2022</u>	<u>2021</u>
Original donor-restricted gift amount and amount required to be maintained in perpetuity by donor	\$ 5,101,735	\$ 4,784,826
Accumulated investment (losses) gains	<u>(516,100)</u>	<u>676,036</u>
Total endowment activity	<u>\$ 4,585,635</u>	<u>\$ 5,460,862</u>

Changes in endowments for the years ended December 31 were as follows:

	<u>2022</u>	<u>2021</u>
Activity:		
Investment activity:		
Interest and dividends	\$ 130,716	\$ 70,197
Realized/unrealized (losses) gains	<u>(1,130,406)</u>	<u>344,063</u>
Total investment activity	(999,690)	414,260
Contributions	316,908	782,072
Amount appropriated for expenditure	<u>(192,445)</u>	<u>(188,133)</u>
Total activity	(875,227)	1,008,199
Endowment net assets, beginning of year	<u>5,460,862</u>	<u>4,452,663</u>
Endowment net assets, end of year	<u>\$ 4,585,635</u>	<u>\$ 5,460,862</u>

Endowment net assets of \$4,585,635 and \$5,460,862 as of December 31, 2022 and 2021, respectively, are included with investments in the accompanying statements of financial position.

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor requires AIChE to retain as a fund of perpetual duration. In accordance with U.S. GAAP, deficiencies of this nature, if they occur, are reported in net assets with donor restrictions. The deficiencies may result from unfavorable market fluctuations that occur in the economy as a whole that may affect the donor restricted endowment fund where the fair market value of the donor restricted endowment fund falls below the amount that is required to be retained permanently.

Deficiencies of this nature exist in several donor-restricted endowment funds as of December 31, 2022. The current fair value of the endowment funds is \$4,585,635, with an original gift value of \$5,101,735. Such deficiencies resulted from unfavorable market fluctuations that occurred in 2022 and continued appropriation for certain programs that was deemed prudent by management. There was no deficiency as of December 31, 2021.

NOTE 16 – CONCENTRATION OF CREDIT RISK

Cash and cash equivalents that potentially subject AIChE to a concentration of credit risk include cash accounts with financial institutions that exceed the Federal Deposit Insurance Corporation (“FDIC”) insurance limits. The FDIC provides deposit insurance coverage of up to \$250,000 per depositor, per insured financial institution. As of December 31, 2022 and 2021, there was approximately \$2,125,000 and \$4,897,000, respectively, of cash and cash equivalents, held by one financial institution that exceeded FDIC limits and which represents a concentration of credit risk. On behalf of the Board of AIChE, the Finance Committee has evaluated the credit risk and alternatives and has recommended maintaining the current position while continuing to monitor this financial institution.

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NOTE 17 – REVENUE AND SUPPORT

AIChE’s selected revenue and support areas include:

- A. CCPS is an organization that identifies and addresses process safety needs for a variety of facilities involved with handling, storing, using or processing and transporting hazardous materials. CCPS member companies, working in project subcommittees, define and develop useful, time-tested guidelines that have practicable applications within the industry. Revenues from CCPS are mainly from corporate dues and conference related income.

CCPS revenue consists of the following for the years ended December 31:

	2022	2021
Center for Chemical Process Safety (CCPS)		
REVENUE AND SUPPORT:		
Corporate membership dues	\$ 3,384,406	\$ 3,232,013
Meeting registrations, sponsorships and exhibits	772,168	180,766
Other	1,498,738	1,177,743
TOTAL OPERATING REVENUE AND SUPPORT - CCPS	\$ 5,655,312	\$ 4,590,522

- B. AIChE’s Education Services revenue results mostly from registration fees derived from the sale of Public and In-company courses and online training.

Education services revenue consists of the following for the years ended December 31:

	2022	2021
Education Services		
REVENUE AND SUPPORT:		
In-company courses	\$ 961,692	\$ 758,483
Public courses	821,909	814,282
Online training	958,466	870,073
Other	163,955	225,067
TOTAL REVENUE AND SUPPORT – EDUCATION SERVICES	\$ 2,906,022	\$ 2,667,905

NOTE 18 – RAPID MANUFACTURING INSTITUTE

On October 24, 2016, AIChE was selected by the U.S. Department of Energy to establish a manufacturing institute on *Modular Chemical Process Intensification*. The RAPID Manufacturing Institute (“RAPID” – Rapid Advancement in Process Intensification Deployment) is part of a federal government initiative on advanced manufacturing, established to enhance the competitiveness of U.S. manufacturing, while improving energy efficiency of the sector as a whole. AIChE will receive \$70 million for RAPID over five years with a minimum of 1:1 matching funds from its members in industry, academia, national labs, and other non-profits. AIChE has met its matching requirements for the years ended December 31, 2022 and 2021, respectively.

In early 2023, RAPID received approval of a no-cost extension through June 30, 2023. The term “no cost” means no additional funding will be forthcoming, but the extension will allow additional time to spend down existing funds and ensure that all deliverables can be met.

RAPID’s focus is on the application of modular chemical process intensification in manufacturing processes as a means of lowering costs, improving energy and resource efficiency, increasing overall productivity and maintaining manufacturing jobs within the United States of America (the “U.S.”). One of the primary goals of RAPID and the other institutes is to enable manufacturing within the U.S. to expand and grow.

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NOTE 18 – RAPID MANUFACTURING INSTITUTE (CONTINUED)

RAPID leverages AIChE’s relationships with industry and academia, along with its close ties to the Clean Energy Smart Manufacturing Innovation Institute. AIChE brings its substantial educational resources and infrastructure to bear to train students and professionals in the dissemination and application of new module process intensification tools. AIChE capitalizes on the expertise of its global network of industrial and academic professionals and its long-standing experience of managing subsidiary technical centers such as CCPS and DIPPR.

RAPID operates within AIChE’s 501(c)(3) umbrella, as an Industry Technology Group under the d/b/a RAPID Manufacturing Institute.

As of December 31, 2022 and 2021, accounts receivable included approximately \$4,856,000 and \$6,312,000, respectively, due from the U.S. Department of Energy and liabilities included a balance due to subrecipients of approximately \$2,830,000 and \$4,484,000, respectively.

RAPID revenues consist of the following for the years ended December 31:

	2022	2021
RAPID		
REVENUE AND SUPPORT:		
Federal Government grants	\$ 10,910,943	\$ 13,746,525
Corporate membership dues	540,812	695,279
Other	754,912	255,877
TOTAL OPERATING REVENUE AND SUPPORT - RAPID	\$ 12,206,667	\$ 14,697,681

NOTE 19 – SUBSEQUENT EVENTS

AIChE has evaluated, for potential recognition and disclosure, events subsequent to the date of the statement of financial position through May 31, 2023, the date the financial statements were available to be issued.