RESEARCH PAPERS : PUBLISHED AND PRESENTED

➢ Research Papers Published

1. Fabrication & Application of Thin Film Semiconductor Sensors for the Detection of VOCs
   V.S.Vaishnav\textsuperscript{a,}\textsuperscript{*}, S.G.Patel\textsuperscript{b}, J. N. Panchal\textsuperscript{a}
   DOI: 10.4028/www.scientific.net/AMR.665.85

2. Development of ITO thin film sensor for the detection of formaldehyde at room temperature.
   V.S.Vaishnav\textsuperscript{a,}\textsuperscript{*}, S. G. Patel\textsuperscript{b}, J. N. Panchal\textsuperscript{a}
   Imprint: ELSEVIER, ISSN: 0925-4005

3. Development of ITO thin film sensor for detection of benzene
   V.S.Vaishnav\textsuperscript{a,}\textsuperscript{*}, S. G. Patel\textsuperscript{b}, J. N. Panchal\textsuperscript{a}
   Imprint: ELSEVIER, ISSN: 0925-4005

4. Development of ITO thin film sensor for detection of toluene
   V.S.Vaishnav\textsuperscript{a,}\textsuperscript{*}, S. G. Patel\textsuperscript{b}, J. N. Panchal\textsuperscript{a}

➢ Research Work presented at Conferences/Seminars etc.

1. Semiconductor Vapour Sensor to Detect Explosives
   V.S. Vaishnav, S.G. Patel, J.N.Panchal
   Presented a Poster at the DST PURSE Programme sponsored National Conference on Interdisciplinary Perspectives: Defence Studies, Earth System Science and BioMedical Science (IPDEB – 2013), organized at Sardar Patel University, Vallabh Vidyanagar, November 15-17, 2013

2. Oxide Semiconductor based Vapour Sensors with High Stability for the Detection of Carbon Tetrachloride (CCl\textsubscript{4})
   V.S.Vaishnav\textsuperscript{*}, S.G.Patel, J.N.Panchal

3. **Flexible Electronics: A demanding, desirable breakthrough in Sensor Technology: A Review**
   **V.S.Vaishnav*, S.G.Patel, J.N.Panchal**
   Presented a Poster at a State level Seminar on “Current Trends in Research and Applications of Physical Science in Gujarat (CTRAPSG-12)” organised on 29th December 2012, Department of Physics, Sardar Patel University, Vallabh Vidyanagar, Anand, Gujarat, India. (Poster)

4. **Study of Sensitivity and Selectivity of Thin Film Semiconductor Sensors for the Detection of Volatile Organic Compounds**
   **V.S.Vaishnav*, S.G.Patel, J.N.Panchal**
   Presented a Poster at a State Level Seminar on “Current Trends in Research and Applications of Physical Science in Gujarat (CTRAPSG-12)”, organised on 29th December 2012 at the Department of Physics, Sardar Patel University, Vallabh Vidyanagar, Anand, Gujarat, India. (Poster)

5. **Fabrication & Application of Thin Film Semiconductor Sensors for the Detection of VOCs**
   **V.S.Vaishnav*, S.G.Patel, J.N. Panchal**

6. **Semiconducting Oxide thin film gas sensors for detection of Volatile Organic Compounds (VOCs), a study and a review**
   **V.S.Vaishnav*, S.G.Patel, J.N.Panchal**
   Presented at the 111th GSA-VPN CSC ANNUAL SCIENCE MEET ‘SCI-MEET 2008’, organized under the Joint Auspices of GSA-VPN Chapter & C. C. Patel Community Science Centre Sardar Patel University Vallabh Vidyanagar, Anand, Gujarat, India, on February 17, 2008.
Research Paper Accepted for oral presentation at the International Conference: But not presented

1. Preparation of Thin Film Semiconductor Toluene Sensor  
   J. Panchal, V. Vaishnav, and S. Patel  
   Accepted for Oral Presentation at the International Conference IVC-19, Paris-France, organised during September 9th-13th, 2013  
   Could not attend

2. Development of tin oxide sensor with nanoclusters for the sensitive detection of benzene at room temperature  
   J.N. Panchal, S.G. Patel, V.S. Vaishnav*  
   Accepted for Poster presentation at the TechConnect World Conference and Expo 2014 to be held during 16-18 June, 2014, Washington D.C., USA

3. ITO thin film semiconductor vapour sensor to detect hydrogen peroxide  
   V.S. Vaishnav*, S.G. Patel, J.N. Panchal  
   Accepted for Presentation at The 3rd International Conference on Advanced Materials, Energy, and Environment (ICMEE’14) to be held at Hawaii, USA during July 1-3, 2014.

Other Conferences/ Seminars/ Symposia Attended

1. Attended a seminar on “Nanotechnology from Chemical Engineering Perspectives” on 11th November 2006, organized by Department of Chemical Engineering, Dharmsinh Desai University, Nadiad & the Institution of Engineering (India) Gujarat State Center Ahmedabad.


3. Attended IIIrd GSA-VVNCS Annual Science Meet ‘SCI-MEET 2008’ under the joint auspices of GSA-VVN chapter and C C Patel community science centre, Sardar Patel University, Vallabh Vidyanagar,

4. Attended a workshop on, “Embedded Systems” organized by the P.G. Department of Electronics, Sardar Patel University, Vallabh
Vidyanagar with cooperation of Vi Microsystems Ltd., Chennai (23rd March to 24th March, 2009)

5. Attended a State level Seminar on CANBUS & CAN open Technology jointly organized by USIC, Sardar Patel University, Vallabh Vidyanagar and Global Technology CIA India Office, Mumbai, on 18th January 2010.


7. Attended a One day seminar on “INNOVATIONS IN COLLEGIATE SCIENCE EDUCATION AND RESEARCH” held at VP & RPTP Science College, V.V.Nagar on Saturday – Jan. 8, 2011.

8. Attended and Worked as a Member of Local Organizing Committee for Two Day Symposium on Innovations in Science SPU Research Scholars Meet (ISSPURSM-2012) 8th-9th January 2012 Organized by Sardar Patel University Vallabh Vidyanagar.


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