



IISc AANA Newsletter

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Indian Institute of Science Alumni Association of North America, Mountain View, CA, www.iiscaana.org

Message from AANA Co-Chairs

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2018 IISc AANA National Meeting will be organized by IISc AANA Chicago chapter in September 2018.

Please provide your feedback for this meeting at:
<https://www.surveymonkey.com/r/QBXSYVS>

IISc AANA Global Conference is planned to be held in Silicon Valley in 2019 (summer)

VISIT AND REGISTER ON ODAA website
<https://www.alumni.iisc.ac.in/>

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 Srinivasan Kasturi (1964*)
 Abhinav Dey (2011)
 Gajanana (Gaj) Birur (1971)
 Guneet Walia (2010)
 Mrinalini (Meena) Rao (1972)
 Murthy Gudipati (1987)

* IISc graduation year

In 2017 IISc AANA accomplished major new programs. We held the first annual national meeting at a chapter location, in Gaithersburg, MD. The June 4 national meeting was organized by the newly formed Washington DC chapter. With the addition of Washington chapter, AANA now has a total of seven chapters in the US. Secondly, AANA streamlined the channeling US alumni donations to IISc. Two major donations for undergraduate scholarships and for the department research were sent through AANA to IISc ODAA in 2017. Another major donation will institute an annual international travel fellowship for students (who present research papers).

After several discussions between the AANA Board of Directors and AANA chapter presidents, the Midwest Chapter has agreed to hold the next annual national meeting in Chicago in early September, 2018. The date and the program will be announced shortly. The 2019 Global conference will be overseen by the AANA Silicon Valley chapter (where AANA was founded in 2006).

We are happy to report significant participation by AANA members at the Second Annual Alumni reunion held December 16-17, 2017 at IISc. Dr. Murthy Gudipati made a presentation on the recent activities of AANA while Dr. Brij Seth gave a talk on his student days at IISc in the early 60's and his motivation for giving four annual undergraduate scholarships to the Material Science department.

Gaj Birur and Sunil Kumar

(An article and more pictures on Page 2 in this newsletter)



Editor's Message:

Dear IISc alumni;

Please send your thoughts, comments, activities, ambitions, and dreams that you want to realize through IISc AANA and IISc – with a focus on “giving back” to the society where you live and where you come from (newsletter@iiscaana.org).

Srinivasan Kasturi

Any tax-deductible donation to IISc AANA helps support educational and social activities of IISc and its students. IISc AANA is a California registered 501(c) (3) non-profit organization, tax ID is 03-0602301

2017 IISc Annual Alumni Reunion at IISc Campus

Murthy Gudipati (1987 Ph.D. Organic Chemistry)



Murthy (wearing the cap backwards) with other alumni

The annual Alumni Reunion was first organized by the Office of Development and Alumni Affairs (ODAA) starting in 2016. It is held during the second weekend of December every year. ODAA was established in 2015 as a new initiative of IISc under the leadership of the new IISc Director Prof. Anurag Kumar. The annual Alumni Reunion has provided IISc alumni a stronger connection to their *alma mater*. The program for the second Alumni Reunion in 2017 was developed together by ODAA and IISc Alumni Association (IISCAA). The first day was dedicated to alumni professional meetings, whereas the second day involved social and recreational activities.

The first day, December 16th, started with registration and breakfast at the J. N. Tata Auditorium. ODAA and IISCAA and volunteers did an excellent job in leading the visitors through registration with ease. Prof. Anurag Kumar was the first speaker and he showcased IISc's history, diversity, achievements, and future directions/plans. The conference hall was 75% occupied, indicating excellent attendance from the local, national, and international alumni. An estimated 40-50 alumni attended from the USA. While the progress of IISc over the years has been outstanding with international rankings and visibility, developments within IISc have been equally fascinating. ODAA has been instrumental in attracting donations and endowments to IISc as well as keeping the alumni in closer connection with IISc.

Several donors of named endowments spoke about their motivation behind their generous actions. The speakers included Dr. Brij Seth (1960, B.E. in Metallurgy) from the US who donated funds to establish four annual scholarships for undergraduate students. IISc Alumni Association of North America (IISc AANA), which is a 501(c) (3), facilitated this donation. I represented IIScAANA and highlighted the fact that we the alumni in the US have wonderful opportunity to make contributions. I was surprised to find out that many alumni living in the US were not aware of the IISc AANA and its 501(c) (3) non-profit charter. The morning program included presentation of "Distinguished Alumni Awards (DAA)" to this year's recipients: Ms. Sudha Murthy (InfoSys) and Mr. Ramdorai (former Chairman of Tata Consultancy Services).

There was a panel discussion by outstanding thinkers and leaders on "Artificial Intelligence" (AI) and humans. The discussions ranged from whether AI is taking over humans in the future to how best to use AI to improve human life and enable better access to education, medicine, and quality of life. The discussions were lively and panel did an outstanding job to keep them focused.

On the second day we assembled in the meadow by the Tata Statue and Main Building for a 5 K walk/run event. We all got T-shirts and caps from the IISCAA. Young and old participated in the walk and run through the campus, ending at the new A-Mess, near N-block, where we had an excellent brunch and networking opportunities. After the brunch, we had an "Ecology Tour" of IISc by Center for Ecological Sciences (CES) students. Overall, these two days were worth spent, cherishing the memories, meeting new students and old friends, admiring the beauty of IISc, getting inspired to "give back" to our *alma mater* – through – IISc AANA.



A Thank You Letter from an IISc Student to the US Alumni

Gaurav Tikas, Research Scholar, Department of Management Studies, IISc*

I want to thank the IISc administration and alumni for their help for me to attend the United Nations Youth Conference on 'Sustainable Development Goals (SDGs) 2030 at New York city during February 14-16, 2018. After attending the conference, I visited some of the Ivy League Universities in USA to collect data for my upcoming case study 'Creating Entrepreneurial universities: Learnings from the American Ecosystem' on understanding 'Best Practices' followed in the American Ecosystem in managing Innovation, Entrepreneurship and Commercialization of Research.

I am grateful to the following for their generous help during my trip to the UN conference:

1. Prof Anurag Kumar, IISc Director, for sponsoring my flight between Bangalore and New York. IISc administration and Office of Development and Alumni Affairs (ODAA) and IISc Alumni Association, Bangalore for their critical support, guidance, and financial assistance for attending the UN conference.
2. Many IISc alumni in the United States supported me and took great care of me in the US. My heartfelt thanks to them for their generosity with their time, hospitality at their homes, advice, and providing introductions to academic colleagues at various universities.

New York – Dr. Astha Nautiyal - Dr. Astha Nautiyal, who ensured that I was well-fed throughout the day and made sure that I didn't miss Indian Food. She even showed me around the Queen's area at New York and made sure that I reached home, safely through the subway system at New York. Besides being a wonderful host, Dr. Astha enriched us with her critical insights about the research scenario at some of the top universities in New York.

New Haven – Dr. Kuldeep Gupta - Dr. Kuldeep Gupta hosted me for 2 days at New Haven and showed me around the wonderful Yale campus. He also helped me in getting in touch with a few other researchers at Yale, whose perspectives and suggestions were extremely beneficial for me in developing my case study.

Boston: Dr. Shreyas Gokhale and Mr. Puneet Singh - Dr. Shreyas Gokhale (at MIT) and Mr. Puneet Singh (Harvard) provided invaluable insights on the way research is conducted at top global universities like MIT and Harvard. Their opinions and suggestions will certainly be incorporated in the case study and other constructive forums which concern with improving the quality of Indian researchers in science and technology domains. Both introduced me to some their friends at these places, which enriched the quality of discussions and helped in gathering diversified inputs.

Los Angeles – Dr. Murthy Gudipati - Dr. Murthy Gudipati had to get special permission to get me inside the NASA's Jet Propulsion Lab for a 2-hour visitor tour. I learnt the importance of ownership, accountability and autonomy in managing our projects, not just in our research domain but also in our daily routines. Dr. Gudipati showed me around the wonderful campus, museums and other fascinating aspects of the Jet Propulsion Lab. It was wonderful to discuss and brainstorm about how to improve the quality of Indian research, especially in space technology.



Asta Nautiyal



Kuldeep Gupta



Shreyas Gokhale,



Puneet Singh



Murthy Gudipati



Aditya Vamsee



Gopalan

San Jose: Mr. Gopalan and Dr. Vamsee Aditya - Mr. Periya Gopalan (San Jose') and Dr. Aditya Vamsee (Stanford University) took great care of me during my stay on the West Coast. It was like a home-away-from-home at Mr. Gopalan's residence where he personally ensured that I was well-fed and well-rested. He even ensured that I reach my destinations on time and also provided the necessary logistical support. He himself prepared and packed lunch for me and I must mention, that he is a wonderful cook. Dr. Aditya Vamsee, helped me during my visit to the Stanford University and ensured that I was not lost at any point, during my visit. He personally guided me to the place where my appointment was scheduled to meet one of the Professors at Stanford University.

(* Gaurav Tikas has recently submitted his Ph.D. Thesis titled: 'Predicting Innovation Capabilities at team-level: An exploratory analysis' in the area of Technology and Innovation Management at IISc)

IISc AANA Membership

IISc Alumni Association of North America (AANA) was formed in 2006 as a 501 (c) (3) non-profit organization in California. It has over 130 life members as of 2017 and over 600 alumni who are connected with AANA in many activities. Membership in AANA is free to anyone who is an IISc alum or spent six months at IISc. AANA encourages IISc alumni to become its life members as it strengthens the organization and enables it to expand many of its activities to benefit the alumni. Some of the benefits AANA life membership provides are:

1. Demonstrates your gratitude for the free and excellent education at IISc which got you to current position
2. Allows for full participation in AANA activities, e.g., invitation to AANA hosted dinner meetings during visits of important IISc and other academics
3. A 25% discount in registration fee for AANA National and Global conferences
4. IISc ODAA help in coordinating with IISc faculty on technical and academic topics, IISc Guest House during IISc visits
5. It strengthens the bond of North American alumni with IISc; closer networking with entrepreneurs, academics, other professional in the US and India

One can become a life member by sending a check for \$500 to AANA at:

IISc AANA

897 Independence Avenue, #4C*

Mountain View, CA 94043.

Phone: (650) 965-2500

(* Please include the office number #4C in the address, otherwise your letter will be returned).

AANA Life Member Endows a Student Travel Fellowship at IISc

A new international travel fellowship for IISc students has been set up at IISc by an AANA life member. Dr. Murali Aravamudan (1987 M.E. in Electrical and Communications Engineering) from Boston has donated funds to IISc ODAA through AANA to endow a travel fellowship in the name of his parents 'Lakshmi and Aravamudan'. The interest from the funds provides for an annual student fellowship for presenting research papers at international conferences.

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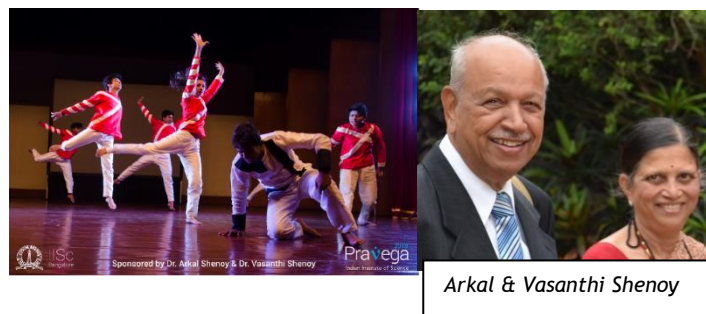
PRAVEGA'18

Undergraduate program at IISc was started in 2011. In continuance in its effort to improve the reach among the general public while maintaining the interest of science lovers and to inspire them to think originally and out of the box, IISc allowed us to start a National-level annual Inter-College science, technology and cultural festival. The fifth edition of the fest concluded on 21st January, 2018. The festival had various competitions with a strong flavor of science, innovation summit, hackathon, workshops from several domains, science gallery, classical artists and a strong line-up of renowned artists, all in effort to provide the best platform for interaction of students, academic researchers and corporates with each other.

We, hereby, would like to apprise AANA of the success of Pravega'18. This edition of Pravega played host to Pravega Innovation Summit, an initiative to bring the pillars of scientific growth and innovation i.e. researchers, students, corporate, investors together and provide a platform for networking, exchange of ideas and foster collaboration. The highlights of Pravega'18 were a social initiative to instill interest in aeromodelling in young children from underprivileged background, taken by the Pravega team in conjunction with AIRBUS, a Cognitive Analytics hackathon by IBM, Decoherence by SHELL: a Pan India physics challenge, Lasya by Dr Arkal Shenoy and Dr Vasanthi Shenoy: a national dance competition. The fest also had a stellar line up of artists. The Friday pronite was opened by a beatboxer, followed by Rahul Subramaniam, one of the best stand-up comedians in the country. Saturday saw a prominent rock band, The Pineapple Express. The concluding night had Thaikkudam Bridge and DJ Rave and Crave. The three days witnessed about 10k footfall with participation from all over the country.

The science and engineering events were Daedalian Auction, Tricks of Trade, Vacuum Cannon, Science Gallery, Molecular Murals, CheMystical, Pecosa, Whodunit and Laser Tag. Science, general and Music Entertainment Literature Art quizzes were held. Workshops from several domains namely Game Development using Artificial Intelligence, Android Apps, Android Controlled Robotics, Augmented Reality, AutoCAD, Automobile, Big Data, Embedded Systems, EthiHack, IoT, Quadcopter and Sixth Sense Robotics were organized. The fun and cultural events were Battle of Bands; Proscenium, a dramatics competition; Footprints, a street play competition; open mic, linguistics quiz, harry potter quiz, body zorbing, gaming, paper marbling workshop and music jam session.

Our sponsors have been an integral part of our fest, helping us applaud education, sharing our dream to reach the people from all corners of the country. The Pravega team would like to thank Dr. Arkal Shenoy and Dr Vasanthi Shenoy for showing faith in us and helping us in facilitating our endeavor.



Arkal & Vasanthi Shenoy

NoteBook Drive (NBD) – IISc Student Volunteer Group

If you happen to pass by the open area in front of B mess on a Sunday morning, you'll see a bunch of school kids huddled up with a handful of IIScians, trying their hands on basic science experiments. These kids from economically and socially disadvantaged families study in one of the government schools in Bangalore and are being mentored by volunteers at NoteBook Drive. NoteBook Drive (NBD) is a students' initiative started in 2002 with the goal of improving the quality of education imparted in government schools. The mentorship initiative is only one among the many activities of NBD. In the last 16 years, NoteBook Drive has steadily increased its reach and scope of activities. The major initiatives include:



(i) **Notebook distribution:** While the text books are available for free through government schemes, many a times the students from poor economic background cannot afford to buy notebooks and stationery. Notebooks and stationery are distributed among the students at government schools at the very beginning of every academic session. NBD distributed notebooks worth INR 5.1 lacs among students in 28 government schools in 2017.



(ii) **Scholarship initiative:** To support students from poor families to enroll for college after 10th examination, NBD provides monetary support. In 2017 the number of students provided with this support was 52. The students are selected after the volunteers visit their homes and survey their economic condition in person.

(iii) **Career Guidance:** Towards the end of the academic year volunteers visit government high schools and interact with the students appearing for the board examinations. Volunteers disseminate information regarding the various career options available to students and the necessary trajectory to reach the goal.

(iv) **Science Outreach and Mentorship:** These initiatives were started with the aim to develop scientific inquisitiveness among the school children. As a part of the Outreach program volunteers visit the schools every Saturday and demonstrate simple experiments to the students so as to motivate them to learn science. During these visits to the school, students with motivation and aptitude to learn are selected from each school to be mentored. The objective of the mentorship program is to hone the scientific reasoning among these kids. During this mentorship program these kids also come up with different innovative projects which are exhibited at an annual campus science fair.

(v) **Teachers' training program:** Workshops with hands-on activities for the high school science and math teachers are conducted every year train them with tools and techniques to make classroom teaching more interactive and effective.

Apart from this weekly **English Communication classes** and **computer classes** are also conducted in two schools near the IISc campus. **Children's Day** is also celebrated in the 25 government primary schools to nurture creativity among the young minds. Through these different initiatives NBD has been able to reach out to hundreds of underprivileged kids with the hope of helping them in any possible way towards a better life. All these activities have been possible due to the generous contributions from the students, faculty, staff as well as alumni of IISc in India and the US (**AANA members in particular**). NoteBook Drive is extremely grateful for all the support, both moral and financial. The efforts of NBD are humble as compared to the scale of the problem but NBD endeavors to give its best within its limitations of finances and members. You may reach out to us for any suggestions or queries at notebookdrive.iisc@gmail.com.

AANA Chapter NEWS**Silicon Valley Chapter****(Dr. Pothaganahalli Draupadi, President, AANA Silicon Valley Chapter)**

On October 7th, 2017, Dr. Manohar Furtado presented a talk on "Innovation and Commercialization in Biology"

On November 4th, 2017, Dr. Anita Mukherjee presented a talk on "The Journey within - Psychoneuroimmunology, Psychoneuroendocrinology and beyond: the role of psychology in our biological, mental and spiritual health." We had a Diwali get together that day. On December 17th, 2017, Mr. Manasa Chandra presented a talk on "Gene Therapy: Applications and Therapies." We had a Christmas party get together on that day.

Washington DC Area Chapter**(Dr. Rita Khanna, President, AANA Washington DC Area Chapter)**

A luncheon meeting of the IISc AANA members was held on Feb 11, 2018 at 12:30 at Jewel of India restaurant in Silver Spring. Over twenty members attended the luncheon. Prof. Sunil Kumar (provost, Johns Hopkins University), AANA Co-chair spoke at the luncheon. Plans for the chapter during the 2018 were discussed. One of the initiatives was having technical discussion meeting at National Institute of Health for the IISc alumni and also to invite other alumni from Indian universities working at the institute. Dr. Anand Swaroop leads this initiative. Two social gatherings were planned for the year one during the summer and other during fall.

Mid-West Chapter, Chicago**(Dr. Ganapathy Dharmasankar, President AANA Mid-west Chapter)**

The mid-west chapter has agreed to organize 2018 AANA national meeting in Chicago. At present the key members of the organizing committee (Sivarajan, Ganapathy Dharmasankar, Murali Ghantasala, Swaminathan Ramesh, Meena Rao, Natarajan etc.) are working to finalize the early September date and the location of the meeting.

Southern California Chapter**(Gopal Chakravarthy, President AANA So. Cal Chapter)****IISc AANA Southern California get together in San Diego, March 24, 2018**

Some of the members of the AANA So. Cal chapter members met at the Jewish Community Center in La Jolla, California during the Indian Fine Arts Academy of San Diego's 9th annual Music and Dance Festival (March 18th through March 25th 2016). The get together held on Saturday March 24th at 12 Noon was coordinated by Arkal Shenoy and Kasturi Srinivasan. One of the highlights of the gathering was the presence of several IISc UG (new) alumni from the University of California at San Diego. There are over 60 IISc UG alumni currently doing graduate studies at various US universities. Arkal Shenoy is in discussions with some of them to bring them into AANA.

The festival had a fantastic line-up of world-renowned **vocal** and **instrumental** artists of both the **Hindustani** and the **Carnatic** genres of Indian music from India. Dance productions during the festival promise to be marvelous aural and visual treats. These classical dance productions have been choreographed by India's most talented and experienced dancers in Bharathanatyam, Odissi, and Kathak (<http://www.indianfinearts.org>)

OBITUARIES**Professor Mandyam D. Srinath**

Professor Mandyam D. Srinath (1957 D.IISc. Electrical Technology) passed away on January 10, 2018 in Dallas, Texas surrounded by friends and family. Born on October 12, 1935 in Bangalore, he earned the B.Sc. degree from the University of Mysore in India and the D.IISc. (ET) from the Indian Institute of Science and M.S. and Ph.D. from the University of Illinois, Urbana. He was an engineering faculty member at both the University of Kansas and at IISc after finishing his PhD. He joined the faculty of Southern Methodist University (SMU), Dallas, Texas, in 1967 and retired as a professor in the Department of Electrical Engineering in 2008. He supervised 45 PhD students in areas spanning control and adaptive systems, detection and estimation theory, digital signal processing, neural networks, image processing and video coding. He was the co-author of textbooks in the area of signal processing: (1) Introduction to Statistical Signal Processing with Applications (co-authored with IISc alumni Dr. P.K. Rajasekaran and Prof. P. Viswanathan), and (2) Continuous and Discrete Signals and Systems. In addition, he was an active member of the Dallas community and was one of the first Presidents of the DFW Hindu Temple Society.

Professor N.S. Venkataraman

Professor N.S. Venkataraman (M.E. Aeronautics 1962) passed away on March 1, 2018 in Washington DC. He was a Professor in the Department of Mechanical Engineering (1984-2018) at University of Puerto Rico. His teaching and research areas were: Thermal and Fluid Sciences, Analytical Dynamics and Aerospace Sciences

He was a **scientist at** National Aeronautical Laboratory, Bangalore (1962-63) before completing his Ph. D in Aeronautics, Astronautics and Engineering Sciences at Purdue University (1964-69). He was a **visiting Assistant Professor**, School of Aeronautics, Astronautics and Engineering Sciences at Purdue University (1970 to 1971). Head, Aerodynamics Division, Indian Space Research Organization, India (1971 to 1979). Senior Researcher and Head, Division of Mission Analysis, Structures and Thermal Control, National Institute for Space Research, Brazilian Space Agency, São José dos Campos, São Paulo, Brazil (1979 to 1984)

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