# c&en

## **BRAND REPORT**

## FOR THE 6 MONTH PERIOD ENDED DECEMBER 2015



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**









## **EXECUTIVE SUMMARY**

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

	Non-Paid	Paid	Average
CHEMICAL & ENGINEERING NEWS (23 issues in the period)	12,082	98,798	110,880
a. Print	8,455	55,877	64,332
b. Digital	3,627	42,921	46,548
1. Requested	-	42,921	42,921
2. Non-Requested Digital Membership Benefit	3,627	-	3,627
CHEMICAL & ENGINEERING NEWS WEBINARS (25 webinars in the period)			
a. Registrants	823	-	823
b. Attendees	347	-	347
CHEMICAL & ENGINEERING NEWS WEBSITES			
Chemical & Engineering News Website			
a. cen.acs.org (Monthly Unique Browsers with 463,062 average Page Impressions)	206,878	-	206,878
ACS Journals Website		_	
b. pubs.acs.org (Monthly Unique Browsers with 20,067,254 average Page Impressions)	2,884,454	-	2,884,454

### **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 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.

1. AVERAGE QUALIFIED CIRCULATION BREAKOUT FOR THE PERIOD

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

NON-QUALIFIED Not Included Elsewhere	Copies
Other Paid Circulation	_
Advertiser and Agency  Allocated for Trade Shows	941
and Conventions	78
All Other	1,605
TOTAL	2,624

### **Total Qualified** Qualified Non-Paid Qualified Paid QUALIFIED CIRCULATION Copies Copies Percent Copies Percent Percent Individual 22 6 16 Sponsored Individually Addressed

\*Membership Benefit 110,858 100.0 12,076 10.9 98,782 89.1 Multi-Copy Same Addressee Single Copy Sales **TOTAL QUALIFIED** 100.0 12.082 10.9 98.798 89.1 110.880 CIRCULATION

Qualified

Total

Qualified

\*See Additional Data

### 2. QUALIFIED CIRCULATION BY ISSUES FOR PERIOD

2015 Issue	Print	Digital	Non-Paid	Paid	Qualified
July 6	64,492	45,134	10,916	98,710	109,626
July 13	64,280	44,748	10,891	98,137	109,028
July 20	64,550	45,148	10,917	98,781	109,698
July 27	64,421	45,714	11,670	98,465	110,135
August 3	64,404	46,055	11,870	98,589	110,459
*August 17	64,547	46,658	12,197	99,008	111,205
August 24	64,653	46,807	12,244	99,216	111,460
August 31	64,767	47,116	12,313	99,570	111,883
September 7	64,667	47,046	12,275	99,438	111,713
September 14	64,719	47,137	12,392	99,464	111,856
September 21	64,392	46,827	12,239	98,980	111,219
September 28	64,443	46,905	12,262	99,086	111,348
October 5	64,379	46,929	12,276	99,032	111,308
October 12	64,243	46,799	12,302	98,740	111,042
October 19	64,126	46,715	12,307	98,534	110,841
October 26	64,156	46,765	12,290	98,631	110,921
November 2	64,073	46,805	12,271	98,607	110,878
November 9	64,143	46,995	12,292	98,846	111,138
November 16	64,132	46,886	12,398	98,620	111,018
November 23	64,067	46,823	12,349	98,541	110,890
November 30	64,107	46,938	12,473	98,572	111,045
*December 7	63,999	46,804	12,389	98,414	110,803
December 21	63,874	46,854	12,357	98,371	110,728

## 3a. BUSINESS/OCCUPATION BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF NOVEMBER 30, 2015 This issue is 0.2% or 172 copies above the average of the other 22 issues reported in Paragraph 2.

BUSINESS AND INDUSTRY	TOTAL QUALIFIED	PERCENT OF TOTAL	Print	Digital	Qualified Non-Paid	Qualified Paid
Academic Institutions	23,871	21.5	11,739	12,132	1,838	22,033
Engineering/Construction Firms	442	0.4	246	196	10	432
Government/Public Utility/Transportation	2,632	2.4	1,447	1,185	89	2,543
Hospitals/Clinics	379	0.3	231	148	15	364
Independent Consulting Firms	1,940	1.8	1,161	779	70	1,870
Independent Laboratories	1,419	1.3	895	524	63	1,356
Manufacturers	13,220	11.9	8,426	4,794	182	13,038
Wholesale/Retail Trade	243	0.2	158	85	6	237
American Chemical Society Members not elsewhere classified	66,865	60.2	39,785	27,080	10,199	56,666
Others Allied to the Field	34	-	19	15	1	33
TOTAL QUALIFIED CIRCULATION	111,045	100.0	64,107	46,938	12,473	98,572
PERCENT	100.0		57.7	42.3	11.2	88.8

CLASSIFICATION BY TITLE	TOTAL QUALIFIED	PERCENT OF TOTAL	QUALIFIED NON-PAID	QUALIFIED PAID
Executive Management (See Note 1)	1,957	1.8	37	1,920
Health and Safety, Process/Quality Control, Production/Operations Management (See Note 2)	1,854	1.7	29	1,825
Engineering and Engineering Management (See Note 3)	1,033	0.9	31	1,002
R & D Management (See Note 4)	2,802	2.5	44	2,758
Chemistry/Science (See Note 5)	17,137	15.4	433	16,704
Sales/Marketing/Business Development/Purchasing (See Note 6)	661	0.6	14	647
Consulting/Advising (See Note 7)	1,236	1.1	48	1,188
Education Staff/Management (See Note 8)	10,760	9.7	777	9,983
American Chemical Society Members not elsewhere classified	72,091	64.9	10,907	61,184
Others Allied To The Field	1,514	1.4	153	1,361
TOTAL QUALIFIED CIRCULATION	111,045	100.0	12,473	98,572
PERCENT	100.0		11.2	88.8

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 NOVEMBER 30, 2015

	Qı	ualified Wit	hin						
QUALIFICATION SOURCE	1 Year	2 Years	3+ Years	Print	Digital	Qualified Non-Paid	Qualified Paid	Total Qualified	Percent
I. Direct Request:	21	2	-	10	13	7	16	23	-
II. Request from recipient's company:	-	-	-	-	-	-	-	-	-
III. Membership Benefit:	92,341	17,009	1,672	64,097	46,925	12,466	98,556	111,022	100.0
<ul><li>IV. Communication from recipient or recipient's company (other than request):</li></ul>	-	-	-	-	-	-	-	-	-
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	92,362	17,011	1,672	64,107	46,938	12,473	98,572	111,045	100.0
PERCENT	83.2	15.3	1.5	57.7	42.3	11.2	88.8	100.0	

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

	Audited Data	Audited Data	Audited Data	Audited Data	Audited Data	Circulation Claim
6-Month Period Ended:	January – June <b>201</b> 3	July – December 2013	January – June 2014	July - December 2014	January – June 2015	July - December 2015*
Total Audit Average Qualified:	112,280	115,913	108,214	112,608	105,817	110,880
Qualified Non-Paid:	11,446	11,465	11,218	11,305	10,891	12,082
Print:	8,704	8,888	8,758	8,864	8,406	8,455
Digital:	2,742	2,577	2,460	2,441	2,485	3,627
Qualified Paid:	100,834	104,448	96,996	101,303	94,926	98,798
Print:	59,772	61,650	56,061	58,516	53,701	55,877
Digital:	41,062	42,798	40,935	42,787	41,225	42,921
Post Expire Copies included in Total Qualified Circulation:	**NC	**NC	**NC	**NC	**NC	**NC
Average Annual Order Price:	\$52.57	\$50.23	\$47.72	\$45.56	\$53.10	\$53.11

<sup>\*</sup>NOTE: July - December 2015 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 NOVEMBER 30, 2015\*

					Total							Total	
State	Print	Digital	Non-Paid	Paid	Qualified	Percent	State	Print	Digital	Non-Paid	Paid	Qualified	Percent
Maine	170	81	43	208	251		Kentucky	510	207	75	642	717	
New Hampshire	276	163	67	372	439		Tennessee	1,068	541	182	1,427	1,609	
Vermont	130	71	28	173	201		Alabama	450	225	57	618	675	
Massachusetts	3,525	2,109	446	5,188	5,634		Mississippi	248	155	35	368	403	
Rhode Island	267	116	37	346	383		EAST SO. CENTRAL	2,276	1,128	349	3,055	3,404	3.1
Connecticut	1,443	694	219	1,918	2,137		Arkansas	239	118	35	322	357	
NEW ENGLAND	5,811	3,234	840	8,205	9,045	8.1	Louisiana	482	284	72	694	766	
New York	3,402	1,538	709	4,231	4,940		Oklahoma	424	218	80	562	642	
New Jersey	3,670	1,517	713	4,474	5,187		Texas	3,330	1,779	549	4,560	5,109	
Pennsylvania	4,233	1,852	750	5,335	6,085		WEST SO. CENTRAL	4,475	2,399	736	6,138	6,874	6.2
MIDDLE ATLANTIC	11,305	4,907	2,172	14,040	16,212	14.6	Montana	124	75	23	176	199	
Ohio	2,627	1,251	507	3,371	3,878		Idaho	173	75	31	217	248	
Indiana	1,355	773	165	1,963	2,128		Wyoming	90	52	21	121	142	
Illinois	2,874	1,377	421	3,830	4,251		Colorado	1,214	763	193	1,784	1,977	
Michigan	2,000	994	328	2,666	2,994		New Mexico	421	250	96	575	671	
Wisconsin	1,103	479	161	1,421	1,582		Arizona	577	326	168	735	903	
EAST NO. CENTRAL	9,959	4,874	1,582	13,251	14,833	13.4	Utah	369	216	53	532	585	
Minnesota	1,131	650	158	1,623	1,781		Nevada	210	128	58	280	338	
Iowa	453	290	72	671	743		MOUNTAIN	3,178	1,885	643	4,420	5,063	4.6
Missouri	1,172	545	166	1,551	1,717		Alaska	46	46	5	87	92	
North Dakota	112	51	12	151	163		Washington	1,132	641	207	1,566	1,773	
South Dakota	115	50	12	153	165		Oregon	600	354	119	835	954	
Nebraska	232	137	26	343	369		California	6,885	3,767	1,087	9,565	10,652	
Kansas	410	236	75	571	646		Hawaii	122	60	29	153	182	
WEST NO. CENTRAL	3,625	1,959	521	5,063	5,584	5.0	PACIFIC	8,785	4,868	1,447	12,206	13,653	12.3
Delaware	750	339	183	906	1,089		UNITED STATES	59,852	30,646	10,506	79,992	90,498	81.5
Maryland	1,927	1,000	378	2,549	2,927		U.S. Territories	126	134	21	239	260	
Washington, DC	263	165	40	388	428		Canada	1,265	909	172	2,002	2,174	
Virginia	1,527	831	305	2,053	2,358		Mexico	72	192	4	260	264	
West Virginia	236	115	57	294	351		Other International	2,779	15,042	1,770	16,051	17,821	
North Carolina	1,903	998	353	2,548	2,901		APO/FPO	12	14	-	26	26	
South Carolina	794	372	144	1,022	1,166			1	1	-	2	2	
Georgia	1,264	730	205	1,789	1,994		TOTAL QUALIFIED						
Florida	1,774	842	551	2,065	2,616		CIRCULATION	64,107	46,938	12,473	98,572	111,045	100.0
SOUTH ATLANTIC	10,438	5,392	2,216	13,614	15,830	14.2	CIRCULATION						

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

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

CEUCDADHICAL E	SDEVKULL UE	OHALIELED	CIDCIII ATION EO	R ISSUE OF NOVEMBER 30	2015*

Region/Country	Print	Digital	Non-Paid	Paid	Total Qualified	Darcant	Region/Country	Print	Digital	Non-Paid	Paid	Total Qualified	Darcant
ASIA	FIIII	Digital	Non-raiu	raiu	Qualified	reiceili		1	Digital 12	Non-Faid	13	13	reiteili
Armenia		1	_	1	1		Luxembourg Macedonia		2	-	2		
Azerbaijan	1	1		2	2		Malta	1	6	-	7	7	
Bangladesh	1	5	1	5	6				1	-	1		
Brunei Darussalam	-	1	-	1	1		Monaco	-					
China	53	1.507	945	615	1,560		Montenegro	-	1	-	1	1	
Georgia	-	5	-	5	5		Netherlands	80	217	7	290	297	
Hong Kong - SAR	26	121	7	140	147		Norway	24	84	3	105	108	
India	86	1.016	369	733	1,102		Poland	20	100	-	120	120	
Indonesia	-	36	-	36	36		Portugal	11	50	2	59	61	
Japan	743	3.050	86	3,707	3.793		Romania	6	55	-	61	61	
Kazakhstan	1	9		10	10		Russian Federation	11	116	-	127	127	
Korea, Republic Of	84	418	2	500	502		Serbia	1	15	-	16	16	
Macao	_	5		5	5		Slovakia	3	20	-	23	23	
Malaysia	11	161	7	165	172		Slovenia	3	24	2	25	27	
Myanmar		2	-	2	2		Spain	74	386	7	453	460	
Nepal	-	1		1	1		Sweden	58	346	12	392	404	
Pakistan	2	18	1	19	20		Switzerland	179	528	19	688	707	
Philippines	10	29	1	38	39		Turkey	10	97	3	104	107	
Singapore	27	192	1	218	219		Ukraine	2	8	-	10	10	
Sri Lanka	-	14	-	14	14		United Kingdom	149	1,241	23	1,367	1,390	
Taiwan	68	248	3	313	316		Subtotal	1,377	6,262	184	7,455	7,639	6.9
Thailand	7	51	-	58	58		AFRICA	1,311	0,202	104	1,+33	1,039	0.9
Vietnam	2	4	-	6	6				4		4	4	
Subtotal	1,122	6.895	1,423	6.594	8,017	7.2	Algeria	-					
MIDDLE EAST	,	-,	, -	-,	-,-		Botswana		6	-	6	6	
Bahrain	2	7	-	9	9		Burkina Faso	-	1	-	1	1	
Iran	1	22	2	21	23		Cameroon	3	2	-	5	5	
Iraq	1	61	-	62	62		Egypt	2	23	-	25	25	
Israel	44	141	24	161	185		Ethiopia	-	1	-	1		
Jordan	2	10	-	12	12		Ghana	-	8	-	8	8	
Kuwait	2	11	-	13	13		Kenya	-	9	-	9	9	
Lebanon	1	5	-	6	6		Lesotho	-	1	-	1	1	
Oman	3	7	-	10	10		Libyan Arab Jamahiriya	-	2	-	2	2	
Qatar	1	22	1	22	23		Malawi	-	2	-	2	2	
Saudi Arabia	12	135	1	146	147		Mauritius	-	2	-	2	2	
Syrian Arab Republic	-	1	1	-	1		Morocco	1	1	-	2	2	
United Arab Emirates	2	43	1	44	45		Namibia	-	3	2	1	3	
Subtotal	71	465	30	506	536	0.5	Nigeria	15	112	1	126	127	
EUROPE							South Africa	19	93	1	111	112	
Albania	-	1	-	1	1		Sudan	-	1	-	1	1	
Austria	32	123	3	152	155		Tanzania		3		3	3	
Belarus	-	1	-	1	1		Tunisia		2	-	2	2	
Belgium	54	211	9	256	265		Uganda		3	_	3		
Bosnia and Herzegovina	-	2	-	2	2		Zambia	1	4		5	5	
Bulgaria	-	21	-	21	21		Zimbabwe	-	_		3		
Croatia	6	30	1	35	36		Subtotal	41	286	4	323		0.3
Cyprus	3	18	-	21	21			41	200	4	323	321	0.3
Czech Republic	21	93	-	114	114		NORTH AMERICA	4.005	000	470	0.000	0.474	
Denmark	49	176	3	222	225		Canada	1,265	909	172	2,002	2,174	
Estonia	-	13	-	13	13		Mexico	72	192	4	260		
Faroe Islands	-	1	-	1	1		United States			10,527			
Finland	27	89	2	114	116		Subtotal	61,327		10,703		93,222	84.0
France	146	468	28	586	614		CARIBBEAN	4	40	4	40	44	-
Germany	277	1,005	37	1,245	1,282		CENTRAL AMERICA	2	30	-	32	32	
Greece	18	74	2	90	92		SOUTH AMERICA	41	418	97	362	459	0.4
Hungary	14	43	1	56	57		ASIA PACIFIC	121	646	28	739	767	0.7
Iceland	2	5	-	7	7		Email Only	1	1	-	2	2	-
	18	88	4	102	106								
Ireland		470	16	526	542								
Ireland Italy	72	470	10	320									
	72 3	17	-	20	20		TOTAL QUALIFIED	64,107	46,938	12,473	98,572	111,045	100.0
Italy							TOTAL QUALIFIED CIRCULATION	64,107	46,938	12,473	98,572	111,045	100.0

## WEBINAR CHANNEL

2015	Sponsor Name	Webinar Name	Registrants	Attendees
July 8	Bruker Daltonics	MALDI Imaging Moving Into The Fast Lane: Toward High Throughput Tissue Typing	785	384
July 22	Thermo	Surfactant Analysis in Hydraulic Fracturing Flowback Waters Using SPE, 2-D UHPLC Followed by Corona CAD and Orbitrap HRAM Detection	556	269
July 29	Metrohm	Thermometric Titration: Protect Your Refinery with Improved Corrosion Monitoring	443	266
August 5	PerkinElmer	Making Meaningful UV/Vis/NIR Absorbance, Reflection, and Scattering Measurement	1336	639
August 12	Bruker Daltonics	Development of Spectral Libraries, Predictive Software, and UHPLC-MS-SPE- NMR Technologies for Large-Scale Plant Metabolite Identification	831	414
August 26	Thermo	A Fully Automated LC-MS Interpretation Workflow for Finding Targets in Chemical Reactions	548	203
September 9	Bruker Daltonics	Advances in Glycopeptide Analysis	729	343
September 15	Wyatt	Essential Polymer Characterization: The Benefits of Multi-Angle Light Scattering (MALS) and Field Flow Fractionation (FFF) for Determining Molecular Weights, Sizes and Branching Ratios	1018	457
September 22	Agilent	Part I: Importance of Extractables and Leachables Analysis; Relevant Analytical Technologies; Regulatory Landscape; Best Practices in Study Design	1697	953
September 24	Metrohm	Improving Productivity and Profitability in the Environmental Lab	409	169
September 30	Agilent	Applications of 2D-LC and 2D-LC/MS for Polymer and Crop Protection Chemical Analysis	786	292
October 13	Agilent	Part II: Designing an Extractables and Leachables Study; New Tools and Tricks for Analysis; Future Perspectives	1837	533
October 20	Agilent	Triple Quadrupole ICP-MS and ICP-OES Fingerprinting of Up to 57 Trace and Minor Elements in Crude Oil Using a Single Sample Preparation Method	984	451
October 21	Thermo	You Are What You Eat: Metabolomic Analysis of Alternative Diets	1,035	463
October 26	Thermo	On the Use of Top Down Proteomics in Targeted and Discovery Mode	480	212
October 27	Agilent	Part 1: Harnessing Multidimensional Chromatography in Pharmaceutical Analysis	1147	262
October 29	Netzsch	Simultaneous Thermal Analysis (STA) Basics and Application Possibilities	663	311
November 4	Bruker Daltonics	New Developments in Quadrupole Time-of-Flight Instrumentation for Quantitative Proteomics	855	445
November 10	Wyatt	Small, But Bright: µSEC-MALS Adds Light Scattering to UHP-SEC for Absolute Molecular Weight and Size	635	265
November 17	Agilent	Part 2: Impact of Supercritical Fluid Chromatography in Pharmaceutical Analysis	861	169
November 18	Thermo	The Next Generation Quality Control Rheometer	283	142
November 19	Waters	Probing the Primary and Secondary Structures of Synthetic Polymers: How Far can we go with Mass Spectrometry?	781	357
December 8	EMD Millipore	Lab Water Purification: Removing Specific Trace Contaminants	578	244
December 9	Waters	UPLC-ESI-TOF MS based Metabolite Profiling of the Antioxidative Food Supplement Garcinia buchananii	715	224
December 10	Thermo	The Promise of Mass Spectrometry-Based Metabolomics for Clinical Research and Stratified Medicine	576	212

### **WEBSITE CHANNEL**

### **CEN.ACS.ORG UNIQUE UNIQUE BROWSER USER SESSION PAGE USER PAGE** 2015 **IMPRESSIONS SESSIONS BROWSERS FREQUENCY** DURATION **DURATION** July 407,107 245,480 184.359 1.33 00:56 01:33 1.34 01:39 August 380,546 213,825 159,464 00:56 September 460,577 267,659 202,886 1.32 00:55 01:36 October 532,998 317,256 242,985 1.31 00:54 01:31 246,021 1.29 00:55 01:32 November 532,022 317,920 December 465,122 274,942 205,558 1.34 02:07 01:28 **AVERAGE:** 463,062 272,847 206,878 1.32 01:07 01:33

July - December 2015 data was provided by Omniture and Google Analytics. All website activity is audited by BPA Worldwide.

PUBS.ACS.ORG						
2015	PAGE IMPRESSIONS	USER SESSIONS	UNIQUE BROWSERS	UNIQUE BROWSER FREQUENCY	PAGE DURATION	USER SESSION DURATION
July	19,029,246	6,536,114	2,518,282	2.60	02:24	04:35
August	17,497,995	6,071,014	2,481,682	2.45	02:21	04:26
September	20,257,058	7,044,385	2,981,804	2.36	02:21	04:25
October	22,024,881	7,741,952	3,317,330	2.33	02:21	04:20
November	22,228,509	7,719,913	3,239,418	2.38	02:19	04:21
December	19,365,836	6,654,622	2,768,210	2.40	02:16	04:20
AVERAGE:	20,067,254	6,961,333	2,884,454	2.42	02:20	04:24

July - December 2015 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 www.adicompli.com

### ADDITIONAL DATA

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## MAGAZINE: CHANGE IN FREQUENCY:

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

Qualified Paid Membership Benefit Subscriptions averaging 98,782 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.

The American Chemical Society published two double issues: August 10, 2015 & August 17, 2015 and December 7, 2015 and December 14, 2015.

### **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, Advertising Sales & Mktg, C & EN

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

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

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

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