

**ANNUAL REPORT  
SPIE STUDENT CHAPTER  
UNIVERSITY OF HOUSTON**

**December 2018**

## Member List

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### Member Roster

Raksha Raghunathan

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Harshdeep Singh Chawla

Kheya Banerjee

Alejandro Carpy

Amar Kavuri

Andrew Lopez

**Alumni Roster**

Shang Wang

Zhaolong Han

Jiasong Li

Susobhan Das

Chen Wu

Manmohan Singh

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- Visiting Lecturer- Dr. Kishan Dholokia
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## ➤ **Activities**

### 1) “Girls Engineering the Future!”

In March of 2018, our UH chapter participated in the second annual “Girls Engineering the Future” event by Chevron at the University of Houston. The chapter members broke out into small stations each with its own optics demonstration. Each station demonstrated a principle of optics that was more complex than the previous (color, then reflection, then TIR); the final station consisted of a commercial OCT system that applied all the concepts previously demonstrated. Girls participating in the event were taken through each station in small groups, allowing individual attention to each attendee throughout the length of the event.

One of the most popular demonstrations during the event was the “balloon popping” station. Students were challenged to determine how color played a role in popping a balloon using a focused laser of the color it absorbs. Girls were taught laser safety, as well as principles of reflection, such as why a red laser would not pop a red balloon. They were awarded for participating in the thought exercise by popping balloons using a focused laser pointer.

We would like to thank Dr. Larin for providing valuable lab resources for this event.



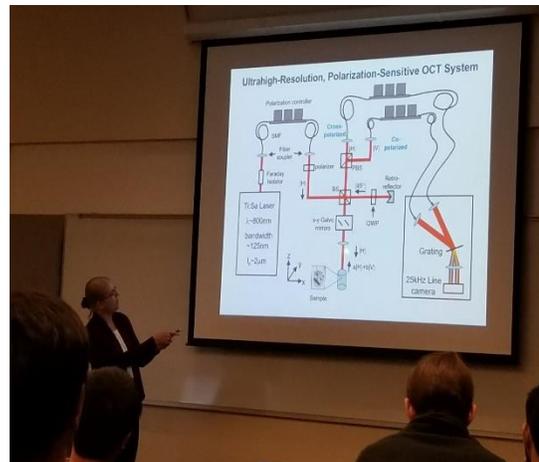
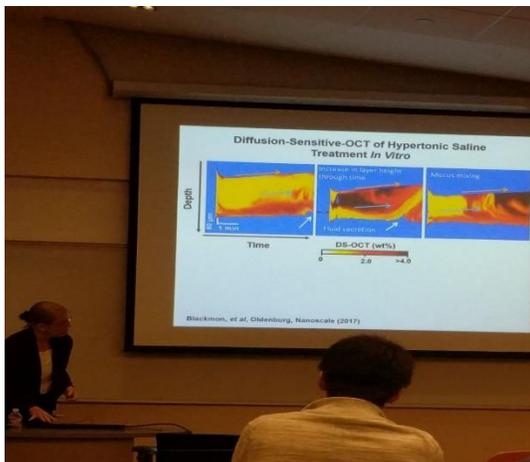
## 2) Visiting Lecturer- Dr. Kishan Dholokia

In April of 2018, the UH student chapter invited esteemed professor Dr. Kishan Dholokia to deliver a lecture regarding his amazing research to the entire Department of Biomedical Engineering. Students had a chance to hear about his work, his experiences, and his life. The student chapter also had dinner with Dr. Dholokia and gain personal advice and insight from this professor.



### 3) Visiting Lecturer – Dr. Amy Oldenburg

UH student chapter invited a very esteemed professor Dr. Amy Oldenburg in October 2017, to deliver a lecture on her research work in Optical Coherence Tomography and Elastography to the entire Biomedical Engineering department. Students had a very good opportunity to hear about her research work, experiences and challenges in research. The student chapter also had dinner with Dr. Amy Oldenburg and gained personal advice.



## ➤ **Future Events**

- 1) Organize intra-university level poster session to spread awareness of our chapter and its activities. Such an event would promote STEM research and participation in our student chapter.
- 2) We will participate again in the “Girls Engineering the Future” event, which is quickly becoming a chapter tradition, and is an amazing way to promote interest in optics and advertise our local chapter.
- 3) Our outreach events the past year have been met with great praise by our audiences and participants. We intend to establish additional more frequent activities across our community.
- 4) We were unable to perform community outreach events as we have done in previous years. This year we will redouble our efforts in promoting STEM and optics in the community

## ➤ Chapter Finances

<b>Previous Year Balance: \$73</b>			
<b>Received</b>		<b>Spent</b>	
<b>Other funds \$19.88</b>		<b>Girls Engineering the Future</b>	
		<b>Supply</b>	<b>\$93</b>
		<b>Hall Booking</b>	<b>\$50</b>
		<b>Food/Snacks</b>	<b>\$75</b>
<b>Activity grant \$500</b>		<b>Visiting Lecture 1</b>	
		<b>Food</b>	<b>\$125</b>
		<b>Visiting Lecture 2</b>	
		<b>Food</b>	<b>\$125</b>
		<b>Transportation</b>	<b>\$50</b>
<b>Total Received</b>	<b>\$ 519.88</b>	<b>Total Spent</b>	<b>\$ 518</b>
<b>Total Current Balance: \$75</b>			