2018 REGION 1 CRC – NEW JERSEY

Thursday, August 16th – Saturday, August 18th

WELCOME TO JERSEY CITY!

The Chapters Regional Conference (CRC) is intended to provide a forum for the dissemination of information pertaining to chapter, regional and society activities. Region I consists of Connecticut, Maine, New Hampshire, New Jersey, New York, Rhode Island & Vermont. Chapters from these areas come together to report their activities from the past year and establish goals for the coming year. Technical sessions are conducted as well as award presentations and social activities. This is an annual conference and is located in the city of one of its region’s chapters and we are proud Jersey City is this year’s chosen city for Region 1.

(see page 15 for more details)
Chapter Officers

**President**
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**Research Promotion**
Matt Devlin

**Webmaster**
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**Nominating / Past President**
Jeff Close (585) 289-6816  
jeff.close@pres-services.com

**Buyer’s Guide**
TBD
Presidential Award Of Excellence

Chapter: ROCHESTER

Fiscal Year: 2017-2018

- Chapter Operations
  Par: 1200  Min Points: 600  Total Points: 1950
- Chapter Technology Transfer
  Par: 1050  Min Points: 450  Total Points: 1375
- Electronic Communications
  Par: 500  Min Points: 250  Total Points: 368
- Grassroots Government Advocacy
  Par: 650  Min Points: 500  Total Points: 1250
- Historical Criteria
  Par: 300  Min Points: 100  Total Points: 730
- Membership Promotion
  Par: 800  Min Points: 500  Total Points: 1445
- RP
  Par: 1050  Min Points: 800  Total Points: 1110
- Student Activities
  Par: 500  Min Points: 300  Total Points: 545

Like us on Facebook!

Visit our new Facebook page by searching for “ASHRAE Rochester” on Facebook. Any ideas for additions or improvements email to Mark Kukla at mark@airsystemsbalancing.com. Keep up to date with current events and photos from recent meetings.

Mission Statement

ASHRAE will advance the arts and sciences of heating, ventilation, air conditioning, refrigeration and related human factors to serve the evolving needs of the public and ASHRAE members.

Vision Statement

- will be the global leader in the arts and sciences of heating, ventilation, air conditioning and refrigeration.
- will be the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines.
- will be the primary provider of opportunity for professional growth, recognizing and adapting to changing demographics, and embracing diversity.
President’s June Message

June Newsletter 2018
President’s Message

On May 21st we held our annual Golf/Picnic Outing at Ravenwood. We held it a few weeks later than we have in the past for a better chance at good weather and much fun was had by all. Special thanks to Jim Browe and Kacie Hoffman for putting together another successful event along with all of our sponsors.

As I write my final president’s message, I reflect back on the successful year we have had. Last summer when the entire board sat down to plan the year we came up with several goals and objectives that we felt were important to the chapter and its members. Our board did an excellent job this year and the chapter is in a great position for continued growth and success.

Throughout the year the chapter hosted multiple events that included a Clambake, Technical Presentations, Valentines Dinner Dance, Golf/Picnic Outing, social events and more.

The success the Rochester Chapter saw this year is in direct correlation to the fantastic job our Chapter Officers, Board of Governors and Committee Chairs did. I personally want to extend my sincere gratitude for all the hard work you put in this year. As a volunteer organization each member should be proud to be a part of a Chapter that believes in giving back and providing learning experiences for all in the Rochester community.

Thank you!!! Enjoy your summer, spend time with your family and we’ll see you back in September for our Clambake.

Please continue to check out our website at www.rochester.ashraechapters.org for information on upcoming chapter meetings, current officer list and contact information, chapter newsletters, and more! Also take a minute and like us on Facebook at www.facebook.com/#!/ashraerochester.

Bill Clark, P.E., CEM
2017-2018 President
Rochester Chapter
Highlights from June ASHRAE Picnic / Golf Tournament

Golf Champs: (L-R) Corey Ruthfoss, Peter Bukowski and Mike Ranalletta (missing is Jim DiPasquale)

Al Rodgers presents Jeff Close with the Realtor Cherne Award
Thank you for your support

PLATINUM

Gray Metal Products, Inc.

GOLD

ABB
ARMSTRONG
BERGMANN
Carrier
Clark Patterson Lee
COOK
Day Automation
dayautomation.com
DYNAMIC
EC4B
GREENHECK
Gujran Energy Systems
H & V GROUP
Herman HVAC products, LLC
IBC
danforth
J.W. Swanson & Associates
Johnson Controls
LG
massive
engineering
ME ENGINEERING
MechTech HVAC
Modular Comfort Systems
Northern Air Systems
Pathfinder Engineers & Architects
Pipitone Heating/Ventilation/Air Conditioning Service & Installation
Popli Design Group
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Price
ProAirPlus
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RenewAire
RL Stone
R.P. Fedder Corporation
TRANE
Ventrol
VJ Stanley

Committed to Making Your Business Better
Job Opening

HVAC Mechanical Engineer

Isaac HVAC is looking for an experienced Mechanical Engineer to join our growing Commercial Installation team and who wants to take their HVAC knowledge to the next level by developing an in depth understanding of the construction process with an emphasis on the Construction Phase. Designing for production requires a different view of HVAC system design and documentation from traditional consulting work. Documenting details traditionally left to the contractors means and methods requires a full knowledge of HVAC installation processes and attention to detail.

Job Requirements –

- Bachelor’s degree in Mechanical Engineering and 5-10 Years of experience in designing Commercial HVAC systems
- Ability to produce Construction Drawings in CAD and/or Revit
- Strong writing, organizational, problem solving, communications skills, and attention to detail
- Work under pressure and multi-task efficiently in the fast-paced construction industry
- Ability to work more than 40 hours per week, self-motivation and a constant drive to improve

If you are interested in applying, please send your resume to:

JGRAHAM@IsaacHeating.com

OR

Visit our Website at:

www.IsaacHeating.com/careers
The Benefits of an ASHRAE Certification

SHINE IN A RISING FIELD
Certification validates critical job knowledge, skills and abilities in a given practice area.

GAIN A COMPETITIVE EDGE
ASHRAE certifications are recognized by over 30 national, state and municipal entities.

DISTINGUISH YOURSELF
Use the ASHRAE Certified logo and designation—e.g. Curtis Smith, BEAP, BEMP—in email signatures, professional networking and business cards to enhance your reputation.

LET ASHRAE PROMOTE YOUR ACHIEVEMENT
Certificants and their employers are listed on the website and in ASHRAE Insights.

5 Easy Steps to Earn and Maintain an ASHRAE Certification

1. Read the Candidate Guidebook
    Visit www.ashrae.org/certification and download the guidebook for the program in which you are interested.

2. Complete the Application
    Complete the online application at www.ashrae.org/certification. Membership in ASHRAE is not a requirement for certification.

3. Schedule an Examination
    BEAP, BEMP, CPMP, HEAP, HFDP and OPMP examinations are offered at over 300 conveniently located computer-based testing centers worldwide. Candidates may schedule an examination appointment online or by telephone.

4. Review Available Resources
    The Candidate Guidebook for a program identifies available resources, including practice exams, that may help candidates gain an understanding of the body of knowledge that the examination tests. Purchase of books or course registrations is not a prerequisite to taking any ASHRAE certification examination.

5. Renew the Certification
    Each certification is renewable every three years. To retain certification, each certification holder must earn 45 Professional Development Hours (PDHs) during the three year period following initial certification or the last renewal.

Schedule an exam at one of over 300 testing centers worldwide TODAY!

To learn more or apply, please go to www.ashrae.org/certification

$545 ($395 ASHRAE Member) per certification application

ASHRAE has Certified More Than 2,300 Built Environment Professionals.

Are You Ready to Join Them?


“Because of the high level of expertise, professionalism and ethics demonstrated by ASHRAE, achieving certification under their established requirements implies one of the highest levels of competence and knowledge available in the industry.”

Jeffrey G Ross-Bain, BEMP, Ross-Bain Green Building, LLC
ASHRAE, the standard setter for sustainable building performance and system design and operation, validates through certification the critical knowledge, skills and abilities of professionals in six key, built-environment fields.

Recognized by over 30 national, state and local government bodies – and with over 2,300 certifications earned – ASHRAE certifications increasingly have become the must-have credential for built-environment professionals.

**Building Energy Assessment Professional (BEAP)**

The growing emphasis on energy consumption reduction and cost savings has highlighted the need for credible specialists who assess energy use in buildings. The BEAP certification validates competency to audit, assess and analyze residential, commercial and industrial building energy use and develop and implement recommendations.

Together, the programs provide a valuable toolkit when it comes to the evaluation and reduction of building energy use. Two separate Workbooks, As Designed and In Operation, are part of the BEAP program. Submitting both of these Workbooks can earn an As Designed and In Operation building rating. Only those certified as BEAPs, or Professional Engineers licensed in the jurisdiction where a BEAP project is located, may submit the As Designed Workbook to ASHRAE. Like BEAPs who may submit In Operation Workbook, BEAPs may display the BEAP Certified Provider logo with descriptions of their services. For more information about BEAP visit www.buildingenergyquotient.org.

**Building Energy Modeling Professional (BEMP)**

The BEMP certification validates competency to evaluate, select, implement, calibrate and interpret the results of energy modeling software when applied to new and existing building and systems energy performance.

The BEMP certification complements ASHRAE’s Building Energy Quotient (bEQ) program by helping to ensure that only qualified practitioners can submit As Designed Workbooks to receive building ratings from ASHRAE. Only those certified as BEAPs, and Professional Engineers licensed in the jurisdiction where a BEQ project is located, may submit the As Designed Workbooks to ASHRAE. Like BEAPs who may submit In Operation Workbooks, BEAPs may display the BEMP Certified Provider logo with descriptions of their services. For more information about BEMP visit www.buildingenergyquotient.org.

**Commissioning Process Management Professional (CPMP)**

The CPMP certification validates competency to develop and manage the whole building commissioning process.

Many building owners look for ways to lower energy bills, reduce change orders during construction, avoid premature equipment replacement costs, and create safer and healthier buildings. Building commissioning measures and tunes up performance of existing buildings and ensures that new buildings begin their lifecycle at optimal productivity.

**High-Performance Building Design Professional (HBDP)**

The HBDP certification, an ANSI accredited certification program, validates competency to design and integrate sustainable HVAC&R systems into high performing buildings.

Today’s building design market requires use of ground-breaking technologies in new and existing structures to meet the need of building owners.

**Healthcare Facility Design Professional (HFDP)**

The HFDP certification validates competency to incorporate standards, guidelines and regulatory codes as well as unique healthcare facility requirements and design principles in HVAC system design.

Growing numbers of aging medical facilities, advances in technology, shifting environmental requirements and an increasingly older population have created a critical need for expansion and renovation of healthcare facilities.

**Operations & Performance Management Professional (OPMP)**

The OPMP certification validates competency to manage facility operations and maintenance to achieve building performance goals, including those related to indoor environmental quality, health and safety.

Today’s complex buildings can fade from green to gray when building operators don’t realize the full potential of the systems they manage. Staying current with the latest facility operation strategies and technologies can reduce energy use in buildings by 10% to 40%.

**Building Commissioning Professional (BCxP) Coming Soon!**

The ASHRAE BCxP certification will validate competency to design, coordinate and manage commissioning tasks to implement commissioning processes in new and existing buildings, against scheme requirements set forth in the Better Buildings Workforce Guidelines, with the goal of achieving Department of Energy (DOE) recognition of services provided by these certificants by the spring of 2017.

Application opens September 15, 2016 for the very first BCxP exam administration to be held February 1, 2017 at the ASHRAE Winter Conference in Las Vegas.

The NATIONAL INSTITUTE OF BUILDING SCIENCES is the developer, publisher of and holder of copyright in the Guidelines.
MEMBERSHIP

WHO ARE ASHRAE MEMBERS?
Members are represented by consulting engineers, mechanical contractors, building owners, employees of manufacturing companies, educational institutions, research organizations, government, architects, students or anyone concerned with HVAC&R for the built environment.

WHICH MEMBER TYPE IS RIGHT FOR YOU?
ASHRAE has three grades of membership awarded to applicants based on their experience and participation in the industry. Before you apply and select a member grade, we encourage you to visit the ASHRAE website to see the member grades and their corresponding member benefits. Prices shown are in US currency.

Member ($206)
Available to anyone with 12 years or more ASHRAE approved experience in the HVAC&R industry.

Associate Member ($206)
Available to anyone with less than 12 years of ASHRAE approved experience in the HVAC&R industry.

Affiliate Member
($52 first year, $78 second, $103 third)
Affiliate grade is for individuals who are new to ASHRAE (no previous membership in ASHRAE) and are age 30 or younger. It provides a great beginning for young professionals who wish to become involved in ASHRAE. (Does not include the annual member benefit of the ASHRAE Handbook).

MEMBER BENEFITS AND RESOURCES

PUBLICATIONS & RESOURCES
• ASHRAE Handbook (Available to Members and Associates) in print or PDF, as well as a 12 month complimentary subscription to the Handbook Online, which provides online access to the most recent 4 volumes of the Handbook series.
• Monthly ASHRAE Journal in print and online
• Quarterly High Performing Buildings magazine in print and online
• e-Industry and eSociety electronic newsletters
• Access to members-only resources through ASHRAE.org, including the ASHRAE Journal and ASHRAE Research archives
• Discounts on over 300 of the industry’s leading technical publications

PROFESSIONAL EDUCATION AND CAREER DEVELOPMENT
• Discounted registration for education courses through the ASHRAE Learning Institute, as well as ASHRAE certification programs
• Earn PDHs/CEUs/AIA LUs to maintain your professional designation/license with courses, seminars, and webcasts
• Gain industry knowledge, communication, and management skills by participating in ASHRAE technical programs or committees
• Post jobs or seek employment utilizing www.ASHRAEjobs.com

NETWORKING
• Connect locally, regionally and internationally with over 57,000 members in over 180 chapters worldwide
• Learn, share, and grow at the Annual and Winter Conferences, on ASHRAE technical committees, and ASHRAE xChange.org
• Participate in your local chapter or regional meetings and events

Privacy Policy: By supplying your email address you are agreeing to receive electronic communications from ASHRAE, with the knowledge that you may opt-out of certain electronic communication once you become a member. Please visit ashrae.org/privacypolicy for additional information.

Completed applications or questions can be sent to ASHRAE via
email: membership@ashrae.org | fax: 678-539-2129 | phone: 1-800-527-4723 or 404-636-8400
mail: 1791 Tullie Circle, NE, Atlanta, GA 30329

Code of ethics: By submitting this application you are agreeing to abide by the ASHRAE Code of Ethics, found at ashrae.org/codeofethics.
ASHRAE MEMBERSHIP APPLICATION. Please complete each applicable section. Prices valid from 7/01/2017 - 6/30/2018.

1. Contact Information. [ ] Mr. [ ] Miss [ ] Ms. [ ] Mrs. [ ] Dr.  *Birthday (required) _______ / _______ / _______
   (Month) (Day) (Year)
   Name ____________________________________________
   (First) (Middle) (Last) (Designation)
   Primary Address This is a [ ] Home [ ] Business
   Company Name ________________________________
   Address ________________________________________
   City ________________________ State/Province ____________
   Zip/Postal _________ Country _______________________
   E-mail _________________________________________
   Telephone __________________ Cell __________________
   Name/Chapter of referring member (if applicable): ____________________________

2. Member Grade.
   For additional information on member grades and benefits see reverse or visit ashrae.org.
   [ ] Member — $206 (must complete section 2a)
   [ ] Associate Member — $206
   [ ] Affiliate Member — $52 first year/$78 second/$103 third (new members, under 30)
   [ ] Reinstall my previous membership. Previous member number:__________

2a. Biographical Information. ONLY Member Grade applicants must complete this section.
   Use additional sheets or attach resume if necessary. Associate and Affiliate grade applicants do not complete this section.
   School Location Dates of Attendance Degree/Course of Study
   ____________________________ ____________________________
   ____________________________ ____________________________
   Employer Location Dates of Employment Position/Title
   ____________________________ ____________________________
   ____________________________ ____________________________
   Professional Engineering Registration Information License Number Date Issued Field of Registration
   ____________________________ ____________________________ ____________________________
   Educational Record Qualifying Work Experience

3. Demographics. Please answer the questions by entering the codes in the space provided.
   Which best describes your title? __________
   B- President C- Partner D- Associate E- Owner F- Vice President G- VP Eng. Chief Engineer K- Design Eng./Designer L- Proj./Application Eng. O- Facility Eng./Mgr. P- R&D Eng. R- Sales Engineer
   Which best describes your firm? ________
   Which best describes your function? ________
   1- Design/Application 5- Sales 2- Manufacturing 6- Research 3- Maintenance 7- Teaching 4- Management 8- Other

4. Areas of HVAC&R Interest. Enter the code for your area of interest from the list below:
   Code: ___________
   Heating Refrigeration
   A- Hydronic S- Unitary Refrigeration
   B- Forced Air T- Commercial Refg.
   C- Steam U- Industrial Refg.
   D- Process V- Process Refg.
   E- Service Water W- Low Temp (<60F)
   F- Solar X- Refg. Components
   G- Radiant
   Ventilating & AC
   H- Air Cleaning J- Industrial
   I- Commercial K- Clean/Computer Room
   L- AC Equip. <20 tons M- AC Equip. 20-200 tons N- AC Equip. >200 tons P- Air Handling Systems Q- Evaporative Coolers R- IEQ
   R- IEQ
   Refrigration
   5- Sales Engineering
   6- Research
   7- Teaching
   8- Other
   General Areas
   1- Controls/Instrumentation 6- Sound & Vibration
   2- Heat Transfer Fluid Flow 7- Energy Recovery
   3- Pipes, valves, fittings 8- Food Application
   4- Refg. & Lubrications 9- Health, Safety
   5- Process Refg. 10- Commissioning
   6- Process Refg. 11- Consulting Eng.
   7- Process Refg. 51- Manufacturer
   8- Process Refg. 61- Manufacturers Rep.
   9- Process Refg. 62- Sales Engineering
   10- Process Refg. 71- Wholesaler/Dist. 11- Consulting Eng.
   13- Process Refg. 84- Tech/Prof Assoc. 31- Industrial Facility
   14- Process Refg. 85- Trade Assoc. 41- Commercial Facility
   15- Process Refg. 86- Student 42- Gov’t, Health, Education
   16- Process Refg. 91- Other/Misc. 43- Utility
   17- Process Refg. 51- Manufacturer
   19- Process Refg. 62- Sales Engineering
   20- Process Refg. 71- Wholesaler/Dist. 26- Property Mgmt & Dev.

5. Handbook Preference. New Members and Associate Members receive a 12 month complimentary subscription to the Handbook Online, which includes access to the most recent 4 volumes of the Handbook. If you would like a print copy of the ASHRAE Handbook in addition to this subscription, please chose either IP or SI version below. Handbooks are printed and mailed to members annually in June.
   [ ] IP (inch/pound units), print with PDF
   [ ] SI (metric units), print with PDF
   [ ] PDF only (I-P & SI)

6. Privacy Notice If you DO NOT wish to receive 3rd party physical mailings, please check here. [ ]

7. Include chapter membership dues: [ ] Dues Amount:__________ Paying chapter dues is encouraged but not mandatory, and can be paid separately to the Chapter at anytime. Contact chapter officers for amount. Add this amount to your Society dues in the ‘Total Amount’ of the payment section below.

8. Payment. [ ] Visa [ ] Mastercard [ ] Amex [ ] Diner’s Club [ ] Check/money order**
   Card # ____________ Expiration Date _______ / _______
   (Month) (Year)
   Total Amount:__________ Signature____________

CHECKS WILL BE ACCEPTED IN US AND CANADIAN FUNDS. CREDIT CARD PAYMENTS ACCEPTED IN US FUNDS ONLY.
Application for Student Membership

Join online at www.ashrae.org/students

At the student branch level, you’ll enjoy meeting other students with similar interests – if your school hasn’t yet started a student branch, take charge and contact a faculty member and ask for help on getting started!

Why ASHRAE?

- Discounts on publications, conferences, and continuing education opportunities
- Society and chapter-level scholarships for both undergraduate and graduate engineering students
- Discounts for student members on select publications
- Digital access to the monthly ASHRAE Journal and the quarterly High Performing Building Magazine
- Participate in events with your local ASHRAE Chapter
- Find internships and jobs at jobs.ashrae.org
- Senior Undergraduate Project Grant Program
- Discounted ASHRAE Annual and Winter Conference registration (AHR Expo, Student Program, Technical Sessions)
- Gain essential skills not taught in class
- Make great new friends!

Developing Economies Program for Students
Students who reside in countries categorized as "Low Income" and “Lower Middle Income” developing economies by the World Bank List of Economies statistics are eligible to participate in this program. Students in this program receive all the benefits of regular student membership, including online access to the ASHRAE Journal (digital access only - participants will not receive a monthly printed copy of the ASHRAE Journal).

Visit www.worldbank.org for a listing of qualified countries: Low Income and Low Middle Income only. If you currently reside in one of the countries listed in those categories, simply check the box marked ‘Developing Economies Program’ in the ‘Purchases’ section of this application.
1. Contact Information. □ Mr. □ Miss □ Ms. □ Mrs. *Birthday (required) _________/_________/_________ (Month) (Day) (Year)
Name ____________________________________________ (First) ____________________________________________ (Last)
Primary Address (where all correspondence will be mailed)  Alternate Address
Address__________________________________________ Address__________________________________________
City ___________________ State/Province_______ City ___________________ State/Province_______
Zip/Postal_________ Country_________________ Zip/Postal_________ Country_________________
E-mail _______________________________ E-mail __________________________________________
Phone: _______________________________ Phone: _______________________________
☐ I would like to receive occasional student updates via email. ☐ I would like to participate in the _____________________ ASHRAE Chapter.

2. Student Branch Information. School Name:_________________________________________________________
Address: ____________________________________________
City: ___________________ State/Province: _______ Postal Code_________________

3. Education. Classification: Freshman □ Sophomore □ Junior □ Senior □ Masters/PhD. □
Full time □ Part time □ Degree: ___________________________ Expected Graduation Date: ___________________________ (MM/DD/YYYY)

4. Sponsor Information.
All student applicants must have the name and member number of an ASHRAE member serving as their student spon- sor. If your Student Branch Advisor is an active Associate or Member of ASHRAE, he/she can serve as your sponsor. If you need assistance locating a sponsor, please email students@ashrae.org or call 678-539-1212. Also, you must list the name, phone and email address of your faculty advisor or course instructor.
Sponsor Name: __________________________________________ ASHRAE Member #: ___________________
Advisor/Instructor: _______________________________________ Email__________________________

5. Purchases.
☐ Student Membership- Regular: $21  ☐ Student Membership- Developing Economies Program (see reverse for qualifications) $11
☐ Printed Edition of the current ASHRAE Handbook: □ I-P □ SI Student Member Price: $49.00
☐ PDF Version of the ASHRAE Handbook (Includes both I-P and SI Units) Student Member Price: $39.00
☐ ASHRAE Handbook Online - One Year Subscription to all four volumes of the Handbook series: $33.00
*Additional publications are available at student member discounts at ashrae.org/studentbookstore

6. Payment. □ Visa □ Mastercard □ Amex □ Diner’s Club □ Check/money order**
Card # ____________________________________________ Expiration Date _________/_________ (Month) (Year)
Total Amount: ______________ Signature____________________________________________________
CHECKS WILL BE ACCEPTED IN US AND CANADIAN FUNDS. CREDIT CARD PAYMENTS ACCEPTED IN US FUNDS ONLY
WELCOME TO HOUSTON

A letter of invitation from Stephen Redding, General Chairman of the 2018 ASHRAE Annual Conference

The Houston Chapter and Region VIII cordially invite you to our dynamic city for education, networking and fun! The June 23-27, 2018 Annual Conference will be in the heart of downtown Houston – surrounded by parks, hotels, entertainment and dining venues, our convention center and professional sports venues.

Our technical tours will highlight HVAC systems in one of the world’s most air-conditioned cities. In south Texas, we are particularly proud of how our industry has conquered “hot and humid” – in our buildings, transportation, industry, entertainment and daily life.

Our general tours will introduce you to Houston – the nation’s 4th most populous city and home to:

• Space Center Houston: the official visitor center of the National Aeronautics and Space Administration’s center for human spaceflight activities
• World’s largest medical center (52,000 employees, 21 million square feet, 4.8 million patients each year)
• World Series champion Astros (They will be playing in town that week!)
• World’s first indoor sports stadium – the 50-year-old Astrodome, currently being re-purposed as an event space
• The Houston Theater District, a 17-block area downtown and home to nine professional performing arts organizations, Bayou Place entertainment complex, restaurants, movies, plazas, and parks
• The Houston Museum District: 19 museums, galleries, cultural centers and community organizations, dedicated to promoting art, science, history and culture.

Houston encompasses an area larger than New Jersey and has been cited as the most ethnically diverse city in the nation. You will find that reflected in our dining, culture and friendliness. You can hear more than 90 spoken languages and can check-in with any of 84 consular offices. In the mood for Fajitas? Pad Thai? Tikki Masala? Fish Sauce or Pho? Barbecue and Craft Beer? – we have you covered (and at reasonable prices)!

It will be a “Hot Time in the Old Town Tonight” – literally and figuratively. Heat is energy and you will feel that energy – in the ASHRAE sessions, in interactions with your colleagues and in the discovery of a vibrant, beautiful city.

We look forward to meeting you in Houston!
Steve Redding, General Chair / Houston Host Committee
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<th>Program Tracks</th>
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<th>Tuesday, June 25th</th>
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<td><strong>District Energy and Cogeneration Plants</strong></td>
<td>Conference Paper Session 19: Energy Storage Systems, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 18: Energy Management Best Practices, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 17: Energy Storage Systems, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 16: Energy Storage Systems, 371AB, 8:00am-9:00am</td>
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<tr>
<td><strong>HVAC &amp; Analytics</strong></td>
<td>Conference Paper Session 22: HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 21: HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 20: HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 19: HVAC Ventilation, 371AB, 8:00am-9:00am</td>
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<td><strong>HVAC &amp; Systems and Equipment</strong></td>
<td>Conference Paper Session 23:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
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<td>Conference Paper Session 20:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
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<tr>
<td><strong>Professional Skills</strong></td>
<td>Conference Paper Session 24:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 23:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 22:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 21:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
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<tr>
<td><strong>Research Summit</strong></td>
<td>Conference Paper Session 25:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 24:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 23:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 22:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
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<tr>
<td><strong>Residential Modern Buildings in Hot &amp; Humid Climates</strong></td>
<td>Conference Paper Session 26:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 27:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 28:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 29:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
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<tr>
<td><strong>Safeguarding Your HVAC&amp;R System</strong></td>
<td>Conference Paper Session 20:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 19:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 18:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
<td>Conference Paper Session 17:HVAC Ventilation, 371AB, 8:00am-9:00am</td>
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<tr>
<td><strong>Networking Coffee Break</strong></td>
<td>Saturday 5:00pm - 5:30pm</td>
<td>Saturday 9:00am - 9:30am</td>
<td>Saturday 1:00pm - 1:30pm</td>
<td>Saturday 8:30am - 9:00am</td>
</tr>
</tbody>
</table>

**All courses have been approved for AIA LSUs**

**Sponsored by RGF Environmental Group, Inc.**
2018 Region I CRC
Jersey City, NJ
August 16-18, 2018

Hosted by: New Jersey Chapter

Click this link to register and reserve your hotel room:
http://ashraeregion1.org/index.php/crc/

Cut off date is Thursday July 29th, 2018. There is a 24 hour cancellation policy

<table>
<thead>
<tr>
<th>Registration Type</th>
<th>By July 1, 2018</th>
<th>After July 1, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Conference</td>
<td>$375</td>
<td>$450</td>
</tr>
<tr>
<td>Companion Full Conference</td>
<td>$230</td>
<td>$275</td>
</tr>
<tr>
<td>Kids Full Conference</td>
<td>FREE</td>
<td>FREE</td>
</tr>
<tr>
<td>Family Tour (Liberty Science Center)</td>
<td>$35</td>
<td>$35</td>
</tr>
<tr>
<td>Companion Tour (Statue of Liberty and Ellis Island)</td>
<td>$35</td>
<td>$35</td>
</tr>
<tr>
<td>YEA Event (Rooftop At Exchange Place)</td>
<td>FREE</td>
<td>FREE</td>
</tr>
<tr>
<td>Friday/Saturday Conference</td>
<td>$225</td>
<td>$275</td>
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<tr>
<td>Friday/Saturday Companion</td>
<td>$135</td>
<td>$165</td>
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<tr>
<td>Saturday Only</td>
<td>$125</td>
<td>$150</td>
</tr>
<tr>
<td>Thursday Dinner Only (Cruise)</td>
<td>$110</td>
<td>$125</td>
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</tbody>
</table>
CRC 2018 Announcement

Hyatt Regency Room Rate: $259 + taxes & fees
2 Exchange Place Jersey City, NJ
Meetings will be held in their modern meeting facilities

*Note: Hotel reservation is separate from conference registration.*

---

**ASHRAE Region I**
Chapter Regional Conference - New Jersey
August 16 -18, 2018

### EVENT SCHEDULE

<table>
<thead>
<tr>
<th>Day</th>
<th>Start Time</th>
<th>End Time</th>
<th>Event</th>
<th>Location</th>
<th>Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THURSDAY August 16, 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00pm</td>
<td>7:00pm</td>
<td></td>
<td>Registration</td>
<td>Lincoln Room</td>
<td>All Attendees</td>
</tr>
<tr>
<td>12:00pm</td>
<td>7:00pm</td>
<td></td>
<td>Chapter History Displays</td>
<td>Hudson Room, Holland, TBD</td>
<td>All Attendees</td>
</tr>
<tr>
<td>12:00pm</td>
<td>7:00pm</td>
<td></td>
<td>Region I Audit</td>
<td></td>
<td>Invited Region I Officers</td>
</tr>
<tr>
<td>1:00pm</td>
<td>3:00pm</td>
<td></td>
<td>Hospitality Suite</td>
<td></td>
<td>Registered Attendees</td>
</tr>
<tr>
<td>2:00pm</td>
<td>4:00pm</td>
<td></td>
<td>Business Meeting 1</td>
<td>Hudson I, II, III</td>
<td>Delegates, Alternates &amp; Regional Officers and Chairs</td>
</tr>
<tr>
<td>4:00pm</td>
<td>5:00pm</td>
<td></td>
<td>Technical Session</td>
<td>Harborside</td>
<td>Registered Attendees</td>
</tr>
<tr>
<td>6:15pm</td>
<td>10:00am</td>
<td></td>
<td>Dinner Cruise</td>
<td>Pier next to hotel</td>
<td>YEA/Registered Attendees</td>
</tr>
<tr>
<td>10:00pm</td>
<td>10:00pm</td>
<td></td>
<td>YEA Event</td>
<td>Rooftop Exchange</td>
<td>Registered Attendees</td>
</tr>
<tr>
<td>10:00pm</td>
<td>1:00am</td>
<td></td>
<td>Hospitality Suite</td>
<td>TBD</td>
<td>Registered Attendees</td>
</tr>
<tr>
<td><strong>FRIDAY August 17, 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00am</td>
<td>7:00am</td>
<td></td>
<td>Registration</td>
<td>Lincoln Room, Hudson I, II, III</td>
<td>All Attendees</td>
</tr>
<tr>
<td>7:00am</td>
<td>7:00am</td>
<td></td>
<td>Chapter History Displays</td>
<td>Hudson Room, TBD</td>
<td>All Attendees</td>
</tr>
<tr>
<td>9:00am</td>
<td>11:00am</td>
<td></td>
<td>Hospitality Suite</td>
<td>TBD</td>
<td>Registered Attendees</td>
</tr>
<tr>
<td>9:00am</td>
<td>9:00am</td>
<td></td>
<td>Breakfast</td>
<td>Harbourside I</td>
<td>Registered Attendees</td>
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<tr>
<td>8:00am</td>
<td>9:00am</td>
<td></td>
<td>Local ASHRAE Recognition Breakfast</td>
<td></td>
<td>Registered Attendees</td>
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<tr>
<td>8:00am</td>
<td>10:00am</td>
<td></td>
<td>Caucus / Executive Session</td>
<td>Hudson I, II, III</td>
<td>Delegates &amp; Alternates ONLY</td>
</tr>
<tr>
<td>10:00am</td>
<td>11:45am</td>
<td></td>
<td>Chapter Operations Workshop</td>
<td>Harbourside II</td>
<td>Chapter Officers</td>
</tr>
<tr>
<td>10:00am</td>
<td>4:00pm</td>
<td></td>
<td>Company Tour</td>
<td>Statue of Liberty &amp; Ellis Island</td>
<td>Registered Attendees w/ RSVP</td>
</tr>
<tr>
<td>10:00am</td>
<td>4:00pm</td>
<td></td>
<td>Family Event</td>
<td>Liberty Science Center</td>
<td>Registered Attendees w/ RSVP</td>
</tr>
<tr>
<td>12:00pm</td>
<td>1:00pm</td>
<td></td>
<td>Lunch</td>
<td>Harborside</td>
<td>Registered Attendees</td>
</tr>
<tr>
<td>2:00pm</td>
<td>5:15pm</td>
<td></td>
<td>Business Meeting 2</td>
<td>Hudson I, II, III</td>
<td>Delegates, Alternates &amp; Regional Officers and Chairs</td>
</tr>
<tr>
<td>6:00pm</td>
<td>10:00pm</td>
<td></td>
<td>Presidential Dinner</td>
<td>Manhattan Ballroom</td>
<td>Registered Attendees</td>
</tr>
<tr>
<td>10:00pm</td>
<td>12:00am</td>
<td></td>
<td>Hospitality Suite</td>
<td>TBD</td>
<td>Registered Attendees</td>
</tr>
<tr>
<td><strong>SATURDAY August 18, 2018</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>7:00am</td>
<td>10:00am</td>
<td></td>
<td>Registration</td>
<td>Lincoln Room, Hudson I, II, III</td>
<td>All Attendees</td>
</tr>
<tr>
<td>7:00am</td>
<td>2:00am</td>
<td></td>
<td>Chapter History Displays</td>
<td>Hudson Room, TBD</td>
<td>All Attendees</td>
</tr>
<tr>
<td>9:00am</td>
<td>11:00am</td>
<td></td>
<td>Hospitality Suite</td>
<td>TBD</td>
<td>Registered Attendees</td>
</tr>
<tr>
<td>9:00am</td>
<td>9:00am</td>
<td></td>
<td>Breakfast</td>
<td>Harbourside</td>
<td>Registered Attendees</td>
</tr>
<tr>
<td>8:00am</td>
<td>9:45am</td>
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<td>Business Meeting 3</td>
<td>Hudson I, II, III</td>
<td>Delegates, Alternates &amp; Regional Officers and Chairs</td>
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<tr>
<td>8:00am</td>
<td>9:45am</td>
<td></td>
<td>Government Activities Workshop</td>
<td>Holland II, Liberty I, II, Holland</td>
<td>GA Chairs</td>
</tr>
<tr>
<td>8:00am</td>
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<td>Student Activities Workshop</td>
<td>Holland I, Liberty I, II, Holland</td>
<td>Student Activities Chair</td>
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<tr>
<td>8:00am</td>
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<td>Research Promotion Workshop</td>
<td>Harbourside</td>
<td>Research Promotion Chairs</td>
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<td>CTTTC Workshop</td>
<td>Holland I</td>
<td>CTTTC Chairs</td>
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<td>Historian Workshop</td>
<td>Harbourside</td>
<td>Historians</td>
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<tr>
<td>9:45am</td>
<td>11:45am</td>
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<td>Membership Promotion</td>
<td>Palaisades I, II, Palaisades II, Holland</td>
<td>Membership Chairs</td>
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<td>9:45am</td>
<td>11:45am</td>
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<td>RECC Workshop</td>
<td>Holland I</td>
<td>RECC Chairs</td>
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<tr>
<td>9:45am</td>
<td>11:45am</td>
<td></td>
<td>YEA Workshop</td>
<td>Holland I</td>
<td>YEA Members</td>
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<td>10:00am</td>
<td>12:00pm</td>
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<td>Hospitality Suite</td>
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<td>Registered Attendees</td>
</tr>
<tr>
<td>12:00pm</td>
<td>2:00pm</td>
<td></td>
<td>Awards Luncheon</td>
<td>Manhattan Ballroom</td>
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<tr>
<td>2:30pm</td>
<td>3:30pm</td>
<td></td>
<td>CRC Debrief</td>
<td>Board Room</td>
<td>CRC Host Committee &amp; Guests</td>
</tr>
</tbody>
</table>
Senior Mechanical Engineer
AC Corporation, Greensboro, NC
TOPIC: “Design-Build-Operate – What Can Go Wrong?”

Charles E. Gulledge III, PE, HBID, LEED AP is a current nominee for ASHRAE Treasurer and is a past ASHRAE Vice President, serving on the Executive Committee and the Board of Directors. He is a former ASHRAE Director at-Large. Gulledge has served as past Chair of the ASHRAE 2011 Energy Modeling Conference, Chapter Technology Transfer Committee, and Technical Committee 7.1: Integrated Building Design. He has served as member of the Handbook Committee, CTTC-RVC for Region IV, President of the North Piedmont Chapter, and as the ASHRAE Liaison to the Construction Specifications Institute (CSI). Gulledge has received the Distinguished Service Award, Regional Award of Merit, Chapter Service Award, and the Dan Mills Technical Award.

Mr. Gulledge is a Senior Mechanical Engineer with the design/build firm of AC Corporation in Greensboro, NC. He has over 31 years of experience in the HVAC industry. A licensed professional engineer in the states of North Carolina, Georgia, Kentucky, South Carolina, Virginia, and Alabama; he received his B.S. in Mechanical Engineering from North Carolina State University.

SOCIAL EVENTS

Thursday, August 16th – Dinner Cruise
Private Dinner Cruise aboard the Cornucopia Destiny cruising the waterways around Jersey City and New York City. The yacht will depart from the dock at the Hyatt Hotel. Dinner and drinks will be served. Boarding Time: 6:30pm – Return Time: 10:00pm.
Website for the boat: http://www.nauticalholidays.com/boat/cornucopia-destiny/

Thursday, August 16th – YEA Event
The party continues at the RoofTop at Exchange Place for drinks and conversations. RoofTop features stunning views of the Manhattan skyline, Hudson River, Statue of Liberty, Staten Island and beyond. The RoofTop provides year round comfortable vibes with its retractable glass roof and walls. Walking ("crawling") distance from the hotel. Start Time: 10:00pm

Friday, August 17th – Companion Tour
A self-guided tour to the Statue of Liberty and Ellis Island. Transportation to and from the hotel will be provided. Lunch is available for purchase along the way. Ferry rides to both islands are included. Comfortable walking shoes are recommended.
Depart: 10:00am – Returning: 4:00pm

Friday, August 17th – Family Tour
Liberty Science Center is a 300,000-square-foot learning center located in Liberty State Park on the Jersey City bank of the Hudson near the Statue of Liberty. The Science Center houses 12 museum exhibition halls, a live animal collection with 110 species, giant aquariums, a 3D theater, live simulcast surgeries, hurricane- and tornado-force wind simulators, and the Western Hemisphere’s largest and most technologically advanced planetarium—the Jennifer Chalsty Planetarium and LSC Giant Dome Theater. Their mission is to inspire the next generation of scientists and engineers and excite learners of all ages about the power, promise, and pure fun of science and technology. Transportation to and from the hotel will be provided. Lunch is available for purchase at the Museum. Depart: 10:00am – Returning: 4:00pm
Friday, August 17th – Presidential Dinner
Join us in the Manhattan Ballroom of the Hyatt for dinner and entertainment.
Charles Gulledge will be delivering the Presidential Message.
After dinner, Comedian-Magician And Stage Hypnotist Denny More will be performing.
Please see his website for more information about his show: http://www.dennymore.com/
Start time: 6:00pm

Welcome to Jersey City, NJ! – http://www.cityofjerseycity.com/
An unparalleled history as the nation’s “Golden Door,” Jersey City is fittingly nestled in the shadows of the historic Ellis Island and Statue of Liberty, and is one of the nation’s most diverse cities, comprised of over 265,000 residents.
Located between the Hudson and Hackensack Rivers, Jersey City covers nearly 15 square miles of land at the center of the New York City metropolitan region. Once a city driven by immigrants working in the shipping and manufacturing industries, Jersey City has transformed into a modern urban community. Old factories have been repurposed and reborn into office buildings and housing units, abandoned rail yards are now landscaped parks. Jersey City’s vibrant culture and diversity and commitment to collaboration and innovation, create an unparalleled quality of life for residents and businesses.
Some cities are known for their landmark attractions, for their action-packed nightlife, or simply for the unmatched quality of their community. All of these elements and more define the City of Jersey City. From the Greenville neighborhood to the bustling Downtown area, the Heights to the West Side, in Bergen-Lafayette, India Square and Journal Square, everywhere you turn you’re surrounded by diversity and growth.

PLACES TO EAT
* Vu – Stylish New American spot with NYC Views
* Piggyback Bar – Lively hangout for Asian-style pub bites
* Green Hook Bar & Kitchen – Refined American fare
* City Diner – Modern outfit for comfort food & drinks
* Light Horse Tavern – Modern American fare in old, airy setup
* Taqueria Viva Mexico Kitch Café – Bright nook for classic Mexican fare
* Honshu – Japanese sushi & noodle specialist
Platinum Level
Carrier Corp

Gold Level
GBS
Heatcraft Worldwide Refrigeration
Jim and Jean Davidson Fund of the Princeton Area Community Foundation
Nortec Humidity Ltd

Silver Level
ABCO HVACR Supply and Solutions
Accuspec, Inc.
Eaton Corporation
Gil-Bar Industries
Mechanical Contractors Association of New Jersey
Wales-Darby, Inc.

Bronze Level
Engineered Design Group
Engineered Air Solutions
Hughes Environmental Engineering, Inc.
RAE Corporation
Samuel Tepp Associates, LLC
Wallace Eannace Associates, Inc.
Wallwork Group

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