

American Institute of Chemical Engineers

Financial Statements (Together with Independent Auditors' Report)

Years Ended December 31, 2018 and 2017



AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

FINANCIAL STATEMENTS (Together with Independent Auditors' Report)

YEARS ENDED DECEMBER 31, 2018 AND 2017

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors of American Institute of Chemical Engineers

We have audited the accompanying financial statements of American Institute of Chemical Engineers ("AIChE"), which comprise the statements of financial position as of December 31, 2018 and 2017, and the related statements of activities, functional expenses and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements 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 the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of AIChE as of December 31, 2018 and 2017, 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.

Emphasis of Matter

Marks Pareth LLP

As discussed in Note 2L to the financial statements, during the year ended December 31, 2018, AIChE adopted Accounting Standards Update (ASU) 2016-14, Not-for-Profit Entities (Topic 958) – *Presentation of Financial Statements of Not-for-Profit Entities*. Our opinion is not modified with respect to this matter.

New York, NY May 2, 2019



AMERICAN INSTITUTE OF CHEMICAL ENGINEERS STATEMENTS OF FINANCIAL POSITION AS OF DECEMBER 31, 2018 AND 2017

		2018		2017
ASSETS				
Cash and cash equivalents (Notes 2D and 15)	\$	1,768,100	\$	2,219,313
Investments, at fair value (Notes 2E, 4, 10A and 10C)		26,298,992		27,404,380
Accounts receivable, net (Note 2F and 17)		8,284,798		4,932,298
Contributions receivable, net (Notes 2C and 5)		3,761,007		2,424,478
Prepaid expenses and other (Note 12)		462,078		321,076
Property and equipment, net (Notes 2G and 6)		2,638,445		2,529,620
TOTAL ASSETS	\$	43,213,420	\$	39,831,165
	<u>*</u>	,,	<u>*</u>	55,653,755
LIABILITIES				
Accounts payable	\$	1,398,080	\$	2,017,041
Accounts payable to subrecipients (Note 17)		4,677,928		1,591,784
Deferred revenue - dues, subscriptions and other (Note 2H)		3,888,626		3,847,794
Accrued expenses:				
Employee vacation and other benefits		566,859		538,437
Pension and other postretirement benefit costs (Notes 7 and 8)		3,171,736		3,028,311
Other (Notes 2I and 10A)		1,675,065		1,573,197
TOTAL LIABILITIES		15,378,294		12,596,564
COMMITMENTS AND CONTINGENCIES (Note 10)				
NET ASSETS (Note 2B)				
Without donor restrictions With donor restrictions:		19,678,106		20,937,756
Purpose and time-restricted for future periods (Notes 9 and 14)		5,432,981		3,993,643
Perpetual in nature (Notes 9 and 14)		2,724,039		2,303,202
·		8,157,020		6,296,845
TOTAL NET ACCETS		07.005.400		07 004 004
TOTAL NET ASSETS		27,835,126	-	27,234,601
TOTAL LIABILITIES AND NET ASSETS	\$	43,213,420	\$	39,831,165

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS STATEMENTS OF ACTIVITIES FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

	For the Year Ended December 31, 2018			For the Year Ended December 31, 2017			
	Wi	thout Donor	With Donor	Total	Total	Without Donor	With Donor
	R	estrictions	Restrictions	2018	2017	Restrictions	Restrictions
OPERATING ACTIVITY:							
REVENUE AND SUPPORT:							
Dues and other membership revenue (Note 2H)	\$	3,122,547	\$ -	\$ 3,122,547	\$ 3,203,040 \$	3,203,040	\$ -
Publications sales and subscriptions	Ψ	3,191,478	· -	3,191,478	3,141,830	3,141,830	· -
Industry technology groups (Notes 1 and 16)		19,952,753	-	19,952,753	13,484,536	13,484,536	-
Meetings and technical programming		6,897,860	-	6,897,860	6,186,167	6,186,167	-
Education services (Note 16)		2,972,090	-	2,972,090	2,677,034	2,677,034	-
AIChE Foundation - contributions (Note 1)		978,031	4,025,989	5,004,020	3,416,348	1,492,266	1,924,082
Other revenue		1,339,664	1,020,000	1,339,664	929,293	929,293	- 1,021,002
Net assets released from restrictions (Note 9)		2,039,003	(2,039,003)	-	-	1,397,517	(1,397,517)
That addate followed from fourieries (thate o)		2,000,000	(2,000,000)				(1,007,017)
TOTAL OPERATING REVENUE AND SUPPORT		40,493,426	1,986,986	42,480,412	33,038,248	32,511,683	526,565
EXPENSES:							
Program Services:							
Membership		3,160,503	-	3,160,503	3,045,697	3,045,697	-
Publications		2,617,366	-	2,617,366	2,581,440	2,581,440	-
Industry technology groups		16,713,614	-	16,713,614	11,814,990	11,814,990	-
Meetings and technical programming		4.433.331	-	4,433,331	3,661,043	3,661,043	-
Education services		3,092,061	-	3,092,061	2,960,915	2,960,915	-
Other program expenses (Note 11)		1,554,781	-	1,554,781	1,599,446	1,599,446	-
		31,571,656		31,571,656	25,663,531	25,663,531	
Supporting Services:		01,011,000		01,011,000	20,000,001	20,000,00.	
General and administration		4,421,710		4,421,710	4,287,202	4,287,202	
Fundraising		4,192,703	_	4,192,703	3,239,819	3,239,819	_
i uliulaisilig							<u>-</u>
		8,614,413	<u> </u>	8,614,413	7,527,021	7,527,021	-
TOTAL OPERATING EXPENSES		40,186,069	<u> </u>	40,186,069	33,190,552	33,190,552	<u> </u>
Change In Net Assets From Operations		307,357	1,986,986	2,294,343	(152,304)	(678,869)	526,565
NON OPERATING ACTIVITY							
NON-OPERATING ACTIVITY:		(4, 400, 040)	(400.044)	(4 500 000)	0.400.007	3,197,949	0.40,000
Investment activity, net (Notes 4 and 14)		(1,402,049)	(126,811)	,	3,438,837		240,888
Pension related changes other than net periodic pension cost (Note 7)		(28,005)	-	(28,005)	174,559	174,559	-
Postretirement related changes other than net periodic postretirement cost (Note 8)		(136,953)	<u> </u>	(136,953)	162,443	162,443	<u> </u>
TOTAL NON-OPERATING ACTIVITY		(1,567,007)	(126,811)	(1,693,818)	3,775,839	3,534,951	240,888
CHANGE IN NET ASSETS		(1,259,650)	1,860,175	600,525	3,623,535	2,856,082	767,453
Net assets - beginning of year		20,937,756	6,296,845	27,234,601	23,611,066	18,081,674	5,529,392
NET ASSETS - END OF YEAR	\$	19,678,106	\$ 8,157,020	\$ 27,835,126	\$ 27,234,601 \$	20,937,756	\$ 6,296,845

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS STATEMENT OF FUNCTIONAL EXPENSES FOR THE YEAR ENDED DECEMBER 31, 2018 (WITH COMPARATIVE TOTALS FOR DECEMBER 31, 2017)

For the Year Ended December 31, 2018 Program Services Supporting Services Meetings Total Total Industry and Technical Education Other Program Program General and Supporting Total Total Membership **Publications** Technology Group Services Administration Fundraising Services 2018 2017 Programming Services Expenses Salaries \$ 1,276,001 \$ 1,128,879 3,968,839 1,434,253 1,085,238 296,500 \$ 9,189,710 2,224,493 622,924 \$ 2,847,417 \$ 12,037,127 \$ 10,928,591 Payroll taxes and employee benefits (Note 7) 1,288,705 352,383 2,983,951 157,067 632,933 414,325 366,553 465,710 96,275 475,866 3,616,884 3,219,776 **Total Salaries and Related Costs** 1,690,326 1,495,432 5,257,544 1,899,963 1,437,621 392,775 12,173,661 2.700.359 779,991 3,480,350 15,654,011 14,148,367 Grants and other assistance 71,145 19 22,304 15,676 27 189,124 298,295 57,679 57,679 355,974 353,698 Legal fees 9,663 9,663 61,831 61.831 71,494 122.183 Professional fundraising services 66,000 66,000 66,000 72,000 Other professional fees 394,781 544,168 2,016,502 223,625 810,332 343,221 4,332,629 211,096 323,415 534,511 4,867,140 5,127,351 Advertising and promotion 80,867 60,481 11,704 57,185 25,759 315 236,311 72,831 72,831 309,142 418,248 71 185 227,000 108 117 62,111 33,536 530 418 54,644 26,629 81,273 636 579 Office expenses 28,469 611 691 Information technology 107,060 26,000 133,060 133,060 128,915 19,013 33,227 52,240 52,240 62,968 Royalty 22,561 147,470 20,620 7,786 234,951 525,880 8,197 534,077 769,028 667,941 Occupancy (Note 10) 17,058 19,456 110.650 35,417 602.731 127,703 61.537 1.231.007 125.889 148.858 1.379.865 1.418.553 292,969 22.969 Travel Conferences, conventions and meetings 227,024 5.999 2,051,258 868,719 115,397 269,088 3,537,485 9.689 178,334 188.023 3,725,508 3,057,664 136,435 136,435 136,435 132,660 83,241 46,769 308,124 50,390 86,934 33,297 608,755 131,800 37,365 169,165 777,920 688,849 Depreciation and amortization (Note 6) 5,615,679 5,615,679 1,591,784 5.615.679 Payments to subrecipients 50.024 107.410 Equipment rental and maintenance 109 966 15 096 117.392 663,756 101,283 1.057.517 71,119 36 291 1.164.927 1.135.330 Printing and publications 62,556 70,239 111,142 141,610 106,104 13,079 504,730 798 58,550 59,348 564,078 500,416 Telephone 26,023 7,290 48,755 105,596 12,929 11,603 212,196 25,536 6,365 31,901 244,097 275,694 Bank charges/credit card fees 103,068 10,136 75,665 161,065 27,786 377,720 91,065 7,746 98,811 476,531 398,426 82,262 Miscellaneous and dues 50 164,551 3.249 20,764 154.463 425.339 275,569 2,510,341 2,785,910 3,211,249 2,252,926 **Total Other than Personal Services** 1,470,177 1,121,934 11,456,070 2,533,368 1,654,440 1,162,006 19,397,995 1,721,351 3,412,712 5,134,063 24,532,058 19,042,185 **TOTAL EXPENSES** \$ 3,160,503 \$ 2,617,366 16,713,614 4,433,331 3,092,061 1,554,781 \$ 31,571,656 4,421,710 \$ 4,192,703 \$ 8,614,413 \$ 40,186,069 \$ 33,190,552

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS STATEMENT OF FUNCTIONAL EXPENSES FOR THE YEAR ENDED DECEMBER 31, 2017

				Program Services				Sup	porting Services		_
	Membership	Publications	Industry Technology Group	Meetings and Technical Programming	Education Services	Other Program Expenses	Total Program Services	General and Administration	Fundraising	Total Supporting Services	Total 2017
Salaries Payroll taxes and employee benefits (Note 7)	\$ 1,151,937 342,660	\$ 1,077,586 320,543	\$ 3,593,771 1,069,019	\$ 1,203,207 357,911	\$ 947,023 281,706	\$ 295,886 88,016	\$ 8,269,410 2,459,855	\$ 2,112,855 606,016	\$ 546,326 153,905	\$ 2,659,181 759,921	\$ 10,928,591 3,219,776
Total Salaries and Related Costs	1,494,597	1,398,129	4,662,790	1,561,118	1,228,729	383,902	10,729,265	2,718,871	700,231	3,419,102	14,148,367
Grants and other assistance Legal fees Professional fundraising services Other professional fees Advertising and promotion Office expenses Information technology Royalty Occupancy (Note 10) Travel Conferences, conventions and meetings Insurance Depreciation and amortization (Note 6)	100,577 1,759 387,033 107,784 88,322 102,915 - 23,198 129,261 252,345 - 95,003	32 - 534,063 60,577 219,098 - - 19,885 33,701 6,112 - 59,374	35,163 31,925 - 2,370,824 48,061 142,867 26,000 29,243 68,781 619,040 1,561,711 - 216,220	1,757 - 176,334 41,760 36,181 - 33,725 15,484 135,292 667,358 - 26,792	41 - - 837,067 54,029 39,972 - - 19,131 279,831 152,377 - 84,791	187,037 - 289,917 52,939 30,654 - 8,828 78,841 254,736 - 40,069	324,607 33,684 - 4,595,238 365,150 557,094 128,915 62,968 155,307 1,275,966 2,894,639 - 522,249	88,499 - 254,381 - 49,704 - - 505,223 107,502 37,969 132,660 141,032	29,091 - 72,000 277,732 53,098 29,781 7,411 35,085 125,056 - 25,568	29,091 88,499 72,000 532,113 53,098 79,485 - 512,634 142,587 163,025 132,660 166,600	353,698 122,183 72,000 5,127,351 418,248 636,579 128,915 62,968 667,941 1,418,553 3,057,664 132,660 688,849
Depreciation and amortization (Note 6) Payments to subrecipients Equipment rental and maintenance Printing and publications Telephone Bank charges/credit card fees Miscellaneous and dues	78,384 67,020 31,323 83,162 3,014	59,374 - 21,683 75,903 13,294 7,537 132,052	1,591,784 147,876 114,006 54,663 59,767 34,269	578,129 125,999 87,185 133,546 40,383	110,348 47,913 19,796 22,981 63,909	83,559 9,091 16,311 324 163,238	1,591,784 1,019,979 439,932 222,572 307,317 436,865	74,425 334 45,872 84,601 46,129	25,568 - 40,926 60,150 7,250 6,508 1,769,932	115,351 60,484 53,122 91,109 1,816,061	1,591,784 1,135,330 500,416 275,694 398,426 2,252,926
Total Other than Personal Services TOTAL EXPENSES	1,551,100 \$ 3,045,697	1,183,311 \$ 2,581,440	7,152,200 \$ 11,814,990	2,099,925 \$ 3,661,043	1,732,186 \$ 2,960,915	1,215,544 \$ 1,599,446	14,934,266 \$ 25,663,531	1,568,331 \$ 4,287,202	2,539,588 \$ 3,239,819	4,107,919 \$ 7,527,021	19,042,185 \$ 33,190,552

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

		2018		2017
CASH FLOWS FROM OPERATING ACTIVITIES: Change in net assets	\$	600,525	\$	3,623,535
Adjustments to reconcile change in net assets to				
net cash provided by (used in) operating activities:				
Realized and unrealized loss (gain) on investments		2,143,271		(2,908,499)
Depreciation and amortization		777,920		688,849
Bad debt expense (recapture)	_	120,970		(56,413)
Subtotal		3,642,686		1,347,472
Changes in operating assets and liabilities:				
(Increase) or decrease in assets:				
Accounts receivable		(3,384,726)		(2,554,195)
Prepaid expenses and other		(141,002)		(5,617)
Contributions receivable		(1,425,273)		170,702
(Decrease) or increase in liabilities:				
Accounts payable		(618,961)		(10,653)
Accounts payable to subrecipients		3,086,144		1,591,784
Deferred revenue		40,832		(315,729)
Accrued expenses:		00.400		(40.505)
Employee vacation and other benefits		28,422		(16,595)
Pension and other postretirement benefit costs		143,425		(292,515)
Other	-	101,868		(195,394)
Net Cash Provided by (Used in) Operating Activities		1,473,415		(280,740)
CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchases of investments		(3,116,789)		(3,489,798)
Proceeds from the sale of investments		2,078,906		4,534,927
Purchases of property and equipment		(886,745)		(801,140)
Net Cash (Used in) Provided by Investing Activities	_	(1,924,628)		243,989
NET DECREASE IN CASH AND CASH EQUIVALENTS		(451,213)		(36,751)
Cash and cash equivalents - beginning of year		2,219,313		2,256,064
CASH AND CASH EQUIVALENTS - END OF YEAR	\$	1,768,100	<u>\$</u>	2,219,313

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 17.

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 AlChE's operations over which the Board of Directors have 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 2% reserve allowance for bad debt as of December 31, 2018 and 2017, 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 and pledges are not included as support until the conditions are substantially met. The reserve allowance for bad debt amounted to approximately \$82,000 and \$51,000 as of December 31, 2018 and 2017, respectively.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

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, 2018 and 2017, AIChE determined that an allowance of approximately \$57,000 and \$55,000, 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 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

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 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 either predetermined installments or in increments based on expenditures or milestones for the period.

1. Straight-Lining of Rent Expense

Rent expense is 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.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

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 on a square footage basis, as well as salaries, wages and benefits, payroll taxes, professional services, office expenses, information technology, interest, insurance, 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 in the December 31, 2017 financial statements have been reclassified to conform to the December 31, 2018 presentation. Such reclassifications had no effect on previously reported net assets.

L. New Accounting Pronouncements

Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") 2016-14, "Not-for-Profit Entities Topic 958" *Presentation of Financial Statements of Not-for-Profit Entitles* was adopted for the year ended December 31, 2018. ASU 2016-14 provides for a number of changes, including the presentation of two classes of net assets and enhanced disclosure on liquidity resources and functional expense allocation. These changes had no impact on the change in net assets for the year ended December 31, 2018. As a result of implementing ASU 2016-14, AIChE reports net assets in two classes (see Note 2B) and provides additional information about liquidity (see Note 3), the methodologies used to allocate expenses by function (see Note 2J) and now include statements of functional expenses which shows expenses by natural class and function. Net assets as of December 31, 2017 were reclassified to conform to the current year presentation.

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 balance sheet date, comprise the following:

Cash and cash equivalents	\$	1,768,100
Accounts receivable		3,606,870
Operating investments	<u>—</u>	17,853,117
	\$	23,228,087

In addition, AIChE has a line of credit totaling \$1.5 million with a financial institution, which can be drawn upon if needed.

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):

	 2018	 2017
Mutual Funds		
U.S. Large Cap/Mid Cap	\$ 5,923,755	\$ 6,777,448
U.S. Small Cap	1,196,224	1,549,940
Diversified Foreign Equity	7,010,189	7,614,064
U.S. Core Bonds	8,256,637	8,505,140
Global Bonds	3,066,340	2,591,658
Money Market Mutual Funds	 840,134	 336,745
Total mutual funds	26,293,279	27,374,995
Equity securities – domestic	 <u>5,713</u>	 29,385
Total investments	\$ 26,298,992	\$ 27,404,380

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

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

	2018	2017
Interest and dividends Realized and unrealized (losses)/gains Investment fees	\$ 686,821 (2,143,271) (72,410)	\$ 600,057 2,908,499 (69,719)
	<u>\$ (1,528,860)</u>	<u>\$ 3,438,837</u>

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.

AlChE's policy is to recognize transfers in and transfers out between fair value levels as of the beginning of the period in which the transfer takes place. During the years ended December 31, 2018 and 2017, no such transfers between fair value levels occurred.

NOTE 5 - CONTRIBUTIONS RECEIVABLE

Contributions receivable consisted of the following as of December 31:

	2018	2017
Amounts due in: Less than one year One to five years	\$ 1,492,291 2,489,862	\$ 992,795 1,564,087
Gross contributions receivable Less: allowance for uncollectible accounts Less: discount to present value at 3%	3,982,153 (82,243) (138,903)	2,556,882 (51,138) (81,266)
	\$ 3,761,007	\$ 2,424,478

NOTE 6 – PROPERTY AND EQUIPMENT

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

		2018		2017	Estimated Useful Lives
Furniture and fixtures Computer and office equipment Leasehold improvements Total cost	5,0 1	464,033 015,440 1 <u>58,822</u> 638,295		449,996 4,163,603 137,951 4,751,550	3-5 Years 3-10 Years 15 Years
Less: accumulated depreciation/amortization	(2,9	999,850)	(2	<u>2,221,930)</u>	
Net book value	\$ 2,6	<u>638,445</u>	\$ 2	<u>2,529,620</u>	

Depreciation and amortization expense amounted to \$777,920 and \$688,849 for the years ended December 31, 2018 and 2017, respectively.

NOTE 7 – PENSION PLANS

Through December 31, 2005, AlChE 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, AlChE froze this plan. AlChE 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. AlChE'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.

This calculation below reflects a settlement as of December 31, 2018 resulting from the lump sum payments distributed during the year. There are no other calculations that have been made regarding certain events under FASB Accounting Standards Codification ("ASC") Subtopic 715-30.

AIChE also maintains a qualified contributory defined contribution retirement plan pursuant to IRS Section 403(b) for its employees. Employees are eligible to participate after 500 hours of service in a 6-month period and upon attaining the age of 21. 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 annual compensation. Contributions are deemed to be vested upon completion of two years of employment. AIChE's contributions under the plan amounted to \$256,635 and \$213,845 for the years ended December 31, 2018 and 2017, respectively.

NOTE 7 - PENSION PLANS (Continued)

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 \$854,119 and \$759,629 for the years ended December 31, 2018 and 2017, respectively.

AIChE also offers a deferred compensation arrangement under Section 457(b) of the IRC for key employees. AIChE does not make any contributions to the 457(b) plan as the 457(b) plan is entirely funded by employee contributions. AIChE had no liability relating to the 457(b) plan as of December 31, 2018 and 2017.

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

	2018	2017
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 11,744,328	\$ 10,844,255
Interest cost	459,615	471,910
Actuarial (gain) loss	(719,551)	796,591
Benefits paid	(308,122)	(368,428)
Settlements	(520,814)	
Benefit obligation at end of year	10,655,456	11,744,328
Fair value of plan assets	<u>8,180,691</u>	9,439,301
Funded status	<u>\$ (2,474,765)</u>	\$ (2,305,027)

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

	2018	2017
Net loss	\$ (2,943,408)	\$ (2,915,403)

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

	 2018	 2017
Interest cost	\$ 459,615 (631,334)	\$ 471,910
Expected return on plan assets Amortization of net loss	 (621,234) 225,805	 (582,881) 305,387
	\$ 64,186	\$ 194,416

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

		2018		2017
Net loss Lump sum payments Amortization of net loss Total recognized in change in	\$	397,677 (143,867) (225,805)	\$	130,828 - (305,387)
unrestricted net assets	\$	28,005	\$	(174,559)
Total recognized in net periodic pension cost and change in unrestricted net assets	\$	236 058	\$	19.857
400010	Ψ	200,000	Ψ	10,001

NOTE 7 – PENSION PLANS (Continued)

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:

	2018	2017
Discount rate used for net periodic benefit cost	4.75%	4.25%
Discount rate used for pension obligation	4.75%	4.25%
Expected return on plan assets	6.80%	7.00%

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 expects to contribute \$118,000 to its pension plan in 2019.

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:

2019	\$ 435,692
2020	585,554
2021	1,103,741
2022	1,055,096
2023	814,335
5 years thereafter	3,648,513

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

	2018	2017
Equity securities	51%	56%
Debt securities	45%	43%
Cash equivalents	4%	1%
	100%	100%

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:

	 2018	 2017
Investments:		
Mutual Funds		
U.S. Large Cap/Mid Cap	\$ 1,648,124	\$ 2,107,776
U.S. Small Cap	415,723	561,038
Diversified Foreign Equity	2,068,230	2,575,493
U.S. Core Bonds	2,403,024	2,763,688
Global Bonds	1,341,989	1,282,627
Money Market Mutual Funds	 303,601	 148,679
Total assets at fair value	\$ 8,180,691	\$ 9,439,301

NOTE 7 – PENSION PLANS (Continued)

The composition of AIChE's plan assets is a target asset mix allocated 54%/46% between equity and fixed-income securities. 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 objectives. Volatility will be reduced by assuring that the plan assets are at all times diversified by asset class, economic sector, and industry and/or market capitalization. The target asset mix is developed and periodically reviewed based on rolling three and five—year strategic investment horizons. In order to effectively maintain the benefits of diversification, actual allocation percentages are rebalanced back to the current asset target mix on a quarterly basis.

NOTE 8 – 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, 2018, the accumulated postretirement benefit obligation related to the HRAs was \$176,366.

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

		2018	 2017
Change in benefit obligation:			
Benefit obligation at beginning of year	\$	723,284	\$ 966,243
Service cost		1,250	4,321
Interest cost		31,184	40,718
Plan amendments		-	(202,671)
Actuarial gain		(19,122)	(46,552)
Benefits paid		(39,625)	 (38,775)
Benefit obligation at end of year	_	696,971	 723,284
Funded status	\$	(696,971)	\$ (723,284)

NOTE 8 - POSTRETIREMENT OTHER THAN PENSIONS (Continued)

Amounts recognized in unrestricted net assets for the plan consisted of the following as of December 31:

		<u>2018</u>	 2017
Prior service credit Gain	\$	362,654 338,100	\$ 481,746 355,961
	<u>\$</u>	700,754	\$ 837,707

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

	 2018	 2017
Service cost	\$ 1,250	\$ 4,321
Interest cost	31,184	40,718
Amortization of prior service credit	(119,092)	(56,942)
Amortization of net gain	 (36,983)	 (29,838)
Net periodic benefit (income) cost	\$ (123,641)	\$ (41,741)

Other changes in plan assets and benefit obligations recognized in the change in unrestricted net assets for the years ended December 31 were as follows:

	 2018		2017
Actuarial gain Prior service credit Amortization of prior service credit Amortization of net gain	\$ (19,122) - 119,092 36,983	\$	(46,552) (202,671) 56,942 29,838
Total recognized in change in unrestricted net assets	\$ 136,953	\$	(162,443)
Total recognized in net periodic pension cost and change in unrestricted net assets	\$ 13,312	<u>\$</u>	(204,184)

The estimated net gain, transition obligation 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 \$49,000, \$0 and \$119,000, respectively.

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>2018</u>	2017
Discount rate used for net periodic benefit cost	4.75%	4.25%
Discount rate used for benefit obligations	4.75%	4.25%

NOTE 8 - POSTRETIREMENT OTHER THAN PENSIONS (Continued)

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:

2019	\$ 49,095
2020	69,460
2021	70,075
2022	52,461
2023	52,323
5 years thereafter	207.557

NOTE 9 - NET ASSETS WITH DONOR RESTRICTIONS

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

	2018	2017
Subject to expenditures for specific purpose and the passage of time		
Industry technology groups Other programs AIChE Foundation (not a separate entity) Unappropriated earnings on endowment funds-(See Note 14) Subtotal	\$ 215,460 214,935 4,963,486 39,100 5,432,981	\$ 215,460 110,855 3,431,134 236,194 3,993,643
Subject to AIChE's endowment spending policy and appropriation of income		
Award programs for scholastic achievements Educational and professional development Public and government outreach and other	1,375,509 720,269 628,261	911,912 634,393 756,897
Subtotal	2,724,039	2,303,202
Total net assets with donor restrictions	\$ 8,157,020	<u>\$ 6,296,845</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:

	2018	2017
Educational and professional development	\$ 1,997,483	\$ 1,353,777
Award programs for scholastic achievements	27,738	18,355
Public and government outreach and other	12,222	19,085
Other programs	1,560	6,300
	\$ 2,039,003	\$ 1,397,517

NOTE 10 - COMMITMENTS AND CONTINGENCIES

A. Lease Commitments

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 of December 31, 2018, 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 in October 2021 and has annual base rental charges of approximately \$35,000 over the lease term.

Rent credits and charges are accounted for on a straight-line basis over the life of the lease. Straight-lining of rent gives rise to a timing difference that is reflected as deferred rent in the accompanying statements of financial position. Included in other liabilities in the accompanying statements of financial position as of December 31, 2018 and 2017 is a liability of \$518,564 and \$480,750, respectively, related to deferred rent under the straight-line method of accounting.

Minimum future lease payments under the lease agreements for the years subsequent to December 31, 2018 are approximately as follows:

2019	\$ 572,000
2020	589,000
2021	578,000
2022	554,000
2023	553,000
Thereafter	 3,248,000
	\$ 6 094 000

Rent expense, including real estate taxes and porters' wage escalation (or de-escalation) charges, for the years ended December 31, 2018 and 2017 amounted to approximately \$607,000 and \$599,000, respectively.

B. Meeting Commitments

In the ordinary course of business, AIChE has entered into contracts with hotels for meetings scheduled to occur beyond December 31, 2018 and 2017. 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 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 2018 and 2017 that are under contract, it would incur approximately \$10.2 million and \$6.9 million, respectively in cancellation charges. AIChE is subject to negotiable penalties in the event meeting attendees do not utilize the rooms.

C. Line of Credit

AIChE has a line of credit with a financial institution. The line of credit has a maximum borrowing amount of \$1,500,000 and expires on September 30, 2019. Borrowings are secured by mutual funds and money market funds owned by AIChE and held at the same financial institution. Interest is at the one-month London Interbank Offered Rate ("LIBOR") plus 2%. This line of credit has no loan covenants attached to it. As of December 31, 2018 and 2017 and May 2, 2019, there were no borrowings.

NOTE 10 - COMMITMENTS AND CONTINGENCIES (Continued)

D. Uncertainty in Income Taxes

AIChE believes it had no uncertain tax positions as of December 31, 2018 and 2017 in accordance with ASC Topic 740, "Income Taxes," which provides standards for establishing and classifying any tax provisions for uncertain tax positions.

NOTE 11 - 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:

	_	2018		2017
Subsidized activities include the governance of AIChE, public and governmental outreach programs, and support for the chemical engineering profession Financial services	\$ 	1,319,460 235,321 1,554,781	\$ \$	1,405,912 193,534 1,599,446

NOTE 12 – 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, 2018 and 2017, 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, 2018 and 2017, the present value of AIChE's share of the trusts was \$128,571 and \$129,019, 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 \$236,000 and \$237,000, respectively, as of December 31, 2018 and 2017.

NOTE 13 – 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.

NOTE 13 – PUBLISHING AGREEMENTS (Continued)

B. In February 2005, AIChE entered into a four—year book 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 14 - 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 unrestricted 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 all above historic dollar value as of December 31, 2018 and 2017.

AIChE's endowment investment policy is to invest 43% of assets into fixed-income mutual funds and cash equivalents, and 57% into equity mutual funds based on an asset allocation with the objective of capital appreciation.

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

	 2018	 2017
Original donor-restricted gift amount and amount required to be		
maintained in perpetuity by donor	\$ 2,724,039	\$ 2,303,202
Accumulated investment gains	 39,100	 236,194
Total endowment activity	\$ 2,763,139	\$ 2,539,396

NOTE 14 – ENDOWMENTS (Continued)

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

	 2018	 2017
Activity:		
Investment activity:		
Interest and dividends	\$ 56,932	\$ 38,303
Realized/unrealized (losses)/gains	 (177,658)	 185,65 <u>5</u>
Total investment activity	(120,726)	223,958
Contributions	420,837	547,614
Amount appropriated for expenditure	 (76,368)	 (66,190)
Total activity	223,743	705,382
Endowment net assets, beginning of year	 2,539,396	 1,834,014
Endowment net assets, end of year	\$ 2,763,139	\$ 2,539,396

Endowment net assets of \$2,763,139 and \$2,539,396 as of December 31, 2018 and 2017, respectively, are included with investments in the accompanying statements of financial position.

NOTE 15 – 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. As of December 31, 2018 and 2017, there was approximately \$1,976,000 and \$2,387,000, 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.

NOTE 16 - REVENUE AND SUPPORT

AIChE's Industry Technology Groups ("ITGs") are comprised of two major categories:

1. <u>Industry Technology Alliances (ITAs)</u> are corporate membership organizations in which corporations pool their dues to work collectively on pre-competitive projects. The ITAs in AIChE are RAPID, CCPS and DIPPR.

Rapid Advancement in Process Intensification Deployment (RAPID) – see also Note 17. In December 2016, the U.S. Department of Energy established RAPID, AIChE's newest Industry Technology Alliance. RAPID 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. Revenues from RAPID are mainly from federal funds and dues from corporations and academia.

The Center for Chemical Process Safety (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.

The Design Institute for Physical Properties (DIPPR) is the world's best source of critically evaluated thermosphysical and environmental property data. The DIPPR® 801 database contains recommendations for 34 constant properties and 15 temperature-dependent properties for more than 2,200 compounds. Revenues from DIPPR are mainly from corporate dues and product data licensing income.

NOTE 16 - REVENUE AND SUPPORT (Continued)

2. Technical Entities (TEs) are individual communities of chemical engineers and other professionals, who address certain societal grand challenges such as health and nutrition, energy, environment and sustainability, water and safety. These entities keep AIChE at the forefront of new technologies available to chemical engineers. Their goal is to expand AIChE's reach to engineers and scientists who are working in fields beyond core chemical engineering competencies and who are concentrating on these challenges. AIChE's Institute for Sustainability (IfS) and Society for Biological Engineering (SBE) were founded nearly 15 years ago, and have subsequently expanded their reach and technical content through workshops, conferences, credentialing and educational offerings. Since then, additional technical entities such as the Center for Energy Initiatives (CEI), the International Metabolic Engineering Society (IMES), the International Society for Water Solutions (ISWS), the Center for Innovation and Entrepreneuring Excellence (CIEE) and the Regenerative Engineering Society (RE Society) have been created. Additionally, the Design Institute for Emergency Relief Systems (DIERS) reorganized to become a technical entity, enabling it to develop an individual membership structure. Revenues from TEs are mainly from conference registrations, sponsorships and exhibits. All "entities" described above are not separately incorporated, but rather operating under "Doing Business As" or D/B/A's.

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

	 2018	_	2017
Industry Technology Groups (ITG)			
REVENUE AND SUPPORT:			
Federal Government grants	\$ 10,015,699	\$	4,767,096
Corporate membership dues	4,290,774		4,749,938
Meeting registrations, sponsorships and exhibits	3,328,512		2,621,428
Product data licensing	453,730		442,778
Other	1,864,038		903,296
TOTAL OPERATING REVENUE AND SUPPORT - ITG	\$ 19,952,753	\$	13,484,536

AIChE's Education Services revenue results mostly from registration fees derived from the sale of Public and Incompany courses and online training.

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

	2018	2017
Education Services		
REVENUE AND SUPPORT:		
In-company courses	\$ 1,351,247	\$1,436,819
Public courses	915,439	770,424
Online training	555,336	435,426
Other	150,068	34,365
TOTAL REVENUE AND SUPPORT - EDUCATION SERVICES	\$ 2,972,090	\$2,677,034

NOTE 17 - 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 year ended December 31, 2018.

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.

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 the Center for Chemical Process Safety, the Design Institute for Physical Properties, and the Chinese Hamster Ovary Genomic Systems Consortium which ended in 2017.

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, 2018 and 2017, accounts receivable included approximately \$6,575,000 and \$3,254,000, respectively, due from the U.S. Department of Energy and accounts payable included a balance due to subrecipients of approximately \$4,678,000 and \$1,592,000, respectively.

NOTE 18 – SUBSEQUENT EVENTS

AIChE has evaluated, for potential recognition and disclosure, events subsequent to the date of the statement of financial position through May 2, 2019, the date the financial statements were available to be issued.