

# Dr. Sangeeta Kale



**Director (International Cell) and Dean (Research)  
Private Limited  
and Professor (Physics)**  
Defence Institute of Advanced Technology (DIAT)  
India)  
(University, funded by Ministry of Defence), Pune, India

**Co-Director, Nayyukti Innovations  
and Founder**  
(Start-up incubated under DIAT-IIC, Pune,  
[www.nayyuktiinnovations.com](http://www.nayyuktiinnovations.com)

---

Contact: email: [sangeetakale2004@gmail.com](mailto:sangeetakale2004@gmail.com) /  
<https://snkalelab.wixsite.com/snkalelab>  
[sangeetakale@diat.ac.in](mailto:sangeetakale@diat.ac.in)  
Phone: +91-20-24604495 (O) / 9850497712 (Cell)

Website:  
[Sangeeta Kale - LinkedIn](#)  
[Google Scholar](#)

## Education, Notable Work & Positions Held:

- Master's in Electronic Science & PhD (Doctoral Studies) in Material Science  
1992-1996  
University of Pune, India
- Post Doctoral Studies, University of Maryland, College Park, U.S.  
2000-2002
- Visiting Scientist @ International Centre for Theoretical Physics, Trieste, Italy  
2006-2020
- Co-Director, Nayyukti Innovations Private Limited  
**The company is into development of health-care products and sensors using  
advanced materials, electronics, and AI-enabled technologies.**
- Research focus – Work on Nanomaterials for their sensing and biomedical applications,  
typically pertaining to Defence research (DRDO and Tri-Services (Army-Navy-Air  
Force)).
- Guided more than **17 PhD students** and more than 50 Masters projects for their  
dissertations.
- Published more than **160 International peer-reviewed research publications, 8 Book  
Chapters and 4 Books.**
- Written an invited chapter in a book entitled “*Lilavati's Daughters*” published by Indian  
Academy of Sciences, which is a short biography of Indian Women Scientists.
- Appeared in the list of **Top Women Scientists in STEM “From Lab Coats to  
Leadership”** (27 stories of Women Leaders in Physics and Engineering) , published by  
Indian National Science Academy (INSA) along with CERN-Switzerland.

## Medals & Honors:

- National Award for Women Leaders by **Ministry of Heavy Industries, Government of  
India** for work in the domain of Innovation and Research in March 2023.
- **Indian National Science Academy** (INSA) Teachers award for 2016, in the subject:  
Physics.
- **Materials Research Society of India** (MRSI) Medal for 2014, by MRS-India.
- DRDO Science Oration award (2014).

## Social Engagements:

- President, Sharada Shakti, an NGO for promotion of S&T in India, especially amongst  
women.

- Program-Director “PIC Adda” of Pune International Centre (PIC), which is a Think-Tank of Pune.
- Mentor to start-ups in Rural and Tribal Category at Social Innovation Labs of PIC, Pune.
- Former Trustee of Lila Poonawalla Foundation, an NGO responsible for facilitating education to deserving girl students from poor economic background.
- Works as Honorary Research Council Member of Belrise Industries Ltd, Pune

### Technologies Developed and Delivered:

1. **ANANYA:** A wide area disinfectant in COVID Times. Tech Transfer to the below:
  - a) Kinetic Green Energy & Power Solutions Ltd,
  - b) JVD Mettle Pvt. Ltd.
2. **SILVO-KAVACH:** Nanotechnology based antibacterial solution  
Researched and produced by: Navyukti Innovations Pvt Ltd.  
In the consumer market now through Vaishwik Biochem LLP.
3. **S’Breeze:** Antibacterial and antifungal wide-area disinfectants  
Researched and produced by: Navyukti Innovations Pvt Ltd.  
In the consumer market now through Vaishwik Biochem LLP.
4. **Wound healing smart bandages:** Nanomaterials-embedded medicinal capsules for heavy wound healing and antimicrobial protections for extended durations  
Delivered to DEBEL, Bangalore (DRDO) for further technology upscale.
5. **HemoProbe:** A non-invasive multi-parameter monitoring optoelectronic sensor for health-parameter monitoring. An AI-ML enabled electronic-digital gadget. At TRL4 level now (technology readiness level).  
Researched and produced by: Navyukti Innovations Pvt Ltd. (Under Clinical Trials and Product development cycle) – In discussion with Vanguard Diagnostics, New Delhi

### Administrative Experience

| S N | Responsibilities  | Period   |
|-----|---|--|
| 1.  | Director (International Cell)   | 7 <sup>th</sup> March 2024 – till Date                   |
| 2.  | Dean (Research)   | 15 <sup>th</sup> January 2024 – till Date                |
| 3.  | Director (Policy & Planning)  | 1 <sup>st</sup> Jan 2021 – 7 <sup>th</sup> March 2024    |
| 4.  | Vigilance Officer   | 1 <sup>st</sup> Jan 2018 – 7 <sup>th</sup> March 2024    |
| 5.  | ICC Chairperson   | 1 <sup>st</sup> Jan 2018 – till Date                     |
| 6.  | Controller of Examination (CoE)   | 1 <sup>st</sup> Jan 2023 – 14 <sup>th</sup> January 2024 |
| 7.  | Dean (Academics), DIAT (DU)   | 1 <sup>st</sup> Jan 2019 – 1 <sup>st</sup> Jan 2021      |
| 8.  | Dean (Student Affairs), DIAT (DU)   | 28 <sup>th</sup> Sept 2017 – 31 <sup>st</sup> Dec 2019   |
| 9.  | Head (Materials Management Group), DIAT (DU)  | 23 <sup>rd</sup> August 2017 - Dec 2019                  |
| 10. | Officiating Vice Chancellor, Defence Institute of Advanced Technology (DIAT) (Supported by Ministry of Defence) | 11 <sup>th</sup> August, 2014 - 3 <sup>rd</sup> Feb 2015 |
| 11. | Dean (Academics), DIAT (Deemed University)  | 22-03-2013 to 21-03-2015                                 |
| 12. | Chairperson, Doctoral Research Committee (DRS)  | 01-04-2015 to 23-08-2017                                 |
| 13. | Head, Department of Bio-Sciences & Technology   | 07-12-2012 to 19-09-2016                                 |
| 14. | Head, Department of Applied Physics   | 29-03-2011 to 16-09-2016                                 |
| 15. | Chairperson, Post Graduate Committee  | March 2011 to March 2013                                 |
| 16. | Chairperson, Results Review Committee   | March 2015 - 14 <sup>th</sup> January 2024               |

### At Administrative level, in DIAT, worked on :

- a) Implementation of National Education Policy (NEP) at DIAT level
- b) Drafting 5-year plan for the growth of DIAT in Research and Teaching
- c) Drafted Multiple other policies for faculty and staff well-being.
- d) Drafted Multiple policies for student progression as CoE, DIAT
- e) Actively involved and materialized MoUs at National and International Levels (Cranfield University, BEL, City University of London, IISER Pune, NCL Pune, NIAS, NADP, Bharat Forge and so on)