

Suman A. Sawant

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EDUCATION

March 2011	<i>Pernoli Highschool Pernoli, Ajara, Kolhapur</i> S.S.C. [93.45%] Kolhapur Divisional board
February 2013	<i>Ajara Mahavidyalaya Ajara, Kolhapur</i> H. S.C. [64.83%] Kolhapur Divisional board Subjects: Physics, Chemistry, Mathematics, Biology.
March 2016	<i>Shivaji University, Kolhapur</i> B.Sc. (Physics) [88.12%] Subjects: Physics, Mathematics, Chemistry, Statistics
March 2018	<i>Department of Physics, Shivaji University, Kolhapur, India</i> M.Sc. (Physics) [67.33%] Subjects: Solid-State Physics Project: Supercapacitive Evolution of CuO Thin Films by Chemical Bath Deposition Method
2019	Qualified State Eligibility Test (Physics)
2024	<i>Shivaji University, Kolhapur</i> Ph.D. (Material Science) Topic: Interaction of Ionizing Radiation on rGO-PANI Nanocomposite for Supercapacitor Application

RESEARCH INTERESTS

- Energy storage devices
- Synthesis and characterization of Graphene-based materials and composites

(List of publications and conferences is attached on a separate sheet)

WORK EXPERIENCE

2023-2024	Worked as an assistant professor (CHB) at Shivraj College of Arts, Commerce and D. S. Kadam Science College, Gadhinglaj.
2024-2025	Worked as an assistant professor (CHB) at Karmveer Bhaurao Patil College, Urun-Islampur.

COMPUTER SKILLS

Data Analysis: Origin software, Image J software, Mendeley software, EXI software
Operating Systems: Windows OS
MS Office

PROFICIENT IN USING FOLLOWING CHARACTERIZATION TECHNIQUES

- ✓ Atomic Force Microscopy (AFM)
- ✓ X-Ray Diffraction (XRD)
- ✓ Fourier-Transform Infrared Spectroscopy (FTIR)
- ✓ Raman Spectroscopy
- ✓ Electrochemical workstation

PERSONAL SNIPPETS

- Date of Birth: 28/03/1995
- Languages known: Marathi, Hindi, English

ACADEMIC ACHIEVEMENTS

- Chhatrapati Shahu Maharaj Research, Training and Human Development Institute (SARTHI), Pune Fellowship (CSMNRF)-2019
- Malhotra Weikfield Foundation (MWF) Scholarship for PhD Studies -2019
- C. V. Raman Fellowship, Malhotra Weikfield Foundation (MWF)-2016-18
- Maharashtra Talent Search Examination (MTSE)
District Scholarship Rank 5- April 2010
- Maharashtra Talent Search Examination (MTSE)
Taluka Prize- April 2010
- National Mean Cum-Merit Scholarship-2009-2013

REFERENCES

- **Prof. R. G. Sonkawade**
Head, Department of Physics, Shivaji University,
Former Head (i/c), University Science Instrumentation Centre (USIC) and Common Facility Centre (CFC)Coordinator,
Sophisticated Analytical Instrument Facilities (SAIF),
Shivaji University,
Kolhapur-416 004
Mobile: 9763041193, 8329375247 (Maharashtra)
- **Prof. K. Y. Rajpure**
Former Head, Department of Physics,
Shivaji University,
Kolhapur-416 004
Mobile: 9763041193, 8329375247 (Maharashtra)
- **Mr. I. D. Fernandes**
Principle, Madilage Highschool Madilage, Ajara, Kolhapur-416 505
Mobile:9011375592

LIST OF PUBLICATIONS

- ✓ **Chemical Synthesis and Supercapacitive Evaluation of Polyaniline Nanofibers (PANINFs)**
Suman A. Sawant, Maqsood R. Waikar, Akash S. Rasal, Gayatri R. Chodankar, Suprimkumar D. Dhas, Annasaheb V. Moholkar, Mahendra D. Shirsat, Shiv K. Chakarvarti, Rajendra G. Sonkawade*.
Journal of Materials Science: Materials in Electronics (Accepted-22 March 2021, I. F. = 2.77)
- ✓ **Advances in chemical and biomass-derived graphene/graphene-like nanomaterials for supercapacitors**
Suman A. Sawant , Ashwini V. Patil, Maqsood R. Waikar, Akash S. Rasal, Suprimkumar D. Dhas, Annasaheb V. Moholkar, Rajiv S. Vhatkar, Rajendra G. Sonkawade*.
Journal of Energy Storage (Accepted- 14 March 2022, I. F. = 8.907)
- ✓ **A redox additive electrolyte boosted supercapacitive energy density of wrinkled RGO electrode**
Suman A. Sawant, Maqsood R. Waikar, Sunny R. Gurav, Gayatri R. Chodankar, Ashwini V. Patil, Rajiv S. Vhatkar, and Rajendra G. Sonkawade*.
Journal of Energy Storage (Accepted- 13 November 2022, I. F. = 8.907)
- ✓ **Green Synthesized Carbon Aerogel for Electric Double-Layer Capacitor**
Ashwini V. Patil, **Suman A. Sawant**, Rajendra G. Sonkawade, Rajiv S. Vhatkar ^{a, *}.
Journal of Energy Storage (Accepted- 27 July 2023, I. F. = 8.907)
- ✓ **Exploration of aqueous electrolyte on the interconnected petal-like structure of Co-MOFs for high-performance paper-soaked supercapacitors**
Sunny R. Gurav, **Suman A. Sawant**, Gayatri R. Chodankar, Umesh V. Shembde, Annasaheb V. Moholkar, and Rajendra G. Sonkawade*.
Electrochimica Acta (Accepted- 13 August 2023, I. F. = 6.6)
- ✓ **Exploring the potential of simultaneous nanoarchitectonics and utilization of Co-MOFs electrode as well as powder for aqueous supercapacitors**
Sunny R. Gurav, Gayatri R. Chodankar, **Suman A. Sawant** , Umesh V. Shembde, Annasaheb V. Moholkar, and Rajendra G. Sonkawade*.
Journal of Energy Storage (Accepted- 9 October 2023, I. F. = 8.907)
- ✓ **Enhanced electrochemical performance: Synergetic effect of time-dependent synthesis and redox additive concentration on ammonium nickel phosphate hydrate**
Gayatri R. Chodankar, **Suman A. Sawant**, Sunny R. Gurav, Annasaheb V. Moholkar, Maqsood R. Waikar, and Rajendra G. Sonkawade*.
Electrochimica Acta (Accepted- 16 January 2023, I. F. = 6.6)
- ✓ **Tailoring the Electrochemical Performance of Monoclinic Ni₂P₂O₇ Microstructure across Different Alkaline Electrolytes**
Gayatri R. Chodankar, Maqsood R. Waikar, **Suman A. Sawant** , Nilesh R. Chodankar, Suprimkumar D. Dhas, Umesh V. Shembade, Aniket R. Sonkawade, Annasaheb V. Moholkar, Rajendra G. Sonkawade*.
International Journal of Hydrogen Energy (Accepted- 11 February 2024, I. F. = 7.2)
- ✓ **Influence of different dyes on tailoring electromagnetic shielding and microwave absorption in polypyrrole**
Shital J. Shinde, Sunny R. Gurav, Maqsood R. Waikar, Suman A. Sawant, Satyashila D. Ghongade, Azeem M. Bagwan, Aniket R. Sonkawade, Rajendra G. Sonkawade*.
Surfaces and Interfaces (Accepted- 14 May 2025, I. F. = 5.7)

CONFERENCES AND SEMINARS

- ✓ ***Supercapacitive Performance of Electrodeposited Flexible PANINFs Electrode***
Two days National Conference on “Development in Organic-Inorganic Halide Perovskite Material and its Modern Applications” jointly organized by Centre for Material Research (CMR) and Department of Science and Humanities, Nehru Institute of Technology, Coimbatore- December 22-23, 2021.
Paper Presented
- ✓ ***Synthesis of transition metal oxide-based thin films by SILAR method and their supercapacitive performance***
National conference on advances in functional and sustainable materials organized by SGN college, Karad- April 8, 2022
Paper Presented
- ✓ ***Supercapacitive performance of Wrinkled Graphene Sheets Synthesized via Thermal Reduction of Graphene Oxide***
International Conference on Functional Material and Nanotechnology (ICFNM)-2K22 organized by Department of Physics, Nehru Institute of Technology \, Coimbatore in collaboration with the Indian Association for Crystal Growth- July 20-21, 2022.
Paper Presented
- ✓ ***Chemically Prepared CuO thin film for Supercapacitor Application***
National Conference on Newer Materials for Energy and Environmental Application organized by Department of Chemistry, Annamalai University (NCNM)-2022
Paper Presented
- ✓ ***4th International Conference on Physics of Material and Materials-Based Device Fabrication (4thICPM-MDF)- 2019*** organized by the Department of Physics, Shivaji University, Kolhapur- January 10-11, 2019.
Organizing Committee Member
- ✓ ***National Conference on Recent Advances in Astrophysics and Space Science*** organized by Department of Physics, G. I. Bagewadi Arts, Science, Commerce and PG College, Nipani- December 19-20, 2014.
Participated
- ✓ ***INUP Hands on Training Workshop on Nanofabrication Technologies*** organized by IIT Bombay, Mumbai- October 22-26, 2018.
Participated
- ✓ ***Workshop and Hands-On Training on XRD*** organized by SAIF-CFC, Shivaji University, Kolhapur- November 11-12, 2021.
Participated
- ✓ ***Workshop and Hands-On Training on Bio-AFM*** organized by SAIF-CFC, Shivaji University, Kolhapur under the theme of “Azadi ka Amrit Mahotsav”- January 4-5, 2022.
Participated
- ✓ ***Science week*** organized by SAIF-CFC, Shivaji University, Kolhapur February 22-28, 2022.
Participated and Organizing Committee Member
- ✓ ***Workshop and Hands-On Training on "Structural and Morphological Characterization using a Sophisticated Instrument"*** organized by SAIF-DST, Shivaji University, Kolhapur under STUTI

scheme- September 12-18, 2022.

Participated, Organizing Committee Member, and Give Hands-on Training of Bio-AFM

- ✓ *Workshop and Hands-On Training on "Structural and Morphological Characterization using a Sophisticated Instrument" organized by SAIF-DST, Shivaji University, Kolhapur under STUTI scheme- December 5-10, 2022.*

Participated, Organizing Committee Member, and Give Hands-on Training of Bio-AFM

- ✓ *National Seminar on "Emerging Nanomaterials for Renewable Energy" organized by Sanjay Ghodawat University, Kolhapur- December- 2022.*

Attended

- ✓ *Workshop on Awareness About Sharing R & D Resources Through I-STEM Portal organized by SAIF-DST, Shivaji University, Kolhapur- August 5, 2022.*

Attended

- ✓ *IP Awareness/training Program under the National Intellectual Property Awareness Mission organized by intellectual properties of India- April 26, 2022.*

Attended

- ✓ *Faculty Development Programme/ Webinar on "Advanced Materials and Characterization" organized by National Institute of Technology Andhra Pradesh – June 15-19, 2020.*

Attended