

ACRC Alumni Newsletter

University of Illinois at Urbana-Champaign

ACRC

Air Conditioning and Refrigeration Center

Issue 1, 2019



HEADLINE



**13 ACRC students
graduated this
spring**

We wish you a wonderful summer! Drier than the past month in Urbana-Champaign, where it has been raining a lot!

Welcome back!

Dear Colleagues,

You are reading the first issue of the ACRC Alumni Newsletter. It makes me extremely happy that it happens at the 30th anniversary of ACRC, with intention to last at least that long in the future. We are doing all we can to make that promise reality. With over 450 ACRC Alumni (350 graduated students and 100 visiting scholars) and

very healthy membership and eager leadership, that seem more than just possible.

Talking about anniversary, when Clark and Roy started ACRC in 1989, 30 years ago it was a very brave endeavor, the first and the only center of excellence in our profession, co-founded by National Science Foundation. Clark told us it was even more difficult for him when he was leading ACRC alone

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Inside this issue



Spring 2019 Graduations

13 ACRC students graduated. Profiles, pictures and more.

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ASHRAE Award

Pega received the Louise and Bill Holladay Distinguished Fellow Award.

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<https://acrc.mechse.illinois.edu/>

Please send your editorial contribution to
salomel@illinois.edu

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for some time. Tony and I joined ACRC in 1992/1993 and were helping as much as we could. After a couple of years Clark appointed us as associate directors and later when he retired in 2001 as Co-Directors. Following Tony's appointment as the Head of Department in 2014, I was running the Center alone until last year when I appointed Stefan and Nenad as associate directors. What a great help! Some similarity to Clark's decision and tandem Tony/Pega? That is just one of the steps to continue the path Clark, Roy and Tony paved and assure ACRC longevity.

Lisa was our strong support over many years, and when she retired, after a short time with Davida, Salome took over the coordination of numerous ACRC activities last year. Salome, Nenad, Stefan and I are a well-oiled machine, and rest assured it will stay that way until the next logical and natural evolutionary step. We are getting exquisite contributions from Xiaofei, and last year also from Ke Tang and Hui Zhao, with Tony's great advice.

We have very strong interest and real support from numerous faculty mostly from our department, but not only.

Nevertheless, the main strength of ACRC was coming from our superb students, Pls, and to great extent the excellent visiting scholars. That is the group I am addressing in this first communication. Salome is trying hard to update the mailing list, and your help in providing information which is currently missing would be greatly appreciated. We will be updating not only the mailing list but numerous other information on the ACRC website: photos, details, etc. Please send us news of your lives, professional and personal, and we will include them in the Newsletter. Please have in mind that we have many new graduate students who will join you soon as alumni. We want to help them learn from you, and become proud members of the family!

We are planning another anniversary event: the first alumni get-together, linked to the ACRC IAB meeting. You are

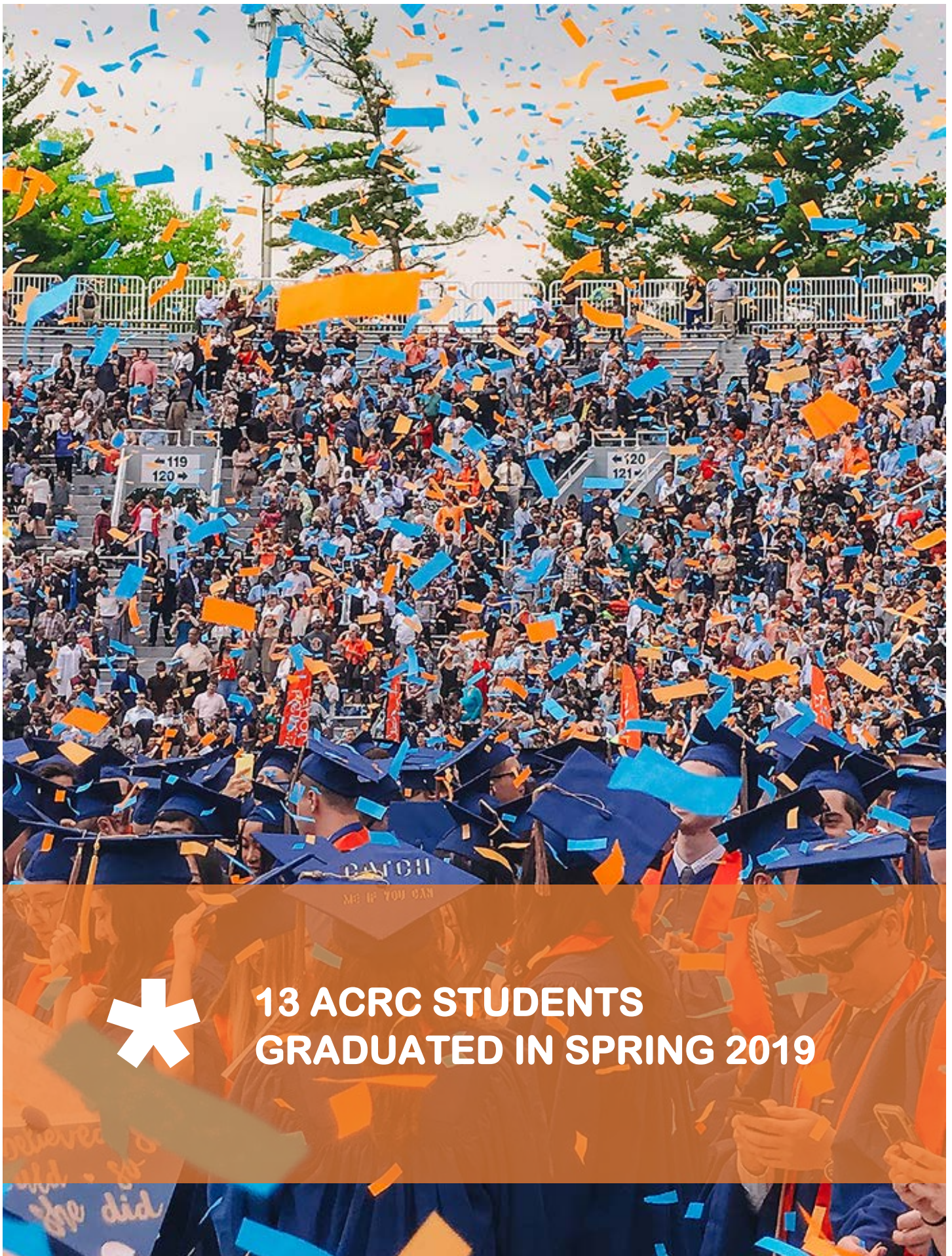
all invited, please let Salome know you are interested and even more if you can come. We know it will be difficult to have extreme attendance immediately at the first time, but we plan to organize meetings at some other occasions, not only ACRC IAB meetings. We plan to add more substantive and leisurely events.

Cheers!

Pega



Mechanical Engineering Laboratory



13 ACRC STUDENTS GRADUATED IN SPRING 2019

SAIF KHAN ALEN

Saif is working at Brazeway.



GRADUATES, SPRING 2019

We are very proud to introduce you the 13 brilliant students who graduated this year.

Graduation celebrations filled campus with joy, sense of accomplishment, both for students and advisors, and propelled thousands of scholars

towards the next phase of their lives, whether it is in academia, industry or other paths they have chosen. We wish them the best of luck!



Pega and his students on graduation day.
Everyone is over the moon!



PATRICK BIRBARAH

Patrick is leveraging his doctoral research in phase change thermal transport to pursue a career in air conditioning systems and refrigeration cycles for residential, commercial and industrial use. He will be joining Trane, a subsidiary of Ingersoll Rand Corporation, as a thermal systems engineer and will be based in Lacrosse, Wisconsin as of August 2019.

SHREYAS CHAVAN

Shreyas will be joining McKinsey & Company's Chicago office in August 2019. He will join as an Associate and will work primarily in strategy and management consulting.



BILL DAVIES

Bill Davies has graduated with his PhD from the ACRC this past May, with his graduate-school research focused on air-cooled condensers for power plants. He enjoyed spending his time in the lab, building experimental facilities and running experiments. He is moving to Boston (closer to his home) and will work for Exponent in their Thermal Sciences team. He is excited to investigate thermal-related failures, and is hoping to learn the business side of industry, as well as continuing his research.



Saif and his friends at the graduation ceremony.

LILI FENG

Lili is working at Tesla.



HOUPEI LI

ACRC provides a great opportunity to meet people from different places around the world with different background. The experiments may be tough, but the lab is so much fun. The atmosphere in ACRC is always happy. Houpei is so thankful to have worked with you and learned from you, his ACRC friends.



JUNHO OH

Junho obtained his doctorate and is set to join University College London (UCL) in London, UK, starting from this August as a postdoctoral research associate. He works with Dr. Manish Tiwari on steam condensation and freezing, and healthcare applications. Junho enjoyed working with ACRC projects during his PhD years and hopes to continue his future research career in academia, related to HVAC&r and healthcare applications.

HYUN JIN KIM

Hyun "Jin" is a postdoctoral scholar at Stanford University and is a member of the Nanoheat Laboratory. Her current research activities are centered around cooling of extreme heat fluxes utilizing fluid flows in various nano/microstructures. The rigorous training that she got at ACRC clearly helped her quickly adopt to her new role as a postdoc.

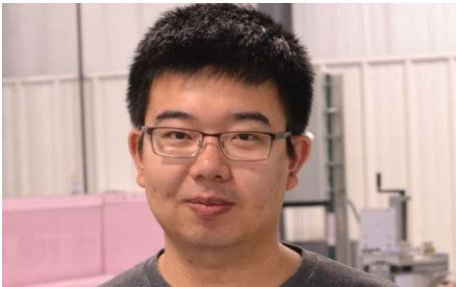


CE SHI

Ce works at Creative Thermal Solutions.



Shreyas
and his
family
on the
main
Quad

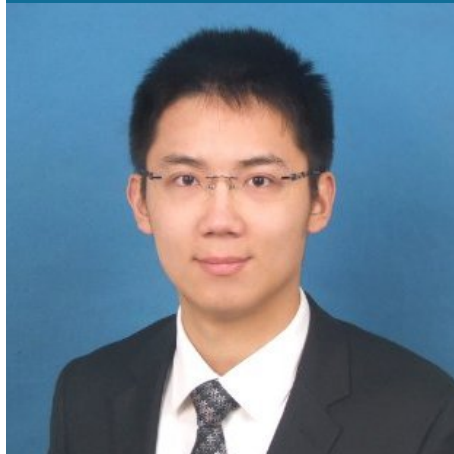


JIANG XIAO

Jiange is heading to New York University to study law. Being part of ACRC was his best experience so far. He really likes the vision they had when the founders of ACRC built this bridge between industry and academia, and the platform for young researchers. His advisor, Pega, always sees the right path, and provided Jiange with a great amount of help, in a supportive and patient way. His colleagues gave him another family far away from his original home, and he kept feeling love and friendship from them. Now as he is moving forward, he knows that his time in ACRC has made him who he is today, and will continue to lead his way into tomorrow.

Jiu Xu

Jiu just started his full-time job as a thermal engineer in Facebook Hardware team. He will be working on the thermal design of servers and data centers of the company. After graduation, he moved from Urbana to the San Francisco Bay area, where there is a warm ACRC alumni community, which makes his transition very smooth. Jiu appreciates a lot the education and experience he got from ACRC.



CHENG-MIN YANG

Cheng-Min will work as a postdoctoral research associate at Oak Ridge National Lab. He will probably live in Oak Ridge or Knoxville in Tennessee. From his 5 years of experience as a graduate student in ACRC, he gained a lot of knowledge in heat transfer, fluid dynamics, thermal dynamics, and HVAC systems. He also learned how to work as a team, think independently, and seek scientific discoveries that will probably be used for rewriting the textbooks.



◇ Shreyas at the entrance of MEL



JINGWEI ZHU

Jingwei works at Tesla.



◇ Jiu with his parents



**CONGRATULATIONS TO ALL ACRC
STUDENTS WHO GRADUATED THIS
SPRING!!**



Sheila Hayter handing the Louise and Bill Holladay Distinguished Fellow Award to Pega

ASHRAE Honors and
Awards Program
Recognizes
Outstanding
Achievements of
Dedicated
Members

ASHRAE HONORS AND AWARDS PROGRAM RECOGNIZES OUTSTANDING ACHIEVEMENTS OF DEDICATED MEMBERS



At the Plenary Session of ASHRAE Annual Meeting at Kansas City, June 22nd, 2019, Sheila Hayter, ASHRAE's President, presented to Pega the Louise and Bill Holladay Distinguished Fellow Award.

This single annual award is given to an ASHRAE Fellow for continuous preeminence in research or engineering work.



Highlights

ACRC celebrates 30 years of societal impact

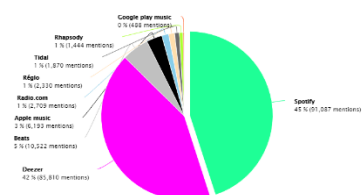
In the late 1980s, damage to the ozone layer began to rapidly increase. This was due in part to an accelerated introduction of chlorofluorocarbon (CFC)—and other compounds that contain chlorine—into the ozone layer. Under proper conditions, chlorine can destroy large amounts of the ozone, so international agreements began limiting certain refrigerants. At the time, a DuPont executive and Illinois alumnus knew that the university was working on research for automobile and refrigeration companies, and he returned to the university to propose a collaboration to address this issue.

MechSE Professor Clark Bullard (now professor emeritus) helped facilitate grants from the estate of Richard W. Kritzer, the

Illinois Governors' Science Advisory Council, and the National Science Foundation. He also suggested expanding this research endeavor to include other companies across the industry. With this introduction, the Air Conditioning and Refrigeration Center (ACRC) at the University of Illinois was born, with Bullard and Roy Crawford (then an assistant professor in MechSE) at the head. This year marks the 30th anniversary of the ACRC. **Read more** <http://mechanical.illinois.edu/news/acrc-celebrates-30-years-societal-impact>



From left to right: Pega Hrnjak, Stefan Elbel, Tony Jacobi, Clark Bullard, Nenad Miljkovic



Important information you may want to share with us



Vacation pictures, anecdotes, etc.

News from Alumni

We are looking forward to your contributions

Any professional news are welcome!

As well as personal, anything from weddings, births, birthdays, trips, discoveries, etc.



Conferences you attended, etc.



ACRC RELATED NEWS

CLARK BULLARD RECOGNIZED FOR NATURE CONSERVATION

Professor Emeritus Clark Bullard has been named a recipient of the National Wildlife Federation's National Conservation Special Achievement Award.

A former director of the Air Conditioning and Refrigeration Center in MechSE, Bullard was interviewed recently by the News-Gazette and said, "Establishing the AC&R Center was another form of activism. In 1988, when the ozone hole was 'discovered,' I set out to show the UI that it was possible to get industry funding for fundamental academic research to solve societal problems." [Read the interview on the News-Gazette website](#)



News from MechSE

MEB becoming Sidney Lu Mechanical Engineering Building at Illinois

<http://mechanical.illinois.edu/news/introducing-sidney-lu-mechanical-engineering-building-illinois>

Readers' questions, feedback and suggestions

Please send us your questions, comments, suggestions and we will be happy to reply in the next issue!