

# **BRAND REPORT**

FOR THE 6 MONTH PERIOD ENDED JUNE 2016



No attempt has been made to rank the information contained in this report in order of importance, since BPA Worldwide believes this is a judgment which must be made by the user of the report.

BRAND REPORT

American Chemical Society 1155 16th Street, NW Washington, DC 20036 Tel. No.: (202) 872-4600 www.cen.acs.org **C&EN (CHEMICAL & ENGINEERING NEWS)** is a news magazine serving the industrial and specialty chemical, life sciences, and laboratory industries. For nearly 95 years, C&EN has provided scientists, engineers and R&D professionals around the globe with timely news coverage including the latest technologies, tools and trends that serve the chemical enterprise. C&EN's audience work in industrial, academic and government laboratories driving research and development. Published by the American Chemical Society, C&EN's integrated network is delivered in print, digitally and online.

### **BRAND REPORT PURPOSE**

The Brand Report provides a deeper understanding and identification of all audited touch points with customers that have interest in the brand. It is designed to present analysis of all communication channels, including a brand's unique users within each channel of, but not across, multiple media platforms. This non-integrated report contains data for each separate media channel as indicated in the Executive Summary. No attempt has been made to identify or eliminate duplication that may exist across media channels.

# **CHANNELS**







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# **EXECUTIVE SUMMARY**

Below are the Average contacts per occurrence, including frequency per period reported

	Non-Paid	Paid	Average
CHEMICAL & ENGINEERING NEWS (26 issues in the period)	14,069	92,426	106,495
a. Print	8,346	50,870	59,216
b. Digital	5,723	41,556	47,279
1. Requested	-	41,556	41,556
2. Non-Requested Digital Membership Benefit	5,723	-	5,723
CHEMICAL & ENGINEERING NEWS WEBINARS (18 webinars in the period)			
a. Registrants	732	-	732
b. Attendees	272	-	272
CHEMICAL & ENGINEERING NEWS WEBSITES			
Chemical & Engineering News Website			
a. cen.acs.org (Monthly Unique Browsers with 529,641 average Page Impressions)	228,633	-	228,633
ACS Journals Website			
b. pubs.acs.org (Monthly Unique Browsers with 22,069,413 average Page Impressions)	3,137,706	-	3,137,706

#### **FIELD SERVED**

**CHEMICAL & ENGINEERING NEWS** serves manufacturers including pharmaceutical, biotech/life sciences, industrial chemical, environmental/water, agricultural, food/ beverage/flavors, petrochemical and others, independent consulting firms, independent laboratories, academic institutions, engineering/construction firms, government, hospital/clinics, public utilities/transportation, retail/wholesale trade and others allied to the

#### **DEFINITION OF RECIPIENT QUALIFICATION**

Qualified recipients are: Individuals in Chemistry/Science (Chief Chemist/Scientist, Research Scientist/Chemist, Senior Qualified recipients are: Individuals in Chemistry/Science (Chief Chemist/Scientist, Research Scientist/Chemist, Senior Scientist/Chemist, Principal Scientist/Chemist, Graduate Student, Postdoctoral/Fellow Research, Chemical Technician), Executive Management (CEO, President, VP, Mgr Director, Owner, Partner), R & D Management (VP, Director, Manager of R & D, Research, Development, Laboratory Director/Head, Technical Director, Manager and Specialist), Engineering and Engineering Management (Chemical Engineer, Chief, Engineer, Plant/Production Engineer, Design Engineer, Director of Engineering, Engineering Mgr.), Health and Safety, Process/Quality Control, Production/Operations Management (Health and Safety Regulatory Affairs Manager, Process and/or Quality Control Manager, Quality Assurance Manager, Area Mgr, Dir of Production, Dir of Operations, Plant Mgr, Unit Mgr, Supervisor/Project Lead/Foreman, Area Manager, Group/Section Leader, Program Manager, Tech Supervisor), Sales/Marketing/Business Development/Purchasing (Acct. Exec., Bus. Dev Mgr., Dir of Sales, Dir of Marketing, Purchasing Manager, Buyer, Procurement Manager), Consulting/Advising (Consultant, Patent Attorney, Advisor, Association Expert), Education Staff/Management (University/College Professor, Teacher, Teaching Assistant, High School Teacher, University/College Administrator, Secondary Principal), Members of the American Chemical Society and others within the field served. Administrator, Secondary Principal), Members of the American Chemical Society and others within the field served.

#### **AVERAGE NON-QUALIFIED CIRCULATION**

NON-QUALIFIED Not Included Elsewhere	Copies
Other Paid Circulation	-
Advertiser and Agency	935
Allocated for Trade Shows and Conventions	437
All Other	-
TOTAL	1,372

### 1. AVERAGE QUALIFIED CIRCULATION BREAKOUT FOR THE PERIOD

	Total Q	ualified	Qualified	Non-Paid	Qualified Paid		
QUALIFIED CIRCULATION	Copies	Percent	Copies	Percent	Copies	Percent	
Individual	24	-	5	-	19	-	
Sponsored Individually Addressed	-	-	-	-	-	-	
*Membership Benefit	106,471	100.0	14,064	13.2	92,407	86.8	
Multi-Copy Same Addressee	-	-	-	-	-	-	
Single Copy Sales	-	-	·	-	-	-	
TOTAL QUALIFIED CIRCULATION	106,495	100.0	14,069	13.2	92,426	86.8	

See Additional Data

#### 2. QUALIFIED CIRCULATION BY ISSUES FOR PERIOD

2016 Issue	Print	Digital	Qualified Non-Paid	Qualified Paid	Total Qualified
January 4	53,778	44,339	12,993	85,124	98,117
January 11	55,407	45,122	13,244	87,285	100,529
January 18	56,070	45,348	14,086	87,332	101,418
January 25	56,945	45,757	14,095	88,607	102,702
February 1	57,420	46,082	14,121	89,381	103,502
February 8	57,824	46,461	14,104	90,181	104,285
February 15	58,347	46,516	14,099	90,764	104,863
February 22	58,882	46,801	14,111	91,572	105,683
February 29	59,233	46,918	14,102	92,049	106,151
March 7	59,446	47,095	14,101	92,440	106,541
March 14	59,268	46,897	14,075	92,090	106,165
March 21	59,950	47,518	14,079	93,389	107,468
March 28	59,684	47,298	14,228	92,754	106,982
April 4	60,306	47,884	14,253	93,937	108,190
April 11	60,362	47,942	14,267	94,037	108,304
April 18	60,336	48,013	14,129	94,220	108,349
April 25	60,400	47,940	14,133	94,207	108,340
May 2	60,403	48,071	14,139	94,335	108,474
May 9	60,401	48,121	14,146	94,376	108,522
May 16	60,475	48,221	14,147	94,549	108,696
May 23	60,567	48,305	14,137	94,735	108,872
*May 30	60,744	48,433	14,175	95,002	109,177
June 6	60,755	48,480	14,183	95,052	109,235
June 13	60,745	48,463	14,190	95,018	109,208
June 20	60,919	48,555	14,226	95,248	109,474
June 27	60,949	48,686	14,240	95,395	109,635
Analyzed Issue					

# 3a. BUSINESS/OCCUPATION BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF MAY 30, 2016 This issue is 2.6% or 2,789 copies above the average of the other 25 issues reported in Paragraph 2.

BUSINESS AND INDUSTRY	TOTAL QUALIFIED	PERCENT OF TOTAL	Qualified Non-Paid	Qualified Paid
Academic Institutions	23,488	21.5	1,852	21,636
Engineering/Construction Firms	447	0.4	12	435
Government/Public Utility/Transportation	2,359	2.2	86	2,273
Hospitals/Clinics	333	0.3	11	322
Independent Consulting Firms	1,743	1.6	77	1,666
Independent Laboratories	1,290	1.2	56	1,234
Manufacturers	12,561	11.5	187	12,374
Wholesale/Retail Trade	213	0.2	5	208
American Chemical Society Members not elsewhere classified	66,683	61.0	11,889	54,794
Others Allied to the Field	60	0.1	-	60
TOTAL QUALIFIED CIRCULATION	109,177	100.0	14,175	95,002
PERCENT	100.0		13.0	87.0

CLASSIFICATION BY TITLE	TOTAL QUALIFIED	PERCENT OF TOTAL	QUALIFIED NON-PAID	QUALIFIED PAID
Executive Management (See Note 1)	1,754	1.6	30	1,724
Health and Safety, Process/Quality Control, Production/Operations Management (See Note 2)	1,712	1.6	33	1,679
Engineering and Engineering Management (See Note 3)	996	0.9	27	969
R & D Management (See Note 4)	2,576	2.4	49	2,527
Chemistry/Science (See Note 5)	16,527	15.1	448	16,079
Sales/Marketing/Business Development/Purchasing (See Note 6)	625	0.6	10	615
Consulting/Advising (See Note 7)	1,234	1.1	47	1,187
Education Staff/Management (See Note 8)	11,001	10.1	845	10,156
American Chemical Society Members not elsewhere classified	71,324	65.3	12,525	58,799
Others Allied To The Field	1,428	1.3	161	1,267
TOTAL QUALIFIED CIRCULATION	109,177	100.0	14,175	95,002
PERCENT	100.0		13.0	87.0

Note 1 - CEO, President, VP, Mgr Director, Owners, Partners, etc.

Note 2 - Health and Safety Regulatory Affairs Manager, Process and/or Quality Control Manager, Quality Assurance Manager, Area Mgr, Dir of Production, Dir of Operations, Plant Mgr, Unit Mgr, Supervisor/Project Lead/Foreman, Area Manager, Group/Section Leader, Program Manager, Tech Supervisor, etc.

Note 3 - Chemical Engineer, Chief, Engineer, Plant/Production Engineer, Design Engineer, Director of Engineering, Engineering Mgr.

Note 4 - VP, Director, Manager of R & D, Research, Development, Laboratory Director/Head, Technical Director, Manager and Specialist

Note 5 - Chief Chemist/Scientist, Research Scientist/Chemist, Senior Scientist/Chemist, Principal Scientist/Chemist, Graduate Student, Postdoctoral/Fellow Research, Chemical Technician

Note 6 - Acct. Exec., Bus. Dev Mgr., Dir of Sales, Dir of Marketing, Purchasing Manager, Buyer, Procurement Manager

Note 7 - Consultant, Patent Attorney, Advisor, Association Expert

Note 8 - University/College Professor, Teacher, Teaching Assistant, High School Teacher, University/College Administrator, Secondary Principal

## 3b. QUALIFICATION SOURCE BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF MAY 30, 2016

	Qualified Within								
QUALIFICATION SOURCE	1 Year	2 Years	3+ Years	Print	Digital	Qualified Non-Paid	Qualified Paid	Total Qualified	Percent
I. Direct Request:	20	6	-	11	15	5	21	26	-
II. Request from recipient's company:	-	-	-	-	-	-	-	-	-
III. Membership Benefit:	100,872	6,837	1,442	60,733	48,418	14,170	94,981	109,151	100.0
IV. Communication from recipient or recipient's company (other than request):	-	-	-	-	-	-	-	-	-
V. Sources other than above, including: Association rosters and directories; Business directories; Manufacturer's, distributor's and wholesaler's lists; and Other sources:	-	-	-	-	-	-	-	-	-
VI. Single Copy Sales:	-	-	-	-	-	-	-	-	-
TOTAL QUALIFIED CIRCULATION	100,892	6,843	1,442	60,744	48,433	14,175	95,002	109,177	100.0
PERCENT	92.4	6.3	1.3	55.6	44.4	13.0	87.0	100.0	

### AVERAGE ANNUAL AUDITED QUALIFIED CIRCULATION AND CURRENT UNAUDITED CIRCULATION STATEMENTS

	Audited Data	Audited Data	Audited Data	Audited Data	Circulation Claim	Circulation Claim
6-Month Period Ended:	July - December 2013	January – June 2014	July - December 2014	January – June 2015	July - December 2015*	January – June 2016*
Total Audit Average Qualified:	115,913	108,214	112,608	105,817	110,880	106,495
Qualified Non-Paid:	11,465	11,218	11,305	10,891	12,082	14,069
Print:	8,888	8,758	8,864	8,406	8,455	8,346
Digital:	2,577	2,460	2,441	2,485	3,627	5,723
Qualified Paid:	104,448	96,996	101,303	94,926	98,798	92,426
Print:	61,650	56,061	58,516	53,701	55,877	50,870
Digital:	42,798	40,935	42,787	41,225	42,921	41,556
Post Expire Copies included in Total Qualified Circulation:	**NC	**NC	**NC	**NC	**NC	**NC
Average Annual Order Price:	\$50.23	\$47.72	\$45.56	\$53.10	\$53.11	\$53.04

<sup>\*</sup>NOTE: July 2015 - June 2016 data is unaudited. With each successive period, new data will be added until six 6-month periods are displayed.

## GEOGRAPHICAL BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF MAY 30, 2016\*

					Total	
State	Print	Digital	Non-Paid	Paid	Qualified	Percent
Maine	170	73	46	197	243	
New Hampshire	273	151	59	365	424	
Vermont	120	77	27	170	197	
Massachusetts	3,263	2,036	420	4,879	5,299	
Rhode Island	243	119	36	326	362	
Connecticut	1,349	694	234	1,809	2,043	
NEW ENGLAND	5,418	3,150	822	7,746	8,568	7.8
New York	3,251	1,611	707	4,155	4,862	
New Jersey	3,476	1,481	710	4,247	4,957	
Pennsylvania	4,058	1,883	722	5,219	5,941	
MIDDLE ATLANTIC	10,785	4,975	2,139	13,621	15,760	14.5
Ohio	2,514	1,266	534	3,246	3,780	
Indiana	1,343	777	172	1,948	2,120	
Illinois	2,684	1,371	422	3,633	4,055	
Michigan	1,901	994	342	2,553	2,895	
Wisconsin	1,049	456	154	1,351	1,505	
EAST NO. CENTRAL	9,491	4,864	1,624	12,731	14,355	13.1
Minnesota	1,056	644	153	1,547	1,700	
Iowa	442	289	73	658	731	
Missouri	1,080	562	165	1,477	1,642	
North Dakota	108	58	12	154	166	
South Dakota	114	42	15	141	156	
Nebraska	215	136	30	321	351	
Kansas	394	214	72	536	608	
WEST NO. CENTRAL	3,409	1,945	520	4,834	5,354	4.9
Delaware	712	316	186	842	1,028	
Maryland	1,855	996	396	2,455	2,851	
Washington, DC	247	151	33	365	398	
Virginia	1,474	819	319	1,974	2,293	
West Virginia	213	121	55	279	334	
North Carolina	1,796	987	368	2,415	2,783	
South Carolina	748	401	144	1,005	1,149	
Georgia	1,205	704	208	1,701	1,909	
Florida	1,664	820	510	1,974	2,484	
SOUTH ATLANTIC	9,914	5,315	2,219	13,010	15,229	14.0

					Total	
State	Print	Digital	Non-Paid	Paid	Qualified	Percent
Kentucky	504	217	81	640	721	
Tennessee	1,015	537	181	1,371	1,552	
Alabama	414	194	57	551	608	
Mississippi	228	169	41	356	397	
EAST SO. CENTRAL	2,161	1,117	360	2,918	3,278	3.0
Arkansas	212	125	31	306	337	
Louisiana	469	266	76	659	735	
Oklahoma	421	225	87	559	646	
Texas	3,122	1,794	547	4,369	4,916	
WEST SO. CENTRAL	4,224	2,410	741	5,893	6,634	6.1
Montana	119	74	27	166	193	
Idaho	158	88	30	216	246	
Wyoming	84	42	20	106	126	
Colorado	1,032	645	187	1,490	1,677	
New Mexico	407	231	100	538	638	
Arizona	561	329	172	718	890	
Utah	356	208	51	513	564	
Nevada	208	128	62	274	336	
MOUNTAIN	2,925	1,745	649	4,021	4,670	4.3
Alaska	41	46	7	80	87	
Washington	1,071	645	212	1,504	1,716	
Oregon	561	346	108	799	907	
California	6,656	4,043	1,061	9,638	10,699	
Hawaii	114	50	24	140	164	
PACIFIC	8,443	5,130	1,412	12,161	13,573	12.4
UNITED STATES	56,770	30,651	10,486	76,935	87,421	80.1
U.S. Territories	120	142	17	245	262	
Canada	1,202	919	181	1,940	2,121	
Mexico	65	204	8	261	269	
Other International	2,575	16,507	3,483	15,599	19,082	
APO/FPO	11	10	-	21	21	
Email Only	1	-	-	1	1	
TOTAL QUALIFIED CIRCULATION	60,744	48,433	14,175	95,002	109,177	100.0

<sup>\*\*</sup>NC = None Claimed.

<sup>\*</sup>See Additional Data

GEOGRAPHICAL	RREAKOUT OF	OHALIFIED CIRCL	II ATION FOR	ISSUE OF MAY 30.	2016*

Dogian (Country	Drint	Digital	Non Doid	Doid	Total	Doroont	Dogian (Coun	+	Drint	Digital	Non Doid	Doid	Total	Darsont
Region/Country	Print	Digital	Non-Paid	Paid	Qualified	Percent	Region/Coun	ıtry	Print		Non-Paid	Paid	Qualified	Percent
ASIA		4		1	4		Macedonia		-	1	-	1	1	
Armenia	-	1	-	1	1		Malta		1	9	-	10	10	
Azerbaijan	-	1	-	1	1		Monaco		-	1	-	1	1	
Bangladesh	1	2	1	2	3		Montenegro		-	1	-	1	1	
Brunei Darussalam	-	1	-	1	1		Netherlands		77	220	7	290	297	
China	46	3,035	2,480	601	3,081		Norway		24	85	3	106	109	
Georgia	-	6	-	6	6		Poland		22	93	-	115	115	
Hong Kong - SAR	22	117	8	131	139		Portugal		9	50	2	57	59	
India	74	1,263	490	847	1,337		Romania		3	49	-	52	52	
Indonesia	1	29	-	30	30		Russian Federation	n	8	106	1	113	114	
Japan	709	2,929	88	3,550	3,638		Serbia	,	1	14	_	15	15	
Kazakhstan	-	8	-	8	8		Slovakia		4	20		24	24	
Korea, Republic Of	81	412	3	490	493		Slovenia		3	24	2	25	27	
Macao	-	4	-	4	4									
Malaysia	12	158	5	165	170		Spain		67	387	7	447	454	
Myanmar	-	1	-	1	1		Sweden		52	328	13	367	380	
Nepal	1	-	-	1	1		Switzerland		178	508	14	672	686	
Pakistan	3	24	2	25	27		Turkey		7	113	1	119	120	
Philippines	6	30	1	35	36		Ukraine		1	11	-	12	12	
Singapore	24	180	1	203	204		United Kingdom		138	1,225	23	1,340	1,363	
Sri Lanka	1	12	-	13	13		S	Subtotal	1,278	6,129	190	7,217	7,407	6.8
Taiwan	60	244	4	300	304		AFRICA							
Thailand	7	65	-	72	72		Algeria			3	-	3	3	
Vietnam	2	4	-	6	6		Benin			1		1	1	
Subtotal	1,050	8,526	3,083	6,493	9,576	8.8	Botswana		_	6		6	6	
MIDDLE EAST									2	3	-	5	5	
Bahrain	2	6	-	8	8		Cameroon		2					
Iran	1	26	1	26	27		Comoros		-	1	-	1	1	
Iraq	-	65	-	65	65		Egypt		1	25	-	26	26	
Israel	37	137	22	152	174		Ghana		-	6	1	5	6	
Jordan	2	7	-	9	9		Kenya		1	10	-	11	11	
Kuwait	2	10	-	12	12		Libyan Arab Jama	hiriya	-	2	-	2	2	
Lebanon	1	6	1	6	7		Malawi		-	1	-	1	1	
Oman	3	11	-	14	14		Mauritius		-	2	-	2	2	
Qatar	3	29	1	31	32		Morocco		-	3	-	3	3	
Saudi Arabia	13	132	1	144	145		Namibia		-	3	2	1	3	
United Arab Emirates	1	34	1	34	35		Nigeria		11	83	1	93	94	
Subtotal	65	463	27	501	528	0.5	Sierra Leone		1	-	-	1	1	
EUROPE		100		001	020	0.0	South Africa		15	87	2	100	102	
Albania	_	1	_	1	1		Tanzania			3	-	3	3	
Austria	27	131	3	155	158					2		2	2	
Belarus	-	1	-	133	1		Tunisia		-		-			
Belgium	48	212	12	248	260		Uganda		-	2	-	2	2	
Bosnia and Herzegovina	-	3	-	3	3		Zambia		1	3	-	4	4	
Bulgaria	2	22	-	24	24			Subtotal	32	246	6	272	278	0.3
Croatia	5	32	1	36	37		NORTH AMERICA	1						
	3	15	-	18	18		Canada		1,202	919	181	1,940	2,121	
Cyprus Czech Republic	20	94	3	111	114		Mexico		65	204	8	261	269	
Denmark	47	161	3	205			United States		56,770	30,651	10,486	76,935	87,421	
	47				208		unspecified North		131	152	17	266	283	
Estonia		11	-	11	11						10,692		90.094	82.4
Faroe Islands	- 27	1	-	1 1 7	1		CARIBBEAN	- ao cotai	20,100	32	2	30	32	J
Finland	27	93	3	117	120			04	-					-
France	128	443	34	537	571		CENTRAL AMERIC		2	19	-	21	21	-
Germany	269	979	36	1,212	1,248		SOUTH AMERICA		38	459	152	345	497	0.5
Greece	14	75	3	86	89		ASIA PACIFIC		110	633	23	720	743	0.7
Hungary	14	43	-	57	57		Email Only		1	-	-	1	1	-
Iceland	2	4	-	6	6									
Ireland	12	88	3	97	100									
Italy	60	444	16	488	504									
Latvia	2	15	-	17	17		TOTAL QUA		60.744	48,433	14.175	95.002	109,177	100.0
Liechtenstein	1	1	-	2	2		CIRCUI	LATION	, - • •	,	,	,		
Lithuania	1	4	-	5	5									
Luxembourg	1	11	-	12	12									
*See Additional Data														

<sup>\*</sup>See Additional Data

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# **WEBINAR CHANNEL**

2016	Sponsor Name	Webinar Name	Registrants	Attendees
February 23	PerkinElmer	Single Particle ICP-MS: Overview of Environmental, Industrial and Biological Applications	1,112	444
March 3	Metrohm USA	Evaluating Surfactants Using Potentiometric Titration	1,021	352
March 22	PerkinElmer	Quantification of Metal Content in Individual Cells using Single Cell Analysis by ICP-MS: An Insight into Cancer Treatment	782	204
March 23	Wyatt	Measuring Size, Stability and Conformation of Biopolymers with Dynamic Light Scattering	1,197	412
March 30	Anton-Paar	4 Key Advances in Particle Characterization Technology	778	295
April 5	NETZSCH	Unleashing the Power of Thermogravimetric Analysis (TGA or STA) by Coupling to FTIR, MS, and GC-MS for Characterization of Evolved Gases	875	353
April 7	Metrohm USA	Optimizing Water Cycle Chemistry and Preventing Corrosion in Nuclear & Conventional Power Plants	473	206
April 13	Agilent	Technology Advancements in Sulfur Chemiluminescence Detection for Trace Analysis of Sulfur Compounds in Industrial Processes	572	238
April 26	Metrohm USA	Accurate API Assays by Non-Aqueous Titration	462	198
April 28	Waters	Analytical Challenges of Food Contact Materials	821	343
May 11	Anton-Paar	Key Benefits of Implementing State of the Art Refractometry	444	146
May 17	Bruker	Biosynthetic Function of Genes in Plants and Their Consequences in Insects – a Metabolite Profiling Approach Driven by Automatic Compound Identification	514	149
May 18	PerkinElmer	The Diversity of UV/Vis/NIR Techniques for Nano and Advanced Material Characterization	1210	429
May 24	Agilent	Routine and Research Analysis in Academia with FTIR, UV-Vis and Fluorescence Spectroscopy: Powerful Solutions Without Complexity	852	287
June 16	Bruker	Uncovering Metabolic Pathways in Disease to Support Drug Discovery Using High Resolution MALDI Imaging Mass Spectrometry	411	189
June 22	Anton-Paar	Advancing Microwaves into a Simplified & Efficient Digestion Technique for Environmental, Food and Pharmaceutical Samples	430	162
June 23	Wyatt	Well, Ain't That Swell! Characterizing Microgel Polymers and Nanostructures by Light Scattering	615	252
	Bruker	Structure Elucidation with Trapped Ion Mobility Spectrometry	598	243

# **WEBSITE CHANNEL**

#### **CEN.ACS.ORG**

2016	PAGE IMPRESSIONS	USER SESSIONS	UNIQUE BROWSERS	UNIQUE BROWSER FREQUENCY	PAGE DURATION	USER SESSION DURATION
January	512,573	290,347	212,327	1.37	02:02	01:34
February	554,176	320,633	236,685	1.35	02:09	01:34
March	571,682	334,958	244,700	1.37	02:11	01:33
April	568,313	335,229	247,757	1.35	02:17	01:35
May	504,911	297,969	224,476	1.33	02:16	01:34
June	466,194	276,859	205,853	1.34	02:14	01:31
AVERAGE:	529,641	309,332	228,633	1.35	02:11	01:33

January - June 2016 data was provided by Google Analytics. All website activity is audited by BPA Worldwide.

### **PUBS.ACS.ORG**

2016	PAGE IMPRESSIONS	USER SESSIONS	UNIQUE BROWSERS	UNIQUE BROWSER FREQUENCY	PAGE DURATION	USER SESSION DURATION
January	21,464,464	7,769,596	2,961,032	2.62	02:10	03:49
February	20,280,503	7,714,768	3,129,403	2.47	02:10	03:31
March	24,588,354	9,074,403	3,475,472	2.61	02:13	03:47
April	23,199,070	8,704,849	3,363,691	2.59	02:13	03:42
May	22,549,164	8,454,250	3,168,960	2.67	02:16	03:47
June	20,334,920	7,574,917	2,727,675	2.78	02:16	03:49
AVERAGE:	22,069,413	8,215,464	3,137,706	2.62	02:13	03:44

January - June 2016 data was provided by Google Analytics. All website activity is audited by BPA Worldwide.

#### WEBSITE GLOSSARY

Page Impressions: A Page Impression is recorded each time a page implanted with the JavaScript code (tag) is displayed in a browser window. This will occur whether the page is served directly from the web server, from a proxy, or from the browser's cache.

User Sessions: A single continuous set of activity attributable to a cookied browser resulting in one or more pulled text and/or graphics downloads from a site. A period of 30 minutes of inactivity will terminate the session.

Unique Browsers: An identified and unduplicated Cookied Browser that accesses Internet content or advertising during a measurement period.

Unique Browser Frequency: Unique Browser Frequency represents the average number of times a Unique Browser visits a site during a reporting period. This is calculated by dividing the total number of User Sessions by the number of Unique Browsers.

Page Duration: The average time spent viewing any page on a web site.

User Session Duration: The average time visitors remain on a site per session.

For info on how to obtain online ad campaign performance metrics across multiple sites, visit <a href="www.adicompli.com">www.adicompli.com</a>

# ADDITIONAL DATA

#### **METHOD OF DISTRIBUTION:**

All qualified circulation conforms to the field served and definition of recipient's qualification, as reported. Print copies are distributed via postal services or other carriers. Recipients of the digital version are notified via email when the version is available.

#### STATEMENT OF CONTENT PLATFORM:

Editorial Replica – If a print edition exists, editorial and design are unchanged from the original print edition. Each issue's content and design are identical to the original edition. Apart from minor updates, the content cannot change once the issue is made available.

#### MAGAZINE:

# CHANGE IN FREQUENCY:

Effective with the August 17, 2015 issue, Chemical & Engineering News changed its frequency from 51 to 49 issues per year.

#### PARAGRAPH 1

Qualified Paid Benefit Membership subscriptions averaging 92,407 copies were sold to Qualified Recipients at the following subscription price: \$53.44 for North American and International print and digital subscribers. The Membership yearly subscription price is included in the dues.

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#### PARAGRAPH 2:

The American Chemical Society will publish two double issues in the last half of 2016.

#### **GEOGRAPHIC DISTRIBUTION:**

Geographic Data for Webinars and Websites are not reported at the Media Owner's Option.

## **PUBLISHER'S AFFIDAVIT**

We hereby make oath and say that all data set forth in this statement are true.

Kevin Davies,, Vice President, Publisher, C & EN

Stephanie Holland, Manager, Adv. Sales and Marketing, C & EN

(At least one of the above signatures must be that of an officer of the publishing company or its authorized representative.)

IMPORTANT NOTE:
This unaudited brand report has been checked against the previous audit report.

It will be included in the annual audit made by BPA Worldwide.

#### About BPA Worldwide

A not-for-profit organization since 1931, BPA Worldwide is governed by a tripartite board comprised of media owners, advertising agencies and advertisers. Headquartered in Shelton, Connecticut, USA, BPA has the largest membership of any media-auditing organization in the world, spanning more than 30 countries. Globally, BPA audits media properties including consumer magazines, newspapers, web sites, events, email newsletters, databases, wireless, social media and other advertiser-supported media—as well as advertiser and agency members. Visit www.bpaww.com for the latest audit reports, membership information and publishing and advertising industry news.

August 2, 2016

Washington, D.C.

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