

## Invited Talks, Lectures, and Conference attended

### Invited talks and Lectures

**Total of 50**

1. Delivered an Invited talk "Addressing affordability of diagnosis using paper-based devices", department of Chemistry, Sunandan Divatia School of Science (SDSOS), NMIMS, 25<sup>th</sup> of March 2021
2. Delivered an invited talk "Addressing affordability in the diagnosis of paper-based devices", in a National Webinar jointly organized by Gujarat State Biotechnology Mission and Shree PM Patel Institute of PG Studies and Research in Science, Anand, Gujarat, 6<sup>th</sup> November 2020.
3. Delivered an invited talk on "Paper-based devices and their applications" webinar organized by Department of Bioscience & Bioengineering, IIT Jodhpur, 29th October 2020.
4. Delivered a talk as an Eminent speaker on "Fabrication and Patterning of Paper-based Analytical Devices", BIRAC-SRISTI 6<sup>th</sup> Biotech Innovation Ignition School (BIIS) workshop and webinar, SRISRI, Ahmedabad, 22nd September-12th October 2020.
5. Delivered an invited talk on "PAPER-BASED DEVICES AND THEIR BIOMEDICAL APPLICATIONS" webinar organized by Center of Excellence in Space Sciences India (CESSI), IISER, Kolkata, 18th September 2020.
6. Delivered a talk on "Innovations in Diagnostics" as invited speaker in the 2-Day National Webinar on- "FRONTIERS IN BIOSCIENCES", a virtual launch event of DBT STAR COLLEGE SCHEME to St. Ann's College for Women, organized by St. Ann's College for Women, Mehdipatnam, Hyderabad, 11th-12th September 2020.
7. Delivered an invited talk on "Paper-based devices and its biomedical applications", in National Webinar, 31st August 2020, Organised by Department of Botany, Little Flower Degree College, Uppal, Hyderabad -500039
8. Delivered an invited talk on "Fabrication of paper-based device and its biomedical applications" in PHARMACONVERSE - WEBINAR SERIES 6, hosted by Marri Laxman Reddy Institute of Pharmacy, Hyderabad, 23<sup>rd</sup> of July, 2020.
9. Delivered an invited talk on "Paper-based microfluidic devices and its application in early detection of pregnancy in domestic animals" in a Webinar hosted by Amity Institute of Biotechnology (AIB) & Amity Institute of Integrative Science & Health (AIISH), Amity University Gurgaon on May 9th, 2020.
10. Delivered an invited talk as Distinguished Speaker on "An affordable paper-based microfluidic device for early detection of pregnancy in domestic animals" at Lab-on-a-Chip and Microfluidic Conference, Organized by SelectBio India, 12<sup>th</sup>-13<sup>th</sup> of September 2019, India.
11. Delivered an invited talk on "Fabrication and application of Micro and Nanofluidics", for M.Sc. Final year (Microbiology), Department of Microbiology, St.Pious X Degree and PG College for Women, Hyderabad, 27<sup>th</sup> March 2019.
12. Delivered an **inaugural talk** as **chief guest** on "**Applications of Microfluidic & Paper-Microfluidic Devices in Healthcare**", in the National Seminar on "Advancements in Biomaterials and Nanotechnology in Healthcare – Current Scenario and Future Perspective" organized by Department of Biomedical Engineering, KarpagaVinayaga College of Engineering & Technology, Padalam, TN, Indian 9th & 10th January 2019.
13. Participate and Deliver an **invited talk** on "**Paper-Based Microfluidic-Devices and Their Applications**" in the International Symposium on Molecular Medicine (ISMM) organized Department of Molecular Medicine & Biotechnology, Sanjay Gandhi Post Graduate Institute of Medical Sciences, 14th to 16th December 2018, Lucknow, India.
14. Participate and Deliver a **talk** on "**Paper-Based Microfluidic-Devices and Their Applications**" in the National Symposium on "Materials In Healthcare" (MIH-2018), 6<sup>th</sup> to 8<sup>th</sup> September 2018, Gitam University, Hyderabad.
15. Participate and Deliver a **talk** on "**Fabrication of Paper-based SERS substrate and their uses**", in Workshop on "Raman Microscopy", Organized by CSIR- Central Electronics Engineering Research Institute (CEERI), Pilani, 13<sup>th</sup> of July 2018.
16. Delivered **Invited talk** on "**Polymer/Paper-Based Microfluidic and their applications**" in **Nano-Technology workshop** Sponsor by Indian Council Medical Research and organized by Department of Molecular Medicine & Biotechnology, Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS), 26<sup>th</sup> -27<sup>th</sup> of June 2018, Lucknow.
17. Delivered **Invited talk** on "**Microfluidic and paper microfluidic devices and their applications**", 11<sup>th</sup> April 2018, Indian Institute of Technology, Hyderabad.
18. Delivered **Invited talk** on "**A facile and affordable laboratory method of enhancing Raman scattering**" as **Invited Speaker** in a day National Seminar on "Nanotechnology - Emerging Issues and applications" organized by the Department of Microbiology, St.Pious X Degree and PG College for Women in association with **Telangana Academy Of Sciences**, 26th Feb 2018, Nacharam, Hyderabad.
19. Delivered an invited talk on "**Application of Paper-Based Devices and Nano-delivery System**" at the National Institute of Plant Genome Research (NIPGR), New Delhi, 16<sup>th</sup> March 2018.

20. Delivered an invited talk on “**Transition from Ramalingaswami Fellow to Faculty position**” and share the experience as Ramalingaswami Fellow, in 8th Ramalingaswami Conclave, organized by the National Institute of Plant Genome Research (NIPGR), New Delhi, 15th - 17th February 2018.
21. Delivered **Invited talk** on “**Paper-microfluidic devices**” and received **Award of Honor, as Distinguished Speaker** at Lab-on-a-Chip and Microfluidic Conference, Organized by SelectBio India, 17<sup>th</sup> to 18<sup>th</sup> January 2018, Mumbai, India.
22. Delivered **Invited talks** “**Paper-microfluidic devices**” and “**Non-conventional methods of fabricating microfluidic and their applications**” in **Short Term Course on Microfluidic Based Healthcare Diagnostics and Interfacial Phenomena**, Sponsored by **Quality Improvement Program, Centre Continuing Education, Ministry of Human Resource Development, Government of India**, Organized by **Indian Institute of Technology, Madras**, November 6<sup>th</sup> to 11<sup>th</sup>, 2017.
23. Delivered an **Expert lecture** entitled “Beautiful world of small things” at MNR College of Pharmacy, 26<sup>th</sup> October 2017, Hyderabad.
24. Delivered **Invited talk** on “**Paper-microfluidic devices and its applications**” as **Distinguished Speaker** in a three-day conference, “Integrated ChemieCONference (ICCON – 2017)”, On “Current Research Perspective and Advanced Concepts in Chemistry”, Organized by the Department of Chemistry, Prasanthi Nilayam Campus, 10<sup>th</sup> to 12<sup>th</sup> March 2017, Puttaparthi.
25. Delivered **Invited talk** on “**Paper-microfluidic devices and its applications**” at the 6th Annual Meeting of the Indian Academy of Biomedical Sciences - IABS 2017, Govt. Medical College, 6th to 8th January 2017, Bhavnagar.
26. Delivered **Invited talk** on “**Potential application of Microfluidics and Paper Microfluidics in food analysis**” at the 4th annual conference of AOAC International on, Organized by India Session of AOAC International, 11<sup>th</sup> -12<sup>th</sup> of November, 2016, hotel The Park, New Delhi on in international AOAC conference.
27. Delivered **Invited talk** on “**BioChips**” in the Cutting Edge Technology session of the National Summit on Innovations and Technology (NSIT), Organized by Gujarat State Biotechnology Mission (GSBTM), Department of Science & Technology, Government of Gujarat, 30<sup>th</sup> September- 1<sup>st</sup> October 2016, Mahatma Mandir, Gandhinagar, Gujarat.
28. Delivered **Invited talk** on “**Paper-microfluidic devices**” and received **Award of Honor, as Distinguished Speaker** at Lab-on-a-Chip and Microfluidic Conference, Organized by SelectBio India, 26<sup>th</sup>-27<sup>th</sup> May 2016, Bangalore, India.
29. Delivered **Invited talk** on “**Paper-microfluidic devices and their applications**” at the **Rapid Diagnostics conference**, 8 to 10 of February 2016, BioAsia 2016, Hyderabad.
30. Delivered **Invited talk** on “**Microfluidic and paper-microfluidic devices and their applications**” at the conference on Challenges in Product Development of Medical Implants and Devices, December 18-19, 2015, Centre for Healthcare Science and Technology, IEST, Shibpur, India.
31. Delivered **Invited talk** on “Non-conventional methods of fabricating microfluidic & paper-microfluidic devices and their applications” at the **Third International Conference on Nanotechnology for Biological and Biomedical Applications (Nano-Bio-Med 2015)**, Dec. 1-4, 2015, VMCC, IIT-Bombay, Mumbai, India.
32. Delivered **invited talk** on “**Affordable Diagnostic**” at Sunshine Hospital, Hyderabad, September 2015.
33. Delivered an **Expert lecture** entitled Beautiful world of small things at Dept. of Biotechnology, NIT, Warangal, January 2015
34. Participated and delivered a **talk** on Understanding pitfalls of conventional 2DE and potential of microfluidics in proteomic analysis of the wound environment, 5<sup>th</sup> Annual Conclave for Ramalingaswami Fellows, *Bhubaneswar*, February 2014.
35. Delivered **Invited talk** on Non-conventional methods of fabricating microfluidic and their applications, in National Seminar on Emerging Trends in Analytical Sciences, Organised by Indian Society of Analytical Scientists (Hyderabad Chapter) and CSIR-Indian Institute of Chemical Technology, Hyderabad 27<sup>th</sup> -28<sup>th</sup> of November 2013.
36. Participated and delivered a **talk** on Understanding pitfalls of conventional 2DE and potential of microfluidics in proteomic analysis of the wound environment, 3rd Annual Conclave for Ramalingaswami Fellows, Pune, 12th -14<sup>th</sup> September 2013.
37. Delivered **Invited talk** on Non-conventional methods of fabricating microfluidic and paper-microfluidic devices and their applications and received **Award of Honor, as Distinguished Speaker** at Lab-on-a-Chip and Microfluidic Conference, Organized by SelectBio, 27<sup>th</sup>-28<sup>th</sup> September 2013, Bangalore, India.
38. Delivered **talk** on Three-dimensional microfluidic devices and its applications: Biocatalytic micro-bio-reactor, droplet-based gene expression and particle generation, March 11, 2009, Research seminar series, School of Pharmacy, University of Queensland, St. Lucia, Australia.
39. Delivered invited **talk** on Microfluidic devices derived from preceramic polymer and natural biopolymer: applications in biological science, June 24, 2008, Australian Institute of Bioengineering and Nanotechnology, University of Queensland, St. Lucia, Australia.

40. Delivered **expert talk** on Nanotechnology and its applications in fuel cells, December 12, 2006, Dept. of Electronics and Communications, Shri Venkateshwara College, New Delhi India.
41. Delivered **talk** on Microfluidics and its applications in biological sciences, February 28, 2006, Center for Biomedical Engineering, Indian Institute of Technology, New Delhi, India.
42. Delivered **talk** on Fabrication of microfluidic devices & macroporous microchannels using transparent polysilazane glasses, protein patterning on polysilazane glasses and cell-free protein synthesis in PDMS reactor, January 24, 2006, National Chemical Laboratory (C.S.I.R), Pune, India.
43. Delivered **talk** on Microfabrication of microfluidic devices and macroporous channels using transparent polysilazane glasses and application of these glasses in micro protein patterning, September 22, 2005, Dept. of Biotechnology, Indian Institute of Technology, Madras, Chennai, India.
44. Delivered **talk** on Micro-Technology and its various applications: CE, M.E.M.S.  $\mu$ -TAS, Microfluidics, Bio-MEMS,  $\mu$ -Fuel Cells, December 23, 2004, Dept. of Fine Chemical Engineering and Chemistry, College of Engineering, Chungnam National University, Daejeon, South Korea.
45. Delivered **invited talk** on An alternate route to generate hydrogen: Micro Bio-Fuel Cell, March 19, 2004, Central Electrochemical Research Institute, Karaikudi, India.
46. Delivered **invited talk** on Fast separation of large DNA molecules using a micro-fluidics system, May 3, 2002, Department of Mechanical Engineering, Indian Institute of Technology, Mumbai, India.
47. Delivered **invited talk** on Integrated electrochemically driven fluid pumping at the microscale, April 29, 2002, Regional Research Laboratory, Bhopal, India.
48. Delivered **invited talk** on Microchip based capillary electrophoresis and its fabrication, December 27, 2001, Quimica Analitica - E.S.T.C.E. – Universitat Jaume I, Castello, Spain.
49. Delivered **invited talk** on Development of new separation matrix for the fast separation of long DNA using Bio-MEMS, June 7, 2001, Mikroelektronik Centret, Danish Technical University, Lyngby, Denmark.
50. Delivered **invited talk** on Detection enhancement and separation of toxic compounds using capillary electrophoresis and other nano & micro-scale analytical techniques, June 7, 2001, Mikroelektronik Centret, Danish Technical University, Lyngby, Denmark.

#### **Papers / Poster presented in conferences (28)**

1. Engineered nano-structured and their effect on the Neural stem Cell Characteristics, poster presentation at the Lab-on-a-Chip and Microfluidic Conference, Organized by SelectBio India, 26<sup>th</sup>-27<sup>th</sup> May 2016, Bangalore, India.
2. **A truly single-step method for the fabrication of paper-based microfluidic devices and its bio-functionalization for various applications** at the Third International Conference on Nanotechnology for Biological and Biomedical Applications (Nano-Bio-Med 2015), Dec. 1-4, 2015, VMCC, IIT-Bombay, Mumbai, India.
3. Effect of Nano-Patterns on the Neural Precursor Cell Characteristics, **poster presentation** at the Third International Conference on Nanotechnology for Biological and Biomedical Applications (Nano-Bio-Med 2015), December 1-4, 2015, VMCC, IIT-Bombay, Mumbai, India.
4. A novel rapid, the physical method for the synthesis of gold nanoparticles in an aqueous solution **poster presentation** at the Third International Conference on Nanotechnology for Biological and Biomedical Applications (Nano-Bio-Med 2015), December 1-4, 2015, VMCC, IIT-Bombay, Mumbai, India.
5. Embedded template method for rapid and cost-effective fabrication of biomaterial-based microfluidic devices with selective permeability, **oral presentation** in The Second Conf. on Advances in Microfluidics and Nanofluidics & Asia-Pacific Intl. Symposium on Lab on Chip (AMN & APLOC 2011), Singapore, January 5-7, 2011.
6. ANFF-QLD node: The Bio Nano specialist, **oral presentation (Exhibitor Session)** The Second Conf. on Advances in Microfluidics and Nanofluidics & Asia-Pacific Intl. Symposium on Lab on Chip (AMN & APLOC 2011), Singapore, January 5-7, 2011.
7. Enzyme loaded alginate hollow fiber for reactor **poster presented** in The 13th International Conference on Miniaturized Systems for Chemistry and Life Sciences ( $\mu$ TAS2009), Jaju, South Korea, November 1-5, 2009.
8. *In vitro* synthesis of protein in three-phase flow via merging of droplets of PCR and translational machinery, **poster presented** in The 12th International Conference on Miniaturized Systems for Chemistry and Life Sciences ( $\mu$ TAS2008), San Diego, USA, October 12-16, 2008.
9. Solvent-resistant and transparent Polysilazane glass microfluidics for photochemical reactions, **poster presented** in The 10th International Conference on Miniaturized Systems for Chemistry and Life Sciences ( $\mu$ TAS2006), Tokyo, Japan, November 5-9, 2006.
10. Fabrication of ceramic microchannels with tailored pores, **Oral presentation** in 7<sup>th</sup> International Symposium on Eco-materials Processing and Designing (ISEPD 2006), Cheng Du, China, January 8-11, 2006.

11. Fabrication of microdevices for protein patterning on transparent polysilazane and polysilane glasses, **poster presentation** in 3<sup>rd</sup> International Symposium on Nanomanufacturing (ISNM 2005) University of Cyprus, Limassol, Cyprus, November 3-5, 2005.
12. Fabrication and characterization of an on-chip continuous exchange cell-free protein synthesis system fabricated on polysilazane glass, **poster presentation** in Polymer-Derived Ceramics and Their Applications Symposium, 11<sup>th</sup> Asian Chemical Congress (11<sup>th</sup> ACC 2005) Seoul, Korea, August 24-26, 2005. **(Selected as 2<sup>nd</sup> best poster amongst 800 posters)**
13. Fabrication of transparent polysilazane glass derived microchannels, **oral presentation** in Polymer-Derived Ceramics and Their Applications Symposium, 11<sup>th</sup> Asian Chemical Congress (11<sup>th</sup> ACC 2005) Seoul, Korea, August 24-26, 2005.
14. Fabrication of ceramic microchannels with tailored pores, **poster presentation** in Polymer-Derived Ceramics and Their Applications Symposium, 11<sup>th</sup> Asian Chemical Congress (11<sup>th</sup> ACC 2005) Seoul, Korea, August 24-26, 2005.
15. Solvent resistant and low surface energy mold materials for fabrication of polysilazane and polysilane glass devices by imprinting lithography and micromolding, **poster presentation** in Polymer-Derived Ceramics and Their Applications Symposium, 11<sup>th</sup> Asian Chemical Congress (11<sup>th</sup> ACC 2005), Korea, August 24-26, 2005.
16. Micro protein patterning on polysilazane and polysilane glasses with inherent chemical resistivity and hydrophobic surface, **poster presentation** in Polymer-Derived Ceramics and Their Applications Symposium, 11<sup>th</sup> Asian Chemical Congress (11<sup>th</sup> ACC 2005), Korea, August 24-26, 2005.
17. Fabrication and characterization of microfluidic channels using transparent polysilazane glass, **poster presentation** in 31<sup>st</sup> Korean Society of Industrial and Engineering Chemistry Meeting, Chungnam National University, Daejeon, Korea, May 13-14, 2005.
18. Characterization of a Silicon-based Formic Acid Microfuel Cell with Passive Fuel Delivery Microstructures, **poster presentation** in symposium J1, Micro and Portable Fuel Cells, 205th Meeting of The Electrochemical Society, San Antonio, TX, May 11, 2004
19. Fast Separation of Biomolecules Using Microfluidics system, **Oral presentation** in a seminar on Modern Biology, Nagarjuna University, Guntur, India, August 28-30, 2003
20. A fuel storage and evaporative delivery chamber for micro-fuel cells: evaporation at the microscale, **Oral presentation** in Section Fuel Cells I, AIChE 2002, Annual Meeting Indianapolis Convention Center, Indianapolis, IN, U.S.A., November 3-8, 2002.
21. Integrated electrochemically driven fluid pumping at the microscale, **poster presentation** in Section Food, Pharmaceutical & Bioengineering, AIChE 2002, Annual Meeting Indianapolis Convention Center, Indianapolis, IN, U.S.A., November 3-8, 2002.
22. Fast separation of large DNA using self-organizing Bio-MEMS, **poster presentation** in Micro-Total Analysis Systems 2001, Monterey, California, U.S.A., October 21-25, 2001. (Last minute poster)
23. The self-organizing array of magnetic particles as replaceable matrices for electrophoresis on a chip, **poster presentation** in ICES 2001, Verona, June 10-13, 2001.
24. Fast separation of large DNA using a micro-fluidics system, **poster presentation** in 5<sup>th</sup> International conference on Microreaction Technology (IMRET 5), Palais de la Musique et des Congres, Strasbourg, France, May 27-30, 2001. **(Last minute poster)**.
25. Detection methods for aromatic amines separated by capillary electrophoresis, **poster presentation** in 13<sup>th</sup> International Symposium On High-Performance Capillary Electrophoresis And Related Microscale Techniques HPCE 2000, Universität Des Saarlandes, Saarbrücken, Germany, February 20-24, 2000.
26. Application of CE in environmental analysis, **poster presentation** in The Royal Dutch Annual Conference for Analytical Chemists, Lunteren, The Netherlands, November 3-4, 1997.
27. Application of CE in environmental analysis, **poster presentation** in 3<sup>rd</sup> Third International Symposium and Short course on Separation Sciences, Bhopal, India, November 23-26, 1998.
28. Use of gas chromatography technique for the analysis of organic compounds, **Oral presentation** in Seminar on Modern Trends in Engineering and Technology, Samrat Ashok Technological Institute, Vidisha, India, May 10, 1995. **(Awarded with a certificate of Merit)**.