PERSONAL INFORMATION

Name: **Dr. Mayur A. Gaikwad**

Address: Department of Physics
D. Y. Patil College of
Engineering and Technology,
Kasaba Bawada, Kolhapur,
Maharashtra, India.

E-mail: ***mayur00gaikwad@gmail.com***

RESEARCH EXPERIENCE: *(5 years)*

BRNS Project Fellow Successfully completed the major research project entitled "*Development of porous nanocarbon electrodes for alkaline fuel cells*" funded by Board of research in nuclear sciences (BRNS), Mumbai, Sanction Letter: **Ref. - 2013/36/29-BRNS/2351** dated 26 Nov. 2013 **(2015-16).**

Ph.D. **Thesis Title:** *"Studies on ZnO and TiO_2 based dye sensitized solar cells"*, **2013-2017**

AWARDS

- Worked as a Secretarial assistant for **UGC SAP DSA-I** programme, **Department of Physics, Shivaji University, Kolhapur** from January 2014 to March 2015
- **Junior Research Fellow (JRF)** on DAE-BRNS major research project from 19 Jan. 2015 to 31 March 2016.
- **First prize for best presentation** in the International Conference on Emerging Trends in Engineering, Technology and Architecture (iCETETA-2017).

RESEARCH PUBLICATIONS

(a) Papers published in International Journals **– 11**

(b) Papers presented in National/International Conferences – **05**

Citations*: *85 ***h-index: 05*** ***i10-index: 03***

Google Scholar link *https://scholar.google.co.in/citations?hl=en&user=Pab-n0MAAAAJ&view_op=list_works&sortby=pubdate*

LIST OF PUBLICATIONS

1. **Authors:** **M. A. Gaikwad,** M. P. Suryawanshi, S. S. Nikam, C. H. Bhosale, J. H. Kim, A. V. Moholkar

Title: Influence of Zn concentration and dye adsorption time on the photovoltaic performance of M-SILAR deposited ZnO-based dye sensitized solar cells
Journal: ***Journal of Photochemistry and Photobiology A: Chemistry***, *329 (2016) 246*

2. **Authors:** **M. A. Gaikwad,** A. A. Mane, S. P. Desai, A. V. Moholkar
Title: Template-free TiO_2 photoanodes for dye-sensitized solar cell via modified chemical route
Journal: ***Journal of colloid and interface science***, 488 (2016) 269

3. **Authors:** **M. A. Gaikwad,** M. P. Suryawanshi, S. P. Desai, A. V. Moholkar
Title: ZnO-based photoelectrodes for dye sensitized solar cell via modified successive ionic layer adsorption and reaction route
Journal: ***International Journal of Engineering Research and Technology***, 10 (2017) 1

4. **Authors:** **M. A. Gaikwad,** M. P. Suryawanshi, P. S. Maldar, T. D. Dongale, J. H. Kim, A. V. Moholkar
Title: Nanostructured zinc oxide photoelectrodes by green routes M-SILAR and electrodeposition for dye sensitized solar cell
Journal: ***Optical Materials***, 78 (2018) 325

5. **Authors:** S. S. Nikam, M. P. Suryawanshi, S. M. Bhosale, **M. A. Gaikwad,** P. A. Shinde, A. V. Moholkar
Title: Cu_2O thin films prepared using modified successive ionic layer adsorption and reaction method and their use in photoelectrochemical solar cells
Journal: ***Journal of Materials Science: Materials in Electronics***, 27(2016)1897

6. **Authors:** M. P. Suryawanshi, S. W. Shin, G. L. Agawane, K. V. Gurav, U. V. Ghorpade, C. W. Hong, **M. A. Gaikwad,** P. S. Patil, J. H. Kim, A. V. Moholkar
Title: A Promising Modified SILAR Sequence for the Synthesis of Photoelectrochemically Active Cu_2ZnSnS_4 (CZTS) Thin Films
Journal: ***Israel Journal of Chemistry***, 55(2015)1098

7. **Authors:** A. A. Mane, V. V. Ganbavle, **M. A. Gaikwad,** S. S. Nikam, K. Y. Rajpure, A.V. Moholkar
Title: Physicochemical properties of sprayed V_2O_5 thin films: Effect of substrate temperature
Journal: ***Journal of Analytical and Applied Pyrolysis***, 115 (2015) 57

8. **Authors:** S. M. Bhosale, M. P. Suryawanshi, **M. A. Gaikwad**, P. N. Bhosale, J. H. Kim, A. V. Moholkar
Title: Influence of growth temperatures on the properties of photoactive CZTS thin films using a spray pyrolysis technique
Journal: ***Materials Letters***, 129 (2014) 153

9. **Authors:** S. P. Desai, M. P. Suryawanshi, **M. A. Gaikwad**, A. A. Mane, J. H. Kim, A. V. Moholkar
   Title: Investigations on the thickness dependent structural, morphological, and optoelectronic properties of sprayed cadmium based transparent conducting oxide
   Journal: ***Thin Solid Films***, 628 (2017) 196

10. **Authors:** P. S. Maldar, **M. A. Gaikwad**, A. A. Mane, S. S. Nikam, S. P. Desai, S. D. Giri, A. Sarkar, A. V. Moholkar
    Title: Fabrication of Cu_2CoSnS_4 thin films by a facile spray pyrolysis for photovoltaic application
    Journal: ***Solar Energy***, 158 (2017) 89

11. **Authors:** S. S. Nikam, M. P. Suryawanshi, **M. A. Gaikwad**, J. H. Kim, A. V. Moholkar
    Title: Photoelectrochemical performance of surfactant (polyvinyl alcohol) assisted PbS thin films grown by chemical route
    Journal: ***Journal of Materials Science: Materials in Electronics***, 28 (2017) 5165

PAPERS PRESENTED AT NATIONAL AND INTERNATIONAL JOURNALS

1. **M. A. Gaikwad**, M. T. Sawant, G. M. Lohar, V. J. Fulari, Synthesis and characterization of ZnS thin films by electrodeposition technique for solar cell application, *1st International Conference on Physics of Materials and Materials based Device Fabrication (ICPM-MDF- 2012)*, Department of Physics, Shivaji University, Kolhapur, 17-19 Jan-2012.
2. **M. A. Gaikwad,** P.M. Raste, R.S. Sutar, S. M. Bhosale, V.S. Mohite, M.A. Mahadik, S. S. Nikam, A.V. Moholkar, Synthesis and characterization of Spray deposited TiO_2 thin films, *2nd International Conference on Physics of Materials and Materials based Device Fabrication (ICPM-MDF- 2014)*, Department of Physics, Shivaji University, Kolhapur, 13-15 Jan-2014.
3. **M. A. Gaikwad**, S. M. Bhosale, M.P. Suryawanshi, S. S. Nikam, A.V. Moholkar, Synthesis and characterization of modified SILAR deposited Zinc Oxide thin films, *National Seminar on Physics of Materials and Materials based Device Fabrication (SSPM-MDF- 2014)*, Department of Physics, Shivaji University, Kolhapur, 19-20 Dec-2014.
4. **M. A. Gaikwad**, S. S. Nikam, A.V. Moholkar, Photoelectrochemical performance of M-SILAR deposited zinc oxide based dye sensitized solar cells, *International Conference on Materials Science and Ionizing Radiation Safety and Awareness (ICMS-IRSA- 2016),* Department of Physics, Shivaji University, Kolhapur, 28-30 Jan-2016.
5. **M. A. Gaikwad**, M. P. Suryawanshi, S. P. Desai, A. V. Moholkar, ZnO-based photoelectrodes for dye-sensitized solar cell via modified successive ionic layer adsorption and reaction route, *International Conference on Emerging Trends in Engineering, Technology and Architecture (iCETETA-2017), D. Y. Patil College of Engineering and Technology, Kasaba Bawada, Kolhapur (Hotel Sayaji)*, 11 March 2017.