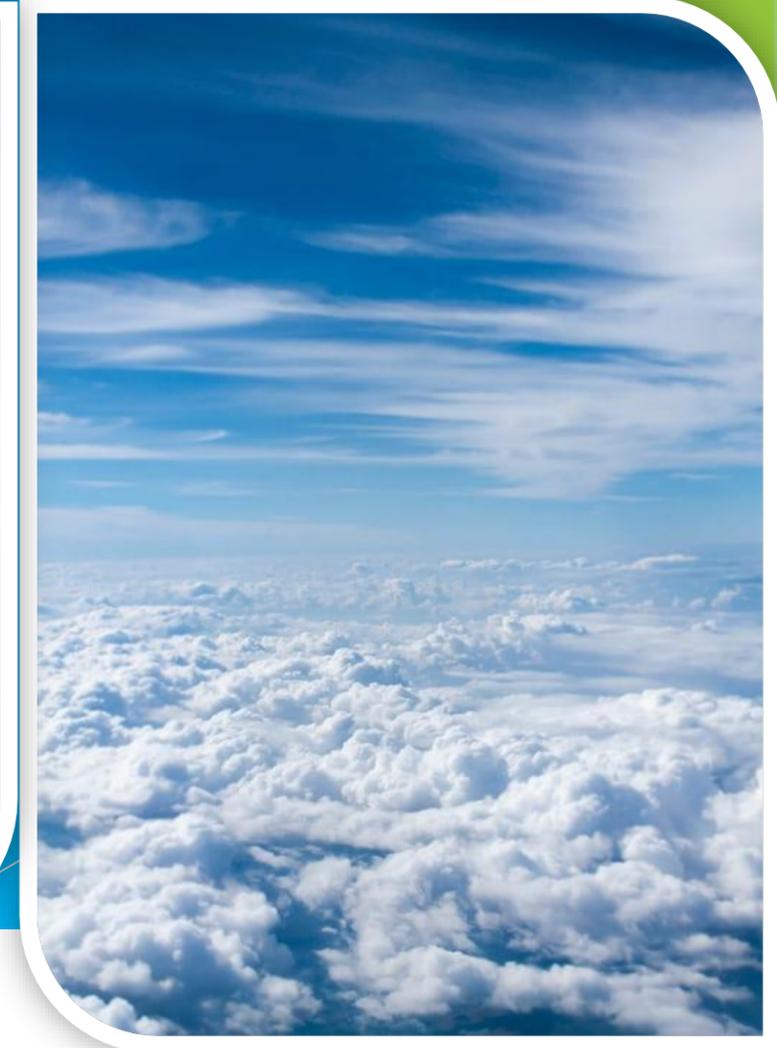
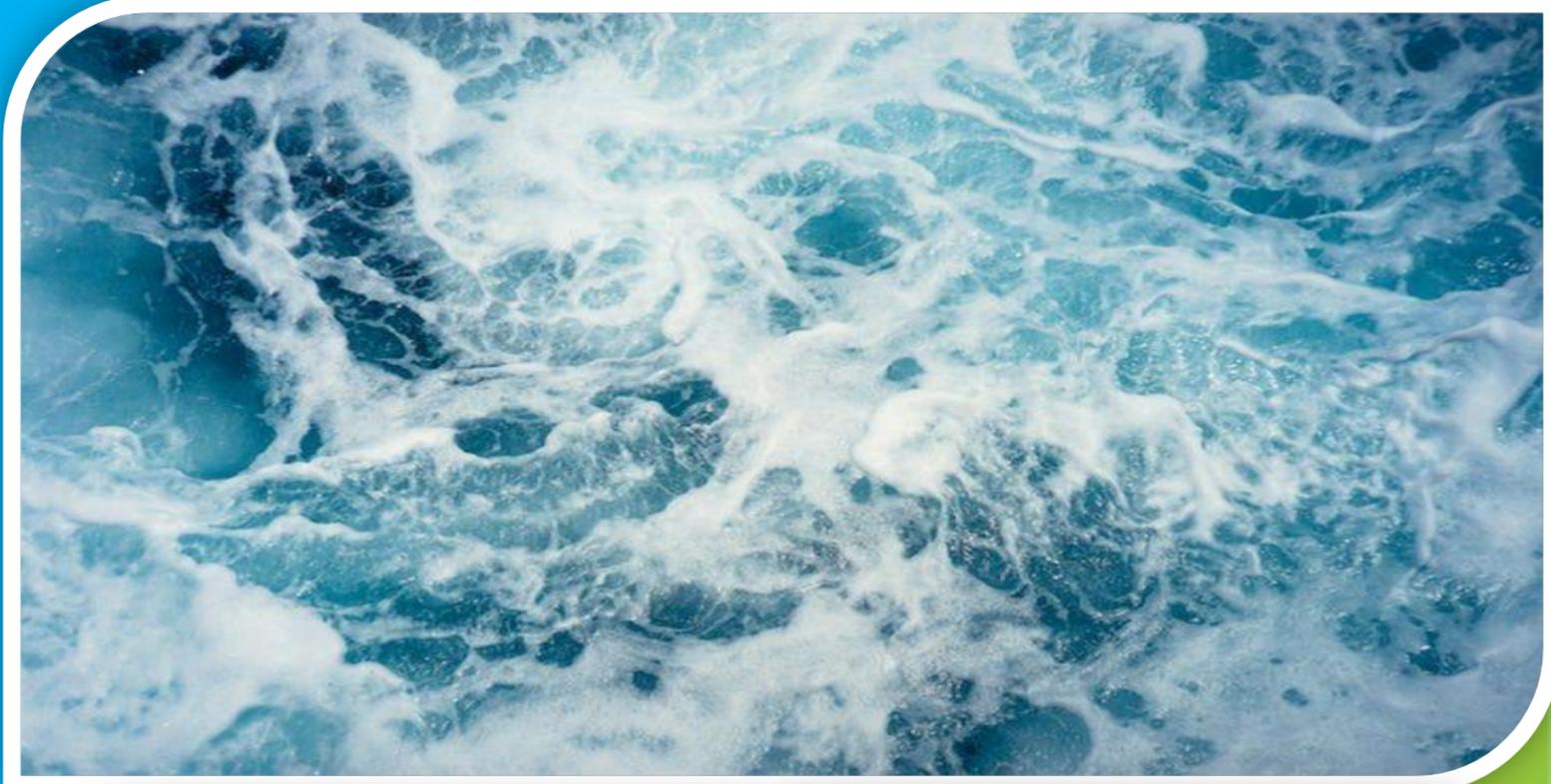




# Chinese-American Oceanic and Atmospheric Association

## E-News



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# About the COAA

February [2020]

COAA is a member-led, all-inclusive, non-profit, professional association supporting its members and promoting excellence in oceanic and atmospheric sciences and related activities. Members have many opportunities to share information, news, studies and concerns related to the fields of oceanic and atmospheric sciences through board members, submitting correspondence or articles to the COAA Newsletter, leading workshops and making presentations at the Annual Meetings, making contributions to the COAA website, and networking with people in a wide variety of careers (from well-known senior professionals to young environmental enthusiasts).

# Message from the New President

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Dear COAA members, Friends and Colleagues:

It is a great honor for me to serve as President of the Chinese-American Oceanic and Atmospheric Association (COAA) for the year of 2020. Thanks to the great vision of the founders, the leadership of previous presidents, and altruistic contributions by numerous board members, COAA has been going strong since 1993 for almost three decades. Now we have over 800 members from many different countries, and three regional Chapters in Southern California, Colorado and Northwest. Most importantly, COAA has become a cohesive and inclusive community to unite the ethnic Chinese scientists in Ocean and Atmosphere-related fields from all over the world. I'm thrilled and humbled by your election to serve this community.

Although my COAA Presidency begins in 2020, I had the opportunity to work with the 2019 Board members, when planning the 8th ICAOCC Conference in 2019 and the AMS reception in early 2020. During this period, I witnessed the spirit and hard work of all the board members, and their enthusiasm for serving the COAA community. Thanks to their dedicated work, both of these major events were extremely successful. Please join me to congratulate them and thank their services.

COAA's primary mission is to promote studies of ocean- and atmosphere-related sciences and technologies by facilitating communication and collaboration between ethnic Chinese scientists, researchers, scholars and students in these fields. To fulfill this mission goal, each year COAA sponsors a series of activities including seminars and workshops, mid-autumn moon festival picnic, Ping Pong tournament, AMS and/or AGU receptions, and international conferences on oceanic and atmospheric sciences. As President of 2020, I will work along the Board members to continue these traditional activities to promote the core values of COAA. This year is the beginning of a new era. Looking into the future, there are both great opportunities and challenges facing COAA. It is important and a good time to reexamine and reimagine ourselves, and plan for a more vibrant future for COAA.

In the end, I would like to say that COAA is "by us and for us". With your support and only with your support will we be able to sustain this community and ensure a bright future for it. We welcome and forward to your participation and support of COAA's activities and events. Thank you!

Sincerely Yours,

Zhibo Zhang (张智博)

President of COAA (2020)

# 1 2020 COAA-NJU AMS Reception at Boston

Zhibo Zhang

January 14th, 2020 Tuesday - COAA hosted the COAA-NJU AMS Dinner Reception on Tuesday, January 14, 2020 starting at 6:30pm at the hotel of Renaissance Boston Waterfront. Over 130 COAA members and guests attended the reception. The School of Atmospheric Sciences at Nanjing University (NJU) and COAA are co-sponsors of this event.

At the opening of the reception, **Dr. Cheng-Zhi Zou**, the President of COAA, first

welcomed all attendees and briefed them on the history of COAA, noticeable achievements and latest activities. **Dr. Aijun Ding**, the Dean of the School of Atmospheric Sciences at NJU, appreciated the important role of COAA in promoting the collaboration among ethnic Chinese scientists in the fields of Atmospheric Sciences. He also briefly introduced the recent achievements of the School of Atmospheric Sciences at NJU and their employee recruitment strategies.



From Jul.10 to 12, 2019, the 8th COAA International Conference on Atmosphere, Ocean, and Climate Change (ICA OCC) was successfully held at NUIST (Nanjing, China). This was a major event of COAA in 2019, attracting more than 200 attendees from several countries. NUIST was the main sponsor of the 2019 ICA OCC. **Dr. Cheng-Zhi Zou** acknowledged the strong and continuous support by the NUIST to COAA. He presented a Distinguished Service Award to the leadership of the NUIST support team, **Drs.**



**Zhaoyong Guan** and **Zhihong Jiang** during the COAA-NJU AMS dinner reception. The vice president of NUIST, **Dr. Zhihong Jiang** received the award on his behalf.

In the summer of 2019, COAA lost an outstanding member, **Dr. Fuqing Zhang** (1969-2019). Numerous members of COAA attended the funeral and ceremonies for **Dr. Zhang**. COAA also organized a donation for **Dr. Fuqing Zhang's** bereaved family. In memory of **Dr. Fuqing Zhang**, the president of COAA, **Dr. Cheng-Zhi Zou**, requested a moment of silence before the dinner.



Every year, ethnic Chinese scholars and scientists make exceptional contributions to the Ocean and Atmosphere related fields through their scientific discoveries, public services, and education and outreach.

In the year of 2019, our contributions and achievements were well recognized by the AMS and AGU. **Dr. Qiang Fu** from the University of Washington was selected by AMS to receive the **JULE G. CHARNEY MEDAL**, for his “*pioneering contributions to the theory and practice of atmospheric radiative transfer and its critical linkages to climate and climate change*”.

**Dr. Ping Yang** from the Texas A&M University was selected by AMS to receive the **DAVID AND LUCILLE ATLAS REMOTE SENSING PRIZE** for his “*sustained, seminal contributions to developing light-scattering and radiative transfer models and datasets for remote sensing of ice clouds and dust aerosols*”.



## 2 | 2020 COAA-NJU AMS Reception at Boston

**Zhibo Zhang**

Five ethnic Chinese scholars and scientists, **Drs. Ping Chang** (Texas A&M University), **Ellie (Zhiyong) Meng** (Peking University, China), **Mingfang Ting** (Columbia University), **Juanzhen (Jenny) Sun** (NCAR), and **Ming Xue** (University of Oklahoma), were elected to the 2020 AMS fellow. **Dr. L. Ruby Leung**, a senior scientist at PNNL, was elected to the AMS Government Sector Council. In addition, **Dr. Tong Zhu** (Peking University, China), **Ximing Cai** (UIUC) and **Chunmiao Zheng** (Southern University of Science and Technology, China) were elected as 2019 AGU Fellow. The President-Elect of COAA, **Dr. Zhibo Zhang**, congratulated these outstanding members of COAA on their achievements and invited them to share their personal perspectives and experiences.

After almost three decade’s effort through several generations, COAA now is proud to have over 800 members from many different countries, and three regional Chapters. At the dinner reception, **Dr. Baijun Tian**, President of the Southern California Chapter, **Dr. Ming Hu**, President of the Colorado Chapter, and **Dr. Muyin Wang**, President of the Northwest Chapter, briefly introduced their notable achievements and activities in 2019.

This year, COAA honored five young researchers, **Drs. Yue Qin, Xiaodong Chen, Jianfei Peng, Youtong Zheng** and **Peter Gao** with the 4th Yuxiang Early Career Award. **Dr. Yuan Wang**, chair of the selection committee, congratulated the award winners, highlighted their special contributions, and wished further achievements in their own fields.

The reception concluded with inspiring remarks by the Assistant Secretary-General of WMO, **Dr. Wenjian Zhang**, and a great talent show by the guests.

# 1 COAA Spotlight: Dr. Xiaowen Li



**Dr. Xiaowen Li** is a senior research scientist at Morgan State University, Baltimore. A native to Sichuan Province, she received her Bachelor of Science degree from Peking University and Master's degree from Chinese Academy of Meteorological Sciences, before she came to the US. Upon receiving her PhD from the University of Chicago, **Dr. Li** joined the mesoscale modeling group at NASA Goddard Space Flight Center. She has been working as an affiliated research scientist at NASA Goddard since 2002.

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**Dr. Li's** research mainly focuses on aerosol, cloud and precipitation, especially microphysical aspects of precipitation processes, using cloud-resolving models and satellite observations. Other research interests include aerosol radiative effects, air-sea interactions, anvil and cirrus clouds, mesoscale simulations of intraseasonal oscillations, ocean wave simulations, and feature identification and data retrieval using machine learning. In addition to research, **Dr. Li** enjoys hiking and photographing the beautiful world and its inhabitants.

**Q: How did you decide to study atmospheric science?**

I think it all started with my love of science fictions. When I was a teenager, I read almost exclusively sci-fi. I mean every single book I could find. When I needed to choose my major at the time of college application, I put down the department of geophysical sciences, since it was more relatable to all those science fictions. Our old geophysics department included sub fields of all the locations where sci-fi stories took place, from deep down underground (the field of geophysics) all the way up to the outer space

**Q: Which accomplishments are you most proud of in your professional life, including your group achievements?**

I'm not sure I want to call them accomplishments, they are works I have done. I'm a member of the mesoscale modeling group at NASA Goddard Space Flight Center. A big chunk of my work is building, improving, and application of the Goddard Cumulus Ensemble Model, which was built by **Dr. Wei-Kuo Tao** at Goddard. My main contribution to the GCE model is the implementation and application of a sophisticated spectral bin microphysical scheme, which was built by **Professor Alexander Khain** at the Hebrew University of Jerusalem. The spectral bin microphysical scheme explicitly simulates size distributions of all hydrometeor particles along their lifecycles. It has made unique

(space sciences and astrophysics). I didn't get to choose my field though, but was assigned to the field of atmospheric physics, squarely in the middle of the spectrum. To me it was the least exciting place in all the science fictions, but I came to realize, during my college years, that it was the most practical fields in terms of career outlook. So here I am, working for NASA, studying atmospheric sciences. I still love good science fictions, except for I now have a much better understanding of the imaginations that went in science fictions, physical laws, and the reality, than my teenage years.

contributions in studying aerosol-cloud-precipitation interactions and interpretations of remote sensing.

I'm also a proud member of the NASA Global Precipitation Measurement Mission. I came to the US for my PhD study under a grant from GPM Mission's processor, the Tropical Rainfall Measurement Mission (TRMM), in the year when the TRMM satellite was launched. So I can declare that I have been involved with the GPM mission since its very beginning. TRMM satellite was the first one with a precipitation radar onboard, and the GPM core satellite carries a dual-frequency radar. My work with the TRMM and GPM mission mainly involves unraveling microphysical processes from the satellite observations. It's a difficult task, lots of frustrations, lots of challenges, lots of fun, too.

**Q: Who influenced you the most in your professional life and why?**

Many teachers, advisors, colleagues and students have influences in my professional life. Let me take this opportunity and acknowledge 4 of them. I was fortunate to have some overlapping in work, and thus some interactions with two of the big names of the first-generation atmospheric scientists at Goddard: **Dr. Joanne Simpson** and **Dr. David Atlas**. I watched them working and interacting with people in awe. Later I also attended their funerals. Witnessing their lives through their children, friends and colleagues were inspirational, and provoked a much deeper grasp of life. My PhD advisor,

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**Professor Ramesh Srivastava**, and my postdoc advisor, **Dr. Wei-Kuo Tao**, are the two people with many impacts in my career. Both of them are from Asia, and have deep interest in oriental culture and philosophy: **Ramesh** was born in Indian, and **Tao** in Taiwan. I guess somewhat against the hierarchical Asian philosophy, both of them trusted me and gave me full freedom of scientific exploration, together with lots of encouragement. I consider myself very lucky to have their support through thick and thin over the years.

**Q: What is your major advice to young scientists in our field?**

Do not listen to my advice.

I suppose I'll need some explanation for giving such a paradoxical statement. As a mother of two teenagers, I've been getting lots of pushback from giving advices to young people. Nowadays I try hard, I mean really hard, not to give advice to my young. I am extending this to all young scientists in my field, just so my children will not call me a hypocrite one more time. Of course, if you come to me seeking for a specific piece of advice, I'd be happy to give it to you. Afterall, it is a boost to my ego that you value my opinion. However, please keep in mind that everyone is different. What tickles me may not tickle you. At the end of the day, if my advice, or any advice for that matter, goes against your gut feeling, I'd suggest always go with your guts.

## 2 COAA Spotlight: Dr. Xiaowen Li

**Q: How are you interacting with Chinese-speaking scientists in Asia?**

I don't have much interaction with Chinese-speaking scientists in Asia. I guess the most of the interactions, if one can call that an interaction, have been through paper reviews. I believe COAA will provide good opportunities in the future.

**Q: What are your perspectives for future direction in our field??**

Ah, the crystal ball question. Through my crystal ball...I see one word..."change". Actually, one doesn't need a crystal ball to see changes these days. Our environment is changing rapidly. A large part of this change is induced by our own activities, especially during the post-industrial development period. In turn, we are forced to change our societal and personal behavior to adapt to the changing environment. The atmosphere and ocean science research will change rapidly, too, with much more interdisciplinary interactions. Let's hope our work in these fields will result in better usages of our limited natural and human resources toward mitigating bad impacts of a changing environment on human society, and toward taking advantages of the opportunities bring about by it.

## COAA HQ Board of Directors

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## COAA Northwest Chapter Board of Directors

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- President-Elect: Hailong Wang (王海龙, PNNL)



## Chinese-American Oceanic and Atmospheric Association

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