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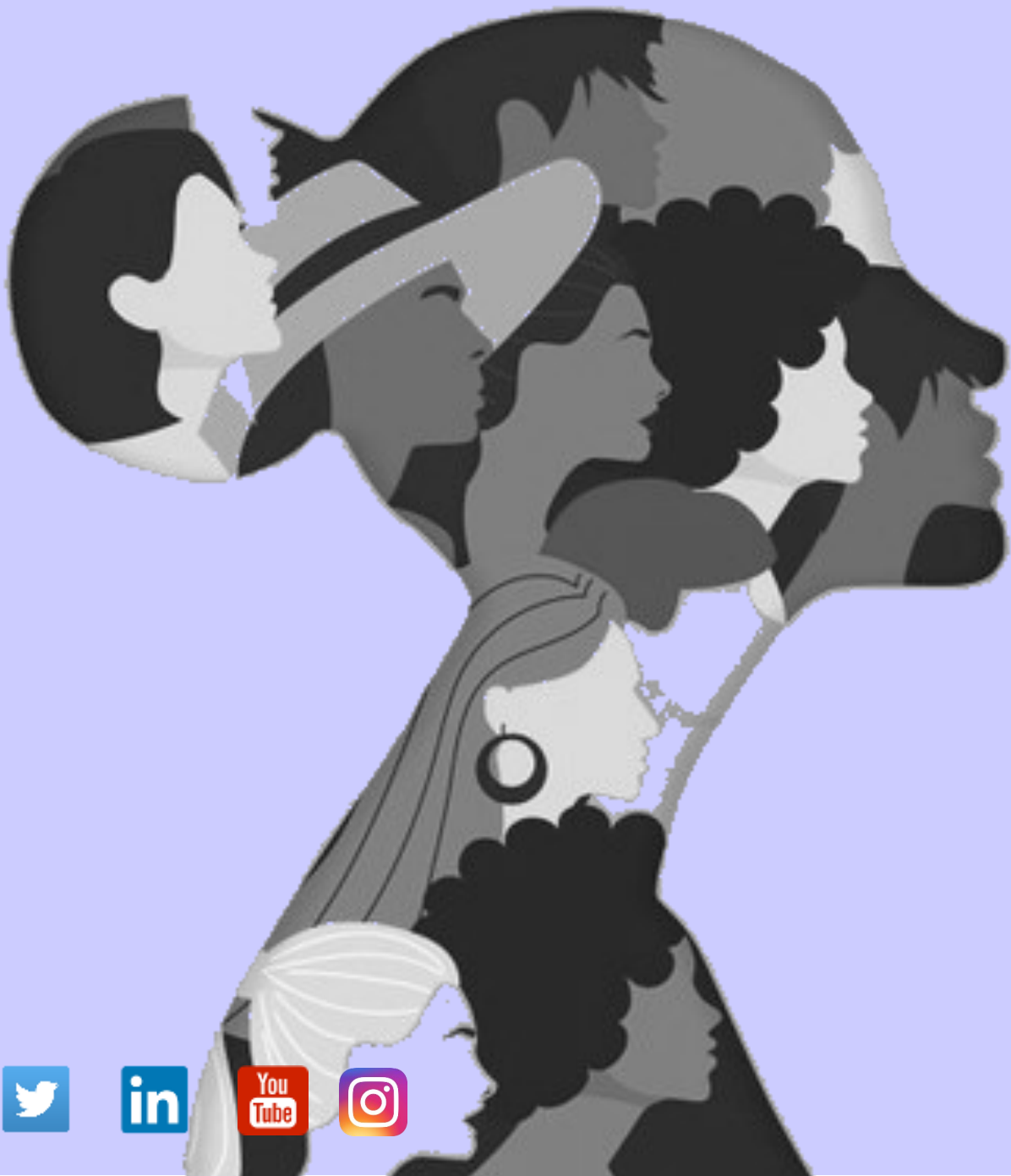
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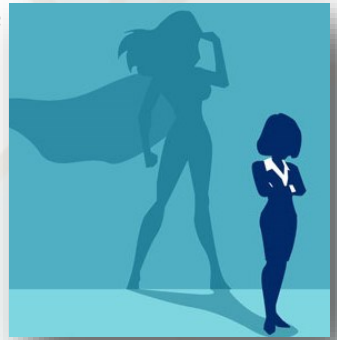
SAMPADA

Your window to UVCE



EDITORIAL

This edition of Sampada, we celebrate women! We celebrate the privilege we enjoy in the company of these strong women who have always uplifted our morale both at home and work especially during the past year where we have learnt to be more appreciative of their presence in our lives. We should celebrate women by just not acknowledging their response, encouraging their progress and respecting her boundaries but by treating them as equals and creating the same opportunities for them to grow and explore.



Every sector is today witnessing women taking on challenging jobs in both technical and managerial areas. They have not only strived to empower themselves but also the women around them and its heartwarming to see the impact brought in by these strong women in their respective fields. The battle to provide equivalent opportunities is definitely changing but there is still a long way to go and we are happy to share the stories of women who have achieved success in their fields of expertise and sustained to grow companies of their own. Slowly but progressively, we can see a change in the systems responding to create opportunities for women in mainstream fields and accommodate flexible schedules. Today the opportunities that can be explored are wide spread starting with IT professionals, to doctors, engineers, entrepreneurs, teachers and the world is slowly changing to invent creative opportunities for women and we have prospered in cultivating a space today where we see women mastering roles in diverse fields and rising alongside us shoulder to shoulder with their accomplishments.

Over the last 70 years, UVCE has garnered and nurtured women engineers and these women spread across the world have grown to make a change in the field of engineering in diverse areas of technology. Today we witness students applying for their masters both here and abroad in larger numbers further diversifying the alumni network of UVCE around the globe. We have interacted with several engineers from public and private sectors, manufacturing and healthcare industries who have advanced in their domain of expertise. We also see students pursuing Academics and teaching as a profession and a major section choosing to explore the IT industry scattered across various domains and a few engineers growing as entrepreneurs starting their own ventures as well. It is definitely a proud moment for UVCE to be an eminent contributor of engineers especially women who spread across the world contributing to world of science by creating more opportunities and shaping our futures. In addition to this, students especially women today see a variety of opportunities made available for them to explore and succeed in with both the education sector and IT sectors creating openings for them.

Further, in this Women's day special, we have published exclusive interviews distinguished alumni who have etched their places various fields with their contributions and research work. As the first interview read, we have Roopa Rao who with an industry experience of over 20 years co-founded a company progressing in the Healthcare sector. Further, we have Aishwarya, a gold medalist who has excelled in the IT industry sharing her experience as a working professional and the challenges she encountered specializing in her discipline. We also had the pleasure of talking to Geetha, an academician and founder of a start-up specializing in AI based solutions to detect early stage breast cancer. Breaking the norms that sky is the limit, team Sampada interviewed an alumna, Anuradha T K an Indian scientist, who previously worked as a Project Director at ISRO. And finally we have Sandhya, a Computer Science graduate who pursued her masters in Data Science, currently working as an IT professional provide her take on women in technology and the challenges they overcame to tailor their careers. This edition is a great start to acknowledge women in engineering and we are certain continue this momentum to discover and interview more alumni who have conquered the world in their respective domains and share their stories in future newsletters as well.

- Meghashree G, Batch of 2016 ISE

EMPOWERING TALKS WITH RUPA RAO

Team Sampada: *Can you please give an overview about your career and journey as an Engineer?*

Rupa: In August of 1988, I started my career as Research Associate in the Power System Department at Central Power Research Institute (CPRI). After a year, I had to make a decision whether to apply for a permanent position at CPRI, enrol at IISc for MS in Parallel computing or join TCS. My dread of studies made me take up the TCS offer. At TCS, after my initial training at Chennai, I was extremely lucky to be one of the early employees at the Bangalore Centre. In the Telecom Group, there was a great learning opportunity, and I remained there till 1997, when I left to spend more time with my young child. My journey since then has been with telecom startups in product and engineering leadership roles. The companies I have been associated with are Ind-Telesoft, Openera, NMS Communications, Torres Networks and Sawridge. In 2016, I met a fellow entrepreneur with a vision to build a HealthIT framework to meet Indian Healthcare regulations and price points. We co-founded Healthelife and since the past four plus years this has been my mission.



TS: *Your thoughts about UVCE - College days?*

Rupa: UVCE transformed me in many ways, I joined Engineering because my PUC marks were good enough to get a seat in Engineering! There was no long term career plan. Looking back, I believe many of us were in the same boat. The Computer Science department had just started and we were not clued in on the developments worldwide to pay adequate attention to the possibilities. In the third year when Prof. H.N.Shivashankar told us in a class that 70% of us are likely to be working in the software field, it was news to us. I remember actually using a computer for the first time to learn Pascal for our final year project. But the good news was given opportunities, our fundamentals were fairly good to grasp the concept and build on it. This journey of discovery in UVCE and beyond has enabled great lifetime bonds to be created with my batchmates and I remain closely connected with some of them over the years.

TS: *What was the organizational culture in the industry like 20 years ago for women and working mothers?*

Rupa: Twenty years ago, the industry had realised the need for gender diversity in the workforce, but they were struggling to create win-win options. Workforce management was more day-to-day and hence worked best with physical presence at the office. To cite an example, when I resigned from TCS in 1997, the reason being I was looking for a part time role. TCS had no options to give me. However by the middle of my notice period they reverted saying they will offer a part time position, hence the intent to retain women and working mothers was culturally accepted. Smaller companies had more freedom to make decisions and it was win-win as they could now get expensive resources to join with lesser cash outflow.

TS: *Since you are working in a field which is cutting edge technology focused, what would you suggest the current students and recent graduates?*

Rupa: The first and foremost suggestion is that each of us have to identify our strengths and build on them. My observation has been that we tend to choose our career options with our eyes on wealth creation. In the software industry I have seen many engineers not enjoying their roles as they are not cut out for the demands. This is extra painful as they may have opted for engineering itself with a view that they will be part of the well paying software industry. This trend has changed over the past 5-6 years which is very heartening.

UVCE IN MEDIA

The Highlight of the below newspaper article is as follows:

“The Agriculture University’s Administration, Academical and Financial structure will be remodeled on the lines of UVCE” – says Deputy CM and Higher Education Minister Dr AshwathNaryana.

He was speaking in an event organized by the Alumni Association of University of Agricultural Sciences and mentioned that “UVCE is being given Financial, Administrative and Academic autonomous status and will be modeled into a world-class institution. In the same lines, University of Agricultural Sciences will also be overhauled with a ‘Board of Governance’ model”. “Universities should stop political appointments, bringing forth close-circle disciples/juniors, showing favors. Only deserving people should be in the highest positions. We will be making this guidelines to all the colleges. Currently, to run a Engineering College, we need around Rs. 30 crore annually, whereas to run an IIT, around Rs.1,200 crore is required annually. So, we have decided to allocate Rs.150 crores for the development of UVCE”.

‘ವಿಶ್ವೇಶ್ವರಯ್ಯ ಎಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜು (ಯುವಿಸಿ) ಮಾದರಿಯಲ್ಲಿಯೇ ಕೃಷಿ ವಿಶ್ವವಿದ್ಯಾಲಯದ ಆಡಳಿತ, ಶೈಕ್ಷಣಿಕ, ಆರ್ಥಿಕ ಸ್ವರೂಪವನ್ನು ಆಮೂಲಾಗ್ರವಾಗಿ ಬದಲಾವಣೆ ಮಾಡಲಾಗುವುದು’ ಎಂದು ಉನ್ನತ ಶಿಕ್ಷಣ ಸಚಿವ ಡಾ.ಸಿ.ಎನ್.ಅಶ್ವತ್ಥನಾರಾಯಣ ಹೇಳಿದರು.

ಕೃಷಿ ವಿಶ್ವವಿದ್ಯಾಲಯದ ಹಳೆ ವಿದ್ಯಾರ್ಥಿಗಳ ಸಂಘವು ನಗರದಲ್ಲಿ ಶನಿವಾರ ಏರ್ಪಡಿಸಿದ್ದ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಮಾತನಾಡಿದ ಅವರು, ‘ಯುವಿಸಿಗೆ ಆರ್ಥಿಕ, ಆಡಳಿತ ಮತ್ತು ಶೈಕ್ಷಣಿಕವಾಗಿ ಸ್ವಾಯತ್ತತೆ ನೀಡುವ ಮೂಲಕ ಅದನ್ನು ಜಾಗತಿಕ ಶಿಕ್ಷಣ ಸಂಸ್ಥೆಯನ್ನಾಗಿ ರೂಪಿಸಲಾಗುತ್ತಿದೆ. ಕೃಷಿ ವಿಶ್ವವಿದ್ಯಾಲಯದಲ್ಲಿಯೂ ‘ಬೋರ್ಡ್ ಆಫ್ ಗವರ್ನನ್ಸ್’ ವ್ಯವಸ್ಥೆಯೇ ಬರಲಿದೆ’ ಎಂದರು. ‘ವಿಶ್ವವಿದ್ಯಾಲಯಗಳಿಗೆ ರಾಜಕೀಯ ನೇಮಕಾತಿ ಮಾಡುವುದು, ಶಿಷ್ಯಂದಿರನ್ನು ತಂದು ಕೂರಿಸುವುದು, ಸ್ವಹಿತಾಸಕ್ತಿಗಳು ಮುಂತಾದವುಗಳಿಂದ ಹೊರಬರಲೇಬೇಕಿದೆ. ಅರ್ಹರು ಯಾರಿದ್ದಾರೋ ಅವರಷ್ಟೇ ಇಲ್ಲಿನ ಉನ್ನತ ಸ್ಥಾನಗಳಲ್ಲಿ ಇರಬೇಕು. ಇದೇ ಮಾರ್ಗಸೂಚಿಯನ್ನು ಪ್ರತಿ ಕಾಲೇಜಿಗೂ ಅನ್ವಯ ಮಾಡುತ್ತಿದ್ದೇವೆ’ ಎಂದರು.

‘ಸದ್ಯ ಒಂದು ಎಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜು ನಡೆಸಲು ವರ್ಷಕ್ಕೆ ₹30 ಕೋಟಿ, ಒಂದು ಐಐಟಿಗೆ ₹1,200 ಕೋಟಿ ಖರ್ಚು ಮಾಡಲಾಗುತ್ತಿದೆ. ಯುವಿಸಿ ಅಭಿವೃದ್ಧಿಗೆ ವಾರ್ಷಿಕ ₹150 ಕೋಟಿ ವೆಚ್ಚ ಮಾಡಲು ಉದ್ದೇಶಿಸಲಾಗಿದೆ’ ಎಂದರು.



– ಪ್ರಜಾವಾಣಿ ಸುದ್ದಿ (28/Feb/2021)

We are glad to announce that the VU Scholarships for the First Year students are in progress now. We had opened the applications from February end. We have received around 100 applications so far. Just like the previous time, we had asked the students to upload a video along with the details explaining the need for Scholarships.

We are shortlisting the candidates for interview and the idea is to conduct interviews by 4th week of March. We will keep everyone informed about it. Since the interviews are going to be online, we request the alumni interested to interact with students to join hands with us. It will be helpful to us and motivating to the students. If you have any queries, please write to us - samvaada@visionuvce.in. You can know more about the VU Scholarships in this link - <http://www.visionuvce.in/vu-scholarships/>

IN CONVERSATION WITH AISHWARYA

Team Sampada: *We would like our readers to know more about you and your career/family details. Can you please share some details about it?*

Aishwarya: I come basically from Mangalore but a Bangalorean academically all through. I am a 2009 pass out of UVCE from Electrical and Electronics background. I was honored with a gold medal for getting third rank from Bangalore University. From then till now I'm associated with ABB (presently as Senior Project Engineer). A multi national company of power and automation. UVCE gave me a very good platform with placements. I got married in 2011 and my husband also works for ABB presently in Abu Dhabi. I have a six year old daughter.



TS: *Please share how being an UVCEian has influenced your personality.*

Aishwarya: Being an UVCEian has always given me positive vibes whenever I have mentioned to my colleagues or seniors that I am a UVCEian. This brings in great deal of confidence and enthusiasm at my workplace.

TS: *You were one of the Gold medal winners of 2009 batch UVCE. When you look back, what do you think about it? How can students be motivated in the current age and how should alumni contribute towards this?*

Aishwarya: I was truly surprised when I got to know that I was getting a gold medal as we were always underplaying. I was just doing my regular studying all through and not last minute preparation. It was thrilling to know that I was getting the gold medal from the VC of BU. I would like to tell the students to just give in their 100% at all times. In studies and in enjoying their engineering life too. The fun of 3 months college, 1 month study leave, exam then leave of 1 month and next semester. You won't even realize when you completed your engineering.

TS: *In the wake of Women's Day and being a Working Mother, what are your thoughts on the challenges faced by women engineers in the current scenario?*

Aishwarya: I have been very lucky to have great support from my family, from my in laws as I joined back work when my baby was 6 months old. The challenges were always there that you always miss the first word, seeing first what the kid does. But, career wise there was complete support from my company too. So all in all a beautiful journey.



It's a true joy to see namma UVCE undergoing a total phase shift and renewing it's core. A new canteen block is coming up as well. We wish to see similar works happening in Mechanical department which feels totally deserted without it's labs, lacking the old charm. For more photos, [click here](#)

CARVING A NICHE IN R&D - GEETHA

Team Sampada: *To get our audience acquainted, please could you introduce yourself*

Geetha: I am Geetha, Founder and CEO of NIRAMAI Health Analytix, a deeptech startup where we have developed a novel AI-based solution for detecting early stage breast cancer in an affordable, accessible and privacy aware manner. I did my BE from UVCE, Master and PhD from Indian Institute of Science. I have over 25 years of experience in industry in innovation leadership roles spanning across Hewlett Packard, Xerox Research and C-DAC.



TS: *From BE in UVCE to Ph.D at IISc, how was your academic experience? Could you please tell us how were those days?*

Geetha: My first encounter with a computer was in an exhibition where I was fascinated by the automation it enabled. I wanted to know more and so had taken a small course in programming during my exam breaks in junior college and really loved it. When I did get an opportunity to choose between Engineering and Medical, my liking was towards computer science and engineering and my top choice was UVCE. Though a small class, I had excellent classmates and we were like a close knit family. We had such sincere professors and mentors, that I used to enjoy every class with full attention. After flying out of UVCE with rainbow colours, namely topping the state across all branches, I landed at IISc to do my Masters in Computer Science. IISc experience was very different but I did very much enjoy the grilling academics. I got introduced to some deep research and excellent scientists and professors of whom I was very respectfully fearful of. Thanks to lots of project work, varied assignments, tough exams to crack and excellent guidance from professors, I became very fond of research and decided to choose my career as a researcher. I joined my dream job of C-DAC to be part of the team building first supercomputer from India. I went back to do my PhD at IISc as an external registrant after 15 years of my work experience across Hewlett Packard Labs and C-DAC. I chose to pick up a topic that I had not worked upon in the industry until then, and decided to work on the then upcoming field of Data Mining and was fortunate to get the guidance of Prof M Narasimha Murty Sir and Dr Dinkar Sitaram for my PhD. Doing academic research in parallel to regular job was extremely hectic, but I am glad I did it. The machine learning fundamentals that I learnt during those days are still keeping me going at Niramai.

TS: *What are some of your most favourite memories of UVCE?*

Geetha: When I joined UVCE, I was a shy girl and hardly talking to any of my male classmates. As we were just second batch of CS students, it was a small class and everyone knew each other. The excellent faculty at UVCE made me love computers even more and got me intrigued with the internal of the same. Professors like Venugopal Sir, HNS, AVR, since computer era was just starting up at that time, our college had restricted access to computers. We used to have computer labs twice a week and two of us had to share one computer even during those classes. How time changes. Now, it has become so common for every person in the family to have more than one computer and every mobile is more powerful than a workstation we were waiting to get access to at that time. We also had a lot of fun at UVCE. I still remember the Kamat hotel and Nisarga hotel which we would visit so often when we stayed back in college in the pretext of special classes and combined studies. I also vividly remember our class trip to Mangalore in rainy season and the whole class watching a late night movie in a theatre nearby. I don't remember which movie it was but do recall having a gala time, disturbing the audience by making open loud comments on the movie.

TS: *You have been a core part of Research in the Industry, worked in companies like HP and Xerox to leading your own company. Can you please shed more light on how your professional journey has been so far?*

Geetha: I joined C-DAC right after my Master's at IISc. It was my dream job as I did not want to go abroad but wanted to do research. C-DAC was the only place where systems research was

being done at that time. Really enjoyed the company of another excellent team where we had passionate discussions, lovely trips and friendly lunches. When I felt that the tech innovation content in the work is reducing, Hewlett Packard contacted me as they were starting their first research team in India. I loved the job role as it involved proposing new ideas, implementing prototypes and presenting the new work in front of researchers to get feedback. It also involved a lot of travel abroad where I got to meet and learn from international researchers. I began to love research that made an impact on the ground. That was a transformation – since till then I thought anything to do with application development as lower than systems research. I realized how fulfilling it was to see technology solve a real problem on the ground, rather than staying in publications. I started proposing new product ideas that had business impact. I also got an opportunity to present some of those ideas to the global CTO and also got funded to explore multiple such ideas and converted them into products adjacent to HP business. I joined Xerox Research in 2013 when HP Labs decided to close down their Bangalore research lab. At Xerox, I was a senior manager leading Data Analytics research for India and working with some brilliant team members to propose and lead multiple projects aimed at the future of the company. In addition to mentoring researchers, I had the opportunity to interact with several business leaders and potential customers and learn how to fine tune an idea or product to suit the requirements of business/customers.

TS: What made you start and lead Niramai Health Analytix? What challenges according to you do entrepreneurs (esp women entrepreneurs) face growing in the industry ?

Geetha: When I was in corporate R&D working with business leaders & customers to develop some new solutions for the transportation and healthcare segments, one of my close cousin sisters was detected with breast cancer. I was shocked and started reading up about breast cancer and figured out that there was a great gap in the offerings. Working with my colleague and imaging expert Dr Mestha, and with the blessings of my manager Dr Manish Gupta, we started a project to explore use of thermal images for cancer detection. After seeing a few images and collaboration with hospitals, I thought that can be a good usecase for computer vision and machine learning. Along with a small dedicated team of researchers, we developed a small prototype to try this out. I thought the work could be further enhanced and made to go on the ground to save many lives. So, I quit my job & started Niramai along with Nidhi, Himanshu and Sivateja, starting 1 Jan 2017. Its been a great learning over the last 4 years. Entrepreneurial journey has a lot of ups and downs. One needs to stay focussed on the solution to the problem that they want to solve, be optimistic and keep the perseverance without getting bogged down by everyday issues. Being a woman founder, makes it slightly harder since we have to multiple worlds to manage – kitchen, family, work team, customers, partners, investors etc. Since there are very few women in this ecosystem, it is also difficult to network with people and many times gender comes in between friendship.

TS: In what ways do you think namma UVCE should focus to bridge the gap between academia and industry? What is your advice to our current UVCE students?

Geetha: I think UVCE continues to be the Gem of Karnataka - a go to place for bright students. Along with academic excellence, I think there should be more focus on hands-on-projects where students get to work on real life problems starting from their second year of engineering itself. . This could be in the form of internships in industry or local Centres of Excellences. Professors can identify their area of interest and form research units in those areas and create collaborative projects with industry where these projects can be executed at the institute as well. Regular hackathons can be conducted within the college to give an opportunity for students to practice problem solving. Secondly, there should be more encouragement for creative thinking and entrepreneurship. This could be in the form of additional course work, invited lectures from entrepreneurs & assigning industry mentors to students have their own ideas to pursue. Small funding can be provided to build innovative prototypes, organize idea fests to create a competitive spirit & nurture innovation.

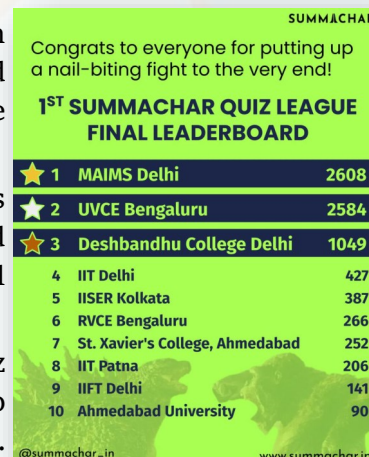
My advice to current students is : Enjoy this learning phase - Its fun to study just with an intent of understanding the concepts and not for the sake of exams. India has several problems and challenges. Look around and pick any real life problem that you feel for and try to solve it in your own way. There is a lot of satisfaction in doing so - & India needs such smart people today!

SUMMACHAR QUIZ LEAGUE

With the tagline #staycurious, Summachar is a knowledge platform that provides holistic education through current affairs. It is founded and led by IIT alumni and seasoned professionals with extensive experience in education and technology.

Over the past month, UVCE's very own cultural club Adhamya has collaborated with Summachar. 3 weekly newsletters on science and tech, business, and general trivia are being sent via email to all interested students across BTech, MTech and PhD.

On 6th and 7th of March, Summachar conducted an intercollege Quiz League on the Summachar android app. Students had 48 hours to answer 20 questions, and their points were added to the college total. UVCE finished in 2nd place, thereby having an upper hand over institutes like IITs and IIMs. With 2584 points, UVCE is eligible for a cash prize from Summachar.



The image shows a graphic titled '1ST SUMMACHAR QUIZ LEAGUE FINAL LEADERBOARD'. It lists the top 10 colleges and their scores. UVCE Bengaluru is in 2nd place with 2584 points. The graphic also includes a congratulatory message at the top and social media handles at the bottom.

SUMMACHAR		
Congrats to everyone for putting up a nail-biting fight to the very end!		
1ST SUMMACHAR QUIZ LEAGUE FINAL LEADERBOARD		
★ 1	MAIMS Delhi	2608
★ 2	UVCE Bengaluru	2584
★ 3	Deshbandhu College Delhi	1049
4	IIT Delhi	427
5	IISER Kolkata	387
6	RVCE Bengaluru	266
7	St. Xavier's College, Ahmedabad	252
8	IIT Patna	206
9	IIFT Delhi	141
10	Ahmedabad University	90
@summachar.in		www.summachar.in

STUDENT SAYS - WOMEN'S DAY

“Having grown up with a woman with that kind of passion for people, watching what one woman can accomplish, I have never doubted the power of women to change the world”
- **Kathy Brown.** This is something I solemnly agree with because I see my mother as my personal driving force at each breakpoint of my life. But the professional field, even though the age of automation, and artificial intelligence technologies provide massive opportunities, women face new challenges overlaid on long-established ones. The main pressure being they trying to constantly prove themselves in male dominated society.

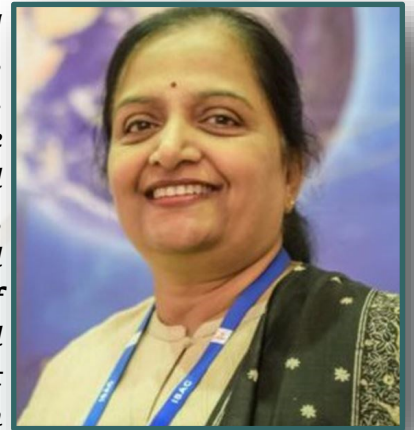
Women have been fighting for their rights for decades, be it in society, at home or in their professional lives. It once was the case that women were limited in the kinds of roles they could obtain, less paid and limited in the circumstances in which they were entitled to work. And, though the world has come a long way from where it was back then, there is still a long way to go before the two genders are truly given equal treatment in all spheres, especially the professional realm. Progress has been made today in all of these aspects. This does not mean, however, that there isn't more to be improved, nor does it mean that women no longer have unique issues they must face within their work. But there are some ways to keep working towards this goal across our daily lives, one step at a time. The technology space is one of many domains which has traditionally been associated with male-led organizations, however, some of the most well-known tech leaders around the globe today are women – but this doesn't come to them easily. The future is about women. Women leading the way for a better world where they can live fulfilling lives, pursuing their individual dreams and those of their families.

Men have a key role to play in the advancement of women in any professional field, where women are underrepresented. Different initiatives can be taken up to encourage men to critically reflect on gender inequality and work towards a change. Men should call out overt discrimination & microaggressions & try having conversations with the respective colleagues on how they can be a better support and avoid those conversations that put women in uncomfortable position. Men should not speak for women, but instead use the voice to help their voices be heard.

-Swaminathan S, 3rd year CSE

BEYOND THE SKY!

Team Sampada had the delight of interacting and interviewing Mrs. Anuradha T K, Retired Indian scientist and Project Director, SATCOM Programme, Indian Space Research Organisation (ISRO). She is a proud alumnus of UVCE from Batch 1982 ECE. She is the first woman to become a satellite project director at ISRO who led teams for the successful realization and launch of GSAT-12 (2011), GSAT-10 (2012). Her revolutionizing and pioneer work in the field of geo-synchronous satellites made her a instrumental part of developing various Indian Space Programs. She also represented India/ISRO in the Royal exhibition Engineers Panel discussions at London, UK along with the representatives from NASA and ESA in 2019. She has several awards to her credit including 2003 Space Gold Medal award by Astronautical Society of India for the services in the field of Space sciences, 2011 Suman Sharma Award by NDRF, 2012 ISRO Team Award, “Hemmeya Kannadiga Award – 2019” by Zee Kannada and many more.



Here is an excerpt of Anuradha Ma'am's journey and achievements:

Team Sampada: Can you please give an overview about your career and journey as an Engineer with ISRO?

Anuradha: I joined ISRO at ISRO Satellite centre, immediately after my graduation from Bangalore University in 1982. I started as Spacecraft test engineer. I had a great opportunity to work on satellites directly as my work involved development of equipment to test the satellite onboard systems, develop interfaces, develop test methods and conduct tests on satellite in various environmental conditions. It was an end to end experience which was very valuable for my career. I worked on both the Remote sensing satellites and communication satellites. This gave an opportunity to be part of the launch campaigns too and learn about the interfaces for both Indian and foreign launch vehicles. The multi-disciplinary teams, multi-national teams with which I worked was a great career opener indeed.

Later, I moved on team leader both on development side and on the Spacecraft project side. Got an opportunity to work on Indian Navigation system from its formative years which added an immense experience in the new field as well. Further I was elevated to take up the independent charge of communication satellites in GSAT series as Project Director. Later I moved on as Programme Director for the all the programs concerning Geo Orbit, which included communication, meteorology, imaging and navigation functionalities. This was a good opportunity to be part of the Centre's Council and contribute towards the planning and management of larger systems.

In the last 2 years of my career, I worked at ISRO Head Quarters as Director, SATCOM Programme. This tenure opened up an entirely new gamut of activities while implementing policies, making new policy drafts, interface to user community, to various ministries and departments. Most importantly, managing and protecting the space spectrum from national and international bodies was also part of my responsibility.

I am really fortunate to have had my hands on various different activities of the organisation and there was never a dull day in the entire service time of nearly 38 years. Most importantly I cherished working with great leaders and I gained friends everywhere which is of immense value to me.

TS: How would you recall your UVCE - College days? How was the college environment for girls in those days?

A: College days at UVCE fill my memory with very pleasant thoughts. We had a great group, both boys and girls. UVCE was the first option for the merit students and naturally there were

hard working and studious boys and girls. None the less, we had loads of fun too. Many of us used commute using our bicycles which was so much fun in the old Bangalore. We would spontaneously decide for a treat at Kamath or a movie at Majestic area or a walk in the Cubbon park or visit a friend who has not attended college and so on. I remember we had an event at Town hall and 4 of us girls had put up a show too.

In fact, regarding academics we were slightly unlucky as some of the best teachers had to leave to pursue their PhD. Also, there were very few lecturers who were regular on classes. But, we made study groups of students who were interested, pool the books and material, read quite a lot on our own, discuss together and so on. I remember our electronics lab which needed a serious upgrade in those days. Despite all these, on the day of semester results, UVCE students would be doing remarkably well. But nothing can stop the bright youth filled with enthusiasm to make best of the available and I see today most of my batch mates did very well in their lives. Those were the days when Microprocessors were not even part of the syllabus but most of the project work were made using processors. In my own team was an extraordinary student, Gopalakrishna, whose understanding of the subject was beyond all of us.

There was nothing specific about the environment for girls, We never felt we were different or exclusive or neglected though we were only about 25% of the total strength. It was a very healthy atmosphere in that respect. Of-course, the girls' rest room was in a deplorable situation. Hope that has changed now.

Most importantly, I met my husband, Kiran, at UVCE who was my classmate too. That adds rainbow colours to my memories. :)

TS: In the initial days, what was the culture for professional women, that too, in the Space Technology field?

A: Oh well. It was not such a Dinosaur era. Space technology was mainly limited to ISRO in those days. ISRO has always maintained one of the best environment for women. I am happy we don't go overboard on either giving special treatment or side lining based on any classifications. Men and women need to work shoulder to shoulder beyond the office hours, round the clock. There is a focus on the work, tight schedules and on excelling. I would say, the work is so exciting and enthralling, one forgets about such classifications. The rewards too are irrespective of one's gender and only based on merits.

TS: In the current scenario, how do you think the alumni (including yourself) can contribute towards the betterment of UVCE ?

A: Students need exposure to the world outside. There is a lot to be looked into including the syllabi. A great thrust on experimental work, project work is needed for engineers along with theory, even from the first year. If such a thing can not happen as a mandatory requisite, can alumni provide such facilities to interested students, even if it is beyond the college time? Alumni also explore such opportunities provided by some of the organisations & make it known to students. If the content of the students is improved in some way, that would be better than monetary help. Alumni also can give career guidance. Anything that makes them better ready for the industry is great.

TS: Since you have worked in a field which many aspire to be in, what would you suggest the current students and recent graduates?

A: I think the students in general aspire to be in the IT industries nowadays. However, I strongly suggest that, the students need to focus on sharpening their abilities across the various specialities at undergrad level. In the professional world, unless one is in a highly specialised niche area, a multidisciplinary knowledge is very valuable.

Space is a typical multi-disciplinary field which needs all specialists in Physics, Chemistry, Maths, Biology, Computations, Engineering, Medical for its activities. And finally, I suggest there is no substitute to hard work, genuine interest and integrity at all times and in every circumstance.

MAKING WAY IN THE WORLD OF DATA SCIENCE!

Team Sampada: *Can you give our readers a brief overview about yourself?*

Sandhya: I am Sandhya and graduated from UVCE with a BE in Computer Science , 1998 Batch. I start my career as an engineer at Oracle India (Hyderabad) for a short period and then moved to US. I worked in various roles building and leading integration systems between Ad Servers and financial systems. Then I went on to do a Masters in DataScience and currently work as a Data Scientist at TD Ameritrade. Also I have a soon to be 7 year old son, who keeps me busy.



TS: *Going back to your days at UVCE, what are your most fond memories? What role did UVCE play in your life?*

Sandhya: The 8 years at UVCE has been some of the best time I have had. The amazing professors we had - HNS, Venugopal Raju Sir. They had the ability teach the subject so well. My fondest memories are the great time with friends, who I am still in contact with. I remember the huge trees at the entrance, and the wooden staircase. Even now during my visits, I show my son the college and tell him where his mom studied.

UVCE shaped me both professionally and personally. Its where I picked up the fundamental of software engineering, something I use to this day. Though what we learned was theory then, now I appreciate what I learned all about s/w engineering and its principles so much of it we put to use almost every day. And its a place when I have met some of my closest friends.

TS:. *You have worked in India and now currently in the USA. Can you take us through your professional journey and how was the experience of this transition?*

Sandhya : After my bachelors, I started off as an engineer at Oracle India. I loved my time at Oracle India. The software industry was growing at a fast pace, and so we had ample opportunity to learn. It always feels good when you know you have put in so much of effort building something and it goes to market. When I look back I wish there was more freedom and openness at work, that would have brought up more innovative ways of doing things. When I started working in the US, my first job was for a client trying to implement one of the products that I had worked for. It was kind of an eye opener to see how there were advantages and challenges to using the product from a clients perspective. This taught me a lot about product design, user interface and experience.

During an acquisition project I got involved into a lot statistical analysis for the finance team and this made me very interested in data science and I went back to college to do my Masters. I then joined Bank of America as a data scientist, working with their data science team to build risk models for their business clients. Later I moved to TD Ameritrade where I am working currently as a DataScientist. At TD Ameritrade which is an online brokerage in the Financial Services Space, my work mostly involves building and monitoring propensity models to understand our clients trading behavior to help them have a better experience.

TS: *In today's industry, we have women in all domains and jobs playing a huge role. What do you think are some challenges faced (especially as a woman) in our corporate/technology field as we aspire and build a career? What keeps you inspired and going whenever you face a challenge?*

Sandhya: We do definitely see a trend towards women in leadership positions in all walks of life. It was great to see US have their first women Vice President. In India too we have women in leadership positions in all domains be it IT, Biotech or politics. In fact today we have more women CEOs than the last 2 decades, but when we look at it in perspective of the Fortune 500 companies we have only about 7.5% CEO roles held by women.

I have spent a good portion of my professional career in finance and financial services industry. Though we have a lot of women in leadership positions it is still very male centric. I feel as women we are required to demonstrate an ability before we get a position but male counterparts are usually groomed to a certain role. And so we take it upon ourselves to prove our ability time and again. The other main challenge we face as women is we tend to juggle on multiple fronts - professional and personal and try to give 100% to both.

One of things that has truly helped me when I face a challenge is to trust my inner voice and not to self doubt. Its ok to fail, but not to stop trying. I see it as an opportunity to grow and improve. If there is something that is just not working I try to take a break , do something very different, may be take a walk, run or step outside of it for a while and revisit it with a fresh perspective, it helps me rewire my thoughts. I also go to various women meetups, when you meet women from same other professions and this helps build a support system and learn from others experiences facing something similar.

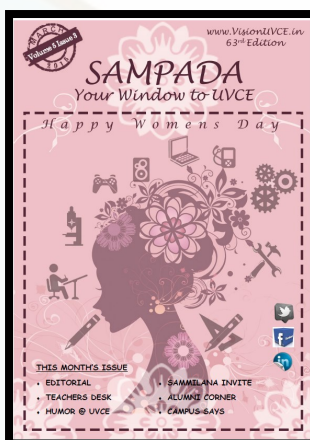
My inspiration in life is nature - Life is gradual, not linear, and always about progression.

TS:. *What is your piece of advice to our current students as they prep themselves to venture in the IT/Corporate Field or even more abroad for their higher studies?*

Sandhya: I feel the students of today are in a great place when it comes to access of information. My advice to them would be to make use of the resources they have. Take time to reflect and truly understand their passions. Believe in it and aspire to bring out your best. The other thing is make connections, reach out to people. Its very helpful to get perspective and helps in personal growth.

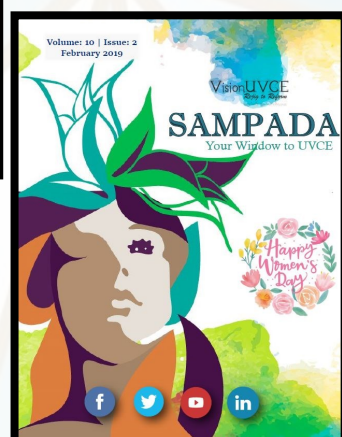
SAMPADA CORNER

Culminating Women's Day celebrations with our edition this is month is not our first. We have had a couple of special editions focusing on our women alumni, their achievement, thoughts and much more. Here is a glimpse of those editions:



SAMPADA 63 ; March 2015

- Special Interviews with Shashikala, Gowri Rastogi, Veena Prasad, Lalitha Anil, Shubha C, Malini, Uma Reddy
- Faculty Corner - Women Professors
- Article on WIE-IEEE UVCE Event
- [Link to Edition](#)



SAMPADA 122 ; Feb 2019

- Guest Editorial by Dr. Usha Murthy
- Special Interviews with Sheenam Ohrie, Kalavathy Bylappa. Sandhya Thyagarajan, Shubha Krishnamurthy
- Excerpt from Avalokana 2, by Sumitra Bai, 1967 Mech and faculty
- [Link to Edition](#)

IEEE WIE WEEK CELEBRATIONS 2021

IEEE UVCE WIE organised WIE week as a part of women's day celebrations. The week commenced on 4th March 2021 with a techno-managerial fun event called Udaan, where the students came in teams of 3-4 and sold paper planes to sectors like public, large scale, small scale and government. It also had a blackmarket and a police as a part of the event. The team with the highest profit was awarded.

Next, AAWAAZ - The First Step Towards Empowerment was conducted. It was an online event to provide an opportunity for the participants to put forth their thoughts on violence against women. Participants were asked to come up with write-ups, poems, paintings etc., supporting the cause. A span of two days was given for the same.

The WIE week culminated on 8th March 2021, with Women's day celebration and a Symposium on 'Women Scientists at the Forefront of the Fight Against COVID-19'. The celebration began with cake cutting and an introduction of the speakers to the gathering. The talk had 2 speakers Dr. Sadhana Attavar, Vice Chair Humanitarian Technology Activities IEEE India Council and 2021 Chair, WIE Bangalore Section and Dr. Kumudini Ravindra, Chair Elect of WIE Executive Committee and Education Society 2021 who spoke briefly about women's role and their leadership skills during COVID-19.

The interactive session ended by presenting mementoes to the dignitaries. The winners of AAWAAZ- the first step to empowerment, were announced. Also, students who attended all the events of the WIE Week were awarded with prizes as a part of an appreciation.



HUMOR @ UVCE

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AAKAASHA RAYA (CONT..)



Our Sampada Edition 131 was crafted as a dedication to Dr. Roddam Narasimha. During our research about Sir, we found a lot of content—just drawing a picture of powerful and vast of an impact he had on the nation. In one of the interesting articles we found, was an interview of Dr. Roddam Narasimha named -'Aakaasha Raya' done in January 2017 by editors at **Bhāvanā**. We published a part1 in Sampada 133, here is another excerpt in continuation:

UVCE [University Visvesvaraya College of Engineering]?

RN: Yes. At that time there were only two colleges in Bangalore. UVCE, which was just called the Government Engineering College at the time, was affiliated to Mysore University, and so did the new college, BMS [B.M. Sreenivasaiah College of Engineering], which was just starting. At first I thought I would do science. Of course, my father was doing physics, and I said I should do physics too. But I didn't do that. At that time, I didn't want to do the usual B.Sc. If I had got admission to B.Sc. Honours, I would probably have done that. I had applied to B.Sc. Honours at Central College, which took twelve or so students each year, and also to the engineering college, UVCE. This was in 1949.

I couldn't get in to B.Sc. Honours. That was partly because I must have been one of the very first batches which was subject to reservations. It was not yet called reservations; it was called Communal GOs [Government Orders]. The country had become free, and one of the first things the government of Mysore did was to introduce this reservation, and I didn't make it. My father was not teaching in Central College at the time, but he used to go there. He was giving a wireless course for some time at an occupational institute near UVCE. And later on he taught at National College, Basavanagudi for a few years. But I didn't get into Central College. Out of twelve, only two of us were in the merit quota. But I already had admission for the four-year Bachelor of Engineering course at UVCE as they took many more students. I joined there. Later, my father told me that his friends told him that not all the seats at Central College were filled. So if I wanted to join now, I would make it to the merit quota and I could go there. But I said no, as I had already joined engineering. UVCE also had some very good teachers. So that's how I started.

The Government Engineering College was renamed University Visvesvaraya College of Engineering, after the death of Sir M. Visvesvaraya, the engineer and statesman. Was he an influence on you? Was he a person you looked up to?

RN: There was a bit of it, certainly. Visvesvaraya was highly respected at that time, and was the big Mysore hero. My engineering college at the time had a good national reputation. Mysore was known for its engineering. I think a lot of the credit should go to Visvesvaraya. He built the dams—he's the one who built the dam on the Kaveri. Visvesvaraya was spoken of in the same breath as C.V. Raman, although not at the same level as C.V. Raman. One represented science, the other represented engineering.

And you wanted to move into engineering?

RN: That's right. My mother's family was dominated by doctors, but in our family it was basically science and engineering. So I went to UVCE, and I think that the college was also changing. I mean, these changes had already come and, once again, it had some very good faculty. People came from outside Mysore to study there.

How did you sustain your interest in science at this time? Was this the time you attended the lectures by the Kannada writer D.V. Gundappa [DVG]?

RN: I learnt about DVG as I entered the engineering college. At the time, we lived close to Acharya Pathashala. And there was the Mallikarjunaswamy temple in that space near it. I used to play cricket in the open area next to the temple. There were also some rocks on one side.

On that rock, a group of five or six senior people would come every evening, of whom DVG was the most conspicuous—by his voice if nothing else. So while playing cricket there you would hear what he was saying. But there were others too. It was a circle of people which included Nittur Srinivasa Rao and V. Sitaramaiah, who used to live in Chamarajpet. So my first encounter with DVG was while playing cricket. The ball would go towards that group, we would all run to get it, and he would cut jokes. One day I asked my father who these people were, and he told me. Eventually when I started going to UVCE, DVG was running Sunday classes at the Gokhale Institute of Public Affairs. It used to be near M.N. Krishna Rao Park circle at the time. DVG resided quite close to it, so he would just walk every Sunday morning to the class. The road in front of his house is now named after him.

What was taught in these Sunday classes? And how many students were there?

RN: Well, I think the number of students in this class fluctuated between fifteen and twenty, and it was open to anyone who was interested. Usually, we studied two books, one in English, and the other one in Kannada or Sanskrit. He wanted to mix these things, and felt that learning English didn't mean that one didn't learn Sanskrit or Kannada. So one of the books was in Kannada or Sanskrit, and furthermore, the subject also kept changing. It might be literature, drama, or maybe political analysis or history, especially in English. It may even be science—not science as a textbook, but general—books by authors like James Jeans, Alexis Carrel, etc.



DVG (sitting on the raised seat) at the Gokhale Institute of Public Affairs

Was DVG the singular figure there or were there other people around him too?

RN: There were always other people, but it was never very big. There was always Venkatachalaiah, who was the secretary of the institute, but he was basically the man who ran the place and made the arrangements, made sure rents were paid, dues were collected, and so on. But there were other people who were friends of the Gokhale Institute. When a public lecture was organized, many of them would come. This sometimes included Nittur Srinivasa Rao and my own father, who had been classmates during their B.Sc. Later, N.S. Rao became the president of the Gokhale Institute.

Did these influences play a role in your decision to come back after your Ph.D. at Caltech? I hear that somebody took a bet that you would go back to USA in two years?

RN: My friends in the U.S. said I would be back there in six months. They didn't think I would last here [India] for two years! During my student days, we were part of a small club of about ten students around Basavanagudi. We called it the Cronies Club. What the Cronies Club did was to meet on Sunday evenings and go have SKC—Sweet Khara Coffee—at some restaurant, and chat about something. Many of the members were associated with Acharya Pathashala; some were from other schools and colleges but known to us somehow. At the time, there was this business about independence, Mahatma Gandhi, Nehru and so on. It was also the kind of thing that our own teachers said at school. They did not say that people shouldn't go abroad. People did go abroad, but the numbers were very much smaller than now. But the Cronies Club thought things should be done here. If you do it abroad, well, that's what they are doing. What have you contributed? There were some in the club who were studying physics at Central College. It was not uncommon for this group to say, for example, about Subbaramaiah, who taught quantum mechanics, that, "You know, if Subbaramaiah was in the US, he would be like—" (some well-known person). Because he's in Bangalore, you see, he does not have those opportunities. And so he would be admired for having stayed here.

(to be continued....)