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CURRICULUM VITAE

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Academic Highlights and Work Experience

June 1 to June 30, 2023	Professor, Nagoya Institute of Technology (International collaborative research project)
2018-till date	Assistant Professor, Department of Physics, Karmveer Bhaurao Patil College Vashi, Navi Mumbai.
2010 to 2012	VBL postdoctoral fellow at Nagoya Institute of Technology, Nagoya Japan
2009 to 2010	MANA Postdoctoral fellowship, National Institute of Material Science, Tsukuba, Japan
2008 to 2009	Senior Project Assistant in Indian Institute of Technology, Kanpur (UP) India
2003 to 2008	Ph D in Physics, Shivaji University, Kolhapur Thesis title: 'Studies on Preparation and Characterization of H ₂ , Cl ₂ Fuel cells'
2002 to 2003	Project work in Indian Institute of Technology, Mumbai (MH) India Project Title – 'Studies on H ₂ , O ₂ fuel cells'
2000 to 2002	Master of Science (Solid State Physics) with first Class grade from Shivaji University, Kolhapur (MH), India



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Awards, Invited talks

1. **Young Scientist Award** - IUMRS-ICA 2008, Nagoya, Japan
2. **“Shankar Dayal Sharma President Award for ideal student”** in 2002-2003 Shivaji University, Kolhapur, MH, India
3. Biography has been added for the 29th Edition of “Who’s Who in the World”

4. Invited Talks

- “Carbon nanotubes Entangled with mesoporous Carbon”
International Conference on Carbon Nanotubes: Potential and Challenges,
Indian Institute of Technology, Kanpur, India December 15-17 (2010)
 - Role of graphene in Gas diffusion electrodes of fuel cells
Defence Research and Development Organization (DRDO), June 13, 2011
5. **Published Book** – Future Clean Energy Sources – Fuel cells; Lambert Publication, Germany-2014

CONFERENCES CONDUCTED AS CONVENOR –

- 1) International conference on Advanced Materials for Physical, Chemical and Biological Applications – March 3 &4, 2023
- 2) One day National conference on Batteries and Fuel cells – February 11, 2022
- 3) Shaping the future with nanoscience and technology – January 8, 2020
- 4) Advanced Nanomaterials and nanotechnology - January 11, 2019

Any other –

- 1) College Co-ordinator for Avishkar research convention – Zonal Round- Thane Region
- 2) Coordinator of Science stream, Mentor Mentee Committee, KBP college, Vashi
- 3) College Coordinator for WORLD NUCLEAR ENERGY DAY CELEBRATIONS, NATIONAL SCIENCE DAY and Skill courses of Department of Physics, KBP College, Vashi

MINOR RESEARCH PROJECT –

- 1) Synthesis and Characterization of Nanostructured porous Graphene sheets for fuel cell electrodes (Year- 2022-2023 Amount – Rs. 40,000/-)
- 2) Cu₂O nanomaterials for enhanced photo activity under visible irradiation (Year- 2019-2020 , Amount – Rs. 30,000/-)



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List of Publications, Papers & Research Activities

- 1 Highly dispersed Pd nanoparticles on NiO–CuO nanocomposite for efficient ethanol sensing
JC Bhangoji, UB Suryavanshi, GP Mane, GC Wadhawa, ND Pawar, ...
New Journal of Chemistry 47 (26), 12329-12338 [Impact Factor – 3.925]
- 2 Advanced Nanomaterials for highly efficient CO₂ photoreduction and photocatalytic hydrogen evolution”
Rashmi Nautiyal, Deepika Tavar, **Ulka Suryavanshi**, Gurwinder Singh, Archana Singh,
Ajayan Vinu, Gurudas Mane, **Science and Technology of Advanced Materials, 2022,23 (1), 866-894** [Impact Factor - 7.662]
- 3 ‘Growth and Physico-chemical properties of interconnected carbon nanotubes in Fe-SBA15 mesoporous molecular sieves’
Ulka Suryavanshi, Arun V. Baskar, Veerappan V. Balasubramanian, Salem S. Al-Deyab, Abdullah Al-Enizi, Ajayan Vinu , **A. Journal of Chemistry, 2016, 9 (6), 171-178.**
[Impact Factor – 6.212]
- 4 ‘Mesoporous BN and BCN nanocages with high surface area and spherical morphology’**Suryavanshi**, U. Balasubramanian, V.V. Lakhi, K.S. Mane, G.P. Ariga, K. Choy, J.-H. Park, D.-H. Al-Enizi, A.M. Vinu, A.
Physical Chemistry Chemical Physics, 2014, 16(43) 23554-23557
[Impact Factor – 3.676]
- 5 ‘In-situ observation of carbon nanotube fiber spinning from vertically aligned carbon nanotube forest’
Toru Ijima, Hisayoshi Osima, Yasuhiko Hayashi, **Ulka Bhimrao Suryavanshi**, Akari Hayashi, Masaki Tanemura
Diamond and related Materials, , 2012, 22, 158-160 [Impact Factor – 4.1]
- 6 ‘Fabrication of ZnO nanoparticles confined in the channels of mesoporous carbon’
Suryavanshi, U., Iijima, T., Hayashi, A., Hayashi, Y., Tanemura, M.
Chemical Engineering Journal, 2012, 179, 388-393
[Impact Factor – 16.744]



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- 7 'Simple Methods for tuning the Pore diameter of Mesoporous Carbon'
U. B. Suryavanshi, T. Ijima, A. Hayashi, Y. Hayashi and M. Tanemura, **Chem. Comm.**, 2011, 47 (38), 10758 – 10760 [Impact Factor – 6.065]
- 8 'Morphology control of rapid grown vertically aligned carbon nanotube forest for fiberspinning'
T. Ijima, H. Oshima, Y. Hayashi, **U. B. Suryavanshi**, A. Hayashi and M. Tanemura
Physical Status Solidi A, 1-3 (2011) [Impact Factor - 2]
- 9 Morphology control of a rapidly grown vertically aligned carbon-nanotube forest for fiber spinning
Iijima, T., Oshima, H., Hayashi, Y., **Suryavanshi U. B.**, Hayashi, A., Tanemura, M.
Physica Status Solidi (A) Applications and Materials Science, 2011, 208 (10), 2332-2334 [Impact Factor - 2]
- 10 Electrical property of carbon nanotube Fiber spun from vertically aligned carbon nanotubeforest
Iijima, T., Hayashi, Y., Suryavanshi, U.B. Tanemura, M., Oshima, H
Proceedings - International NanoElectronics Conference, 2011
- 11 Morphology control of rapid grown vertically aligned carbon nanotube forest for fiberspinning
Iijima, T., Oshima, H., Hayashi, Y., (...), Hayashi, A., Tanemura, M.
Proceedings - 2010 8th International Vacuum Electron Sources Conference and Nanocarbon, IVESC 2010 and NANOCarbon, 2010, 5644118, 404-405
- 12 'Chemical Vapor Deposited Carbon Nanotubes for Aqueous H₂,Cl₂ Fuel Cells'
U. B. Suryavanshi and C. H. Bhosale
J. of Nanoscience and Nanotechnology, 10 (2010) 4007-4010 [Impact Factor- 1.70]
- 13 "Bimetallic and Trimetallic catalysed Carbon Nanotubes for Aqueous H₂,Cl₂ Fuel cellElectrodes"
U. B. Suryavanshi,. and C. H. Bhosale
J. of Alloys and Compounds, 476 (2009) 697 [Impact Factor – 6.371]



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- 14 “Electrosynthesis and Characterization of Iron Selenide Thin Films”,
S. M. Pawar, A. V. Moholkar, **U. B. Suryavanshi**, K.Y. Rajpure and C. H. Bhosale
Solar Energy Materials and Solar Cells, **91 (2007) 560**. [Impact Factor -7.305]
- 15 “Effect of substrate temperature on spray deposited CdIn₂Se₄ thin films”
V. M. Nikale, **U. B. Suryavanshi**, C. H. Bhosale
Materials Science and Engineering B, **134 (2006) 94-98**. [Impact Factor – 3.407]
- 16 “Structural, compositional and optical properties of electrochemically deposited stoichiometric CdSe thin films from non-aqueous bath”
A. V. Kokate, **U. B. Suryavanshi** and C. H. Bhosale
Solar Energy, **80 (2) (2006) 156-160** [Impact Factor – 7.188]
- 17 “Synthesis and Characterization of Chemical vapour deposited nickel catalyzed carbonNanotubes”
U. B. Suryavanshi, G. P. Mane, C. H. Bhosale
Proceedings of 4th Rayat Vidnyan Parishad (2018) 8-13
- 18 “H₂,Cl₂ Fuel Cells carbon nanobeads coated with platinum and tin over porous ceramicfor hydrogen electrode”
U. B. Suryavanshi, G. P. Mane, C. H. Bhosale
Proceedings of 4th Rayat Vidnyan Parishad (2018) 66 to 71

List of Papers Published/Presented in National International Conferences:

1. Incorporation of ZnO nanoparticles in Mesoporous carbon Synthesized via soft templating approach
U. B. Suryavanshi, T. Ijima, A. Hayashi, Y. Hayashi and M. Tanemura
ISACS4 Challenges in Renewable Energy, MIT, Boston, July 5-8, 2011
2. Triconstituent co-assembly of ZnO/mesoporous CarbonNanocomposite to Pore tunableMesoporous Carbon
U. B. Suryavanshi, T. Ijima, A. Hayashi, Y. Hayashi and M. Tanemura
2011 MRS Spring Meeting , San Francisco , April 25-29, 2011 (oral)



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3. Synthesis and Application of ZnO nanoparticles encapsulated in mesoporous carbon
U. B. Suryavanshi, T. Ijima, A. Hayashi, Y. Hayashi and M. Tanemura
MANA International Symposium 2011, Tsukuba, March 2-4, 2011
4. ZnO nanoparticles Encapsulated in Ordered Mesoporous Carbon:
Synthesis, Characterization and its Photocatalytic Activity
U. B. Suryavanshi, T. Ijima, A. Hayashi, Y. Hayashi and M. Tanemura
3rd ISPlasma 2011, Nagoya, March 6-9, 2011 (Accepted)
5. "Morphology control of rapid grown vertically aligned carbon nanotube forest for fiberspinning"
T. Ijima, H. Oshima, Y. Hayashi, U. B. Suryavanshi, A. Hayashi and M. Tanemura (proceeding)
IVESC 2010 and Nanocarbon 2010, Nanjing, China Oct 14-16(2010)
6. "The morphology effect of vertically aligned carbon nanotube forest on fiber spinning"
T. Ijima, H. Oshima, Y. Hayashi, U. B. Suryavanshi, A. Hayashi, M. Tanemura
4th Int. Workshop on Advanced Ceramics, Nagoya, Japan, December 10-12, 2010
7. "Chemical Vapor Deposited Carbon Nanotubes for Aqueous H₂, Cl₂ Fuel Cells"
U. B. Suryavanshi and C. H. Bhosale
IUMRS International Conference in Asia 2008 (IUMRS-ICA 2008)[YOUNG SCIENTIST AWARD for BEST ORAL PRESENTATION]
8. "Studies on Preparation and characterization of hydrogen chlorine fuel cells"
U. B. Suryavanshi and C. H. Bhosale
International conference on Advanced Materials -2007 (ORAL Presentation)



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- 9 “A chemical vapour deposited platinum and tin coated carbon nanobeads for hydrogen chlorine fuel cells”
U. B. Suryavanshi and C. H. Bhosale
National Seminar on new horizons in Physics-2007
- 10 Synthesis and characterization of Chemically Vapour Deposited Carbon nanotubes”
U. B. Suryavanshi, Ashwini Maste, Meena Borge, C. H. Bhosale
National Seminar on Materials for Advanced Technology (NASMAT) - 2006 (Oralpresentation)
- 11 “Preparation and characterization of spray deposited carbon thin films”
U.B. Suryavanshi and C. H. Bhosale
Materials Research Society of India conference-2005, Pune
- 12 Preliminary Studies on H₂, Cl₂ fuel cells”
U. B. Suryavanshi, A. V. Kokate, C. H. Bhosale
International conference on Electrochemical power systems-II Hyderabad, 2004
13. Effect of Fe insertion on electrochemically deposited CdSe thin films”,
A. V. Kokate, **U. B. Suryavanshi**, C. H. Bhosale;
International Conference on Disordered Analytical System 2004.
- 14 “Effect of activation of graphite as a cathode on the performance of H₂, Cl₂ fuelcell”,
U. B. Suryavanshi, A. V. Kokate, C. H. Bhosale;
National Seminar on “Creating Infrastructure for Adoption of Fuel Cell Technology InIndia” on 14th and 15th April 2004 at NTPC-PMI Noida.
15. “Preparation and Characterization of H₂, Cl₂ fuel cell”,
U. B. Suryavanshi, A. V. Kokate, C. H. Bhosale;
Materials Research Society of India conference-2004, Varanasi.9 to 11 Feb. 2004 (poster presented)
- 16 “Effect of bath temperature on electrodeposited Cd-Fe-Se thin film”,
A. V. Kokate, **U. B. Suryavanshi**, C. H. Bhosale;
International Workshop on Physics of Semiconductor Devices (IWPSD) 276 (2003)